Pertanika Journal of

SOCIAL SCIENCES & HUMANITIES

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A Special Issue devoted to

Ethnic Minorities and Community Development

Guest Editors

Sarjit S. Gill and Puvaneswaran Kunasekaran

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Pertanika Journal of Social Sciences & Humanities
Pertanika Journal of Social Sciences & Humanities

PERTANIKA JOURNAL OF SOCIAL SCIENCES & HUMANITIES

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

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

   Comments to authors are about the appropriateness and adequacy of the theoretical or conceptual framework, literature review, method, results and discussion, and conclusions. Reviewers often include suggestions for strengthening of the manuscript. Comments to the editor are in the nature of the significance of the work and its potential contribution to the research field.
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without exception, reviewers' comments (to the authors) are forwarded to the authors. If a revision is indicated, the editor provides guidelines to the authors for attending to the reviewers' suggestions and perhaps additional advice about revising the manuscript.

4. The authors decide whether and how to address the reviewers' comments and criticisms and the editor's concerns. The authors return a revised version of the paper to the Chief Executive Editor along with specific information describing how they have addressed the concerns of the reviewers and the editor, usually in a tabular form. The authors may also submit a rebuttal if there is a need especially when the authors disagree with certain comments provided by reviewers.
5. The Chief Executive Editor sends the revised manuscript out for re-review. Typically, at least 1 of the original reviewers will be asked to examine the article.
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AN INTERNATIONAL PEER-REVIEWED JOURNAL

ABSTRACTING AND INDEXING

The journal is indexed in Clarivate Web of Science (JCR-ESCI), SCOPUS (Elsevier), BIOSIS, Google Scholar, MyCite, ISC. In addition, Pertanika JSSH is recipient of "CREAM" Award conferred by Ministry of Higher Education (MoHE), Malaysia.

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Contents

Preface

Community development and well-being are intrinsically linked, influencing and shaping each other in a dynamic, ongoing relationship. Community development, broadly defined, encompasses improving a community's social, economic, and environmental conditions. On the other hand, well-being refers to the overall state of individuals and communities, encompassing physical, mental, social, and spiritual health, as well as feelings of happiness, life satisfaction, and purpose. Community engagement, capacity building, community participation, and empowerment are the key elements of community development that will lead to well-being. These key concepts are essential for promoting community well-being in relevant, meaningful, and long-term ways for the intended beneficiaries. Community development is organising or assisting community groups in identifying their priority social issues, planning and implementing social action and change strategies, and gaining increased self-reliance and decision-making power because of their experiences.

Research is essential in community development, as the scientific outcome is important in revealing a particular community's current state. Community development researchers play a crucial role in collecting genuine data from the ground. Studies about ethnic minorities, especially in rural areas, require great experience, expertise and dedication. Thus, the papers listed in this issue significantly contribute to the key developmental issues of various communities.

This special issue highlights ten research articles from diverse perspectives. Social issues within communities are found to be an everlasting phenomenon that needs ongoing research and understanding. Economic development agendas, such as tourism, cultural commodification, and financial literacy, are important drivers of community development. The papers reveal that the communities are eager for development. However, the development is intended to be more balanced and sustainable by emphasising social and environmental aspects. This special issue also provides an awareness and knowledge of the distinctive characteristics of the communities studied. The values of these communities are also to be understood and embedded in the broader communities. The government's role in focusing on existing policies, along with the cooperation of other stakeholders, is vital for enhancing community participation, ultimately contributing to community empowerment.

We wish to express our heartfelt gratitude to Professor Ir Ts. Dr. Mohamed Thariq bin Haji Hameed Sultan for giving us the opportunity to prepare the academic papers. Additionally, we express our gratitude to Mrs. Juridah for efficiently facilitating the review and moderation process.

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Unlocking Financial Stability: How Locus of Control Shapes Well-being in Malaysia's Low-income Households

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ABSTRACT

This study investigates the complex interplay between financial stress, financial vulnerability, financial behaviour, and the financial well-being (FWB) of Malaysia's low-income households, spotlighting locus of control (LOC) as a mediating factor and income as a control variable. Using a comprehensive model that accounts for 29% of the variance in FWB, the research analyses responses from 432 household heads across Peninsular and East Malaysia, selected through multi-stage sampling. Questionnaires are employed for data collection, and covariance-based structural equation modelling is used for analysis. The findings reveal that financial behaviours, financial vulnerability, and financial stress significantly influence FWB, with internal LOC acting as a partial mediator. The results underscore the potential for low-income families to improve their FWB by adopting adaptive financial behaviours and strengthening their internal LOC, offering critical insights for policymakers and government bodies. This research emphasises the need to develop targeted, nuanced policies to improve financial decision-making and resilience among economically disadvantaged households, fostering financial stability and overall well-being.

Keywords: Financial behaviour, financial stress, financial vulnerability, financial well-being, locus of control

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INTRODUCTION

Malaysia stands on the precipice of a transformative economic shift, poised to transition from a developing to a high-income nation by 2024. This ambitious goal is underscored by a decade of robust economic growth, exemplified by a 4.3% GDP increase in the first quarter of 2020, as the Economic Planning Unit (2021) reported.

However, this growth masks underlying disparities that pervade the nation's socio-economic fabric, particularly affecting the low-income (B40) and middle-income (M40) groups, constituting approximately 80% of all households.

The country's strategic integration of the Sustainable Development Goals (SDGs) into its national development strategy, notably through initiatives like the Shared Prosperity Vision 2030 and the Twelfth Malaysia Plan, reflects a concerted effort to enhance living standards and mitigate poverty. Despite these initiatives, there remains a significant research gap in understanding the economic resilience of individual households within these income groups during macroeconomic stability and crisis.

Current literature primarily focuses on broader demographic impacts, often overlooking the granular nuances of FWB that affect individual households. For instance, while national policies have effectively curbed unemployment rates and enhanced infrastructure, they have yet to be more successful in addressing the escalating cost of living, disproportionately impacting the lower income brackets. Studies such as those by Ismail et al. (2021) and Thinagar et al. (2021) highlight the precarious financial situations exacerbated by the COVID-19 pandemic, where low-income households faced heightened financial distress due to job losses and reduced economic activity.

The landscape of FWB research in Malaysia is rich but fragmented. Prior studies have primarily concentrated on FWB demographic and economic predictors, often overlooking the nuanced influences of psychological and behavioural factors. Research by Abdullah et al. (2019) explored the direct impact of financial literacy and financial management practices on the well-being of Malaysian households, revealing a significant positive correlation between financial knowledge and the financial stability of families. However, these studies seldom delve into the mediating role of intrinsic psychological factors such as locus of control (LOC), which could offer deeper insights into how individuals perceive and react to financial challenges.

Research predominantly focused on demographic and economic predictors of FWB often overlooks the psychological dimensions that significantly influence financial behaviour and outcomes. Netemeyer et al. (2018) and Ponchio et al. (2019) emphasised the importance of financial behaviours and literacy but did not integrate the role of psychological constructs such as LOC. Similarly, Brüggen et al. (2017) highlighted the complexity of FWB, suggesting the necessity of a multifaceted approach that incorporates both objective financial metrics and subjective psychological factors.

The socio-economic shocks introduced by global crises, such as the COVID-19 pandemic, further underscore the need to understand households' psychological resilience. Studies by Hassan et al. (2021) and the Department of Statistics Malaysia (2020) documented the immediate adverse effects of the pandemic on household income, particularly among the B40 group. These studies pointed out the increase in financial vulnerability due to reduced incomes and heightened unemployment yet did not explore how psychological factors like LOC might mediate the impact of these financial stressors on FWB.

This study addresses the gaps in the literature by focusing on the role of internal LOC as a mediating factor between financial stress, financial vulnerability, financial behaviours, and FWB among low-income households in Malaysia. This approach provides a more holistic view of the factors contributing to FWB. It offers insights for policy-makers to develop targeted interventions that enhance economically disadvantaged populations' financial and psychological resilience.

Given the importance of FWB as a subjective measure of an individual's ability to sustain a desired lifestyle and achieve financial autonomy (Brüggen et al., 2017), there is a critical need for an in-depth exploration of the relationship between personal financial management and its impact on FWB among Malaysia's low-income households. This study aims to bridge the gap in the literature by focusing on the relationship between personal financing, financial behaviour, and the internal LOC among low-income families in Malaysia. It critically examines how factors such as financial stress, financial vulnerability, and financial behaviours mediate this relationship, focusing on the role of LOC as a potential moderator. Theoretical and empirical research suggests that individuals with a high internal LOC are more likely to engage in positive financial behaviours, enhancing their FWB.

LITERATURE REVIEW

Financial Well-being (FWB)

FWB is a critical area of inquiry that delves into individual practices around money management, including spending, saving, and investing (Nanda & Banerjee, 2021). It is increasingly recognised as a vital indicator of economic growth, reflecting a nation's success in enhancing its citizens' financial health (Ghazali et al., 2020). The field has converged towards the Consumer Financial Protection Bureau (CFPB) definitions of FWB in recent literature (Netemeyer et al., 2018; Nicolini & Cude, 2019; Ponchio et al., 2019). However, Brüggen et al. (2017) note the diversity in FWB conceptualisation, leading to varied definitions and measurement approaches. These can be categorised into three main clusters: objective measures of financial health, such as creditworthiness and savings (Delafrooz et al., 2011); subjective perceptions of financial status, including satisfaction and debt management (Kim et al., 2003); and hybrid approaches that blend both subjective and objective assessments, like comparing debt levels with financial satisfaction (Xiao et al., 2009). This multifaceted approach underscores the complexity of assessing FWB, highlighting the need for comprehensive measures considering tangible financial metrics and individual perceptions of financial security.

Financial Stress

The literature presents a variety of definitions of financial stress. It has been described as an interaction between physical arousal and emotional responses to financial stimuli, such as an urgent payment (Choi et al., 2020). Factors like job loss, medical bills, or unexpected costs can cause financial stress. It can also lead to psychological stress, such as depression, anxiety, and feelings of helplessness. Friedline et al. (2020) argue that this contributes to economic hardship. In general, financial stress is usually characterised as physical or mental health symptoms that are triggered by difficulty meeting basic needs and paying bills, which may result in depression. There is a strong correlation between financial stress and both physical and psychological health, and financial stress is particularly relevant to low-income families, who are constantly faced with monetary obligations and obligations that are accompanied by financial stress (Kramer et al., 2019).

Mahdzan et al. (2019) distinguish between financial stress and financial distress, conceptualising financial stress as arising from sudden shocks and abrupt changes in an individual's life. This definition underscores the dynamic nature of financial stress, differentiating it from the broader, often more enduring concept of financial distress. However, financial distress pertains to the opposite perspective of FWB. Additionally, previous research indicates that financial stress negatively correlates with individuals' FWB (Mahdzan et al., 2020; Sabri & Zakaria, 2015).

Therefore, the first hypothesis is as follows:

Ha1: Financial stress has a negative effect on the FWB of low-income households in Malaysia

Income

Additionally, the impact of the study on household baseline income varies from one study to another. Studies have shown that low-income households are disproportionately affected by the economic crisis. In most cases, low-income households are employed in traditional economic sectors that have been negatively affected (Adams Prassl et al., 2020; Almeida et al., 2021; Galasso, 2020; Tanaka, 2022). Nonetheless, in some cases, such as Ghana (Bukhari, 2021) and Uganda (Mahmud & Riley, 2021), the higher- and middle-income classes suffered more regarding income reductions, as demonstrated by their consumption patterns.

Ha2: Income has a positive effect on the FWB of low-income households in Malaysia

Financial Vulnerability

Financial vulnerability is conceptualised as the potential or actual situation in which an individual faces financial difficulties, highlighting the risk of future financial hardship rather than current financial management or living standards (O'Connor et al., 2019). This concept focuses on the prospective nature of financial challenges, encompassing the inability to meet financial obligations, the risk of default, and financial insecurity due to possible shocks. Households, especially those with low income, are deemed vulnerable if they struggle to cover monthly expenses, face unpaid bills, or cannot meet financial commitments (Magli et al., 2022). Financial vulnerability is often quantified through ratios that gauge a household's capacity to fulfil its obligations, with a particular emphasis on debt service-to-income and debt-to-asset ratios, among others, offering a more nuanced understanding of financial fragility compared to absolute debt levels (Daud et al., 2019).

Ha3: Financial vulnerability has a negative effect on the FWB of low-income households in Malaysia

Financial Behaviour

Financial behaviour encompasses actions related to finances, including daily personal financial activities like budgeting, tracking expenditures, borrowing, utilising credit, investing, and managing liquidity, as outlined by Xiao et al. (2022). These behaviours can be categorised based on their impact on financial health as beneficial or detrimental. Positive financial practices enable individuals to monitor and regulate their expenses, establish financial objectives, prepare for future needs, save funds, and timely settle bills, according to Zakaria et al. (2023). Conversely, negative financial behaviours resulting from financial blunders or negligent actions adversely affect one's personal and professional life. The role of financial behaviour as a determinant of FWB has been recognised and examined in various studies, indicating that responsible financial actions correlate with higher subjective FWB (SFWB), as reported by Mahdzan et al. (2019), while irresponsible financial actions are linked to lower SFWB levels (Mahdzan et al., 2022).

Based on these insights, the proposed hypotheses are:

Ha4: Positive financial behaviour has a positive effect on the FWB of low-income households in Malaysia

Ha5: Positive financial behaviour strengthens the internal LOC among low-income households in Malaysia

Internal Locus of Control (LOC)

In psychology, the concept of LOC centres on an individual's belief in their capability to influence outcomes through their actions, as proposed initially by Rotter (1966). An internal LOC reflects a belief in personal agency, where individuals consider their actions as the primary determinants of life outcomes and satisfaction rather than external forces (Cobb-Clark et al., 2016).

The belief in one's ability to control and influence life events significantly impacts FWB. Consequently, they are more inclined to take proactive steps towards improving their financial status, adhere to their financial plans, and take responsibility for their financial outcomes. This proactive and responsible approach towards finances leads to lesser concerns about financial matters and greater satisfaction with their financial state (Strömbäck et al., 2017).

Given these insights, the subsequent hypotheses are proposed:

Ha6: Internal LOC acts as a mediator in the relationship between financial behaviour and the FWB of low-income families in Malaysia

Ha7: A strong internal LOC has a positive effect on the FWB of low-income households in Malaysia

Conceptual Framework of Financial Well-being (FWB)

The conceptual framework of FWB as shown in Figure 1 integrates the roles of financial stress, income, financial vulnerability, and financial behaviour alongside the internal LOC in shaping FWB. Drawing on Expected Utility Theory, as discussed by Morgenstern (1976) and furthered by Daniel Bernoulli's hypothesis, this framework explores how households' financial decisions under risk and uncertainty can predict future behaviour by evaluating current consumption and outcomes. This theory posits that individuals are likelier to engage in behaviours that they perceive as beneficial and relevant, suggesting that positive financial behaviour and a solid internal LOC contribute to higher utility and life satisfaction, thereby enhancing FWB. Additionally, the framework incorporates the Resource Management Model (Deacon & Firebaugh, 1988), rooted in System Theory, to argue that improved financial inputs—like lower financial vulnerability and better financial management—lead to superior FWB outcomes.

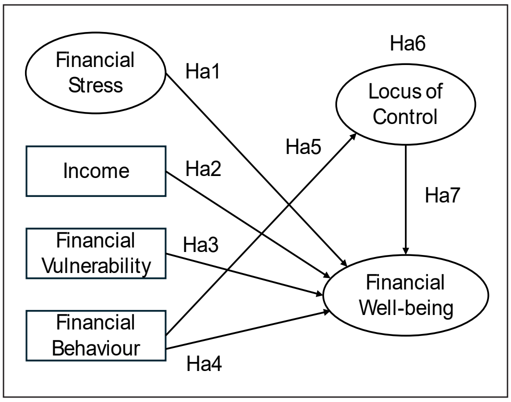

Figure 1. A conceptual framework for FWB

MATERIALS AND METHOD

Research Design and Data Sampling

This pivotal study, part of the Malaysian Long Research Grant Scheme University Network (LRGS MRUN), targets the socio-economic challenges facing Malaysia's B40 demographic, representing the bottom 40% of the income spectrum. Working in conjunction with the Department of Statistics Malaysia (DOSM), the study used the National Household Sampling Frame (NHSF) to implement a multi-stage random sampling technique as the first sampling, which is detailed in the accompanying flowchart (Figure 3). This technique enabled the selection of 2,215 households across five key regions in Malaysia, both Peninsular and East Malaysia (Selangor, Johor, Penang, Pahang, Sabah, and Sarawak) as presented in Figure 2 ensuring a broad and representative sampling base. Ultimately, 1,948 valid responses were collected, resulting in a high response rate of 91.67%.

Conducted during a crucial time frame from September 2020 to March 2021, amidst the global upheaval caused by the COVID-19 pandemic, the study's timing was instrumental in capturing the nuanced impacts of the pandemic on the economic and social well-being of the B40 households. The research team ensured the integrity and relevance of their findings by employing the SPSS software for data analysis, focusing specifically on urban household heads with a monthly income below RM4,850. The methodical selection of households within specific Enumeration Blocks (E.B) and Residential Places (R.P.)

Figure 2. States in data sampling

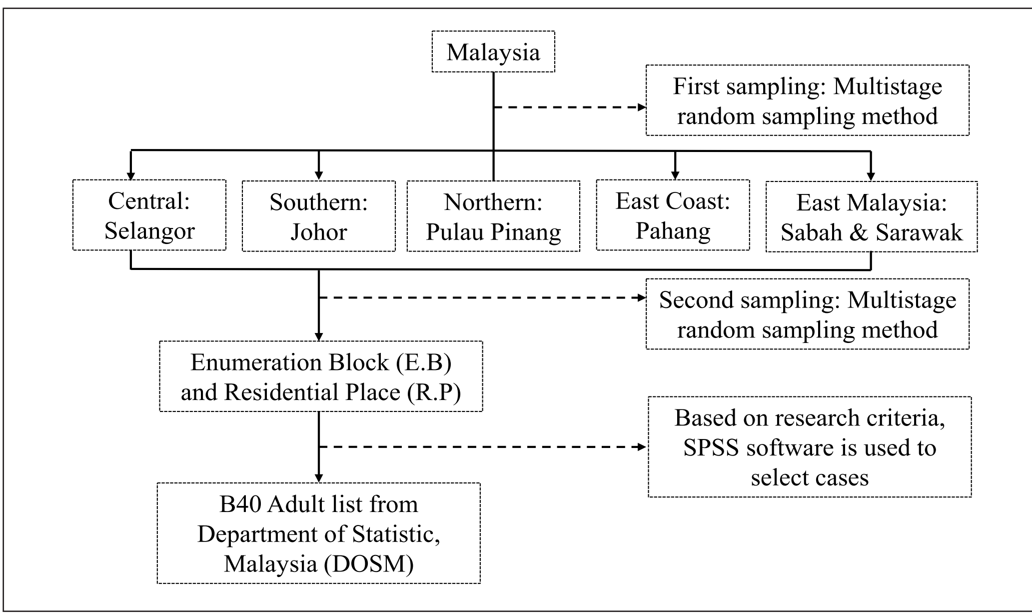

Figure 3. Flow chart of sampling method

across the chosen states was carried out through the second stage of sampling, multi-stage random sampling. Further refining the granularity and accuracy of the data collected based on research criteria: head of households and households belonging to the B40 income group (income less than RM4,850), ultimately resulting in 432 valid datasets for comprehensive analysis, as depicted in Figure 3.

The adherence to established statistical standards and methodologies for sample size determination and data analysis, as highlighted by Hair et al. (2019), underscores the importance of ensuring adequate sample sizes to achieve reliable results. Specifically, Reinartz et al. (2009) emphasise the potential for spurious outcomes in CB-SEM analyses when sample sizes are too small, advocating for sample sizes in the range of 250 to 500 to mitigate such risks and enhance structural modelling accuracy. The robustness of CB-SEM's maximum likelihood estimates against non-normality further underscores the appropriateness of the 432-sample size for this study's CB-SEM analysis (Chou et al., 1991; Olsson et al., 2000). Through its meticulous design and execution, this study offers profound insights into the socio-economic conditions of Malaysia's B40 demographic, providing a valuable resource for policymakers and researchers alike in devising targeted interventions for this vulnerable population segment.

Data Collection

Measurement of Variables

This study incorporates several scales to assess participants' various dimensions of FWB. The Malaysian Financial Well-Being Scale (MFWBS), developed by Jariah (2007), is used to explore participants' ability to meet short-term financial goals, maintain emergency funds, and cover daily expenses, with responses ranging from Strongly Disagree (1) to Strongly Agree (4). Additionally, the Financial Management Behaviour Scale by Dew and Xiao (2011) evaluates participants' financial behaviours across nine areas, including cash and credit management, savings, and investments, on a scale from Never (1) to Very Frequently (4).

Financial stress is measured through items adapted from Aldana and Liljengquist (1998), focusing on health impacts, financial contentment, and stress levels, while the financial vulnerability is assessed using Anderloni et al.'s (2012) criteria on the ability to cover essentials, handle unexpected expenses, and sustain financial commitments. Lastly, the LOC scale, developed by Sumarwan and Hira (1993), examines individuals' beliefs in their capacity to control their financial situations and overall life circumstances, ranging from Strongly Disagree (1) to Strongly Agree (4). These scales comprehensively evaluate FWB, financial behaviours, financial stress, financial vulnerability, and LOC among the study's participants.

Data Analysis

The data analysis encompassed five distinct steps. Initially, descriptive statistics were computed to delineate the univariate characteristics of the socio-economic constructs. Following this, the internal consistency of the examined constructs was evaluated using Cronbach's alpha coefficients. The third step involved conducting a bivariate analysis through the Pearson correlation test to elucidate the relationships between the constructs under review. Subsequently, the fitness of the FWB and mediation model was assessed employing Covariance-Based Structural

Equation Modelling (CB-SEM) analysis, providing insights into the structural dynamics and interrelations among the variables.

RESULTS AND DISCUSSION

Profile of Respondents

The socio-demographic profile of the participants in this study is detailed in Table 1, revealing significant insights into the composition of the respondent group. The study's findings on the socio-demographic profile of participants reveal a predominantly male-led household composition (94.2%) within the surveyed low-income segments in Malaysia, reflecting traditional family structures. Age distribution indicates a focus on middle-aged to older individuals, with significant representations in the 31 to 60 age range but fewer younger participants aged 21 to 30. Ethnically, Malays form

Table 1
Socio-demographic backgrounds

Respondents Characteristics (Head of Households)	Pooled Sample (N=432)	
	Frequency	Percentage (%)
Gender		
Male-headed household	407	94.2
Female-headed household	25	5.8
Age		
21–30 years old	39	10.6
31–40 years old	88	23.9
41–50 years old	107	29.1
51–60 years old	92	25.0
61–70 years old	34	9.2
71–80 years old	8	2.2
Marital Status		
Single	9	2.1
Married	415	96.1
Widowed	5	1.2
Divorced	3	0.7
Education level		
No education qualification	17	3.9
Primary Education	31	7.2
Secondary Education (PMR/PT3, SPM, STPM)	305	70.6
Tertiary Education (Diploma/Certificate, Degree, Masters, Ph.D.)	79	18.2
Ethnicity		
Malay	336	77.8
Chinese	30	6.9
Indian	24	5.6
Peribumi Sabah	26	6.0
Peribumi Sarawak	16	3.7

the majority (70%), followed by smaller proportions of Chinese, Indians, and indigenous groups, showcasing Malaysia's multicultural identity even within low-income demographics. Most respondents are married (95%), and a vast majority have at least secondary education (70.5%), with a smaller percentage holding tertiary qualifications (18.2%). This demographic snapshot highlights the gender, age, ethnic, marital, and educational dynamics of low-income households participating in the study.

Reliability Test

The pilot study conducted in April 2020 with 47 respondents confirmed the survey instrument's reliability, utilising Cronbach's alpha as the metric for internal consistency. The reliability coefficients for the various constructs examined ranged from 0.75 to 0.92, exceeding the established acceptability threshold of 0.7 as recommended by Nunally (1978), thus demonstrating the questionnaire's satisfactory reliability. The specific Cronbach's alpha values were 0.92 for FWB, 0.88 for financial stress, 0.89 for financial behaviour, 0.78 for financial vulnerability, and 0.78 and 0.75 for the internal and external LOC, respectively, as presented in Table 2.

The Assessment of Convergent Validity and Composite Reliability for Each Construct

The study employed Confirmatory Factor Analysis (CFA) and Structural Equation Modelling (SEM) based on methodologies by Awang (2014, 2015) and Awang et al. (2018), focusing on construct, convergent, and discriminant validity for latent constructs' validation. Convergent validity was assessed using the Average Variance Extracted (AVE) with a threshold of >0.5. Composite Reliability (CR) was calculated to evaluate reliability, requiring a CR >0.6 for acceptability, aligning with standards set by Afthanorhan et al. (2020), Mahfouz et al. (2020) and Rahlin et al. (2020). Table 3 outlines the AVEs and CRs for all constructs, ensuring the study's measurements are valid and reliable.

The Structural Model and Structural Equation Modelling (SEM)

The study utilised Structural Equation Modeling (SEM) to explore the determinants of FWB, identifying financial stress as a predictive construct and LOC as a mediating factor. Table 4 presents the model fit indices,

Table 2
Cronbach's Alpha Reliability in the pilot-test (n = 47)

No	Scale	Total Items	Cronbach α
1	Financial Well-Being	10	0.92
2	Financial Stress	10	0.88
3	Financial Behaviour	10	0.89
4	Financial Vulnerability	10	0.78
5	Locus of Control (LOC)	8	Internal LOC: 0.78 External LOC:0.75

Table 3
Convergent validity and reliability for all constructs

Construct	Item	Factor Loading	CR (above 0.6)	AVE (above 0.5)
FWB	FWB2	0.67	0.89	0.54
	FWB3	0.61		
	FWB4	0.82		
	FWB5	0.80		
	FWB6	0.80		
	FWB7	0.66		
	FWB8	0.73		
LOC	LOC_IN_4	0.76	0.80	0.56
	LOC_IN_5	0.84		
	LOC_IN_6	0.62		
Financial Stress	FV12	0.65	0.92	0.63
	FV13	0.75		
	FV14	0.85		
	FV15	0.84		
	FV16	0.85		
	FV17	0.80		
	FV18	0.81		

categorized into absolute, incremental, and parsimonious fit. The RMSEA value of 0.053 and GFI of 0.928 indicate a good absolute fit. Incremental fit indices, including AGFI (0.901), CFI (0.965), TLI (0.956), and NFI (0.938), confirm a robust model fit. The parsimonious fit, represented by a chisq/df ratio of 2.207, further supports the model's adequacy.

These findings are visualized in Figure 4, which illustrates the structural equation model of FWB. The diagram highlights the relationships among financial stress, financial vulnerability, financial behaviour, and LOC in predicting financial well-being, using standardised estimates. This combined presentation of Table 4 and Figure 4 underscores the robustness and validity of the proposed model.

Mediation Analysis

The study on FWB among low-income households in Malaysia, detailed in Table 5, employed a comprehensive analytical approach to validate hypotheses related to financial stress, income, financial vulnerability, financial behaviour, and LOC.

Hypothesis H_a1 (Estimate = 0.389; p-value = 0.001) challenges the negative perception of financial stress by suggesting it may motivate improved financial management, thus enhancing FWB, a notion supported by Netemeyer et al. (2018). This hypothesis posits that increased financial stress reduces overall FWB, exacerbating economic hardship. The findings support this hypothesis, demonstrating that households' ability to achieve financial stability diminishes as financial stress intensifies.

Table 4
Index category and the Model Fit Level of Acceptance

Category	Name of Index	Index Value	Result	Indicator
1. Absolute fit	RMSEA	0.053	Achieved the requirement	Good
	GFI	0.928	Achieved the requirement	Good
2. Incremental fit	AGFI	0.901	Achieved the requirement	Good
	CFI	0.965	Achieved the requirement	Good
	TLI	0.956	Achieved the requirement	Good
	NFI	0.938	Achieved the requirement	Good
3. Parsimonious fit	Chisq/df	2.207	Achieved the requirement	Good

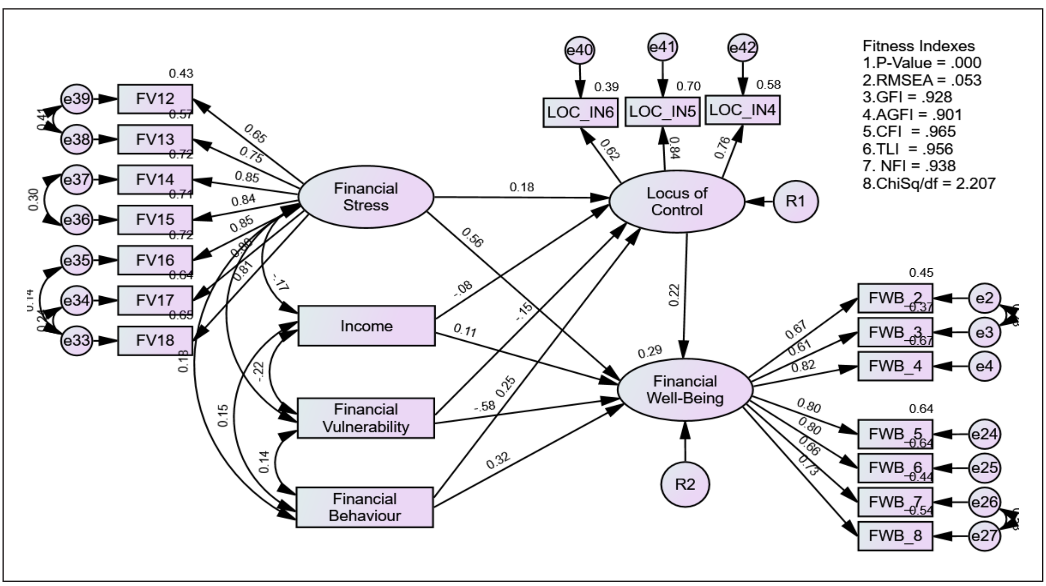

Figure 4. Structural equation modelling of FWB (standardised estimate)

H_a2 (Estimate = 0.005; p-value = 0.018) confirms that increased income positively impacts FWB, reflecting the findings of Magli et al. (2022). This hypothesis suggests that higher income levels lead to better FWB. Analysis confirms that improvements in household income are significantly associated with enhancements in their financial health, offering a buffer against economic instability. Moreover, based on findings reported in Table 5, FWB was least affected by income (B=0.005,

$p<0.05$) compared to other predictors ($p<0.01$). The findings in Table 5 indicate that income has a relatively minor effect on FWB, with a coefficient ($B=0.005$, $p<0.05$). This effect is significantly less impactful than other predictors ($p<0.01$). This observation necessitates reevaluating the traditional belief that income is the primary determinant of FWB.

Historically, income has been regarded as a critical indicator of an individual's financial health. However, the results of this study suggest that in the contemporary context, factors such as how individuals manage financial stress, their behavioural finance strategies, and their LOC play a more pivotal role in defining their FWB. These findings align with emerging perspectives in financial psychology that posit that FWB is increasingly influenced by personal management strategies rather than mere income levels.

Specifically, it is highlighted that while income contributes to financial security, its role is overshadowed by the effectiveness of financial behaviours, the ability to manage vulnerabilities, and the strength of an individual's LOC in influencing financial stability. This shift underscores the complexity of FWB in today's economic environment. It suggests that a broader range of factors should be considered in strategies to enhance financial health.

H_a3 (Estimate = -0.035; p-value = 0.001) indicates that financial vulnerability adversely affects FWB, highlighting the importance of resilience, as noted by Mahdzan et al. (2019) and Sabri and Aw (2020). According to this hypothesis, greater financial vulnerability, characterised by an inability to absorb financial shocks—adversely impacts FWB. The data corroborate this assumption, indicating that more vulnerable households experience lower levels of FWB.

H_a4 (Estimate = 0.052; p-value = 0.001) shows that prudent financial behaviours significantly improve FWB, aligning with insights from Netemeyer et al. (2018). This hypothesis asserts that engaging in beneficial financial behaviours such as saving, budgeting, and prudent debt management enhances FWB. The empirical evidence supports this relationship, highlighting the critical role of sound financial practices in improving economic outcomes.

H_a5 (Estimate = 0.033; p-value = 0.001) reveals a positive relationship between financial behaviour and internal LOC, suggesting financial conduct strengthens individuals' belief in their financial control, echoing Aryani and Khaddafi (2021). It is hypothesised that responsible financial behaviour fosters a stronger sense of personal control over financial outcomes. Findings affirm this relationship, suggesting that good financial habits enhance individuals' beliefs in their ability to control and improve their financial situations.

Further, H_a6 and H_a7 explore internal LOC's role, finding it serves as a mediator between financial behaviour and FWB (Direct effect Estimate = 0.270; p-value = 0.001) and directly enhances FWB (Estimate = 0.270; p-value = 0.001), advocating for a comprehensive FWB enhancement approach that includes economic, behavioural, and psychological elements. This hypothesis proposes that a higher internal LOC, where individuals believe they can influence their financial outcomes through their actions, contributes positively to their FWB. Results indicate that households with a more robust internal LOC exhibit better financial health, supporting the hypothesis.

This finding indicates that households with strong internal LOC beliefs and who actively apply them tend to enjoy improved FWB, in accordance with prior research findings (Magli et al., 2021). Those with a heightened internal LOC view life events as outcomes of their actions, fostering stability, motivation for achieving goals, and the capacity to make informed decisions—all collectively contributing to an enhanced FWB. As a result, they often exhibit reduced financial anxieties and increased satisfaction with their financial circumstances, as corroborated by earlier studies (Strömbäck et al., 2017).

The results outlined in Table 5 provide a compelling insight into the determinants of an individual's LOC. It is observed that financial or economic status—encompassing financial stress, income level, and financial vulnerability—does not significantly predict LOC ($p>0.10$). Contrarily, financial behaviour emerges as the sole significant predictor ($p<0.01$), indicating that LOC is primarily influenced by how individuals manage their financial activities.

These results align with the findings of Netemeyer et al. (2018), who demonstrated that financial behaviours significantly predict FWB. Similarly, Ponchio et al. (2019) found that financial literacy and positive financial behaviours are crucial determinants of FWB. However, unlike these studies, our research highlights the mediating role of LOC, which adds a psychological dimension to the understanding of financial behaviours and outcomes.

Brüggen et al. (2017) emphasised the complexity of FWB, suggesting that a multifaceted approach, which includes both objective financial metrics and subjective psychological factors, is necessary for a comprehensive understanding. These findings support this perspective by demonstrating how internal LOC mediates the relationship between financial stress, financial vulnerability, and FWB. This mediation effect underscores the importance of psychological resilience in managing financial stress and vulnerability.

The rationale behind LOC's significant mediating role can be attributed to the psychological empowerment it provides. Individuals with a strong internal LOC believe in their ability to influence their financial outcomes, which motivates them to engage in positive financial behaviours and effectively manage financial stress and vulnerability. This finding is consistent with the Resource Management Model (Deacon & Firebaugh, 1988), which posits that improved financial inputs and better financial management lead to superior financial outcomes.

This finding is critical, especially considering the potential for early intervention through education. Among the predictors of LOC, financial behaviour is unique. It can be effectively developed and enhanced through targeted educational interventions, such as financial management

Table 5
The direct and indirect effect for the path model of FWB

			Standardise Estimate	Estimate (Beta)	S.E.	C.R.	P	Result
Indirect Effect (A)								
LOC	<---	Financial Stress	.104	.181	.098	1.063	.288	Not Significant
LOC	<---	Income	-.003	-.078	.002	-1.429	.153	Not Significant
LOC	<---	Financial Vulnerability	-.007	-.149	.008	-.906	.365	Not Significant
LOC	<---	Financial Behaviour	.033	.250	.007	4.421	***	Significant
Indirect Effect (B)								
FWB	<---	Income	.005	.113	.002	2.371	.018	Significant
FWB	<---	Financial Behaviour	.052	.324	.008	6.270	***	Significant
FWB	<---	Financial Vulnerability	-.035	-.583	.009	-3.931	***	Significant
FWB	<---	Financial Stress	.389	.559	.107	3.631	***	Significant
Direct Effect (C)								
FWB	<---	LOC	.270	.222	.068	3.993	***	Significant

***The observed difference is statistically significant at the 0.001 level (two-tailed)
*0.05 Significant & 0.01 Significant

courses or comprehensive financial literacy training. The implication is profound for educational policy and curriculum design in schools and higher education institutions. By integrating structured financial literacy programs into the educational system, there is an opportunity to foster a more robust internal LOC among students, equipping them with the skills necessary to make informed financial decisions from an early age.

CONCLUSION

This analysis delves into the pronounced disparity in FWB among low-income households in Malaysia, pinpointing the LOC as a pivotal factor influencing financial behaviour. The study underscores the urgent need for interventions to enhance this demographic's financial literacy and decision-making skills. A comprehensive strategy is proposed, grounded in a conceptual model that interlinks financial stress, financial vulnerability, financial behaviour, and LOC, drawing from behavioural finance and psychology theories. This model advocates for empowering individuals by enhancing their financial knowledge and control, suggesting that a heightened LOC could lead to better financial decisions and improved FWB.

Identifying financial management deficiencies and poor financial practices among these households underscores the necessity for government and corporate interventions. These interventions should address immediate financial threats and engage low-income communities in understanding market dynamics and building beneficial networks. The strategy suggests a partnership model that aligns the resources of various stakeholders for mutual and societal benefits.

Assessing the community's readiness to adopt new financial education programs and services is critical. It involves evaluating existing infrastructure, resources, and cultural attitudes toward financial management and education to tailor programs that are both accessible and acceptable to the target audience. Collaboration with local organisations and utilising existing community networks are vital for seamlessly integrating these programs into daily life.

The findings from this study suggest several directions for future research that could provide deeper insights into the dynamics of FWB among low-income households. First, longitudinal research could explore the long-term effects of interventions to enhance financial literacy and LOC. Such studies would help determine the sustainability of financial behaviour and well-being improvements over time.

Second, there is a significant opportunity to examine the scalability of successful financial education programs across different regions and cultural contexts within Malaysia. Comparative studies could identify the modifications necessary to adapt these programs to diverse environments, enhancing their effectiveness nationwide.

Third, future investigations could also incorporate qualitative methodologies to understand better the personal and emotional impacts of financial stress and poor financial literacy on low-income individuals. Interviews and focus groups could provide rich, narrative data that reveal the underlying reasons for financial behaviours and the barriers to improving FWB.

Finally, incorporating more advanced statistical techniques and models in the analysis of FWB could yield more nuanced insights. Techniques such as machine learning and predictive analytics could identify patterns and predictors of FWB that are not apparent through traditional statistical methods. These future research directions extend the current findings and contribute to a more comprehensive policy framework that could significantly improve the financial stability and quality of life for low-income households in Malaysia.

Implications for Theory and Practices

The findings of this study have significant implications for both theory and practice in the realm of FWB among low-income households. Theoretically, the study advances understanding by integrating psychological constructs, particularly the internal LOC, into models of FWB. This approach enriches traditional models by incorporating subjective psychological factors alongside objective financial metrics, offering a more holistic view of financial behaviour and outcomes. Empirically, the study demonstrates that a strong internal LOC mediates the relationship between financial stress, financial vulnerability, financial behaviour and FWB, aligning with Expected Utility Theory and the Resource Management Model. These findings suggest that individuals with a higher internal LOC are more likely to engage in positive financial behaviours, enhancing their FWB.

Practically, the study underscores the need for financial education programs to not only improve financial literacy but also empower individuals by enhancing their internal LOC. Policymakers can use these insights to develop holistic policies that address both economic and psychological aspects of FWB, such as providing financial counselling and support services. Interventions should target financial vulnerability by building psychological resilience and improving financial management skills, offering emergency financial assistance and debt management services. Additionally, practitioners should integrate financial planning with psychological counselling to support informed financial decision-making. Community-based initiatives that promote financial literacy and empowerment can leverage local resources to provide accessible support, fostering a sense of community and shared responsibility.

In conclusion, the study highlights the critical role of internal LOC in mediating FWB among low-income households in Malaysia. By integrating psychological factors into FWB models and developing targeted interventions, stakeholders can enhance economically disadvantaged populations' financial stability and overall well-being.

Limitation and Recommendations

This research provides critical insights into the FWB of low-income households in Malaysia, yet several limitations need to be addressed in future studies. The primary limitation is the study's cross-sectional design, which restricts the ability to establish causality among the variables of interest. Longitudinal research would offer a more nuanced understanding of the temporal dynamics between financial behaviours, LOC, and FWB, revealing how these relationships evolve and the long-term effects of financial interventions.

This study's geographical and demographic focus also limits the generalisability of the findings. Expanding the demographic scope to include various income levels and age groups would enhance the robustness of the research. Such an approach would allow for comparative analysis across different socio-economic statuses and life stages, providing a broader perspective on the financial challenges and behaviours prevalent in different segments of the Malaysian population.

Finally, it is recommended that future research explore more sophisticated analytical techniques to deepen the understanding of FWB. Employing advanced statistical methods such as machine learning and predictive analytics could uncover hidden patterns and predictors of financial stability that are not evident through traditional methods. This approach would provide policymakers and practitioners with sharper tools for designing effective and adaptive interventions that meet the needs of Malaysia's diverse population.

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Cultural Identity Struggles of the Jahut in Malaysia

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ABSTRACT

This paper explores the challenges the Jahut community faces in preserving their cultural identity. In this study, Orang Asli communities, including the Jahut community, encounter various obstacles threatening their traditional ways of life. This study employed a qualitative approach, with data collected through semi-structured interviews with eleven members of the Jahut community from Kuala Krau, Pahang state of Malaysia. Four significant challenges to maintaining cultural identity are identified: modernisation, assimilation, leadership, and attitudes. The study's findings are significant because they highlight the necessity for policymakers to consider protecting the cultural identity of Orang Asli communities in Malaysia. It also makes a strong case for fostering respect for cultural diversity and recognising the rights of Orang Asli communities to protect their identity in the rapidly changing digital age.

Keywords: Assimilation, cultural identity, diversity, Orang Asli, preservation

INTRODUCTION

Approximately 476 million Indigenous people worldwide constitute about six per cent of the global population (International Labour Organization, 2019; United Nations, 2022). Indigenous communities have a long and complex history of cultural identity preservation, deeply intertwined with their histories, traditions, and ways of life (Ford et al., 2020). Cultural identity encompasses a wide range of elements, including language, traditions, spirituality, gender, and knowledge systems, and plays a vital role in the social, economic, and political well-being of Indigenous communities (Chiriboga, 2006; Fiedeldey-Van Dijk, 2019; Hall, 1990). Malaysia is a multi-ethnic, multi-cultural, and multi-religious country. Among the indigenous people of

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Malaysia are the Orang Asli communities, which comprise 18 distinct sub-ethnic groups. These ethnic groups are divided into three main categories: the Senoi, Negrito, and Proto-Malay, each with their own unique culture, beliefs, and language (Nicholas, 2000).

The Jahut community, a sub-ethnic group of the Senoi, is mainly populated in the Temerloh and Jerantut districts of Pahang state, with a population of approximately 6,383 (Jabatan Kemajuan Orang Asli [JAKOA], 2020). Diffloth (1976) indicated that the Jahut people are generally unfamiliar with the outside world. According to Carey (1976), Jah means "man", while Hut means "forest". The combination of both means "forest people". Most Jahut people live on the outskirts of the Krau River, which is in the Krau Forest Reserve in Pahang (Couillard, 1980). The Jahut community used to be nomadic but now lives in villages. In recent decades, the Jahut have embraced modernity and learned other languages to align with globalisation (Adam et al., 2018; Teoh, 1986). Although the Jahut children have grown up knowing their traditions, these traditions are quickly disappearing (Ghani et al., 2020; Teoh, 1986). However, this issue has received little attention by the respective authorities. Therefore, this paper explores the challenges faced by the Jahut community in preserving their cultural identity in Kuala Krau, Pahang.

LITERATURE REVIEW

Colonialism, globalisation, modernisation, nationalist projects, and assimilation policies have contributed to the erosion of the cultural identity of the Orang Asli communities in Malaysia (Nah, 2008; Nicholas, 2000). Colonialism has resulted in the acquisition of indigenous lands for economic exploitation and settlement, disregarding traditional land rights (Bulkan, 2016; Domínguez & Luoma, 2020). Globalisation and modernisation have greatly impacted Orang Asli cultures. Globalisation has expanded Western culture, incorporating Western values and technologies into indigenous societies (Resta, 2011). As a result, new practices and habits frequently clash with existing indigenous norms and values (Mustafa, 2006). Modernisation has resulted in alterations to their way of life, leading to the forsaking of traditional knowledge and customs that are crucial to the cultural distinctiveness of indigenous minorities (Aswani et al., 2018; Quinlan & Quinlan, 2007). Nowadays, *sewang* (traditional medical ceremonies) is rarely performed, as the Jahut community has opted for contemporary medical services provided by hospitals and clinics (Adam & Yusop, 2020).

The issue of whether to assimilate Indigenous populations into mainstream society is a multifaceted and contentious topic that has been the subject of discourse for several decades. Nationalist projects often emphasise a single, dominant culture, leading to pressure on indigenous peoples to assimilate and conform (Wolfe, 2006); similarly, Islamization programmes have also impacted indigenous people to assimilate. Assimilation proponents argue that it is essential to nurture societal cohesion and provide equal opportunities for Indigenous people. In contrast, opponents argue that assimilation erodes the distinct cultural identities of indigenous communities and may lead to the loss of their customs, dialects, and traditional practices (Gomes, 2004). Regrettably, the cultures, spiritualities, and languages of the Orang Asli are not receiving genuine support, encouragement, or endorsement from the government (Nicholas et al., 2010). Implementing assimilation policies hinders the preservation of cultural identity among Orang Asli communities. The assimilation of Orang Asli communities into the dominant culture has gradually lost their distinctive cultural heritage (Endicott & Dentan, 2004; Nicholas, 2002).

The loss of traditional knowledge due to displacement from traditional lands and the disruption of knowledge transmission from elders to younger generations weaken cultural identity (Alfred, 2009). Sani and Arif (2021) found that the art of wood carving in the Jah Hut community is diminishing due to modernisation, resulting in a decreased interest in preserving this ancestral heritage. Instead, they are more likely to seek alternative employment opportunities to improve their prospects of survival. Smith (1999) noted that the influence of dominant cultures, amplified by globalised media and consumerism, often results in cultural homogenisation and a decline in interest in traditional ways of life. Niezen (2003) also highlights the presence of internal conflicts within communities, such as disputes over cultural practices, leadership, or approaches to addressing historical injustices, which can impede efforts to rejuvenate cultural identity. McIntyre-Bond (2008) emphasises the impact of urbanisation, where migration to urban areas for education or employment can weaken cultural bonds and traditional knowledge, particularly among younger community members.

MATERIALS AND METHODS

A qualitative case study explored the challenges the Jahut community faced in preserving their cultural identity. This method allows for an in-depth exploration of the lived experiences and perspectives of the Jahut members, which offers rich insights focusing on the characteristics of assimilation, integration, and marginalisation. The inclusion criteria were: (1) Jahut people, (2) currently live in Pahang, Malaysia. This study involved eleven informants aged 16 to 62, including six males and five females with various occupations and education levels. Through purposive sampling, this study incorporated informants with varied backgrounds, expertise, and life experiences, which helps to enrich the dataset with a multitude of perspectives, thereby enhancing the depth and breadth of the findings.

Data were collected through semi-structured interviews conducted at convenient times for the informants to ensure engagement. Prior to conducting the interviews, the researcher provided the informants with a printed consent form that explained the purpose and importance of the research, along with their rights and responsibilities.

Interviews were audio-recorded with consent and transcribed verbatim. The researcher applied thematic analysis to information gathered from interview transcripts. Thematic analysis was performed using inductive coding to extract pertinent information. The researcher thoroughly read the transcripts and familiarised the data (Christou, 2022). Subsequently, coding is employed to organise the data into meaningful groups and generate themes (Braun & Clarke, 2006). Emerging themes were reviewed to ensure accuracy and relevance to the research questions (Christou, 2022). The themes and sub-themes were defined and described, and the coding was scrutinised multiple times to finalise the themes (Braun & Clarke, 2006). The process ends when data saturation is reached and no new themes emerge.

Ethical Consideration

This study was reviewed and approved by the Ethics Committee for Research involving Human Subjects Universiti Putra Malaysia and the Department of Orang Asli Development Malaysia. The researcher engaged with Jahut community leaders prior to the study to obtain permission and build rapport. Prior to gathering any data, every informant was given an overview of the study's objectives and methodology through an information sheet. The information sheet stressed that involvement in the study was voluntary while outlining the measures taken to safeguard confidentiality. A consent form was provided alongside the information sheet and signed by the informants. The researcher respected local customs by adapting the interview techniques to be culturally appropriate, ensuring that the study was ethical, respectful, and culturally sensitive.

RESULTS

Orang Asli communities have been associated with problems of customary land rights, political involvement, education participation, and malnutrition (Chew et al., 2022; Edo et al., 2013; Hamzah, 2013; Sawalludin et al., 2020). These problems are associated with their cultural identity as the customary land rights represent economic sustenance and symbolise the preservation of ancestral connections and spiritual legacy. Additionally, lack of political representation undermines their ability to assert cultural rights, while barriers to education participation hinder the transmission of indigenous knowledge. The analysis of the data obtained through the interviews revealed the challenges faced by the Jahut community in preserving their cultural identity.

Modernisation

Modernisation has significantly impacted indigenous cultures and traditions, pressing them to adapt to the rapidly changing world (Irwandi & Taufik, 2023; Karim & Hashim, 2012; Zainuddin, 2023). Lah (2014) stated that many Orang Asli communities face threats to language and way of life due to technological advancements. The findings of this study, consistent with Teoh's (1986) study, indicate that the Jahut community is increasingly exposed to external influences and has adopted modernisation, resulting in diverse impacts on their cultural identity.

> "The challenge now... it's like people are modern now... my mother is good at weaving, but I don't know how to do it because I didn't learn..." (Ema, female, 23 years old).

Another informant disclosed that the Jahut community faces difficulty retaining their traditional customs.

> "They said we can no longer continue with these traditional practices because it is hindering development... people said that it is Orang Asli who always set the snares and annihilate tigers... but actually the ones who annihilate tigers are not Orang Asli... this is also a culture of the Orang Asli for them to earn a living... that's what we're worried about too..." (Yus, male, 58 years old).

Furthermore, environmental changes due to modernisation, especially deforestation, appear to be a crucial factor that hinders efforts to preserve Jahut's cultural identity. One of the reasons why traditional healing practices are disappearing was provided by one informant:

> "It used to be in dreams... that is for the knowledge...but now we have to learn a lot because that used to come mostly from the forest. Now the forest is gone... the spirits of the forest are the ones who tell us..." (Yus, male, 58 years old).

Another informant also noted cultural changes in Jahut traditions, such as the *berkhatan* (circumcision) ceremony, as a result of modernisation.

> "Uhm... I see people are still practising it... but what I see is that sometimes they send their children to the clinic to be circumcised... if they don't want to do it through the traditional way..." (Jar, female, 45 years old).

Assimilation

The assumption that all members of a society will adopt the same social and economic patterns leads to the assimilation of indigenous cultures (Bala et al., 2020). However, this threatens the cultural identity of many Orang Asli communities (Gomes, 2004). The findings of the study revealed that assimilation into mainstream society is a significant challenge for the Jahut community. Language reflects cultural values, and proficiency can affect one's integration into the community (Rameka & Peterson, 2021). Mastering the Jahut language among the younger generation is at risk, with one informant admitting limited proficiency.

> "Language... uhm... I don't really know the language that is too deep... For example, in the next village, it's like going to their village; some speak a deep language, and then I don't understand what they mean..." (Harah, female, 25 years old).

Meanwhile, another informant shared her experience regarding the use of the Jahut language and *Bahasa Melayu*:

> "We speak Bahasa Melayu at home... Since childhood, I was taught in Bahasa Melayu because they (my parents) said it

would be easy to speak Bahasa Melayu later in school... My brothers and sisters all speak Bahasa Melayu, and my son also speaks Bahasa Melayu…" (Sam, female, 36 years old).

Some informants shared their observations regarding the new cultural elements adopted by the Jahut people in wedding celebrations, such as the bridal attire and live band during the wedding.

> "When we got married, we don't dress like a king... ordinary clothes... but today we have clothes like a king, and then wedding attire... at that time we didn't hire a band and so forth... but now, many things are new now... it seems like the culture will disappear... the original culture from generations... as if it is going to disappear..." (Lus, male, 62 years old)

> "What I see... changes about marriage... it's not like before... it used to be simple… now, there is dancing, bersanding, procession... I see the changes are from outside... we follow culture from outside..." (Ros, female, 50 years old).

The observations shared by the informants highlight a significant shift in the Jahut community's cultural practices, particularly in wedding celebrations, with the introduction of luxurious bridal attire and live bands. This suggests external influences and assimilation, leading to a gradual erosion of their original cultural identity.

Leadership

In Malaysia, *Tok Batin* refers to the Orang Asli village's tribal chief. It acts as a liaison agent between the Orang Asli communities and government agencies, the private sector, and non-governmental organisations. For various reasons, Orang Asli communities rely heavily on their leaders. Leaders are responsible for safeguarding the traditions of their people, and the communities look up to their leaders as role models and inspiration (Ottmann, 2005). Some informants in this study have shown their concerns towards the village leadership, which is crucial in ensuring the Jahut culture can be sustained effectively. One of the informants shared his views regarding the leadership in his village.

> "Maybe our efforts are very lacking. For example, whose responsibility it is to fix the situation in this village... Tok Batin... but Tok Batin doesn't care... and now one of them is politics... it's not just us with ICT and the Internet, but also with politics that's what causes us to divide again... divide again..." (Yus, male, 58 years old).

Another informant shared similar opinions regarding the issue of the village leadership.

> "When we want to do something, we must be together, every village head must be present... sometimes these village heads are quite difficult to cooperate... when we can't unite... this is an obstacle... if there is no consensus, then this is quite difficult... it is quite

difficult for us to discuss and to get coordination about cultural customs..." (Lus, male, 62 years old).

Furthermore, another informant highlighted that the leadership of the respective authorities should play a more significant role in assisting the community in preserving its culture.

"I tried to go to JAKOA (Department of Orang Asli Development) too, but I didn't write it in black and white... to do an activity... maybe with JAKOA, we can close the relationship again... but JAKOA too seems don't play the role... they requested a paperwork from me... I don't have time to do the paperwork... I need to work too..." (Yus, male, 58 years old).

Regrettably, ineffective leadership has not succeeded in unifying the village members, resulting in a lack of teamwork, especially among the younger generation of Jahut members.

"Even about gotong-royong sometimes, when we invite them, they don't even care, some don't come... even if they come, the percentage is very low... Because they prioritise themselves... for example, they said: if I come, what will I get... Some parents are concerned about this... but their children don't care either... stick to their stance..." (Yus, male, 58 years old).

Varying leadership practices within Orang Asli communities profoundly impact cultural identity. The *Tok Batin*'s role as a cultural custodian and mediator between the community and external entities is critical for preserving and transmitting cultural traditions. A proactive *Tok Batin* that prioritises cultural preservation promotes the transmission of traditional knowledge to future generations, maintaining cultural continuity. On the other hand, ineffective leadership hinders collective efforts to preserve cultural customs, potentially leading to fragmentation within the community and eventual loss of cultural identity over time.

Attitudes

According to Berry (1999), an individual's sense of belonging, purpose, social support, and self-worth can all benefit from developing a strong cultural identity. Ajibade et al. (2016) suggested that this might occur because of identifying with and receiving support from members of a cultural group who share and reinforce one's values, norms, responsibilities, and ways of life. Therefore, the attitudes of the community members towards the preservation of their cultural identity are vital in ensuring the cultural survival of the community. Some informants shared their views regarding the disappearance of Jahut's tradition, which resulted from the younger generation's indifferent attitudes towards cultural preservation. It led to the gradual disappearance of the pawang and valuable traditional medical practices. *Pawang* is regarded as having access to and influence in the world of good and evil spirits; typically, such people enter a trance state during a ritual and practice divination and healing (Skeat, 2005).

> "For example, pawang... now there are not many people are learning to become pawang... so... pawang are disappearing..." (Ema, female, 23 years old).

> "Only a few of them (pawang) in the Jahut villages... The problem now is that people are too lazy to do such work... lazy to learn... The old folks have died, after that there is no continuation of them... because the young people now, they are like not interested… they prefer the social life like other people..." (Lus, male, 62 years old).

> "Young people are not interested... old people cannot do anything on them... friends or children in the village are more into mobile phones... less participate in all those things... more towards the games..." (Izad, male, 22 years old)

> "The kids now don't care anymore... with customs... culture... tradition... everything they already don't care... I don't know what to say... back to the Internet earlier... they were playing... don't care about anything else... with the game..." (Yus, male, 58 years old).

Nonetheless, one informant noted that certain individuals' individualistic attitudes have contributed to the erosion or slow extinction of Jahut traditional knowledge.

> "One of the reasons is that person who knows (about the traditional medicine knowledge), he won't simply teach others... he put a lot of efforts to learn it, so he doesn't simply teach... so the knowledge, when he passed away, not many people will know... One of the reasons why Jahut's knowledge is getting less and less, he doesn't allow us to write, record... if he reads it, we have to memorise it..." (Dini, male, 38 years old).

On the other hand, some informants explained that they did not have the intention to abandon the Jahut's culture:

> "The challenges that I face... uhm... I don't know much about my own culture… I rarely take part… for example, for medical treatment right, the treatment that must look for leaves... I'm lacking knowledge because I'm still studying... I'm not very exposed..." (Izad, male, 22 years old).

> "I went out to work in Kuala Lumpur and came back here... only now I think about practicing the Jahut culture..." (Ney, male, 50 years old).

The findings revealed different mindsets and attitudes between older and younger generations of the Jahut community concerning the continuation of cultural traditions. Older generations demonstrate a strong dedication to preserving Jahut culture and expressing distress over losing traditional knowledge. Meanwhile, younger generations exhibit disinterest and indifference toward cultural traditions and favour modern activities such as mobile phones and gaming over cultural participation. This divergence in attitudes has significantly contributed to the decline of cultural practices within the community due to a lack of interest and involvement from the younger generations, impeding the effective transmission of traditional knowledge.

DISCUSSION

The findings revealed that the Jahut community had embraced modernity, but the younger generations might not have inherited all cultural knowledge, such as weaving, contributing to its disappearance. Ghani et al. (2020) indicated that modernisation and globalisation erode the Jahut tribe's culture, customs, and distinctive taboos. The Jahut people are facing numerous challenges as they struggle to integrate their traditional cultures with modern life. Stereotyped attitudes erroneously categorise Orang Asli's traditional behaviours as outmoded and inhibiting development, aligning with Mustapha et al.'s (2010) identification of external factors impeding Orang Asli's success, including competition and prejudice held by outsiders.

Wildlife hunting is crucial for indigenous communities' economic sustenance and cultural identity (Luz et al., 2015). Omar et al. (2021) asserted that Indigenous communities prioritise appropriate natural resource use. The Orang Asli communities demonstrate a profound respect for the natural environment, yet they have been unjustly held accountable for the decline of endangered species, overshadowing deforestation by others. Government initiatives promoting cash crops, industrialisation, and modernisation have adversely affected the Orang Asli, eroding their languages, cultures, and traditions, resulting in their dislocation, displacement, and marginalisation (Dhir, 2015; Mat Dong et al., 2022). The depletion of forests threatens traditional knowledge about medical treatments, which is critical for Jahut traditional healers. The land is a livelihood source and embodies cultural identity with spiritual values (Hood, 1993; Masron et al., 2013; Tuck-Po, 2002).

Land development has resulted from modernisation, presenting the Orang Asli communities with a dilemma: either they oppose the "development" and risk stigma or embrace it and risk displacement (Masron et al., 2013). Economic modernisation and development often stereotype Indigenous peoples as primitive, leading to discrimination and marginalisation (Kipuri, 2009; Nicholas, 2000). In fact, Orang Asli communities remain an impoverished group that experiences socio-economic and cultural marginalisation (Ismail et al., 2019; Masron et al., 2013). These communities are often marginalised due to their consistently poor performance in various socio-economic indicators (Othman et al., 2017; Zulkipli et al., 2021).

Malaysia's indigenous languages are at risk of extinction due to linguistic assimilation and the dominant use of *Bahasa Malaysia* in the education system

(Hamzah et al., 2022; Kijai, 2012; Lah, 2014). To promote values like personal development, nationalism, national identity, and harmonious coexistence, Malaysia has implemented civic and citizenship education as part of its curriculum (Moorthy et al., 2021). However, the emphasis on creating a shared national identity through compulsory schooling has contributed to the declining use of minority languages, which struggle to survive due to the dominance of *Bahasa Malaysia* as the national language and English as the widely used language in business and education. Numerous languages spoken by the Orang Asli have not been recorded or documented, making the future of these languages uncertain or even extinct (Abd Ghani, 2015; Ali, 2010). The Jahut language among younger generations is progressively diminishing, and the Jahut language is classified as a severely endangered language (UNESCO, 2007).

Regrettably, ethnic minorities have been treated unequally in various ways (Gill et al., 2016; Khong et al., 2021). They have consistently been compromising their interests without equal development opportunities. The Orang Asli communities confront so many unique challenges, from poverty-related obstacles to a lack of *Bahasa Malaysia* fluency to a dearth of educational resources and a lack of regional mobility; thus, a one-size-fits-all curriculum may not be the best approach (Wong & Abdillah, 2017). Apparently, a lack of sensitivity to minorities' religious and cultural norms and practices in the curriculum is a major contributor to the loss of cultural identity among these groups (Masron et al., 2013).

Among the four characteristics of the acculturation model by Berry (1980), assimilation is the most common characteristic observed in this study, highlighting the pressure on the Jahut community to assimilate, potentially leading to the loss of language, beliefs, and traditional practices. The findings revealed that the Jahut language is diluting as the younger generation of Jahut are keen to communicate in *Bahasa Melayu* at home to help them adapt more quickly to school and future employment, aligning with Berry's model where indigenous minorities may choose to assimilate into the dominant culture to gain social and economic advantages. It can result in the loss of their cultural identity and a disconnection from their traditional ways of life (Berry, 1999). The integration characteristics are also present, with the Jahut community struggling to integrate their traditional culture with modernity. For instance, the Jahut community is depicted as struggling to integrate their traditional culture with modernity, implying a compromise between their heritage and contemporary influences. Furthermore, the participation of the Jahut community in modern economic activities, such as migration for job opportunities, demonstrates characteristics of integration. It shows that the Jahut community are interacting with mainstream culture and adjusting to current economic structures.

The findings also showed that leadership issues, such as lack of quality leadership and politics, exacerbate divisions among community members, making it difficult to preserve their culture. The role of JAKOA is acknowledged but criticised for bureaucratic inefficiency. Mustapha et al. (2010) indicated that the local authorities oversee local welfare and day-to-day operations. However, they cannot take on the role of transformational leaders to affect meaningful change among the Orang Asli youth. Furthermore, the findings revealed that attitudes among community members, particularly the younger generation's indifference, pose a threat to the disappearing culture of the Jahut community. Declining interest in traditional practices, such as becoming a *pawang* and leading traditional knowledge, such as traditional medical practices, is in jeopardy of extinction (Adam & Yusop, 2020). The transfer of indigenous knowledge has become increasingly challenging over time due to the inherent limitations of human memory (Azubuike & Aji, 2021). The situation deteriorated when the elderly groups passed without leaving behind successors. Therefore, parents and institutions need strategic approaches to inculcate indigenous knowledge.

Meanwhile, the informants who frequently leave the village indicated they cannot engage in the Jahut tradition due to their academic and work commitments. In fact, the migration of rural workers to urban areas has created a generational gap between youngsters and traditional knowledge holders, resulting in the loss of indigenous languages (McNaught, 2019). Similarly, the culture, traditions, and distinct taboos of the Jahut tribe are believed to be vanishing due to the currents of modernisation and globalisation. However, certain unique rituals and taboos are still practised among them (Ghani et al., 2020). Therefore, parents and institutions need strategic approaches to inculcate indigenous knowledge.

CONCLUSION

In conclusion, cultural identity preservation in the Jahut community presents complex and multifaceted challenges involving assimilation, modernisation, leadership issues, and attitudinal hindrances. This study offers a broader understanding of the ways indigenous communities preserve their distinctive identities in a world that is becoming increasingly digital. A deeper level of interaction with these communities is necessary to ensure the preservation of their traditions and voices in the modernisation process. The preservation of indigenous cultures is not only a matter of cultural heritage but also a crucial element of human diversity and ecological sustainability.

Implication for Theory and Practice

The contribution of this study suggests potential expansions of the Acculturation Model to better encompass the cultural complexities specific to the Jahut community. It could contribute to a more comprehensive theoretical framework that accounts for how individuals within indigenous tribes negotiate their cultural identities amidst broader societal changes. This study highlights the necessity for specific interventions and policies that support fairness, respect for diversity, and cultural sensitivity among Malaysians. The findings of this study provide guidance for integrating ICT, which can be beneficial for individuals working to foster further ICT development and empowering Indigenous communities that have yet to adopt ICT, helping them shift from traditional approaches to incorporating ICT in their endeavours to preserve their cultural heritage. This study is expected to be beneficial in evaluating National Culture Policy, such as enhancing ICT accessibility and digital literacy and providing funds for community-led cultural preservation initiatives. These initiatives are crucial in ensuring inclusivity across all ethnic groups and minimising the digital divide. Otherwise, lofty slogans will remain mere rhetoric.

Limitations and Recommendations for Future Research

This study possesses various limitations that necessitate consideration. Among these limitations is the use of a small sample size and the exclusive focus on a single sub-ethnic group within the Orang Asli community. While this qualitative study provides valuable insights into individual experiences, it may lack the quantitative data required for a thorough analysis. As a result, the findings cannot be generalised into different contexts. Future studies should, therefore, aim to reproduce these findings with larger and more diverse samples encompassing various sub-ethnic groups of the Orang Asli to enhance the generalizability of the findings.

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Exploring the Role of ICT in Promoting and Preserving Kadazan-Dusun Culture

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ABSTRACT

ICT has transformed daily life, but many cultures risk being forgotten as technology advances and values shift. While ICT use in cultural heritage is growing, communities need to take the lead in using it for preservation. For ICT to support cultural preservation, it must be accessible and provide platforms for documentation and sharing. Although the government has invested heavily in ICT in Malaysia, indigenous communities in Sabah, like the Kadazan-Dusun, have not benefited equally, raising concerns about their ability to preserve their culture using ICT. This paper investigates (1) the determinants of ICT adoption in cultural preservation and (2) how it impacts Kadazan-Dusun culture. A mixed-method approach with a sequential explanatory design was employed, beginning with quantitative data collection from 400 respondents, followed by qualitative data from in-depth interviews with 12 key informants. Descriptive and regression analyses were used to examine the ICT adoption determinants, while thematic analysis explored its impacts. Findings indicate that social influence (SI) has the strongest significant influence on cultural preservation within the Kadazan-Dusun community, highlighting the community's reliance on social networks to drive technological engagement for preserving cultural heritage. The interviews reveal that ICT adoption positively supports cultural preservation efforts by facilitating easier documentation, sharing, and promotion of cultural practices through various digital platforms despite the challenges posed by modernization and limited resources. The study underscores the importance of integrating cultural factors into technology adoption models, such as UTAUT. It highlights the role of social influence and facilitating conditions, such as enhancing ICT accessibility and affordability and providing skills training, to enable successful ICT adoption for cultural preservation among the Kadazan-Dusun community.

Keywords: Culture, Information and Communication Technology (ICT), Kadazan-Dusun, preservation, UTAUT

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INTRODUCTION

The rapid advancement of ICT over the past decade has significantly impacted cultures and indigenous communities worldwide, many of whom still face severe poverty and lack basic necessities (United Nations, 2003). Native communities grapple with land rights, language, and cultural preservation issues while experiencing discrimination in accessing technological tools within a globalized context (Ashraf et al., 2015). In Malaysia, there has been significant government investment in ICT infrastructure. However, the Kadazan-Dusun community has not fully benefited from these advancements in terms of cultural preservation. The Kadazan-Dusun community struggles with cultural preservation due to modernization (Chong, 2015), language shift (Lasimbang & Kinajil, 2000), external influences, and intergenerational disconnection (Adam et al., 2021; Cosmas et al., 2019). It could be due to several barriers, including limited access to technology, lack of digital skills, and minimal community engagement in ICT adoption for cultural purposes (Affendi, 2024). As a result, the community risks losing its cultural heritage in the face of rapid technological change.

This study addresses key gaps in the literature by focusing on ICT adoption for cultural preservation in the context of an indigenous community in a developing country, Malaysia. Specifically, it explores the determinants of ICT adoption among the Kadazan-Dusun community in Sabah, Malaysia, and examines how ICT usage impacts the preservation of their cultural heritage. By integrating cultural factors into the widely used Unified Theory of Acceptance and Use of Technology (UTAUT) model, this study provides new insights into how social influence, facilitating conditions, and access barriers shape ICT adoption in culturally rich but technologically underserved communities. Furthermore, it addresses the lack of empirical data on how indigenous groups utilize ICT for cultural preservation. It offers a novel contribution to developing countries' technology adoption literature and cultural studies.

Cultural Preservation

Cultural preservation is crucial for maintaining a community's identity and heritage by safeguarding traditions, values, and practices passed down through generations. Without these efforts, cultural elements risk disappearing and eroding community identity (Hutson et al., 2024). As societies modernize, their cultural norms and practices often change. King (1993) noted that traditional culture is dynamic, adapting and evolving with modernization to meet contemporary needs. While older generations may uphold traditional practices, younger generations, particularly millennials, may not adhere as closely. Technological advancements have influenced cultural evolution, shifting how traditions are practiced and taught. Historically, cultural education was passed down orally from elders, but now, people of all ages can learn about their culture and others through the Internet. Communities actively promote their heritage online, often with pride (Jati, 2023).

ICT is critical in safeguarding and enhancing cultural heritage but also a double-edged sword. Numerous studies have found that ICT has a positive impact on cultural preservation, particularly in terms of facilitating access to cultural resources, improving cultural education, and fostering cultural exchange and collaboration (Banfi et al., 2019; Fang et al., 2021; Gizzi et al., 2019; Khong et al., 2021; Manikowska, 2022).

Sabah, a Malaysian state known for its abundant natural and human resources and culturally diverse population, faces the threat of language loss due to migration, changing attitudes, education, social dynamics, and economic pressure (Ali, 2010). The Kadazan-Dusun community, Sabah's largest ethnic group, continues to face development challenges, political hegemony, and ongoing marginalization (Puyok & Bagang, 2011). Amid these challenges, the Kadazan-Dusun community has struggled to preserve its cultural heritage.

Chong (2015) found that Kadazan-Dusun traditional musical instruments are gradually disappearing due to the rise of modern instruments. Cosmas et al. (2019) emphasized that while efforts to preserve these traditions remain, more community and organizational involvement is needed to raise awareness, especially among the younger generation. Similarly, Adam et al. (2021) discovered that Dusun and Bajau youths, influenced by foreign cultures through mass media, are becoming detached from their Indigenous heritage, which discourages them from learning their own culture (Tang & Gavin, 2016).

Alpeus and Hussain (2018) found that social media significantly impacts cultural heritage, particularly folklore, among youth engaged with entertainment platforms. Aslom (2019) found that while some traditional Kadazan wedding practices, such as sogit pitas and nopung payment, are still practiced in Kampung Maang, others have been modified or discontinued to fit modern contexts.

Unified Theory of Acceptance and Use of Technology (UTAUT)

This research integrates the Unified Theory of Acceptance and Use of Technology (UTAUT) by Venkatesh et al. (2003), commonly used in Information Technology adoption studies. A limitation of UTAUT is its focus on individual-level factors, overlooking broader social, cultural, and institutional influences on technology adoption (Bozan et al., 2016; Joa & Magsamen-Conrad, 2021; Magsamen-Conrad et al., 2020). Olushola and Abiola (2017) emphasize the importance of community participation and addressing cultural issues for successful technology diffusion

The UTAUT model identifies four key factors in determining user acceptance and use of technology to fit the context of cultural preservation: performance expectancy, effort expectancy, social influence, and facilitating conditions.

Performance Expectancy refers to the degree to which individuals believe using

ICT will help them achieve better outcomes. This study captures how the Kadazan-Dusun community perceives ICT as a tool for enhancing cultural preservation efforts, including documentation, dissemination, and promotion of their cultural heritage.

Effort Expectancy reflects the perceived ease of using ICT. For the Kadazan-Dusun community, where digital literacy levels may vary, this variable examines how the complexity or simplicity of ICT tools affects adoption for cultural purposes.

Social Influence refers to how others influence individuals' decision to adopt technology. This variable is particularly significant in the Kadazan-Dusun context, where community norms, peer influence, and the guidance of family members or elders play a strong role in decision-making processes.

Facilitating Conditions assesses the availability of resources and support required to use ICT. In the context of the Kadazan-Dusun community, this variable captures the practical factors, such as access to the Internet, hardware, software, and skills training, that either enable or constrain the community's ability to use ICT for cultural preservation.

The UTAUT model is particularly well-suited for studying ICT adoption in cultural preservation because it accounts for technical factors, such as performance and effort expectancy, and social dynamics, like social influence and facilitating conditions. In a close-knit community like the Kadazan-Dusun (Grace, 2021), social influence plays a crucial role in shaping collective decisions on technology adoption, making the model ideal for capturing how peers, family, and community leaders drive ICT usage. Additionally, the model's emphasis on facilitating conditions, such as access to resources and digital skills, helps address the practical barriers faced by resource-constrained communities. It makes UTAUT a comprehensive framework for examining the factors influencing ICT adoption for cultural preservation.

METHODS

This study employed a mixed-method approach using sequential explanation. In the initial stage, the researchers collected and analyzed quantitative data on the factors influencing ICT adoption. Subsequently, qualitative data were collected to delve deeper into the participants' perspectives, providing nuanced explanations and interpretations of the quantitative results. This design was selected because it allows for a comprehensive understanding of ICT adoption, particularly in a community-driven context like the Kadazan-Dusun, where quantitative data can highlight key factors, and qualitative interviews can explore the cultural nuances behind those findings.

This study was conducted in Penampang and Ranau, Sabah. The first data collection phase occurred in Penampang from 14 December 2021 to 25 December 2021, while the second phase occurred in Ranau from 8 August 2022 to 14 August 2022. Penampang was chosen because it has a significant Kadazan-Dusun population, while Ranau was selected for its large number of Dusunic speakers (John, 1996; Jolius, 2023).

Due to logistical challenges in accessing a dispersed population, 400 participants were selected using convenience sampling from Penampang and Ranau based on their familiarity or proficiency with technology. Convenience sampling was chosen due to the practical constraints of accessing specific populations within the Kadazan-Dusun community, especially given the logistical challenges of conducting research in rural and geographically dispersed areas. However, the use of convenience sampling introduces potential biases, as the sample may not fully represent the broader Kadazan-Dusun population. Efforts were made to include diverse respondents from different geographical areas and age groups.

The primary data collection instrument for the quantitative phase of this study was a structured questionnaire developed based on validated scales from previous research on ICT adoption, particularly those adapted from Sarjit et al. (2019). The questionnaire was divided into two sections: the first focused on factors influencing ICT adoption, while the second examined the impacts of ICT adoption on cultural preservation. The items in the questionnaire were specifically tailored to the cultural context of the Kadazan-Dusun community and were designed to measure key variables derived from the UTAUT model. A forward and backward translation process was employed to ensure the validity of the translated questionnaire. First, a bilingual expert translated the questionnaire from English to Malay, followed by a back-translation by a different expert to identify any discrepancies. Subject matter experts reviewed the translation for cultural appropriateness, and a pilot test was conducted with a small sample from the Kadazan-Dusun community. Based on the feedback, minor adjustments were made to ensure the clarity and cultural relevance of the translated items, thereby enhancing the validity of the instrument.

A reliability test was conducted on 78 questionnaire items, revealing a Cronbach's Alpha of 0.916 for 21 items in Section A (Factors Influencing ICT Adoption) and 0.974 for 57 items in Section B (Impacts of ICT Adoption on Cultural Preservation). According to George and Mallery (2003), Cronbach's Alpha value above 0.7 is acceptable, indicating satisfactory internal consistency.

Descriptive analysis was used to summarize demographic data and quantify the mean of ICT adoption factors and their impacts on cultural preservation. Multiple regression analysis identified factors influencing ICT adoption for cultural preservation in the Kadazan-Dusun community

Data collection included in-depth interviews, which continued until information saturation was achieved or at the informants' request. The qualitative phase involved twelve key informants with expertise in cultural preservation, ensuring valuable insights were gained to mitigate potential biases. Their identities were anonymized using pseudonyms. Key themes were noted, and interviews were transcribed for analysis. NVivo software was used to organize data into categories or "nodes." Relevant quotes were categorized and assigned to corresponding nodes, followed by thematic analysis to identify patterns and themes in the data, aiding in the interpretation of qualitative data. The findings from both data sets were integrated by comparing the quantitative results with qualitative insights, allowing the thematic analysis to explain and contextualize the statistical findings, offering a comprehensive understanding of ICT adoption in the Kadazan-Dusun community.

RESULTS

Respondent's Background

The respondents' profile indicates that both genders constitute a significant segment of the total sample, with males representing 53.75% and females 46.25%. About 51.5% of respondents completed their primary to secondary level education, while only 29.8% pursued tertiary education for diploma, bachelor's degree, and Master/PhD. However, 10.8% of respondents stated that they had no formal education. A significant proportion, 41.75%, earn less than RM1,000 per month, while 22% earn less than RM4,000 per month. Nonetheless, 33.25% of respondents did not want to reveal their earnings.

Performance Expectancy

From the four statements mentioned in Table 1, the respondents showed the highest mean score, 4.27, in using ICT to promote their culture. However, the mean scores did not show a significant difference in finding information, learning the uniqueness of the culture, enhancing knowledge of the culture and preserving the culture.

Effort Expectancy

From the four statements mentioned in Table 2, the respondents showed the highest mean score, 4.14, in which ICT facilitates them in sharing their cultural knowledge, followed by promoting their culture, 4.11. However, the mean scores did not show a significant difference in facilitating learning about their culture and increasing their skills in preserving it.

Social Influence

From the six statements mentioned in Table 3, the respondents showed the highest mean score, 3.80, where the community influences them to use ICT to promote their culture. However, the difference in the mean scores did not show a significant difference in terms of family, relatives, friends, government and religious influences.

Facilitating Conditions

From the six statements mentioned in Table 4, the respondents scored the highest mean score, 3.75, in terms of having the opportunity to use the Internet with the available facilities in their area. The respondents think financial resources are not a barrier to using ICT to preserve their culture, with a mean score of 3.51. In terms of access to ICT tools and allocating time to use ICT to preserve their culture, the respondents scored a mean score of 3.42. Among all the statements, ICT skills and internet connectivity became the main concern, with the lowest scores of 2.95

Table 1
Mean score of performance expectancy

	Statement	Mean
1.	ICT facilitates me in finding information about my culture easily.	4.10
2.	ICT saves time in learning about the uniqueness of my culture.	4.03
3.	Using ICT can enhance my knowledge of my culture.	4.08
4.	ICT is useful in preserving my culture.	3.98
5.	ICT is useful in promoting my culture.	4.27

Table 2
Mean score of effort expectancy

	Statement	Mean
1.	ICT facilitates me learning about my culture.	4.03
2.	ICT helps me promote my culture.	4.11
3.	ICT increases my skills in preserving my culture.	3.95
4.	ICT facilitates the sharing of my cultural knowledge.	4.14

Table 3
Mean score of social influence

	Statement	Mean
1.	Family influences me to use ICT to maintain my culture.	3.58
2.	Relatives have influenced me to use ICT to preserve my culture.	3.49
3.	Friends have influenced me to use ICT to improve my cultural knowledge.	3.72
4.	Community influences me in using ICT to promote my culture.	3.80
5.	The government encourages me to use ICT to preserve my culture.	3.56
6.	Religion influences ICT usage in personal development for the purpose of preserving my culture.	3.21

Table 4
The mean score of facilitating conditions

	Statement	Mean
1.	Financial resources are not a barrier when using ICT to preserve my culture.	3.51
2.	I have access to ICT hardware and software to preserve my culture.	3.42
3.	I am able to allocate time to use ICT to preserve my culture.	3.42
4.	I do not have sufficient ICT skills to preserve my culture.	2.95
5.	I have the opportunity to use the Internet because there are available facilities in my area.	3.75
6.	When I want to use ICT, my area's Internet connectivity is unstable.	2.48

and 2.48, respectively. This means that the respondents do not have sufficient ICT skills, and poor internet connectivity affects their adoption of ICT.

Table 5 shows the impact of ICT adoption, which has the highest mean score on ethnic festivals, followed by arts, traditional food, dress, language, traditional medicine, and beliefs and rituals. The mean score, 3.94, showed that the Kadazan-Dusun felt that the ICT has the greatest impact on preserving the ethnic festival compared to the other cultural elements. This could be possible due to the ethnic festival Pesta Kaamatan, largely celebrated annually by the community and can be easily promoted through digital platforms across the local and global community. Research by Rahman et al. (2022) highlighted that technology innovation is a marketing tool for branding a country's destination image. As a result, it is not only about using tools to transform a festival into a smart festival; it also provides another orientation in which technology is used to transform tourist experiences, improve tourist satisfaction, and create more potential consumers (Nguyen et al., 2019).

Table 5
Impacts of ICT adoption on cultural preservation

Elements	Mean Score
Impacts on Ethnic Festival	3.94
Impacts on Arts	3.91
Impacts on Traditional Food	3.87
Impacts on Traditional Dress	3.85
Impacts on Language Preservation	3.84
Impacts on Traditional Medicine	3.76
Impacts on Beliefs and Rituals	3.71

Factors that Influence ICT Adoption on Cultural Preservation

The regression analysis (Table 6) showed that all four independent variables are significantly predictive of the dependent variable, cultural preservation, with a p-value < 0.05. In terms of strength of influence, the findings suggest that social influence (SI) has the strongest significant influence compared to all the other four factors ($\beta = 0.312$, $p = 0.000$). The second in terms of strength of influence is effort expectancy (EE) with $\beta = 0.230$ and $p = 0.001$, followed by performance expectancy (PE) with $\beta = 0.203$ and $p = 0.002$. Among the four, facilitating conditions (FC) reflected the weakest influence on cultural preservation ($\beta = 0.104$, $p = 0.018$).

Impact of ICT Adoption on Cultural Preservation

Overall, the respondents do not see any negative impact of ICT on the community's culture. Instead, ICT becomes an important tool when used effectively to preserve culture.

> "I don't see any negative impact as ICT comes in into the livelihood and lifestyle of the cultural community, more to

Table 6
Regression analysis of factors influencing ICT adoption on cultural preservation

Variables	Beta	p
Performance Expectancy	0.203	0.002
Effort Expectancy	0.230	0.001
Social Influence	0.312	0.000
Facilitating Conditions	0.104	0.018

> complement actually. It's only when you misuse it, abuse it, then have an impact, negatively la... but if you use it for the right purpose, then it should not be a problem" (Frank, male, 60 years old).

Other than that, ICT becomes an educational tool for the younger generation to learn about different cultural elements of their own community. It is very easy to access and also easily captures the attention of the children with attractive illustrations on social media.

> "Nowadays, you want to know what is Sumazau maybe? So, if your parents, that one you can easily... and they have lot of information in the ICT. There is this program we went for the award; they want to us to show the Sumazau... so, I clicked Oh, I found this very nice YouTube and also a picture that labels the part of the costume... Ah, so that's ICT... So, children can get access is very, very easy" (Rina, female, 60 years old).

Besides, one of the respondents claimed that cultural preservation takes place when the community promotes its local produce on the Internet. This will also generate economic sustainability for the community, which mainly depends on the proceeds from selling the local produce.

> "It would sustain your cultural preservation because let's say this kind of products... if you can put it in the market and monitor them and everything is to ICT. Yeah, you can sell and then people will continue producing it and as a result your culture will be preserve" (Frank, male, 60 years old).

The verbatim above demonstrates the economic benefits of ICT in supporting cultural preservation. In hindsight, it also suggests that cultural practices could be commodified. While ICT offers opportunities for the community to market their traditional crafts and foods, it raises questions about the commercialization of culture and the extent to which these practices remain authentic when presented for economic gain. It reflects broader concerns about how ICT can support and reshape cultural practices in ways that may not align with traditional values.

Furthermore, ICT has helped promote community festivals in the local context and worldwide. One of the important festivals for the Kadazan-Dusun community is the Pesta Kaamatan, which has also helped foreigners understand the community's culture.

> "Because I have seen how ICT has played a major role in promoting this, not just locally but internationally. And I've seen how people got attracted to Borneo because of ICT. In the Europe in the different country, they romanticize about how Borneo is has headhunting blah, blah, actually, it is not la, the way it's presented, the way is package, it attracts a lot of potential" (Adian, male, 40 years old).

Moreover, the Internet allows the community to discuss and promote its culture through an online forum.

> "Actually, I have one nephew in US, his name is Richard, he owns a restaurant there. so we used to communicate through ICT, organize forum for the event of promoting culture, also this tarian and various research on food. I don't know whether you ever come this Borneo cuisine and traditional culture and all this… online forum... worldwide... during the Kaamatan also got forum about culture" (Hannah, female, 40 years old).

Hannah uses digital tools like ICT to communicate and promote her cultural heritage, particularly through forums focused on traditional dances and culinary research. By participating in global discussions, including those about Kaamatan, she helps preserve and spread local cultural practices.

The qualitative insights from the informants have substantiated various methods by which ICT facilitates the preservation, promotion, and transmission of cultural practices. ICT is essential in preserving cultural identity through education, economic opportunities, global promotion, and cross-border communication. Despite apprehensions regarding the commodification of culture, the prevailing conclusion is that ICT, when employed purposefully, enhances the cultural community by increasing accessibility to traditions and cultivating pride in cultural heritage. The responses from participants indicate that ICT is viewed not as a threat but as an essential and beneficial element for cultural preservation.

DISCUSSIONS

The regression analysis outcomes demonstrate that cultural preservation is significantly predicted by the four independent variables: performance expectancy, effort expectancy, social influence and facilitating conditions. Based on the results obtained, it can be inferred that these variables are vital in influencing individuals' decisions to adopt ICT tools for preserving culture.

The findings indicate that social influence is the strongest predictor of ICT adoption for cultural preservation, aligning with previous research on the role of social norms in shaping technology adoption (Venkatesh et al., 2003). The Kadazan-Dusun community is known for its close-knit and communal nature (Bagang et al., 2021; Grace, 2021), where the influence of family members, peers, and community leaders is deeply embedded in decision-making processes. The influence of the social circle on the adoption of technology is highly relevant to a communal society like the Kadazan-Dusun in Sabah, where the community holds a great sense of respect towards their leaders and maintains strong community relationships (Lajuni et al., 2022).

The strong influence of social factors, particularly family ties, community engagement, and cultural leadership, suggests that future ICT adoption strategies in similar communities should focus on leveraging these dynamics to drive technology use. Family-centered ICT programs that encourage intergenerational learning and cultural documentation can foster collaboration, while community leaders and peers can act as ICT champions, promoting its benefits for cultural preservation. Strategies should also be culturally sensitive, ensuring that the technologies introduced align with traditional values and practices. Collaborative initiatives, such as community-based digital platforms, could enhance ICT adoption by providing spaces for cultural exchange and economic sustainability, making technology more appealing and relevant to the community.

Facilitating conditions like internet skills, connectivity, and stability are crucial for effective ICT adoption in cultural preservation. In Sabah, technology introduction is still in the early stages, with significant disparities in digital access between urban and rural areas (Fang et al., 2022). It mirrors findings from research on telemedicine acceptance in rural Pakistan, where social influence and facilitating conditions significantly impact user behavior toward new technology (Kamal et al., 2020).

According to the in-depth interviews with key informants, ICT adoption has a positive impact. Most respondents saw no negative impacts of ICT on their community's culture. If used correctly, ICT is a useful tool that supplements cultural preservation efforts. This research supports the argument that ICT can help cultural preservation by increasing access to information and promoting cultural practices. While this study found no significant negative impacts of ICT on cultural preservation, this assertion should be considered cautiously. The positive perception of ICT among respondents may reflect early-stage adoption, where benefits like increased access to cultural information and global promotion are more immediately recognized. However, unintended consequences may still emerge over time. For instance, ICT could inadvertently lead to cultural homogenization or the dilution of traditional practices, as younger generations may adopt more modern interpretations of cultural elements. Additionally, over-reliance on digital platforms for cultural preservation could result in losing physical or intangible heritage aspects, such as oral traditions or rituals that require personal interaction.

The verbatim highlights that ICT has become a valuable educational tool for younger generations to learn about their cultural heritage. Unlike traditional oral education from parents, ICT allows easy access to information on cultural elements such as traditional dance, costumes, and local produce, aiding in the preservation of cultural practices and artifacts. ICT makes learning culture more engaging, offering appealing content like illustrations, games, and videos through social media platforms (Ibrahim, 2022; Zhou et al., 2019).

Furthermore, ICT adoption has provided a means for locals to earn a living by marketing their products to tourists. The informants discussed the benefits of promoting local produce on the Internet while supporting cultural preservation efforts. It is consistent with findings that social media has become a supporting factor in promoting the Melukat ritual culture towards cultural tourism and protection in Bali (Rahayu et al., 2023).

The verbatim illustrates how ICT has helped the Kadazan-Dusun community promote global festival participation, particularly for Pesta Kaamatan. This festival has attracted international interest, enhancing cross-cultural understanding and appreciation. During the COVID-19 pandemic, the community used social media to livestream the Sabah Harvest Festival, allowing local and global participation (Annuar & Dawayan, 2022). This virtual approach promoted cultural diversity and unity, highlighting the role of social influence in engaging both local and foreign audiences. The shift to online platforms has increased the festival's outreach and engagement. When it comes to cultural preservation, the influence of the local community is crucial, and policy implementation can play an important role (Nam & Thanh, 2024).

The participants claimed that with the adoption of ICT, discussions about their culture can be conducted through online forums. This is especially true during a pandemic when everyone's movements are restricted. It is when ICT played an important role in facilitating collaboration and the exchange of ideas among different cultures, directly aiding in preserving Malaysia's unique cultural diversity. These findings align with Susanti and Koswara (2017), who found that technological advancements have given rise to new media like Facebook and blogs, enabling broader dissemination of thoughts related to the Sundanese language and culture while reaching a larger target audience.

CONCLUSION

This study reinforced the UTAUT model by confirming that performance expectancy, effort expectancy, social influence, and facilitating conditions are crucial for technology adoption. Social influence emerged as the strongest factor in ICT adoption for the Kadazan-Dusun community, shaping their attitudes and behaviors. The study also highlighted the community's digital divide regarding ICT skills and access. Moreover, it demonstrated that UTAUT is applicable in cultural contexts, particularly for the Kadazan-Dusun community. The research showed that ICT can aid cultural preservation by enhancing access to information, economic sustainability, and cross-cultural understanding. Despite challenges with internet access, the Kadazan-Dusun community views ICT as essential, facilitating cultural documentation and education for younger generations. It underscores the potential of ICT to support and promote cultural diversity.

Implication for Theory and Practice

The study highlights the importance of considering cultural factors in technology adoption, as cultural beliefs, values, and practices influence how people perceive and use technology. Incorporating these factors into models like UTAUT can make them more culturally relevant. This model underscores the significance of social influence and facilitating conditions in technology adoption, such as community support, internet connectivity, and government backing. The Kadazan-Dusun community views ICT as beneficial for preserving and promoting their culture through documentation and learning. It emphasizes the need to include domain-specific performance expectations in technology adoption studies. Effort expectancy, or the perceived ease of use, was also significant; improved internet access is needed to reduce effort and encourage adoption. While the UTAUT model focuses on early adoption, this study points to the importance of examining long-term adoption and sustainability, as the Kadazan-Dusun community's commitment to using ICT for cultural preservation underscores the need for ongoing support and research into post-adoption behavior.

Limitations and Recommendations for Future Research

There are several limitations to this study. First, the research focused solely on the Kadazan-Dusun community, limiting the generalizability of the findings to this group and not to all groups in Sabah. The study's theoretical and conceptual framework, based on the UTAUT model, covers only four variables, excluding potential factors from other ICT adoption models. The study did not consider other influences on ICT adoption for cultural preservation, such as personal values, beliefs, and attitudes toward technology. Future studies could benefit from longitudinal research that tracks ICT adoption to better understand how the community's engagement with technology evolves and its long-term impact on cultural preservation efforts. Comparative studies involving other Indigenous or ethnic groups in Malaysia or other developing countries could provide a broader perspective on how different cultural and social contexts influence ICT adoption for cultural preservation. Furthermore, exploring the role of government policies and community-led initiatives in supporting ICT adoption could shed light on structural factors that either enable or hinder the use of technology for preserving cultural heritage.

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The Influencing Factors of Sustainable Agriculture Tourism in the Farmhouses of Hainan, China

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ABSTRACT

This study explores the factors that affect sustainable tourism practices in rural communities in Hainan Province, China. The theoretical perspective of social exchange theory is typically structured with a well-defined dimension. Previous research has not underlined the importance of investigating new factors influencing sustainable tourism. This study takes a qualitative approach, employing in-depth interview techniques, with 14 Shi Cha Village villagers interviewed in-depth, and the data is analyzed using Nvivo12 software. The model of sustainable development of agricultural community tourism is established based on the qualitative findings. The findings show that Shicha Village, as a rural tourism destination, has abundant natural and profound cultural resources, which are the primary conditions for tourism development. Brand development is an unavoidable option for increasing the community's popularity and ensuring the long-term development of tourism. This study adds three new variables to the Social Exchange Theory: brand, policy, and leadership. The research findings have practical implications for rural tourism decision-makers and managers.

Keywords: Agro-tourism, factors, Social Exchange Theory, sustainable development

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INTRODUCTION

Tourism is an activity that connects the economy, society, and nature (Siakwah et al., 2020). Towner (1995) researched the

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history of tourism and found that tourism starts with the wealthy, from the leisurely life of the ancient Greeks and Romans (Brata et al., 2018). Tourism flourished during the Renaissance (Aikaterini et al., 2001). In the 17th and 18th centuries, spas and seaside resorts developed rapidly. In the mid-20th century, the development of the aviation industry accelerated tourism development. Hainan province is in the Hainan Island, the second-largest island in China (Alam, 2022; Sumra et al., 2020). It has a land area of 35354 sq. km and a population of 9.2576 million in 2017.

Hainanese community's unique characteristics and culture helped transform Hainan Island into an international free-trade zone and free port (Shuiyu, 2018). Hainan's tourism revenue reached RMB81, it includes 119 billion Yuan, accounting for 18.2% of the province's GDP of RMB446.254 billion Yuan, with year-on-year growth of 20.81% in 2017 (Baochang, 2020). Hainan is rich in natural resources. A survey on the classification of tourism resources found that Hainan has all the main categories of natural tourism resources. This includes a coastline as long as 1528 km, sand banks accounting for about 50%–60%, 81 peaks above 1,000 m above sea level, dozens of rivers, and volcanic hot springs all over the island.

The policy to transform Hainan into an international tourism destination gained traction in 2010 when the growth of international tourists exceeded 20% for two consecutive years compared to none in the previous two years (Adom, 2016). From 2013 to 2015, due to the gradual weakening of the role of policy stimulus, there was a negative growth in international tourist volume. In 2014 it stood at -13.16% (Alam & Bahrein, 2021). In 2017, the number of tourists in Hainan reached 55.9143 million, with foreign tourists accounting for only 2%. The revenue of our international tourists was around USD681 million, which accounted for 5.5% of the total tourism revenue at RMB 81.119 billion (Aquino et al., 2018).

Therefore, there is great potential for developing the international tourism market. Yan (2014) contends that rural tourism is the point of breakthrough for tourism in Hainan (Alam & Kuppusamy, 2023). Although insufficient knowledge exists, tourism has played a leading role in solving the SDGs here. For example, tourism can be an essential tool to achieve SDG 1: poverty eradication (Siakwah et al., 2020); the achievement of zero hunger in SDG 2: good health and well-being; SDG 3: quality education; SDG 4: decent work and economic growth; SDG 8: significant efforts in the industry, innovation, and infrastructure; and SDG 9: tourism as a leading role (Kaitano, 2020).

Hainan tourism development is followed by issues such as too many visitors on weekends, poor service quality, too few visitors at other times, and a low workload of service staff. With fewer repeat customers, some farms have been operating for some time and become unviable, resulting in wasted resources and environmental damage. The paper's specific objectives are to address the issues of tourism development, which include lack of holistic planning, difficulty in farm operation, and the contradiction between farms and villagers (Dube & Nhamo, 2021). Tourism moves in a sustainable direction, making it a tool for promoting social and economic development and a balance of social, economic, and environmental interests (Baidal, 2004; Park et al., 2012).

LITERATURE REVIEW

Tourism plays a vital role in developing many areas in both developed and developing countries in terms of capacity building (Guaita Martínez et al, 2019). It includes natural, cultural, human and financial elements with the community resources, and community development is interrelated with sustainable agro-tourism for social, cultural, environmental and economic sustainability (Sumra et al., 2022). Rural tourism was first identified as a specific tourism activity in 1994, and to a certain extent, it explored the process and challenges of integrating tourism into sustainable rural development (Sharpley & Roberts, 2004). Existing livelihood resources are used to generate additional income without significant other input, and tourism has therefore been identified as an effective catalyst for rural development and revitalization. Hagedorn (2014) points out that tourists, rural tourism operators, enterprises, local communities and various organizations and institutions (including governments) are often significantly distinct.

Wang et al. (2008) and Kunasekaran et al. (2011) argue that developing cultural heritage tourism, or agro-tourism in rural areas, can bring huge social, economic, and environmental impacts. It includes rural communities and surrounding areas, regardless of the quality of features, attractions, products, and services. Lee and Jan (2019) show that although previous studies have suggested that community-based tourism is widely believed to have the ability to boost local economies (Kunasekaran et al., 2012), many countries and regions have adopted it. Woosnam et al.'s (2018) reflections on the tourism experience of Galveston residents found that those with a history of tourism support and contribute more to community tourism development. Made et al. (2018a) used quantitative research to examine the perceived positive impact of local residents' support for coastal tourism development and planning.

Muresan et al. (2016) studied a rural area of Romania where the support for sustainable tourism development is excellent as it is subjected to the policymakers and tourists paying attention to residents' concerns and beliefs. The adverse effects of tourism on the community cause a lower societal inclination to participate in tourism development programs (Franzidis., 2019). The positive outcomes increase the support and reach projects' goals for similar tourism-related outcomes. Agricultural tourism has been considered an essential part of rural tourism (Bachok et al., 2019).

Tourism elements promote regional and local economic development by creating area jobs and increasing community tourism spending (Chang et al., 2018). Empowering local communities is one of the fundamental goals of sustainable tourism, based on involving local communities in planning and decision-making, in consultation with stakeholders, for the management and future development of tourism in the region (Mustafa & Tayeh, 2011). The interests of individuals or groups increase, so does the support of community residents for tourism, and vice versa. It suggests that local tourism is still developing and that the local population is making tourism economically important in the future (in addition to traditional agricultural production) (Petrovic et al., 2016). Chen (2014) studied the influence of tourism development on the local social culture in Xi Shuang ban na, Yunnan, China. The results showed that spiritual culture remains relatively unchanged from generation to generation. Fan et al. (2015) discussed the impacts of different types of operators operating pastoral tourism in China on local society, economy, perception, and grassland ecosystem are discussed. Li et al. (2019) reflect on the Furong village, a typical ancient village in Wenzhou City, Zhejiang Province, China. It is unfolding that tourism development in historical villages is due to authenticity and the quality of experience that affects the tourists' value perception and willingness to travel (Alam, 2022; Sumra et al., 2022). In 2016, the number of rural tourists in China reached 1.36 billion, the income from rural tourism reached 400 billion Yuan, and the number of households engaged in rural tourism reached 2 million.

Driven by the demand, social capital investment is active (Sumra et al., 2020). In 2003, the investment in leisure agriculture and rural tourism in China reached 96 billion Yuan, which increased to 160 billion Yuan in 2014, 260 billion Yuan in 2015, and 300 billion Yuan in 2016, with an average annual growth rate of 47% (Zhang et al., 2017). A large number of famous village scenes have sprung up in recent years, such as Wuyuan in Jiangxi, Anji in Zhejiang, Longsheng Terrace in Guilin and Yuanyang Terrace in Yunnan. The integration of tourism and agriculture, as provided in Figure 1, is the significant promoting effect of agricultural tourism on the economic development of poor areas and is conducive to the economic development of rural areas (Lu & Li, 2021).

Theoretical Perspective

Social exchange theory (SET) is justified as an appropriate framework for understanding residents' views on tourism. Homans (1958) introduced the theory of social exchange. It provides the belief that egoism, seeking advantages, and avoiding disadvantages are the basic principles of human behavior. The exchange behavior itself becomes a relative gain and loss because everyone wants to get the maximum benefit in exchange (Wang et al., 2022). The size of the investment and the benefits are roughly equally distributed for individuals. Emerson (1976) developed the social exchange theory. Emerson (1976) agreed that social exchange involves a series of interactions that generate obligations. Thus, in this study, SET is used as the anchor to explore the extent of sustainable development of agro-tourism in Hainan, China. The three main dimensions measured are economic, social, and environmental sustainability (Table 1).

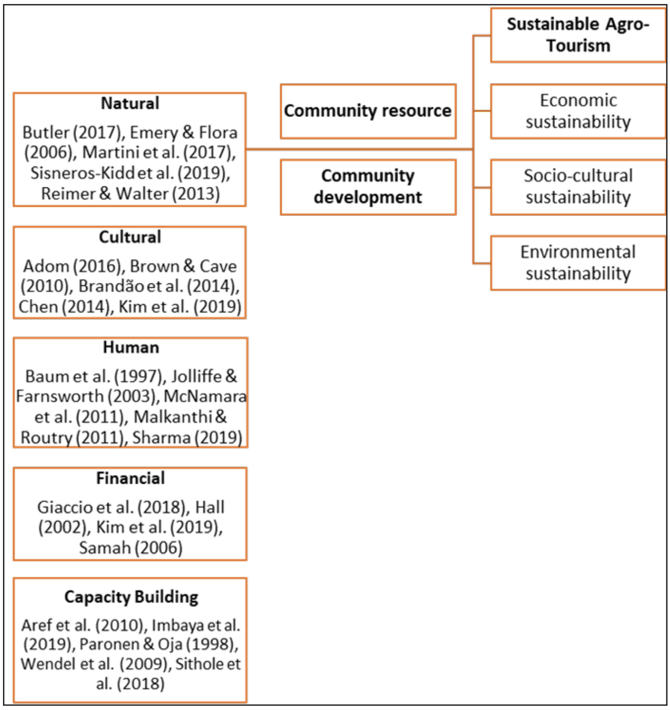

Figure 1. Conceptual framework
Source: Authors' work

Table 1
Application of social exchange theory in agri-tourism research

Author	Research topics
Andereck et al. (2005); Wang & Pfister (2008)	Residents' attitudes toward tourism
Ap (1992); Bachok et al. (2019); Baochang, 2020; Dube & Nhamo (2021); Lee & Jan (2019); Wardana et al. (2018b)	Residents' perceptions of tourism
Andereck et al. (2005); Brida et al. (2011); Franzidis (2019); Saunders et al. (2019)	Residents' perceptions of community tourism impacts

Source: Authors' work

MATERIALS AND METHODS

In the framework of agri-tourism community development research and business and management research, seven theoretical elements are used in a constructivist approach. In this study, interpretation is the most appropriate paradigm to understand the factors affecting the sustainable development of rural tourism destinations. The inductive research approach explores the impact of resource dimensions such as nature, culture, human resources, finance, infrastructure, and community development dimensions such as community participation, empowerment, and government support on sustainable agri-tourism. It is also an exploratory study to understand the factors influencing the development of sustainable agricultural tourism in rural areas of Hainan province, China. Through an in-depth analysis of selected villages with a high degree of tourism development, we can understand residents' awareness of tourism development, as well as their feelings and thoughts on specific situations. In this study, the villagers of Shicha village were considered major stakeholders in the local tourism industry. This research is inductive in nature to carry out the issues for practical problems, followed by a statistical procedure.

This research adopts the case study method to explore the factors that affect the sustainable development of agricultural tourism in Hainan. It is to influence the sustainable development of tourism destinations conducted from stakeholders' perspectives (Noorhayati et al., 2016). The villagers conduct semi-structured face-to-face interviews to obtain rich information and profound views and perceptions on the key attributes affecting tourism development in Hainan. The interview took more than three months, from December 2020 to April 2021. Before each interview, the interviewees would be provided with a confidentiality statement to describe the purpose of the research. If the interviewee agrees, each interview will last about 1 hour. Qualitative data analysis techniques include thematic analysis, template analysis, interpretation construction and testing, grounded theory method, narrative analysis, discourse analysis, content analysis, data display and analysis (Saunders et al., 2019). Subject analysis provides a systematic, flexible, and accessible way to analyze qualitative data. It systematically provides an orderly and logical way to analyze qualitative data (Braun & Clarke, 2006).

The data collected during the interview were coded and analyzed using Nvivo12, a computer-aided qualitative data analysis software considered an essential tool for qualitative data analysis. Shicha village tourism development characteristics, including their culture and industry, are also explored in detail.

RESULTS AND DISCUSSION

Shicha village has 652 households and a population of 3116 people. The villagers have lived here for generations and have the Chinese people's diligence, kindness, and charity virtues. Under the government's leadership, the eight communities created the "One Village, One Product" project, which means that each community has its unique tourism project (Table 2).

Table 2
Communities' tourism development characteristics

Community	Feature
Meishe	Homestay
Ruhuang	Volcanic hot springs
Chuncang	Leisure cycling
Wuhong	Dendrobium planting and visiting
Bofu	Volcano food
Meifu	Family precepts
Guoqun	Dendrobium planting and visiting
Guanliang	Root carving

Source: Authors' work

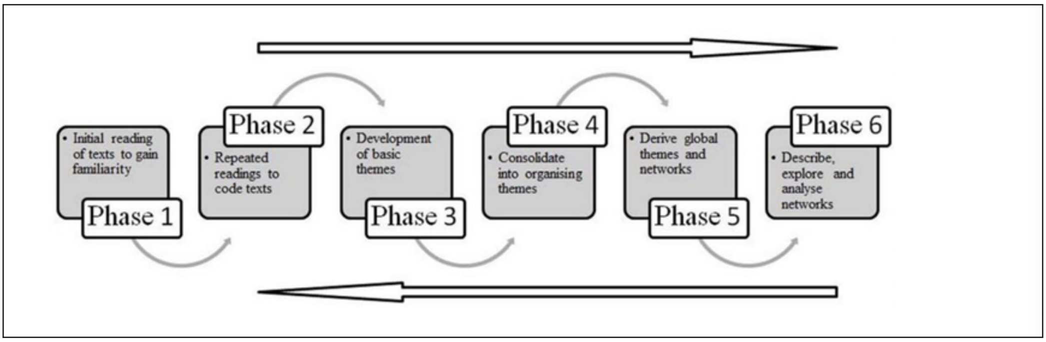

Figure 2. Iterative Thematic Analysis (Braun & Clarke, 2016)

As shown in Figure 2, the visualization of the topic of development status. A total of 14 respondents were interviewed using theoretical and snowball sampling. Theoretical saturation was noted at Respondent 14, and the interview process ended. Two topics emerged from the data analysis. The themes identified by the interviewees are (1) the advantages of developing agro-tourism, (2) the fact that the development of agricultural tourism has a positive effect on rural development, and (3) the problems in the process of developing agricultural tourism. These themes are also consistent with the research results and the development of the framework, as provided in Figure 4. The study found that the analysis of these current topics resulted from relevant interviews and past research.

As shown in Figure 3, Theme 1 is developing agricultural tourism advantage, which follows selling agricultural products at higher prices, constructing modern agricultural and industrial parks, and reducing labor hours by adopting a broader system. As provided by respondent 1: *"Now that tourism has developed in the village, I don't need to work very hard outside every day. I can work in a homestay and do hygiene. I can go home and sleep at noon. I think my friends can easily find jobs in the village and have more opportunities to make*

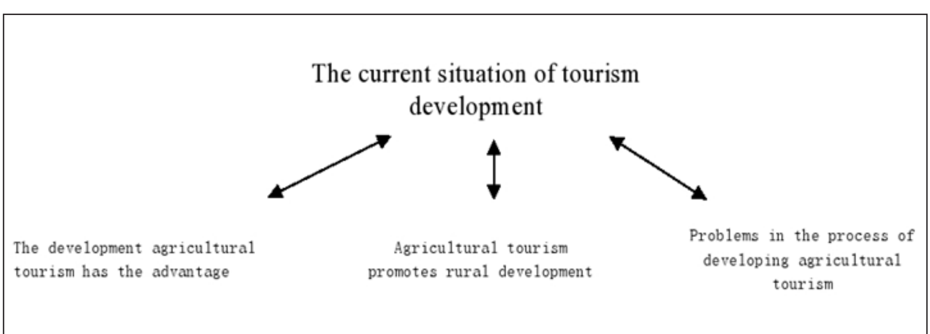

Figure 3. Agricultural tourism development in Shicha Village
Source: Authors' work

money. In a word, they are much better than before and enjoy their current life more."

Themes	Memo (Personal Reflections)
Selling agricultural products at higher prices	Respondents 1, 2, 3, 5, 6, 9, and 12 mentioned that local characteristic agricultural products are very popular among consumers and are not sold through ordinary channels.
Construction of modern agricultural industrial parks started	Almost all the interviewees knew about the local characteristic industry, the Dendrobium Nobile Lindl industry, the leading industry introduced by the local government at a considerable cost and a local banner.
Reduce labor hours by adopting a broader system.	Because of tourism development, intensive management has been produced, making the farmers who used to be busy in the land from farming.

It provides the development of agricultural tourism with a specific driving effect on the economy. It includes the rural development from a simple primary industry to the second and third industry push. The respondents 1, 2, 3, 5, 6, 9, and 12 mentioned that local characteristic agricultural products are very popular among consumers and are not sold through ordinary channels. It shows the local characteristic industry, the Dendrobium Nobile Lindl industry, the leading industry introduced by the local government at a considerable cost. Respondent 5 indicates, *"I sell local agricultural produce in my restaurant, such as fresh vegetables, ginger, cassava, whole grain, and local fruits."*

Themes	Memo (Personal Reflections)
Create communication and entertainment spaces for residents and visitors	Respondents 1 and 3 said they had established a friendly relationships with tourists. Interviewees 10 and 11 were often invited to perform.
Protection of farmland	Respondent 8 proved that farmland was protected from a negative perspective.
Diversification of household income	The development of tourism can provide people with income in addition to their primary job.
Environmental governance has been improved.	The improvement of environmental improvement was evident, highlighted by respondents 3, 4, 5, and 8.

Respondent 8 thinks that people are getting lazier and lazier and do not like agriculture, leading to the abandonment of many primitive farmlands. He says young people today cannot even plant rice or weed. But respondent 5 said, *"There are five people in my family: my wife, my brother and his wife, and my sister don't do other jobs. The jobs of the five of us are all here, and our income comes from here, and the income from here can support our families. It is more than the income from farming before."*

The analysis is further supported by Respondent 12's observation: *"I had stopped doing farm work for a long time, but* *my family still had farmland, but it was my parents who planted the land and only grew vegetables."* The vegetables at restaurants are grown by respondents because of their fresh, organic character, and they are now one of the hallmarks of tourism restaurants. She earns about 500,000 Yuan a year from running a restaurant, far more than farming.

Themes	**Memo (Personal Reflections)**
Villager' living resources have been squeezed	Many interviewees mentioned the problem of crowding out tourism development resources, and interviewees 1, 4, and 12 were more specific.
Tourist facilities are not complete	Almost no one mentions that the village has almost no facilities for visitors
The problem of land ownership has restricted the development of tourism	Respondents 9 and 13 mentioned this question, as did Ms. Zhong Jingjing

The new factors influencing community development and tourism support are the role of branding and the dimensions of capacity building. Sithole et al. (2018) believe that community capacity building is necessary for tourism development to improve the benefits of tourism to local communities. The responses and themes are developed using qualitative research to develop a sustainable agro-tourism model.

CONCLUSION AND IMPLICATIONS

The findings of the interviews aim to answer the study's research objectives. At this stage, the data analysis outcome and theoretical triangulation show the importance of research. Triangulation provides cross-validation of findings by allowing the strengths of one approach to address the limitations. Detailed analysis of these stages helps to improve the rigor of qualitative research. Based on the narration of Shicha

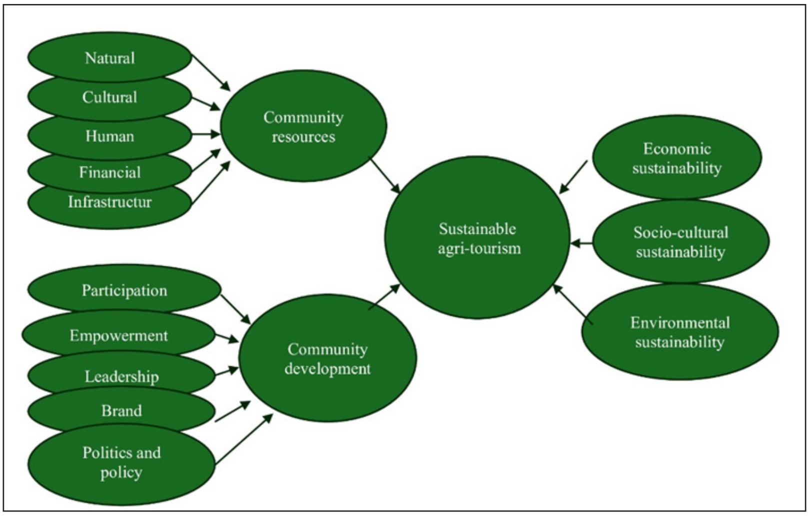

Figure 4. Sustainable agriculture tourism model
Source: Authors' work

village residents' experience, they are the witnesses and builders of the sustainable tourism development process of Shicha village. The qualitative techniques used in this study attempted to understand the complexity of factors affecting sustainable tourism in Shicha village. The developed and featured agricultural products are supported by local products such as Shishan goat, black bean curd, dendrobium and cat beard grass, which the outside world has recognized because of tourism development. Yang (2021) supported the idea that with the continuous efforts of rural operations and service personnel across the country, we have gradually explored a road of characteristic rural industry integrating agricultural planting, product processing, tourism, and leisure experience.

The current situation of farmers in Shicha Village is consistent with the above research. Many young and strong farmers are no longer engaged in agricultural production. Instead, they are engaged in catering, homestay, hand carving, waiters, staff, and other occupations. The investigation found no people in absolute poverty in the village; that is, the population whose annual per capita net income of farmers is less than 865 Yuan (2020 standard).

The architectural culture and the local opera and music culture of Shicha Village are well preserved. Respondent 10 said they cannot play many tunes in the current 8-tune. However, with tourism development in Shicha Village, more and more villagers are confident in their culture. Modern civilization has not completely banned local wedding customs and funeral customs. Natural capital is the basic resource for the long-term development of tourism. Although Shicha village has a naturally formed volcanic landform and a large area of forest, it must be protected and stabilized. At present, the village has prohibited logging, garbage management, and other measures so that it maintains a beautiful environment.

For theoretical implications, Government empowerment and community participation are necessary to ensure the sustainable development of tourism. It is worth mentioning that we found the influence of brand, policy, and leadership in this study. Leadership and policy are the social conditions for realizing sustainable tourism development. Brand development is the inevitable choice to improve community visibility and ensure sustainable tourism development in this region. The establishment of this model makes up for the lack of measuring the sustainable development of rural tourism in sustainable development. Therefore, this study established a model composed of multiple models: the Ladder Participation Model (Arnstein, 1969), The Empowerment Theory (Zimmerman, 2000), The Community Capital Model (Flora et al., 2018), The Brand Equity Model (Burmann et al., 2009) and The Leadership Model (Vroom & Jago, 2007). They are integrated to form a model affecting the sustainable development of agricultural tourism. The outcome is also clearly in line with Social Exchange Theory, stating that the villagers in Sicha involved in tourism support tourism development as it has positive economic, social and environmental impacts.

IVS	This study, YES	This study, NO	Emerging Variable
Participation Jannah et al. (2018); Moser (1989); Rasoolimanesh & Jaafar (2016); Saufi et al. (2014)	✓		
Empowerment Ahmad & Abu Talib (2015); Cole (2006); Khalid et al. (2019); Sutawa (2012); Timothy & Tosun (2003)	✓		
Capacity building Aref et al. (2010); Imbaya et al. (2019); Paronen &Oja (1998); Sithole et al. (2018); Wendel et al. (2009)		✓	
Culture Adom (2016); Brandão et al. (2014); Brown & Cave (2010); Chen (2014); Kim et al. (2019)	✓		
Infrastructure Bennett et al. (2012); Muresan et al. (2016); Singh (2013); Wardana et al. (2018a)	✓		
Nature Butler (2017); Emery & Flora (2006); Martini et al. (2017) Reimer & Walter (2013); Sisneros-Kidd et al. (2019)	✓		
Financial Giaccio et al. (2018); Hall (2002) Kim et al. (2019); Samah (2006)	✓		
Human Baum et al. (1997); Jolliffe & Farnsworth (2003); McNamara et al. (2011); Malkanthi et al. (2011); Sharma (2019)	✓		
Policies Ap (1992); Khalid et al. (2019); Shen et al. (2019); Valente et al. (2015)			✓
Brand Chen & Wu (2019); Liu et al. (2018); Pike (2005) Gartner (2014); Murphy et al. (2007)			✓
Leadership Fang et al. (2020); Valente et al. (2015); Law et al. (2010) McGehee et al. (2015); Trudeau Poskas & Messer (2015)			

LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

For practical implications, the government actively supports the formulation of policies, such as expanding residents' business scope, standardizing land use, formulating tourism development plans, and providing sufficient capital investment. Establishing a private brand is very important for the sustainable development of village tourism. The bank and financial departments are introducing practical financial policies, and the government's financial subsidies are also an important guarantee to support the rapid development of tourism enterprises in Sicha.

The corresponding management and financial knowledge are also necessary. Many farmers' homestay and catering industries are developing swiftly because of the development of tourism. Hainan Provincial government has to formulate the corresponding tourism development policies with certain guiding significance for the work of the village committee and town government. The degree of community empowerment directly affects the degree of community participation. The government should further empower communities to give residents a sense of ownership.

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Drivers of Local Communities Perceptions of Tourism Impacts: An Empirical Investigation in Bogor Regency, Indonesia

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ABSTRACT

By integrating social exchange theory, the norm activation model, and the theory of planned behaviour, this study investigates the effects of awareness of environmental consequences (AEC), environmental attitudes (EA), and local communities' attachments (LCA) on perceptions of tourism impacts, including economic, environmental, social, and physical impacts. Four hundred seventy-eight responses were collected from local communities in Bogor Regency, Indonesia, and the data was analysed using Smart PLS version 4. This study analyses all factors influencing perceptions of tourism impacts to fill the gap from earlier conceptual and empirical studies. Further, it was found that environmental attitudes needed to influence all perceptions of tourism impacts, and local communities also needed to influence perceptions of social impacts. By analysing a thorough model, this study advances factors of perception of tourism impacts by providing supporting and non-supporting factors. Practical applications and potential research directions are discussed.

Keywords: Local community, norms activation model, rural tourism, social exchange theory, tourism impacts

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INTRODUCTION

United Nations World Tourism Organization (UNWTO) declared the scenario for a tourism rebound in 2022; rural tourism is one of the key travel trends that will drive the tourism recovery post-COVID-19 pandemic (UNWTO, 2022). Furthermore, rural tourism is the ideal tool to achieve sustainable development (Lopez-Sanz et al., 2021), where the goal is to find a

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middle ground between regional economic development, community development (Walia, 2020), and the protection of a destination's natural features (Jaya et al., 2022). For over twenty years, scholars have considered whether tourism empowers communities (Scheyvens et al., 2021). Discussions of sustainable forms of tourism will always be an ongoing debate, as they are essential for environmental reasons and generate significant economic and social benefits for locals within the sustainability domain (Iskandar et al., 2020; Roblek et al., 2021; Schubert & Schamel, 2020).

To ensure the success of conservation developments, Shien et al. (2022) suggested that future research study the perceptions of local communities since the participation of grassroots and local communities paves the way for the development of sustainable practices and the preservation of natural resources (Giddings et al., 2002). Wang et al. (2021) mentioned that population growth and environmental deterioration have emerged as significant challenges to sustainable development in the modern era. In contrast, Winingsih et al. (2022) declared that humans are promoters and catalysts for environmental change.

Rural tourism poses a challenge in identifying the primary contributors to environmental problems as local communities and tourists share the same areas and participate in tourism activities (Tou et al., 2022). Previous research on environmental issues has primarily focused on existing debris (Hayati et al., 2020), garbage problems (Pham et al., 2019), and solid waste (Rada et al., 2013) and has not extensively explored the waste generated solely by tourism activities. Waste generated from tourism should not be a significant issue if management allocates sufficient resources for its handling. If waste becomes a problem, it indicates that tourism revenue needs to be effectively invested in waste management and other critical environmental protections, particularly those related to rural tourism activities. Rather than finger-pointing, understanding the underlying factors that influence communities' perceptions of tourism impacts is more significant for addressing these issues as it will determine the subsequent level of communities' assistance for tourism growth (Ghaderi et al., 2021; Štrba et al., 2022). Not to mention growth, even some regional infrastructure is felt to be lacking (Ardiansyah & Iskandar, 2022; Giam & Megawati, 2019).

The social exchange theory, the norm activation model, and the theory of planned behaviour were used to derive the factors that influence perceptions of tourism impacts in an integrated construct: economic, environmental, social, and physical impacts. These theories were used to fill the gaps in earlier conceptual and empirical studies (Orgaz-Aguera et al., 2020; Piatrini, 2018; Safshekan et al., 2020; Zhao et al., 2020). Rural tourism with the sustainable principle of UNWTO, "leave no one and no village behind", fits perfectly to study the balance of environmental, economic, and socio-cultural aspects of tourism development.

Rural tourism development in Indonesia is unquestionably well developed. Ninety-seven new rural tourism destinations were established in just three years (Indonesia

Central Bureau of Statistics, 2018; Kemenparekraf, 2021); being the 13th largest country by land area, Indonesia owns 75.436 registered villages. That enormous number of villages opens up favourable circumstances for rural tourism. Indonesia has 1.734 registered rural tourism villages (Kemenparekraf, 2021). With their abundant natural wealth, the chances for rural tourism development are tremendous. Although the exact increase percentage remains unknown, 6.158 villages successfully declassified themselves from being underdeveloped (Swadaya) in 2014–2018 (Putra, 2018). It is still unknown whether the transition from an underdeveloped (Swadaya) to a developed (Swakarya) village is attributable to the tourism industry, as Sharif et al. (2020) discovered that economic growth contributes to environmental damage, which also caused alarm.

Despite extensive tourism growth in Bogor Regency, West Java, more studies are needed on the environmental conservation behaviours of local communities. Despite tourism being a significant economic catalyst, the precise economic benefits of this activity still need to be determined, and there is a distinct disparity between the population of local communities and the number of tourists. Assessing the involvement of long-term inhabitants in environmental protection is essential since the community's actions directly impact and are influenced by continuous environmental changes. This study aims to fill an existing research gap by investigating the environmental conservation practices of local populations in order to enhance the knowledge base for sustainable tourism strategies. Hence, it is crucial to promptly research environmental conservation behaviours in Bogor Regency, West Java, Indonesia. This region, which is the most populous province and has the highest number of rural tourism destinations in Indonesia (Bogor Dinas Komunikasi dan Informasi [BDKI], 2022), has over 5 million residents, plus a significant number of incoming tourists.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The importance of perceived tourism benefits in evaluating tourist growth and the general quality of life in local communities must be considered. The local community has a positive attitude toward tourism and its development, responding that it would improve their quality of life in the future. The more informed and involved the local community is, the more positive its perceptions of tourism will be (Lopes et al., 2019).

The majority of local communities are tourist-oriented, and they believe the existing level of tourism is compatible with the area's features, as evidenced by a positive correlation between their perceptions and the level of support for tourism in their area. In addition, these findings were bolstered by the fact that local communities' attachment is positively correlated with local communities' perceptions of tourism development (Demirović Bajrami et al., 2020; Wardana et al., 2020). Conversely, an unfavourable perception of the impacts of tourism can lead residents to express criticism, withhold support, and exhibit a lack of interest in participating in tourism development within the area (Kusherdyana, 2021).

The Theory of Planned Behaviour (TPB) is one of the most popular theories for studying human behaviour (Ahmad et al., 2021; Anwar et al., 2021; Arundati et al., 2020; Liobikiene & Poskus, 2019; Zhang et al., 2017). The Norm Activation Model (NAM) includes different kinds of antecedents to make its predictions about pro-social behaviour (Nasr et al., 2022; Orgaz-Aguera et al., 2020; Pradhananga et al., 2021; Safshekan et al., 2020), is also employed to support the effects of awareness of environmental consequences. Meanwhile, the revised framework of Social Exchange Theory (SET) (Cropanzano & Mitchell, 2005; Rasoolimanesh et al., 2015) will support the effect of local communities' perceptions (Huo et al., 2023; Gannon et al., 2020; Rasoolimanesh et al., 2019; Zhang et al., 2020), this is the first instance of integrating all three theories into this research location.

Factors Influencing Perceptions of Tourism Impacts

On the research site, the poor population gets lower each year: 8.83% in 2016, 8.57% in 2017, and 7.14% in 2018, and the labour force participation rate is still fluctuating each year: 63.64% in 2016, 62.71% in 2017, and 64.07% in 2018 (Badan Pusat Statistik Kabupaten Bogor [BPSKB], 2018), but neither of them is necessarily due to the presence of the tourism industry since there is no exact data nor measurement about its impact, only expected business earnings in gross regional domestic product. It is generally accepted that people's perceptions of their surroundings affect the frequency with which they engage in environmentally friendly behaviours in their day-to-day lives (Marcinkowski & Reid, 2019).

Perceptions of tourism development surely take time to measure. Hence, an analysis of the positive economic impacts can be conducted to ascertain the influence of the impacts on the attitudes of local communities and the positive and negative effects of social exchange theories (Cropanzano et al., 2017; Gannon et al., 2020; Huo et al., 2023; Rasoolimanesh et al., 2015). This new construct will reflect perceptions of tourism impacts based on the combined reception of local communities.

Rasoolimanesh et al. (2016) explored positive and negative perceptions of local communities because their sustenance and welfare are inextricably linked to the environment and resources. Local communities will frequently go to great lengths to safeguard themselves (Wang et al., 2021; Zhang et al., 2017) and will support sustainability if they can meet the basic needs of life (Gai et al., 2018; Zhang et al., 2020), even though Piatrini (2018) is still unsure whether positive economic impacts and benefits are indeed affecting local communities' attitudes or not, depending on whether they are in line with the positive and negative effects of social exchange theories (Gannon et al., 2020; Huo et al., 2023).

Related theories from the Theory of Planned Behaviour (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975), Social Exchange Theory (Byrd et al., 2009), and the Norms Activation Model (Schwartz, 1977), which turn into awareness of the environmental consequences (AEC) (Arundati et al., 2020; Frick et al., 2004; Liobikiene & Poskus, 2019; Zhang et al., 2017), environmental attitudes (EA) (Rasoolimanesh et al., 2015; Zheng et al., 2017), and local communities' attachments (LCA) (Orgaz-Aguera et al., 2020; Rasoolimanesh et al., 2015), are measured as influencing factors to perceptions of tourism impacts (PTI) (Andereck et al., 2005; Demirović Bajrami et al., 2020; Kastenholz et al., 2013; Piatrini, 2018; Rasoolimanesh et al., 2015; Sanchez et al., 2009).

The fair distribution of tourism's impacts has a significant impact on how locals view tourism (Aytekin et al., 2023); if locals are getting a good return on their investment in the tourism industry, they will view it more favourably in its role in ensuring the sustainability (Goodwin, 2017). Numerous studies have been conducted to document the effects of tourism on local communities (Halim et al., 2022), but the social impacts of tourism are typically less pronounced and less publicised than the economic and environmental impacts (Prasad & Kumar, 2022), not to mention the physical impacts. Then, Demirović Bajrami et al. (2020) analysed locals' financial, social, environmental, and physical perceptions of sustainable tourism development.

A study by Zhang et al. (2017) highlighted local communities' understanding of environmental consequences since the rural tourism destination is forever home to the locals. It has been reported that locals generally view the impacts of tourism development negatively (Guo et al., 2014). Awareness of environmental consequences is one antecedent of pro-social behaviour in the Norms Activation Model (Schwarts, 1977).

H1: Awareness of environmental consequences positively affects perceptions of economic impacts.

H2: Awareness of environmental consequences positively affects perceptions of environmental impacts.

H3: Awareness of environmental consequences positively affects perceptions of social impacts.

H4: Awareness of environmental consequences positively affects perceptions of physical impacts.

The social exchange theory, as applied to tourism, posits that an individual's perceptions and attitudes towards tourism are shaped by their evaluations of the impact of tourism on both their well-being and that of their community (Ward & Berno, 2011). This is especially true of the revised SET, which follows six rules (Cropanzano & Mitchell, 2005; Rasoolimanesh et al., 2015) for communities' interpersonal exchange.

H5: Environmental attitudes have a positive effect on perceptions of economic impacts.

H6: Environmental attitudes have a positive effect on perceptions of environmental impacts.

H7: Environmental attitudes have a positive effect on perceptions of social impacts.

H8: Environmental attitudes have a positive effect on perceptions of physical impacts.

Orgaz-Aguera et al. (2020) and Safshekan et al. (2020) agreed that local communities' attachment is critical in determining locals' perceptions of tourism impacts. Therefore, Pradhananga et al.'s (2021) study highlighted the need for further study focusing on the social and economic impacts to analyse the positive associations with their environmental involvement and protection.

H9: Local communities' attachments positively affect perceptions of economic impacts.

H10: Local communities' attachments positively affect perceptions of environmental impacts.

H11: Local communities' attachments positively affect perceptions of social impacts.

H12: Local communities' attachments positively affect perceptions of physical impacts.

MATERIALS AND METHODS

Study Area and Measurement

This study employs a quantitative methodological approach. The local communities in Bogor Regency, located in West Java, Indonesia, are the participants in this study. Simple random sampling is used because it includes randomly selecting study subjects in order to provide a fair and unbiased representation, and in order to ascertain the credibility of the participants, two screening questions have been utilised to primarily focus on local populations that have a direct or indirect connection to the tourism industry. Each respondent is limited to filling out the form once using a single email address.

Partial least squares (Smart PLS version 4) were utilised to evaluate the study's measuring model and structural model analysis. This reflective construct, which consists of awareness of environmental consequences (8 items) (Arundati et al., 2020; Liobikiene & Poskus, 2019; Zhang et al., 2017); environmental attitude (8 items) (Rasoolimanesh et al., 2015; Zheng et al., 2017); local communities' attachments (7 items) (Orgaz-Aguera et al., 2020; Rasoolimanesh et al., 2015); all four constructs of perceptions of tourism impacts (Economic Impacts [Eco], Environmental Impacts [Env], Social Impacts [Soc], Physical Impacts [Phy]) (Demirović Bajrami et al., 2020; Wardana et al., 2020) were derived from prior research.

The survey was initially in English, then back-translated to Indonesian. The content and format of the questionnaire were then revised after being reviewed by two academic experts and a local authority in the rural tourism destination before being run for a pilot test with 50 respondents. Respondents rated their answers on a Likert scale, with one (1) being never or very rarely true, two (2) being rarely true, three (3) being sometimes true, four (4) being often true, and five (5) being very often or always true.

Data Collection

A self-administrative questionnaire was distributed face-to-face and online from March to August 2022. From Bogor Regency's total population of 5,489.536, the minimum required sample size is 384 using the Z-score method (BPSKB, 2021), simultaneously achieving statistical significance for a path coefficient of 0.11 to 0.20 (Hair et al., 2021). From the minimum of 384 samples, 384 printed and 186 online questionnaires were collected. Still, after the preliminary examination of those data, only 478 complete entries were used for further analysis.

The respondents' sociodemographics consist of 62% males and 38% females. 57% of respondents were older than 45, and 43% were younger. 57% of respondents had completed high school; 29% had diplomas or bachelor's degrees; then elementary and junior high school graduates (7%); and finally, those with no formal education (6%). No respondents have doctorates, and only 1% have master's degrees. 57% of respondents earn Rp. 4.300.000–Rp. 6.000.000 monthly; 29% earn Rp. 6.000.000–10.000.000. A small number of respondents with incomes between Rp. 0-Rp. 1.900.000, or 6%, followed by a significant income gap of Rp. 1.900.000-Rp. 4.300.000, or 7%. Last, 1% of respondents earn more than Rp. 10.000.000 per month. 65% are natives, and 66% of respondents are involved in tourism activities (Table 1).

Table 1
Respondents' socio-demographic profile

Variables	Category	Frequency	Percentage
Gender	Male	297	62
	Female	181	38
Age	Old Age	273	57
	Young Age	205	43
Completed Education	Not completing any formal education	34	6
	Elementary - Junior High School	34	7
	Senior High School	270	57
	Bachelor	139	29
	Magister	7	1
	Doctorate	0	0
Monthly Income	Rp. 0,- to Rp. 1.900.000	28	6
	>Rp. 1.900.000,- to Rp. 4.300.000,-	34	7
	>Rp. 4.300.000,- to Rp. 6.000.000,-	270	57
	>Rp. 6.000.000,- to Rp. 10.000.000,-	139	29
	>Rp. 10.000.000,-	7	1
Native	Yes	309	65
	No	169	35
Tourism Involvement	Yes	316	66
	No	164	34

Hair et al. (2017) stated that "garbage in, garbage out" applies to data, so this study examined the data to determine how much estimation and modification was done. Data errors invalidate all analyses. The response rate was 85.33%; no outliers were found; data is usually distributed, and listwise deletion is used for missing data. Less than 3.3 is the standard method variance (CMV) value, calculated using the full collinearity VIF for each construct, demonstrating no CMV issues with the data (Kock, 2017).

RESULTS AND DISCUSSION

Measurement Model Assessment

Partial Least Squares-Structural Equation Modelling (PLS-SEM) was used to test and assess multivariate causal linkages, as this method works best for complicated research models with many different constructs and interactions (Hair et al., 2021). All constructs have met all the requirements for measurement and structural model assessment (Usakli & Rasoolimanesh, 2023).

For the structural assessment measurement, the reliability and validity of the construct are measured (awareness of environmental consequences [AEC], environmental attitudes [EA], and local communities' attachments [LCA]). Then, include all four dimensions (economic impacts [Eco], social impacts [Soc], environmental impacts [Env], and physical impacts [Phy]) of perceptions of tourism impacts in reflective dimensions where each item was checked for the outer loadings, internal consistency (CR), convergent validity, and reliability can be established if the values of loadings are all above 0.7 and 0.5 proportionately (Ali et al., 2018). However, if the CR and AVE values are higher than the cutoff above, loadings of 0.5 to 0.7 are still tolerated (Hair et al., 2017).

Then, measure convergent validity (AVE) and follow the HTMT criterion (Usakli & Rasoolimanesh, 2023). Table 2 presents a summary of the outcomes of all reflective constructs, indicating the reliability and convergent validity of the construct. It is recommended to examine the HTMT values, whereby values below 0.85 or 0.9 indicate a significant deviation from the threshold value to assess the discriminant validity (Franke & Sarstedt, 2019; Hair et al., 2021; Henseler et al., 2015) as presented in Table 3. Moreover, the square root of the mean-variance extracted (AVE) associated with each construct surpasses its correlation with all other constructs, thus signifying the presence of discriminant validity.

Table 2
Assessment of measurement models

Construct	Items	Type	Loading/Weights	CR	AVE
Awareness of Environmental Consequences		Reflective		0.953	0.721
	AEC1		0.943		
	AEC2		0.749		
	AEC3		0.936		

Table 2 *(continue)*

Construct	Items	Type	Loading/Weights	CR	AVE
	AEC4		0.744		
	AEC5		0.886		
	AEC6		0.791		
	AEC7		0.767		
	AEC8		0.941		
Environmental Attitudes		Reflective		0.955	0.727
	EA1		0.843		
	EA2		0.782		
	EA3		0.905		
	EA4		0.835		
	EA5		0.830		
	EA6		0.865		
	EA7		0.892		
	EA8		0.861		
Local Communities' Attachments		Reflective		0.884	0.525
	LCA1		0.540		
	LCA2		0.742		
	LCA3		0.793		
	LCA4		0.767		
	LCA5		0.788		
	LCA6		0.724		
	LCA7		0.688		
Economic Impacts		Reflective		0.880	0.598
	EcI1		0.850		
	EcI2		0.658		
	EcI3		0.655		
	EcI4		0.893		
	EcI5		0.780		
Social Impacts		Reflective		0.900	0.751
	SI1		0.899		
	SI2		0.750		
	SI3		0.939		
Environmental Impacts		Reflective		0.891	0.804
	EnI1		0.972		
	EnI2		0.814		
Physical Impacts		Reflective		0.891	0.803
	PI1		0.878		
	PI2		0.914		

Table 3
Result of discriminant validity

Heterotrait-Monotrait Ratio (HTMT)							
	AEC	Eco	EA	Env	LCA	Phy	Soc
AEC							
Eco	0.504						
EA	0.842	0.388					
Env	0.037	0.068	0.027				
LCA	0.562	0.841	0.444	0.090			
Phy	0.038	0.107	0.066	0.067	0.105		
Soc	0.032	0.138	0.044	0.103	0.091	0.062	
Fornell-Lacker Criterion							
AEC	0.849						
Eco	0.456	0.773					
EA	0.785	0.353	0.852				
Env	-0.029	0.007	-0.010	0.897			
LCA	0.503	0.712	0.399	0.051	0.725		
Phy	0.012	0.078	0.061	-0.042	0.080	0.896	
Soc	0.012	0.116	-0.027	-0.073	0.038	0.004	0.867

Note: AEC: awareness of environmental consequences; EA: environmental attitude; LCA: local communities' attachments; Eco: perceptions of economic impacts; Env: perceptions of environmental impacts; Soc: perceptions of social impacts; Phy: perceptions of physical impacts

Structural Model Assessment

For structural model assessment checking, this study employs bootstrapping with 5,000 subsamples and a significance level of p 0.05 in a two-tailed test. Following the step-by-step structural model assessment in Usakli and Rasoolimanesh (2023), where the full collinearity VIF of all constructs is less than 3.3 (Kock, 2017), and the result of R^2 shows that all exogenous constructs were able to explain the variance of endogenous latent variables (Figure 1). A specific dependent construct is indicated by Q^2 values that exceed zero for a given reflective endogenous latent variable (Hair et al., 2017), where perceptions of economic impacts have considerable predictive relevance and perceptions of environmental impacts have medium predictive relevance. In contrast, all the other endogenous variables have a minor predictive relevance.

Result of Hypothesis Testing

Twelve direct hypotheses were tested, and the results showed that only seven were approved.

Awareness of the Environmental Consequences

Based on the statistical findings, awareness of environmental consequences has a positive and significant relationship to perceptions of economic impacts (H1) as the p-value (0.006), β (0.147), and t-value

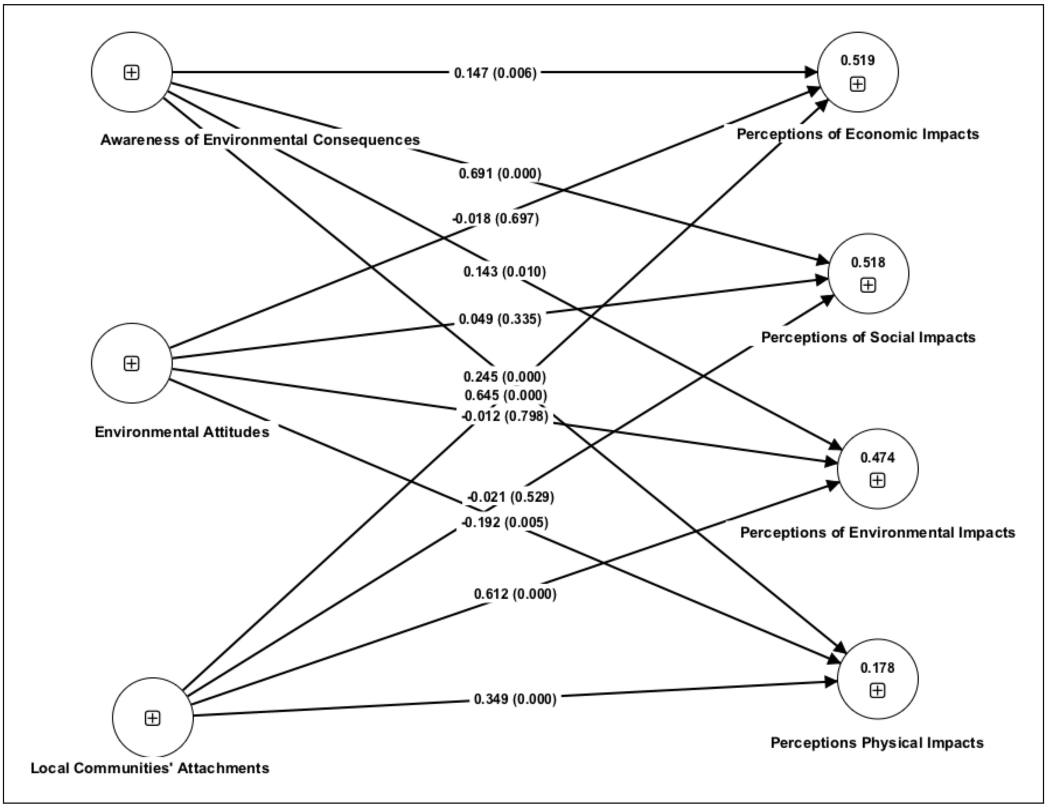

Figure 1. Assessment of structural model

(2.743), and to perceptions of environmental impacts (H2, p-value: 0.010, β: 0.143, t-value: 2.592), as well as to perceptions of social impacts (H3) with a p-value (0.000), β (0.691), and t-value (11.376), and finally to perceptions of physical impacts (H4, p-value: 0.000, β: 0.246, t-value: 3.565).

These findings support Handayani et al.'s (2021) findings that being environmentally aware may lead to adopting sensible environmental protection measures. It is also very natural that local communities will go to great lengths to protect themselves after hearing about the potential negative consequences of the environment (Zhang et al., 2017).

Environmental Attitudes

Statistically, it was found that environmental attitudes have no positive and significant relationship to perceptions of economic impacts (H5) as the p-value (0.997), β (-0.118), and t-value (0.389), and to perceptions of environmental impacts (H6) as the p-value (0.798), β (-0.012), and t-value (2.256), as well as to perceptions of social impacts (H6) as the p-value (0.335), β (-0.049), and t-value (0.964), which contradicts Gai et al. (2018) and Zhang et al. (2020), who discovered that communities would have eco-friendly behaviour if they can meet the basic needs of life. When viewed from the income perspective, 57%

of the respondents' net income per month is above the province's minimum wage, which is Rp. 4,300,000.

Although further research is needed, the results of this study found that 66% of respondents involved in tourism activities are believed to have no income below the provincial minimum wage because only 13% earn less than the average minimum salary. It is unknown if they work full time or are still enrolled in school since 13% of respondents are also young. Although environmental attitudes towards perceptions of physical impacts (H8) showed significant path coefficients (p-value: 0.005), since the interaction effect is negative (β: -0.192), the hypothesis should be disproved.

The distinctive features of the local communities in West Java could influence the outcome of this scenario (Setivorini et al., 2019). Tourism has been a significant economic driver in this area for decades, making it one of the most developed rural tourism destinations (Pradono et al., 2016). Local communities' beliefs, which prioritise economic gains more than environmental preservation, may play a role in this relationship. Local communities might have adjusted or turned indifferent to environmental changes brought about by tourism because it focused only on economic gain. However, this is merely a negative generalisation about the people of Sunda or the communities located in West Java (Damayana et al., 2021), which, of course, needs to be demonstrated to be accurate.

Local Communities' Attachments

The result statistically demonstrated that local communities' attachments only have a positive and significant impact on perceptions of economic impacts (H9), as indicated by p-values (0.000), β (0.645), and t-values (16.588), and on perceptions of environmental impacts (H10, p-value: 0.000, β: 0.0612, t-value: 15.205), as well as on perceptions of physical impacts (H12, p-value: 0.000, β: 0.349, t-value: 8.475). These may be supported by the increase in the economic status of the study region (Putra, 2018), and the findings of H10 mean to reject the findings of Ofoegbu and Chirwa (2019) that local communities are not necessarily responsive to environmental risk management.

However, local communities' attachments did not significantly affect the other endogenous variable, perceptions of social impacts (H11, p-value: 0.529, β: -0.021, t-value: 0.629). In the group gain rule of Social Exchange Theory, LCA positively impacts positive perceptions while hurting negative ones (Gursoy et al., 2017; Rasoolimanesh et al., 2016, 2015).

CONCLUSION AND IMPLICATIONS

Constant evaluations of perceptions of tourism's economic impact are conducted to ascertain the tourism sector's role in economic development (Comerio & Strozzi, 2019). However, for sustainability to be achieved, tourism management and activities must also contribute positively to the environment and society (Lim, 2022); furthermore, Demirović Bajrami et al. (2020) include physical impacts. As locals stay forever, understanding the factors that influence locals' perceptions of tourism impacts may ensure the success of sustainable rural developments.

This research has formulated the most influential influencing factors, filling a gap in previous studies that identified factors that affect the perceptions of tourism impacts in local communities. This results in local communities' perceptions of economic impacts being influenced by all influencing factors. Evaluations of the impacts of tourism on individuals and communities will shape their perspectives on the industry and the extent to which locals will advocate for its growth (Andereck et al., 2005; Ward & Berno, 2011).

Surprisingly, none of the tourism impacts were influenced by environmental attitudes. Environmental attitudes have a significant relationship with perceptions of physical impacts, but since the interaction effect is negative, it is negatively impacted, which is an unexpected relationship. It is quite discouraging, but it also highlights the need to check another influencing factor since environmental planning and application at local levels are recognised as the primary barriers to implementing sustainable tourism (Yang et al., 2023). Local communities' attachments affect other perceptions of tourism impacts, except social impacts, meaning none of those factors affects local culture enhancement, opportunities to participate in local activities, or improvements in the sense of belonging.

This needs special attention since studying the social impacts of tourism on local communities is one way to evaluate tourism growth (Hakim et al., 2023). Harun et al. (2018) recognise that to assess local communities' perceptions of tourism development, local managers or policymakers must understand the attitudes of the local communities. Local communities' perspectives on the benefits of tourism growth are influenced by their level of involvement in the industry's planning and expansion, providing insight for local authorities and other decision-makers into what areas must be strengthened to encourage environmentally responsible practices among communities in the future. The lack of implementation of sustainability practices in tourism can result in significant consequences, such as the closure of Maya Bay in Thailand due to excessive tourism, as Koh and Fakfare (2019) highlighted. Consequently, local managers must minimise environmental and societal harm while ensuring tourists' satisfaction.

This study's findings should encourage rural tourism sustainability through communities' perceptions of tourism impacts in all four aspects: economic, environmental, social, and physical, as maintaining the three pillars requires local communities' support. Adaptation involves changing one's behaviour, social norms, and self. Humans must also adapt to nature. Local management must examine its control over the economic impact the local community receives to sustain tourism in this rural tourism destination. Does this proper tourism impact make communities lazy to care for the environment? Relook at the current setup for how local managers set up the involvement of local communities in the environment, intended to keep the environment safe in a planned manner before it deteriorates further.

This study suggested a model to measure the local communities' perceptions of tourism impacts in their living area by merging three theoretical models and frameworks, including the extended theory of planned behaviour, the norms activation model, and the social exchange theory. To the researcher's knowledge, this study is the first to combine all three frameworks and models into a single diagram. This combination is expected to lead to more excellent knowledge of what influences local communities' perceptions of tourism impacts to attain sustainability in rural tourism.

Local tourism authorities should prioritise issuing regulations that encourage other influences than economic ones to gain the support of local communities in the tourism industry. The central government has provided various supports and even incentives for the environmental development of rural tourism destinations, which supports better perceptions of economic impacts. Still, socialisation and training regarding tourism awareness training (7 charms) and aspects of environmental protection must be continuously emphasised, given that people appear too comfortable with current conditions and must realise that failure to protect the environment can endanger their future.

The present study has concluded that its results are highly significant in identifying the relatively negligible direct effects of the influencing elements on the practice of environmental conservation within local communities. The results of this investigation will have significant theoretical and practical utility. The results of this study should cause concern among the local authorities responsible for managing rural tourist destinations. It is necessary to assess the current state of rural arrangements to ascertain their compliance with sustainability principles. Collaboration among the local government, central government, and tourist higher education institutions is required to critically examine the reasons behind the findings and develop several solutions to improve local communities' environmental conservation practices on a broader level.

However, limitations exist. First, we only looked at the direct effect of all the factors; future research can further establish the hypothesised indirect and even more relationships. The location of this research study is a rural tourism destination home to a sizable population; however, it is recommended that future studies be carried out in more diverse locations to better account for the specific conditions and requirements of rural tourism. Future research may also apply the triangulation of methodologies with the interview data, which could lead to a deeper comprehension of the actual context, improve the study's findings, and identify and explore potential variations that may influence perceptions of tourism impacts. Furthermore, we suggest doing longitudinal research to gain a deeper understanding of the potential changes in environmental attitudes and perceptions of tourist impacts over time, particularly in areas with well-established tourism practices. These investigations have the potential to provide a more profound understanding of the dynamics of these interactions and contribute to the development of theoretical frameworks.

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Exploring Societal Challenges in the Malaysian Sikh Community: Perspectives and Insights

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ABSTRACT

This research examines the social issues confronting the Sikh community in Malaysia. Despite the noteworthy contributions made by the Sikh community to Malaysian society, they encounter social challenges with far-reaching implications. This study explores the complex social issues affecting the Sikh community in Malaysia, particularly emphasizing three core areas: the economy, health, and family dynamics. To capture the subjective experiences of individuals, the researchers employed qualitative techniques, specifically conducting comprehensive interviews featuring open-ended questions. The interviews yielded three principal themes: generational conflicts, drinking habits, and financial instability. These themes highlight the imperative for transforming societal norms within the Punjabi community. The insights from the Malaysian Sikh community suggest significant implications for research and practice, indicating that addressing issues like alcohol use, marital strain, and gender dynamics requires culturally sensitive approaches. Collaborative efforts among religious leaders, community organizations, and professionals are necessary to create effective solutions tailored to this community's unique needs. The study holds substantial value in its potential to inform targeted interventions and support systems that foster a more inclusive and harmonious society, irrespective of its members' cultural or religious backgrounds.

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INTRODUCTION

Renowned for its remarkable diversity, Malaysia is home to a dynamic Sikh

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community that has made tireless contributions to the nation's advancement and cultural tapestry. Despite comprising only a small fraction, estimated between 80,000 to 100,000 individuals of Malaysia's total population of 32.7 million (Department of Statistics Malaysia [DOSM], 2022), the Sikh community has made significant contributions to the country's diverse society across multiple domains. However, like any other minority group, Sikhs in Malaysia face social issues that can have far-reaching consequences on their overall well-being. While there has been a gradual increase in studies conducted on the Malaysian Sikh community in recent years (Gill et al., 2015; Gill & Kaur, 2008; Kaur, 2002, 2003, 2012; Kaur & Kaur, 2022), researchers in this current study believe that further research is necessary to comprehend the challenges affecting this community. This study delves into the intricate web of social issues impacting the Sikh community in Malaysia, particularly focusing on three main aspects: economy, health, and family. As it is widely acknowledged, societal contexts evolve due to various factors like globalization, technological advancements, and changing cultural norms. Therefore, this study holds significance in acquiring a nuanced comprehension of the ways in which these changing dynamics influence the Sikh community and its societal challenges. Research findings can empower members of the Sikh community to advocate for their rights and address systemic injustices. It provides evidence-based insights that can be used to raise awareness, mobilize resources, and influence policies addressing social issues affecting the community.

Sikhism and its Theological Perspective

Sikhism, a faith that emerged more than 550 years ago, holds a pantheistic belief wherein God is perceived as the encompassing universe and all its elements or as the doctrine that sees the universe as a manifestation of God. This perspective on life is characterized by its practicality, rationality, and contemporaneity (Kaur, 2012). Sikhism finds its spiritual guidance in the Guru Granth Sahib, a scripture considered authentic, with God Himself as the author, who revealed the truth to the Sikh Gurus, regarded as messengers of God, and commanded them to spread it to humanity across the globe. Notably, the Gurus wrote the philosophy and authenticated themselves during their lifetimes, setting it apart from others compiled posthumously (Kaur, 2012). The scripture has been passed down through generations without any alterations, preserving its original content.

Sikh spirituality centers on understanding and experiencing God, with the ultimate goal of uniting with Him. The faith emphasizes living a virtuous life while balancing spiritual and worldly responsibilities. Sikhism promotes values like love for God, truthful living, peaceful coexistence, justice, and contentment, embodying the highest levels of human righteousness. Sikhs are encouraged to live these virtues daily, actively engaging as responsible community members, demonstrating integrity, and showing compassion (Kaur, 2002, 2003; Kaur & Gill, 2022). These values are practiced through four fundamental principles that reflect the Sikh way of life: (i) *kirat karo* (honest hard work), (ii) *wand chakko* (sharing one's earnings with the needy), (iii) *naam japo* (contemplating and remembering God in thoughts, words, and actions), and (iv) *seva* (voluntary selfless service to humanity) (Kapur & Misra, 2013; Kaur, 2012). It is important to note that Sikh individuals are not isolated but rather interconnected with their family (*parvaar*), society (*samaaj*), and the larger community congregation (*sadh-sangat*) (Sandhu, 2004). The Sikh identity involves preserving the body's natural form, such as maintaining uncut hair, while also nurturing the character developed through the teachings of the scripture, which is considered an accomplishment for a Sikh (Kaur, 2012).

Economy Issues

Financial problems like strain, job loss, debt, and money disagreements can stress Sikh and other families, causing conflicts and straining relationships. The COVID-19 pandemic worsened this, with many households facing income drops and moving from higher to lower income levels. In 2020, households earning less than RM2,500 increased by 12.5 percent, and 20 percent of families from the M40 group, which makes between RM4,850 and RM10,959, dropped to the lower-income B40 group. The T20 group, representing higher-income households, also felt the impact as 12.8 percent transitioned to the M40 group. The decrease in income was more notable for B40 and M40 households compared to the T20 group (DOSM, 2021).

Many Malaysians, especially those in the B40 group, have faced tough times during the pandemic. Surprisingly, there's been little academic research on the economic struggles of Malaysian Sikhs. There is a common misconception that Malaysian Sikhs are generally well-off economically, but this notion does not hold true for the entire community. Though there are successful Sikh entrepreneurs, many Sikhs haven't thrived lately. Furthermore, the Sikh population has struggled to keep up with Malaysia's current socio-economic pace. Income inequality hampers the progress of the Indian ethnic community in urban areas—many struggle to afford basic necessities like food, rent, and transportation due to low job income. Poor budgeting and unnecessary spending worsen this financial strain (Jeyakumar, 1993). Rising urban living costs lead people to seek new jobs or resort to unhealthy lifestyles (Sandhu, 1970).

Studies by organizations like the Asian Development Bank (2002) and van de Walle et al. (2001) consistently find that ethnic minority groups worldwide tend to have higher poverty rates compared to the majority. These minorities often struggle to access job opportunities and are frequently relegated to low-wage positions despite improvements in their education and qualifications (Mail Online News, 2007, as cited in Gopal, 2013). A news article focusing on impoverished Sikhs in Perak, Malaysia, sheds light on the poverty situation among Malaysian Sikhs. Initially, the former Chief Minister of Perak, Zambry Abdul Kadir, believed that Malaysian Sikhs didn't face severe socio-economic challenges like other communities. However, local leaders revealed there were approximately 1,500 hardcore poor Sikhs in Perak, accounting for about five percent of the total Sikh population of 28,000 in the state at that time (HT Correspondence, 2009).

Health Issues

The study primarily focuses on alcohol consumption, particularly its health implications, among Malaysian Sikhs. Regular consumption of hard liquor like Whiskey and Scotch is common among Punjabi Sikhs, with a notable lack of awareness about the health risks associated with alcohol use in this community (Thom et al., 2010). Countries like the United Kingdom, the United States, and India are increasingly acknowledging the need to address alcohol abuse within the Punjabi Sikh community on a national scale. However, similar studies in other countries, including Malaysia, are notably lacking. Due to the cultural acceptance of alcohol consumption, many Punjabi Sikhs tend to overlook this issue. Sikhs in the United Kingdom are identified as having the highest risk of alcohol-related health problems compared to other ethnic minorities (Galvani & Guru, 2020). A survey by Gleeson et al. (2019) found that 27 percent of British Sikhs knew of someone in their family with alcohol addiction.

Limited research exists on alcohol consumption among Malaysian Sikhs, with only a few studies briefly addressing the issue. Both Gill et al. (2015) and Singh (2014) recognize alcohol consumption among Malaysian Sikhs as a significant social issue requiring serious attention. Singh (2014) emphasizes that the community often overlooks the social illness caused by alcohol consumption, adversely affecting thousands of Sikh families. Excessive alcohol consumption is sometimes perceived as a sign of success. Singh (2014) notes that Malaysian Sikh women and children often end up abandoned because they lose their male family members, and this can be tied to alcohol consumption. Excessive drinking can lead to deaths among men, leaving their families without support. It can also cause family breakdowns, with separations or divorce leaving women and children on their own. Additionally, alcohol-related job loss creates financial stress, pushing families into tough economic situations. Alcohol use can also lead to domestic violence, forcing women and children to leave for safety. These scenarios illustrate the profound impact that alcohol consumption can have on family cohesion and the well-being of women and children in the Malaysian Sikh community. Despite this, little progress has been made by community leaders or the community itself to address the issue. Even occasional sermons from religious leaders advising against alcohol consumption often go unheard.

Family Issues

In Sikh society, as in others, individuals often face various family issues despite Sikhism's emphasis on strong family values and nurturing harmonious relationships. The generation gap, characterized by differences in values, beliefs, and lifestyles between older and younger generations, is a common challenge leading to misunderstandings, conflicts, and strained familial bonds. This issue is not unique to Sikh society but is observed in diverse cultural and religious communities (Mooney, 2020). Additionally, gender inequality can exist within Sikh families despite Sikhism's promotion of equality. This inequality may appear through the unequal distribution of household responsibilities, limited decision-making opportunities for women, or favoritism toward male children over female children (Kaur et al., 2022a). Parent-child conflicts, arising from differing expectations, lifestyle choices, career decisions, and cultural assimilation, can also arise within Sikh families as well as in other societies.

Despite being a minority group, the Sikh community in Malaysia has one of the highest divorce rates in the country, which is a paradoxical situation. Even though divorce is generally taboo within the Malaysian Sikh community, it continues to happen. According to the DOSM (2022), there was a notable increase in Muslim marriages by 21.0 percent in 2021 (176,002) compared to 2020 (145,443). Conversely, Muslim divorces decreased by 16.4 percent in 2021 (31,650) compared to 2020 (37,853). On the other hand, non-Muslim marriages declined by 4.7 percent in 2021 (38,941) compared to 2020 (40,854), while non-Muslim divorces surged by 30.4 percent in 2021 (12,284) compared to 2020 (9,419). These statistics illustrate a declining trend in non-Muslim marriages and an increasing trend in divorces. Many individuals undergoing divorce lack comprehensive knowledge of the legal framework governing such matters. Rahmat et al.'s (2019) study supports this, revealing that non-Muslim couples face emotional burdens due to their limited understanding of civil family law. Similarly, Kaur et al.'s (2022b) research found that Malaysian Sikh couples generally lack understanding of Malaysian Family Law. This study underscores the importance of Sikh couples familiarizing themselves with family law to protect their rights in difficult divorce situations. Many participants in the study felt trapped in unhappy marriages due to considerations like children or family pressure.

MATERIALS AND METHODS

To accurately capture the subjective experiences, the researchers adopted a comprehensive interview approach using qualitative techniques (Creswell & Plano-Clark, 2011). It involved crafting open-ended questions where the researchers ask broad, non-restrictive questions that allow respondents to answer in their own words, providing detailed and nuanced responses. This method elicits deeper insights and understanding of a particular topic or experience rather than merely seeking yes-or-no answers or numerical data. Purposive sampling was employed to select primary participants with relevant experiences pertaining to the phenomena under investigation (Boyd, 2001; Creswell, 1998). Additionally, snowball sampling techniques were utilized to broaden participation, whereby current informants were encouraged to suggest others for interviews. The number of respondents was decided using a saturation point, attained at respondent number 12.

Twelve individuals were chosen for inclusion in the study based on specific criteria. Firstly, they were required to identify as Sikh, adhering to the Sikh faith. Secondly, they needed to be citizens of Malaysia, thus ensuring a focus on individuals within the local context. Lastly, participants were either currently facing or had previously encountered various social challenges or issues in their lives. These criteria were established to ensure that the perspectives and experiences gathered would be relevant and representative within the research context. Pseudonyms were allocated to participants, and their informed consent was obtained before proceeding with the study to safeguard confidentiality and privacy.

During the interviews, the participants' comfort level was considered, and the interviewer ensured that the questions were acceptable and proceeded accordingly. Interviews were carried out in three languages: Punjabi, English, and Bahasa Melayu, according to each participant's preference. This approach aimed to accommodate the linguistic diversity among participants and ensure effective communication and understanding during the interview process. Each interview, lasting approximately 90 minutes, was recorded. Data collection continued until saturation was achieved, indicating no introduction of new viewpoints or perspectives.

The interviews were analyzed using Interpretative Phenomenological Analysis (IPA), a method allowing researchers to describe, interpret, and understand how respondents perceive and make sense of their lived experiences. According to Smith et al. (2009), "there is no right answer to the question of...sample size" (2009, p.56) when it comes to employing IPA methodology. On the other hand, Coyle (2014) stated that an average sample size of one to twelve people is sufficient for IPA. Themes were identified through a 'bottom-up' approach, emerging directly from the data rather than being influenced by existing theories. Interviews were transcribed verbatim and carefully reviewed for accuracy. Researchers familiarized themselves with the transcripts by reading them repeatedly and noting significant portions. Analytical rigor was ensured through discussions among the authors to validate identified themes. Following the categorization of themes or the essence of lived experiences, a 'validity check' was performed by revisiting participants to confirm the accuracy of the captured essence. Maintaining objectivity and integrity, researchers consciously separated their own experiences from those of the participants.

RESULTS AND DISCUSSION

In this study, the participants reflect the diverse makeup of the Sikh community. Among the 12 participants are four young adults in their twenties, five aged between 32 and 45, and three elders in their sixties, each offering unique viewpoints. Seven participants are female, while five are male, primarily from Peninsular Malaysia. Specifically, four are from Kuala Lumpur, three from Selangor, two from Negeri Sembilan, one from Penang, and two from Perak. They come from various backgrounds, including lorry drivers, housewives, educators, entrepreneurs, guards, and retirees, which enriches the discussions with their varied experiences. Among the participants, seven are married with two to four children, four are single, and one is a widower with three children. Educationally, five have bachelor's degrees, three have SRP qualifications, three have master's degrees, and one has a PhD. In terms of income, five participants earn between RM4000 and RM6000 monthly, four earn between RM1000 and RM3000, two earn between RM6001 and RM8000, and one has no income. The interviews revealed three primary themes: generational conflicts, drinking habits, and financial instability, which will be explored further in this section.

Generational Conflicts

Generational conflicts arise from differences in values, beliefs, and lifestyles between older and younger generations within families or societies. These tensions can manifest in various areas, such as communication styles, career aspirations, and parenting approaches, impacting family dynamics and relationships. Gurnoor Kaur noticed from a young age that her mother favored her brother due to his gender, resulting in unequal treatment toward her and her sister.

> The notion of being the '*ikala munda ghar da'* (sole male of the household) is simply an indirect form of differential treatment in any Punjabi household. Both my sister and I are expected to learn how to make *rotiyan*, cook a whole feast, and manage all the household chores. However, such expectations are never placed upon my brother. Why? Because it is assumed that he will bring a '*ghar di nauh*' (daughter-in-law) who will take care of cooking and cleaning for him. This situation is incredibly unfair and frustrating! (Gurnoor Kaur, personal communication, June 1, 2023).

Akalmeet Singh recounted an incident in which he observed his sister being compelled to abandon her dream of pursuing a Ph.D. due to their parents' preoccupation with finding a suitable life partner, considering her age, which was in her thirties.

> The matchmaker herself commented to my sister that she is becoming '*budhi*' (aged) and that if she postpones her marriage, she will only have leftover options, such as divorced or widowed men. This deeply saddened me on behalf of my sister and made me realize that if I have a daughter someday, I will

> never subject her to such treatment. Girls have so much more to offer than simply getting married (Akalmeet Singh, personal communication, June 1, 2023).

Whereas, according to Birsaroop Kaur, her sister is in an unhappy marriage where her husband verbally abuses her and doesn't support their children financially. Despite this, their parents insist she be patient and expect Birsaroop Kaur to provide constant aid. The parents feel entitled to intervene because they arranged the marriage.

> In my attempts to discuss the possibility of divorce, my parents always silence me, claiming that it's inappropriate to suggest such things to my sister, especially considering she has two young children. Similarly, when I bring up the topic of finding a partner on my own, they respond with statements like, "*Asi teri bhen di help karde aa because asi munda labhiya. Je usne ape labhiya hunda munda, phir ni asi help karde"* ("We help your sister because we arranged her marriage. If she had found a partner on her own, we wouldn't assist her and let her face the consequences alone"). Regardless of what I say to my parents, I find it impossible to change their perspective. It's disheartening to think about the lengths we must go to fulfill our parents' expectations (Birsaroop Kaur, personal communication, June 1, 2023).

Ekjot Singh, a person who identifies as gay, shared that he is currently concealing his sexual orientation from his family. Despite being open about his true self with his friends, he has not yet disclosed this aspect of his identity to his family.

> I'm terrified of what the future holds. I get panic attacks just thinking about how I'll ever tell them about my orientation. I come from a traditional family that is deeply involved in temple activities, and my dad holds a position on the gurdwara committee. Can you imagine the chaos my news will cause? So, I've decided to leave the country under the guise of furthering my studies soon. Maybe once I'm away from my parents physically, I'll find the courage to reveal my true identity to them. It pains me to keep this from them, but I wish they were more understanding (Ekjot Singh, personal communication, June 1, 2023).

Drinking Habits

Drinking habits encompasses cultural or social practices related to alcohol consumption within a community. It can involve rituals, customs, and norms regarding when and how alcohol is consumed. Many participants discussed the troubling prevalence of alcoholism in their families. Gurnimrat Kaur, for example, recounts the profound impact of alcoholism in her own family. She notes that several of her uncles, relatives, father, and brothers struggle with excessive drinking. Unfortunately, she has witnessed the loss of multiple family members due to alcohol-related accidents and health issues.

> My father experienced a stroke some time ago, and the doctors explicitly advised him against consuming alcohol. However, he disregards their warnings completely. Despite my mother's continuous reminders about the dangers of alcohol, he responds by shouting at her and then casually dismisses her concerns with statements like, "*Ik peg naal ni kuch hunda, thand rakh*" ("One drink won't do any harm, so relax"). This situation deeply saddens me, particularly because I empathize with my mother, who had to care for him during his previous health struggles (Gurnimrat Kaur, personal communication, June 2, 2023).

The interview excerpts highlight the challenges and negative consequences of fathers' excessive drinking despite their health issues being disregarded. Participants express emotions of embarrassment, worry, and frustration due to their fathers' behavior, as well as a lack of understanding or support from relatives.

> Family gatherings are a source of distress for me because my father's behavior at these events is embarrassing. He eagerly attends these functions for free alcohol and ends up ignoring us, opting instead to sit at the bar with relatives. As he gets intoxicated and acts foolishly, people laugh at him. He then compels my mother and me to dance by forcefully pulling us onto the dance floor. Despite suffering from high blood pressure and diabetes, my father shows no concern (Hargun Kaur, personal communication, June 2, 2023).

> Our biggest challenge was convincing my father to quit drinking despite being a heart patient and receiving medical advice against it. Despite knowing his condition, our relatives showed no concern. Whenever they gathered with him, they engaged in prolonged, excessive drinking, causing us great worry at home. Sadly, my father passed away last year due to a stroke and heart attack. Astonishingly, those same relatives attended his funeral and had the audacity to criticize his drinking habits, ignoring their own role in encouraging his excessive alcohol consumption. I wish my father had understood how his drinking affected our family (Harkanwal Singh, personal communication, June 2, 2023).

Both participants discuss the difficulties they encounter when their fathers prioritize alcohol consumption, resulting in adverse effects within their families. Keerat Kaur voices her concern about Punjabi men's excessive drinking habits, expressing sympathy for her mother and disapproval of such behavior. She emphasizes the necessity for change and awareness of the negative consequences.

> Avoid it, guys! I find it perplexing that our male counterparts consume excessive amounts of alcohol despite being well aware that Sikhism prohibits it. However, they casually dismiss

> the notion, saying, "*Saada function and nasha haini? Aa taan kadi ho ni sakda*!" ("Can our event go without alcohol? That's impossible!"). Seeing my mother and aunts sitting apart from gatherings until late into the night is disheartening because my father and uncles are still at the bar. What values are you teaching us, your children? My father often becomes so intoxicated that he loses control of his words when speaking to my mother. My brothers witness this behavior, and I fear they'll emulate it. If our fathers can do it and get away with it, why shouldn't they? Watching Punjabi men lose control due to alcohol truly disgusts me (Keerat Kaur, personal communication, June 2, 2023).

Overall, the statement highlights the negative impact of excessive alcohol consumption among Punjabi men, with implications for family dynamics and the potential perpetuation of such behavior among younger generations.

Financial Instability

Financial instability occurs when individuals struggle to maintain financial security, often due to factors like job loss, excessive debt, economic downturns, or unexpected expenses. Two respondents faced financial challenges during the pandemic, significantly impacting their lives. They had to adjust their lifestyles and seek alternative sources of income to meet their needs.

> When my husband lost his job during the pandemic, it was a terrifying experience. We had to be extremely careful with our spending. The moratoriums were a significant help as they allowed us to postpone car and house payments. Our parents and in-laws generously supported us for about 7-8 months, mainly by buying groceries and essential items. Fortunately, my husband found a job again after the lockdown, although his salary isn't as high as before. Now, he drives for Grab part-time. Our lives have changed, but I'm grateful as long as we can provide food for our children (Sharon Kaur, personal communication, June 3, 2023).

> The recent pandemic had a significant impact on our family. My father lost his job as a security guard, and both my parents contracted Covid-19, leading to ongoing health issues. My sister and I have taken on the responsibility of supporting our parents and managing the household despite having our own expenses. Unfortunately, our father's persistent illness means he can no longer work. While my mother wishes to sew to ease the financial burden, her arthritis prevents her from doing so for long periods. Frankly, I'm unsure how long we can sustain this situation, especially with my family to care for and the rising cost of living (Jasdeep Singh, personal communication, June 3, 2023).

Despite the hardships they faced, both individuals expressed gratitude for having food on the table and prioritized the well-being of their loved ones. The following interview excerpt addresses the transition of financial responsibility and the absence of spousal support in handling childcare duties.

> In 2013, my father suffered a severe stroke that greatly affected his health. Before the stroke, he had a monthly income of RM3500, allowing our family to comfortably cover household expenses since we were all employed and managing our finances. However, due to concerns for my father's health, I encouraged him to stop working. As a result, I took on the full financial responsibility of supporting my family. Recently, my brother has started contributing a small amount towards household expenses. Meanwhile, my married sister struggles to earn enough to support herself and her children. Thankfully, I am unmarried, which allows me to use my salary to support my parents. Over the years, I have been participating in a '*kutt*' (tontine) arrangement, contributing each month. This savings helps fund occasional trips for my parents once every two years (Naamsimran Kaur, personal communication, June 3, 2023).

I was offered a promotion at work, but it required extra hours and frequent travel. When I discussed it with my husband, he made it clear that he could not help with the kids due to his shift work. It led to arguments between us. I turned to my parents for advice, hoping for support, but they advised me to prioritize my husband and children. They suggested I end the conflicts and wait for my children to grow. From that moment, I understood I was on my own. Sadly, I did not get the promotion (Ekroop Kaur, personal communication, June 1, 2023).

PATRIARCHAL NORMS AND GENERATIONAL TENSIONS

The excerpts provided highlight various generational conflicts experienced by individuals within their families, drinking habits within Punjabi culture and its negative consequences on families, as well as financial challenges faced by individuals during the pandemic and their efforts to cope with the situation. Sikhs strive to live a virtuous and genuine life[1] while maintaining a harmonious balance between their spiritual and worldly responsibilities. Furthermore, they need to lead exemplary lives as part of a community, displaying integrity and compassion towards others (Kaur, 2012). The essence of Sikhism lies in the belief in equality among all human beings. This principle advocates for fair treatment of all individuals, regardless of caste, creed, class, religion, or gender. It emphasizes social justice to ensure equal rights and opportunities for everyone,

[1] Sikhism also preaches spirituality and inculcates love for God, truthful living, universal brotherhood, peaceful coexistence, loyalty, justice, impartiality, honesty, humility, forgiveness, self-control, courage, contentment, tolerance and all other morals and virtues known to any holiest man in this world (Kaur, 2012)

reflecting simple and universally applicable values. A key aspect is the belief that every human, regardless of gender, holds equal importance, with the same rights and opportunities to live according to God's will and achieve spiritual liberation (Kaur, 2002, 2003, 2012; Kaur & Gill, 2022). However, respondents express frustration over gender-based differential treatment in Punjabi households, where males are often exempt from household chores. Additionally, some girls face obstacles in pursuing academic and career aspirations due to societal pressure to prioritize marriage over personal goals.

Women are expected to prioritize the welfare and needs of their husbands, families, children, and others. These ideals are ingrained in women from birth to marriage, shaping their ideology (Kakar, 1989). As a result, women are socialized to view men as superior and taught to humbly obey the demands of their parents, brothers, and husbands (Kaur & Gill, 2022). Female respondents express disappointment when their spouses refuse to support their career advancement. Cultural expectations that women excel in domestic roles hinder their career progress, as they lack family support. Young girls are taught domestic skills like cooking and cleaning, which are valued for marriage prospects rather than higher education and earning potential. Interestingly, female respondents become the financial backbone of the family when husbands and fathers lose income sources. These accounts highlight women's resilience, sacrifices, and prioritization of loved ones during financial instability.

Despite a clear structure of equality in human relationships, the majority of the Punjabi households are trapped in the patriarchal system. As a South Asian community, the Punjabi culture is a collectivistic culture that seeks to keep the needs of others ahead of another (Honore et al., 2013). A collectivistic community can be a source of support, but at the same time, it can cause stress among its members. Many Punjabi families are following the patriarchal family structure (Angelo, 1997; Galdas et al., 2012; Gill, 2012; Honore et al., 2013). The Punjabi patriarchal hierarchy authorizes the father's power to make decisions and control his family members. On the other hand, women typically hold the least power and are not involved in household decision-making (Ray, 2006). In such a structure of power imbalance, women may be unguarded by domestic conflict and confined to the lower hierarchy, subject to ancestral rituals and customs.

As noted by Cranny-Francis et al. (2003), patriarchy is a social system where privilege, power, and authority are predominantly held by men, influencing cultural, economic, and social positions. Consequently, Punjabi females are expected to remain silent and refrain from expressing their opinions, as arguing with elders is viewed as offensive and disrespectful. Additionally, they are not encouraged to offer solutions to family issues, discuss divorce or choose their own partners. Divorce or separation is considered a threat to family honor (izzat), leading many Punjabi women to suffer silently, endure abuse, and face health problems.

One study by Gill et al. (2015) revealed prevalent concerns about divorce among Malaysian Sikhs. Another study by Kaur et al. (2022) found a lack of awareness about civil family law among married Sikh couples. Additionally, both studies highlighted misconceptions about *Ghristi Jivan*, clarifying that Sikh teachings do not condone wrongdoing or violence within marriage. These findings prompted further investigation into how Malaysian Sikhs address marital issues that may lead to divorce. These conflicts also prevent respondents from disclosing their sexual identity and orientation to their orthodox families, underscoring the challenges arising from generational differences in values and societal norms. In patriarchal systems, women are typically excluded from positions of power, except when supporting individual men or the social system. Thus, women may assert authority within the home to maintain a supportive environment for their husbands (Kaur & Gill, 2022).

CULTURAL PRACTICES AND HEALTH RISKS

Punjabi Sikhs place significant emphasis on maintaining face value and avoiding shame that is deeply ingrained in their psyche (Angelo, 1997). However, while males are not typically reminded to avoid bringing shame to the family, females are repeatedly cautioned against it (Gill, 2012; Rait, 2005). Interviews reveal that drinking habits create shame among the drinker's family members rather than the drinker themselves. Participants share personal experiences and observations of their fathers' excessive drinking despite medical advice against it, leading to embarrassment, frustration, and worry within the family. Moreover, relatives show no shame in enabling or participating in prolonged drinking sessions, disregarding the health of those involved. Yet, Punjabi society does not label this behavior shameful to the family or community. This lack of recognition exacerbates the challenges faced by participants and their families.

Singh (2014) underscores that Malaysian Sikhs often overlook the social illness stemming from alcohol consumption, which adversely affects numerous Sikh families. Excessive drinking is sometimes viewed as a measure of success despite its devastating consequences observed among Malaysian Sikh women and children, often left abandoned due to the loss of male family members. Families are torn apart by alcoholism, yet community leaders have made little effort to address the issue. Sermons advising against alcohol consumption by religious leaders often go unheeded. This sentiment reflects sadness, concern, and a call for change and awareness regarding alcohol's harmful effects. Participants question the values passed to younger generations and disapprove of witnessed behaviors. It highlights the urgent need to address excessive drinking among Punjabi men and its repercussions on family dynamics and future generations.

CONCLUSION

In conclusion, the excerpts offer a critical lens into the pervasive social issues that deeply impact the lives of individuals and families within the Punjabi Sikh community. These issues, ranging from generational conflicts to entrenched patriarchal structures, underscore the complex interplay between cultural norms, societal expectations, and individual well-being. Despite the egalitarian principles championed by Sikhism, the stark reality of gender-based disparities and familial power dynamics persists, stifling the agency and potential of women. The entrenched patriarchal system within Punjabi households serves as a formidable barrier to progress, perpetuating gender inequalities and curtailing the autonomy of women. This systemic inequality manifests in various forms, from hindering girls' educational and career opportunities to silencing their voices in matters of divorce and partner selection. As a result, women endure silent suffering and bear the brunt of health issues, underscoring the urgent need for systemic change.

Furthermore, the cultural acceptance of excessive drinking within Punjabi society exacerbates familial discord, social stigma, and health risks despite the absence of associated shame within the community. Effectively addressing these entrenched social issues demands a paradigm shift and concerted efforts to challenge and dismantle patriarchal norms and gender inequalities. It necessitates comprehensive community-wide initiatives, including awareness campaigns, support systems, and interventions aimed at addressing the root causes of alcohol consumption and its detrimental effects. Ultimately, enhancing the well-being of individuals and families within the Punjabi Sikh community requires a collective commitment to fostering an environment that values inclusivity, equality, and individual agency. It entails challenging detrimental social norms and stereotypes, promoting gender equality, and creating pathways for comprehensive development and personal fulfillment for all members of the community.

Implication for Theory and Practice

The insights from studies and observations within the Malaysian Sikh community regarding issues like alcohol consumption, marital challenges, generational conflicts, and gender dynamics have profound implications for theory and practice. These findings underscore the necessity of considering cultural contexts when examining social phenomena, suggesting a need for culturally sensitive approaches to research and theory development. Moreover, they contribute to discussions on identity intersectionality, highlighting how factors like gender, culture, religion, and socio-economic status shape individuals' experiences. Practically, these insights call for targeted interventions and support systems tailored to the Malaysian Sikh community's unique needs. Collaborative efforts involving religious leaders, community organizations, and mental health professionals are crucial to addressing issues like alcoholism, marital discord, and gender inequality effectively. Culturally appropriate education and awareness campaigns can challenge harmful norms and promote healthy behaviors. Additionally, culturally competent mental health services are necessary to support individuals and families dealing with substance abuse, domestic violence, and intergenerational conflicts. Bridging theory and practice demands a holistic approach that respects the Malaysian Sikh community's cultural context while striving for meaningful and lasting change.

Limitations and Recommendations for Future Research

One limitation of current research on issues within the Punjabi Sikh community, notably concerning alcohol consumption and family dynamics, is its heavy reliance on anecdotal evidence and qualitative studies. While these studies offer valuable insights into individual experiences, they may lack the quantitative data for a comprehensive analysis. Moreover, longitudinal studies are scarce in tracking changes over time and assessing the lasting effects of interventions or societal shifts. Additionally, there is a lack of research examining how factors like gender, socio-economic status, and cultural norms intersect with alcohol consumption and its impact on family dynamics. For future research, it is recommended that more comprehensive and longitudinal studies that blend qualitative and quantitative methods targeting Sikh youths in Malaysia be conducted. Surveys and statistical analyses can provide quantitative data to complement qualitative insights and offer a more complete understanding of alcohol consumption prevalence and its effects on families. Longitudinal studies can track changes and evaluate intervention effectiveness over time. Exploring the intersectionality of factors like gender and socio-economic status can deepen understanding of alcohol consumption patterns and family dynamics.

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The Role of Social Capital and Social Media in Tourism Development Towards the Wellbeing of the Mah Meri Community in Carey Island, Malaysia

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ABSTRACT

The study aims to close the social media and social capital gaps for sustainable indigenous tourism. It encompasses social media's active participation, social capital, and community sources for sustainable indigenous tourism on Carey Island, Malaysia's Mah Meri. The utilisation of social media in the development of Indigenous tourism is shaped by the application of social capital theory and a quantitative methodology. The application of social media to sustainable tourism fills the gap in the Social Capital Theory. Structural equation modelling (SEM) and partial least squares (PLS) analysis aim to assess the relationship between exogenous and endogenous factors. The outcomes revealed that community sources (including culture, nature, and knowledge) and social media (adaption, participation, interactivity and sharing) significantly influenced sustainable Indigenous tourism. The results of a hierarchical multiple regression analysis used to moderate factors showed that income and educational attainment significantly influenced the association between social capital and sustainable Indigenous tourism. The results of this study contributed fresh insights into the literature on tourism that leverages community social capital.

Keywords: Indigenous tourism, social capital, social media, sustainable

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INTRODUCTION

The global indigenous population is estimated to be about 370 million, approximately 5% of the world population (O'Bryan et al., 2021). The indigenous people reside in more than 70 countries, with the majority (70%) located in Asia

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(O'Bryan et al., 2021). Indigenous tourism is sometimes used interchangeably with "aboriginal tourism" or "ethnic tourism," as it is distinguished by the difference between aboriginal tourism or indigenous tourism and ethnic tourism.

Social capital, which includes institutions, relations, attitudes, values, and norms, is highly connected with sustainable development (Salari Sardani et al., 2014). Rezazadeh et al. (2016) indicated that social capital moderates the relationship between the development of urban tourism and sustainable urban development. A study by Johari and Kunasekaran (2019) revealed the average and strong relationship between social capital and sustainable indigenous tourism dimensions. The relationship between social capital and community-based tourism to provide insights into collective capacity and self-determination. Similarly, Moscardo et al. (2017) and Parmawati et al. (2018) highlighted the limited study on social capital in the development of community-based tourism. Therefore, it underlined the need for further study on social capital in Indigenous tourism. However, it is still at the infancy level of indigenous tourism. Similarly, there are gaps in contemporary literature on the use of social media among the local indigenous community. Moreover, analysing the uses and applications of information and communication technology (ICT) in Indigenous tourism has been relatively less researched by past studies (Lu et al., 2018; Zeng & Gerritsen, 2014). Xiang and Gretzel (2010) further pointed out that 'the extent to which social media constitute the online tourism domain is not well understood in an objective, comprehensive way'. In addition, more social media studies are carried out from the perspective of the consumer than from the local community (Lu et al., 2018). Hence, it stressed the necessity of further study on social media in relation to sustainable tourism. In this study, the Mah Meri community was chosen as the leading indigenous group actively involved in tourism in Malaysia.

Literature Review

Sustainable development is 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'. This statement was said to be misleading as it 'indicates a great deal of ambiguity in this concept, and it has been problematic ever since (Higgins-Desbiolles, 2018). Tourism development has been realised to generate positive changes via sustainable tourism (Hashemkhani Zolfani et al., 2015).

As provided in Figure 1, Sustainable tourism and community resources are significant in introducing positive benefits and creating some regulation and development for culture, natural resources and indigenous knowledge associated with the community-based tourism theory (Bramwell & Lane, 2012). On the other hand, sustainable tourism creates awareness concerning the relatively low impact of nature and the support of stakeholders (Lee, 2013; Lee & Hsieh, 2016). It decreases resource costs, creates market differentiation to reduce profitability and compromises competitiveness. Sangchumnong and Kozak (2018) carried out a study to assess the sustainable cultural heritage tourism at one tourist village.

Tourism development is influenced by social media tools. Most people use social media applications on their mobile devices (e.g., tablets and smartphones) for many reasons. It also allows travellers to share trip experiences and opinions (Roque & Raposo, 2016; Xiang & Gretzel, 2010). There are several types of social media commonly used by internet users, such as social networking (e.g. Facebook, LinkedIn, Google+); microblogging (e.g. Twitter, Tumblr); photo sharing (e.g. Instagram, Snapchat, Pinterest) and video sharing (e.g. YouTube, Facebook Live, Periscope, Vimeo).

Tourism contributes significantly to the economic benefits to Indigenous people by offering jobs (Amoamo et al., 2018). It is also perceived as "a socio-economic cure-all for Indigenous peoples". The indigenous community in Malaysia represents around 12% of the Malaysian population, most of whom reside in East Malaysia, while the remaining reside in Peninsula Malaysia (Isa et al., 2016). The indigenous communities in Peninsula Malaysia are relatively small in number, representing only 0.5% (178,000) of the entire population of Malaysia. They can be categorised into three groups (Abdullah et al., 2015): (1) Semang (Negrito), (2) Senoi and (3) Proto Malay (Aboriginal Malay). Each group has a different language, beliefs, living style, culture and ethnicity (Abdullah et al., 2015; Isa et al., 2016).

Cultural impacts impact the Mah Meri community's quality of life (Majin et al., 2016). Thus, the attitude towards tourism development in Carey Island is positive, and they support tourism. There is also a tendency to increase the exploitation of indigenous people. The evolution of social capital has been discussed by Woolcock (2001). It distinguished three forms of social capital, namely (1) obligations and expectations, (2) information channels, and (3) social norms. Social capital can be categorised into two parts: cognitive social capital and structural social capital (Kawamoto & Kim, 2019). Cognitive, social capital refers to 'shared norms, values, trust, attitudes, and beliefs' (Kawamoto & Kim, 2019). It comprises three features: trust, reciprocity, and cooperation (Kwon & Adler, 2014; Park et al., 2012). It assists a group or community in sustaining itself.

Tourists commonly use social media to make travel decisions, plan trips, share information pertaining to their trips, and exchange information (Edwards et al., 2017; Lu et al., 2018; Pabel & Prideaux, 2016). For example, Pabel and Prideaux (2016) conducted a study to understand the use of social media for information searching before the trip begins for a small coastal destination in Port Douglas, Queensland, Australia.

The Social Capital theory employed in tourism provides the bonding, bridging, and linking of social capital (Kumar et al., 2021). Tourism affects the Mon community due to several negative cultural impacts (e.g., apparel, customs, beliefs) and economic impacts (e.g., income distribution).

The Community-Based Tourism (CBT) theory has been widely used in the past tourism literature. The CBT theory is broadly related to the enormous range of tourism products, such as traditional performances, natural resources, and handicraft products generated by the communities. The adoption of participation for interaction and sharing of social media integration theory is employed for sustainable tourism (Alam & Kuppusamy, 2023). Economic, social, cultural, and environmental sustainability indicates the local communities that own and manage the lodges or homestays in the local communities. The sustainable tourism theory reflects the significance of the local communities setting up their own small-scale self-managed business. Therefore, the local communities prefer utilising natural resources, cultural practices, local food, and lodges as tourism offerings to attract local and international tourists. There are three hypotheses in the present study, as provided by H1, H2, and H3, for the direct effects between the constructs. This follows:

H1: Community resources have a direct effect on sustainable tourism

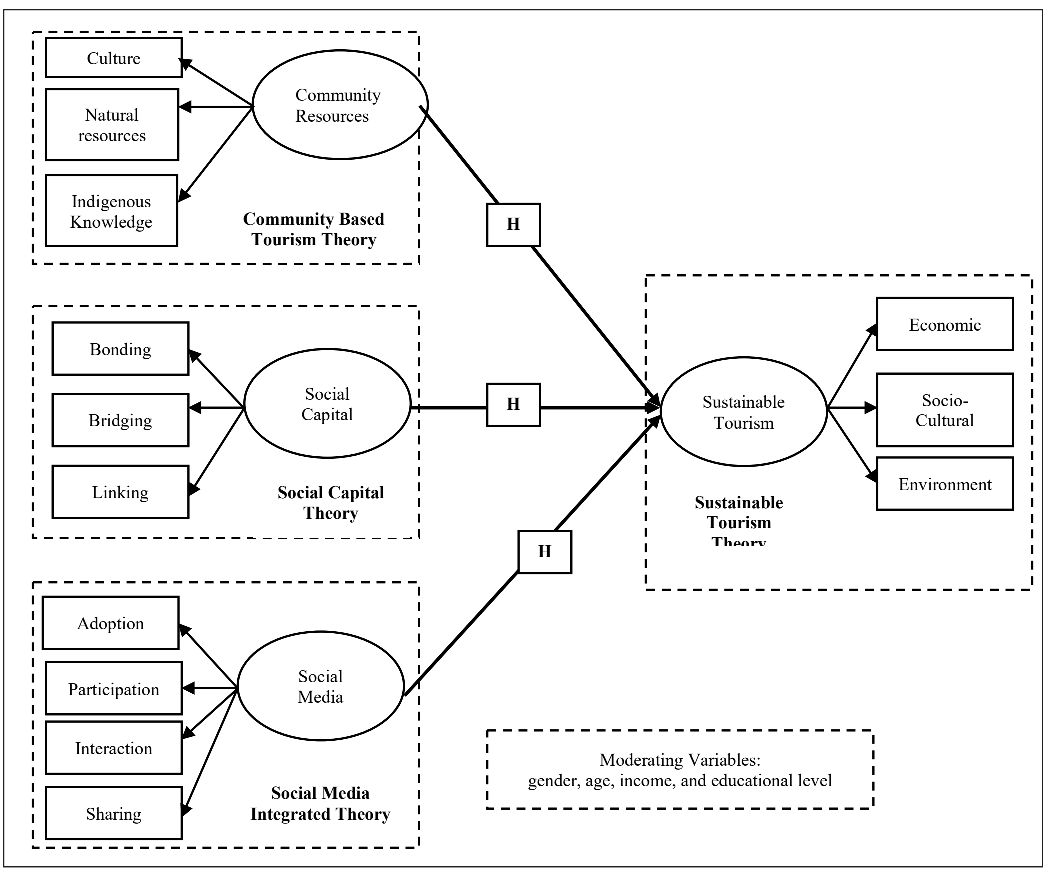

Figure 1. The framework of the study

H2: Social capital has a direct effect on sustainable tourism

H3: Social media has a direct effect on sustainable tourism

H4: Socio-demographic moderating the relationship between community resources, social capital, social media, and sustainable indigenous tourism.

The present study formed a new conceptual framework by combining four components: community resources, social capital, social media and sustainable tourism, which had been explored separately in previous studies. In addition, this combination has not been fully executed in indigenous tourism (Sumra & Alam, 2021). The study outcomes will help fill the research gap in social capital theory in relation to social media utilisation and sustainable tourism. This study also introduces new constructs named community resources, including culture and natural and indigenous knowledge. Hence, it will significantly contribute to the body of knowledge of Indigenous tourism. Finally, the study has also formed a new conceptual framework by combining four theories: Community Based Tourism Theory, Social Capital Theory, Social Media Integrated Theory and Sustainable Tourism Theory, which have been investigated separately in previous studies. Thus, the outcomes of the study will provide new insights to the upcoming researchers who will examine the model further in various tourism fields.

MATERIAL AND METHODS

A quantitative approach is used in this study to collect and analyse data. The study is inductive in nature as the social capital and Indigenous people variables are well explored in the past literature (Johari & Kunasekaran, 2019). The sample for the study was drawn from the total population of the Mah Meri community in Carey Island, which was derived from the Department of Orang Asli Development of the year 2019. The study was conducted among 202 indigenous communities of Mah Meri on Carey Island from April to August 2019. This study adopted purposive sampling methods whereby the researcher only managed to collect data from the Mah Meri community members who agreed and were willing to participate in the survey (Alam & Bahrein, 2021). The data was collected using the survey questionnaire and the Five-Likert questionnaire. Partial Least Squares (PLS)-Structural Equation Modelling (SEM) analysis and Hierarchical Multiple Regression were applied in this study to analyse the collected data.

The target population for this study is Mah Meri communities in Carey Island. The statistics derived from the Department of Orang Asli Development for 2019 indicated that the total population of the Mah Meri community in Carey Island is 3762. This study adopted non-probability sampling because the chance of each member of the Mah Meri community being selected as a respondent for this study is not confirmed (Alam, 2022; Sumra et al., 2020). The purposive sampling method was also used in this study because the researcher only managed to collect data from the Mah Meri community members who agreed and were willing to participate in the survey. The Raosoft Sample Size Calculator was executed to measure the sample size for this study. The calculator estimates 349 Mah Meri people as a suitable sample size for this study (based on the Mah Meri community statistics. In addition, Suresh and Chandrashekara (2015) sample size calculator formula was used to recheck the sample size. Suresh and Chandrashekara (2015) recommended a sample size estimation formula to calculate the sample size: **Sample size calculation formula.**

$$\boldsymbol{n} = \frac{z^2 \times p\,(1-p) / e^2}{1 + (z^2 \times p\,(1-p) / e^2N)}$$

where n is the required sample size. P is the sample proportion, z is the critical value of the normal distribution at the required confidence level, and e is the margin of error.

$$\boldsymbol{n} = \frac{z^2 \times p\,(1-p) / e^2}{1 + (z^2 \times p\,(1-p) / e^2N)}$$

$$\boldsymbol{n} = \frac{1.96^2 \times 0.5\,(1-0.5) / 0.05^2}{1 + (0.05^2 \times 0.5(1-0.5) / 0.05^2\ 3762)}$$

$$\boldsymbol{n} = \frac{3.8416 \times 0.25 / 0.0025}{1 + (0.25 \times 0.25 / 9.405)}$$

$$\boldsymbol{n} = \frac{384.16}{1.01}$$

$$\boldsymbol{n} = \boldsymbol{380}$$

A number of statistical analyses of SPSS were applied in this study to examine the data and hypotheses testing. Finally, Structural Equation Modelling (SEM)-PLS (Partial Least Squares) analysis was executed to evaluate the exogenous and endogenous constructs' relation. After the data collection, coding was used to key the data systematically and easily into SPSS 21 (data analysis software) (Zikmund et al., 2013). The data was coded by assigning character symbols (using numerical symbols) and edited before entering into SPSS to execute the analysis of Structural Equation Modelling (SEM) -Partial Least Squares (PLS). Several tests were conducted to ensure all targeted assumptions remained assembled. There are 230 questionnaires distributed among the Indigenous community of Mah Meri on Carey Island from April 2019 to August 2019. Although the sample size calculator suggested 380 as a suitable sample size for this study, the researcher only managed to distribute 230 questionnaires due to the willingness of the community members to participate in the survey.

RESULTS AND DISCUSSION

Subsequently, path analysis evaluates all proposed hypotheses in this study. The path coefficient or Beta (β) value is used as an indicator in this analysis to examine the designed hypotheses (Alam, 2022). The path coefficient value should be between -1 to +1. Whenever the value is close to +1, it illustrates a strong positive relationship between constructs; a value close to -1 demonstrates a negative relationship. Furthermore, if the value is close to 0, it shows a weak and non-significant relationship between constructs (Hair et al., 2018). Most researchers used the t-value via bootstrapping analysis in SEM-PLS as a statistic to exhibit the relationship between the two tested constructs (Hair et al., 2014). The t-value in this analysis should be greater than 1.96. Whenever the value is 1.96 and above, it illustrates a significant relationship between constructs; therefore, the alternative hypothesis will be accepted (Arkkelin, 2014).

For Hypothesis 1, the outcome in Figure 2 showed a direct correlation between sustainable indigenous tourism and the community source, with a t-value of 5.329 (more than 1.96) and a path coefficient (β) of 0.393. Consequently, this theory is validated. Cheng et al. (2017) found a strong correlation between social media and the sustainability of tourism destinations, which is in line with this outcome. Comparably, research by Liu et al. (2020) showed that social media is crucial for interaction, communication, and behaviour modification among tourists. It is also significant for the growth of the travel industry. The result indicated that the community source directly relates to sustainable Indigenous tourism, where the path coefficient (β) is at 0.250, and the t-value is 3.459 (greater than 1.96). Hence, this hypothesis is supported.

For Hypothesis 2, the outcome of the analysis revealed in Figure 3 that

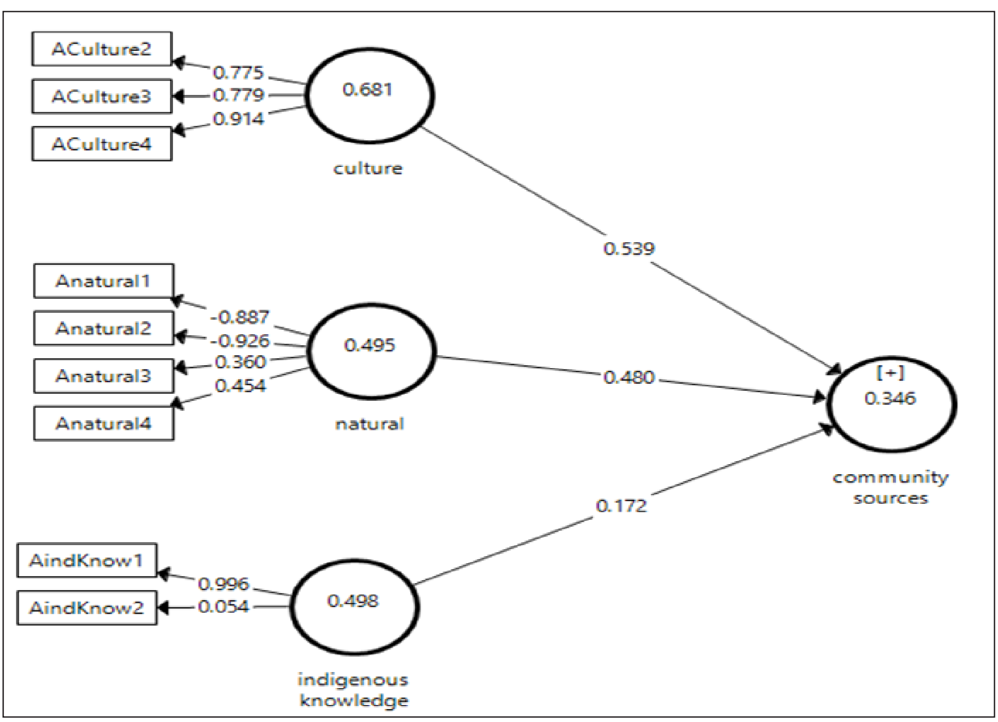

Figure 2. Reflective Assessment (PLS) Community Source

social capital has a direct relationship with sustainable indigenous tourism, where the path coefficient (β) at -0.441 and t-value is 5.877 (greater than 1.96). Figure 3 illustrates a negative and direct relationship between social capital and sustainability. Thus, this hypothesis is supported. This result is against the findings of Watson et al. (2011) and Waylen et al. (2009), who illustrated a significant relationship between social capital, sustainability, and the cultural heritage of Indigenous people. This negative relationship can be interpreted as the Mah Meri people are comfortable working in their own smaller groups rather than having social capital development for sustainability.

For Hypothesis 3, the reflective assessment provided in Figure 4 indicates the association of social media with the leading elements. Similarly, Yongrui et al. (2018) underlined that all dimensions of social media (including adoption, participation, interaction, and sharing) significantly influence the community's commitment to tourism development. However, Suess et al. (2018) stressed that imbalanced power and bonding can lead to negative perceptions and commitments towards tourism development.

This finding is also supported by Lee and Jan (2019a), Mtapuri and Giampiccoli (2013), and Simpson (2008), who found that the community's local culture and natural environment significantly influence the development of tourism destinations. Similarly, studies by Baum et al. (2016) and Kunasekaran et al. (2015, 2017) supported this finding by highlighting the essential role of indigenous economic and social-cultural environment in Figure 5. It follows

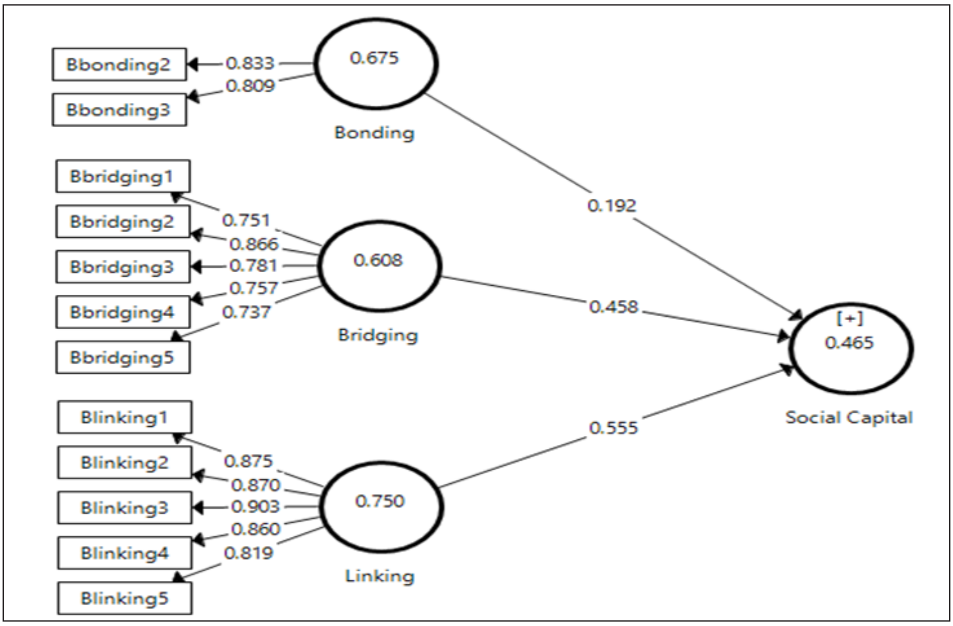

Figure 3. Reflective Assessment (PLS) Social Capital

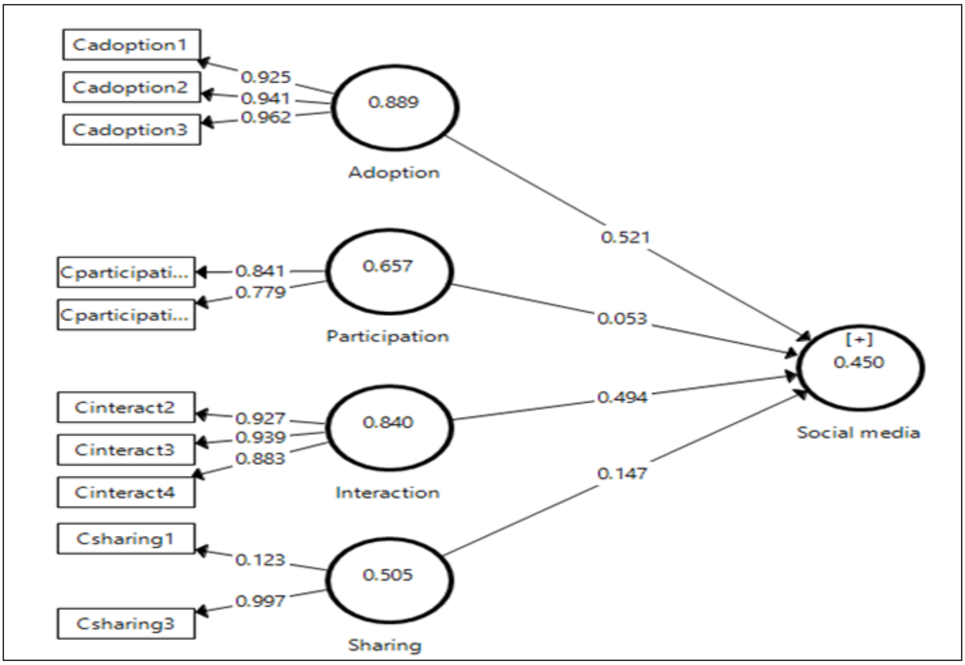

Figure 4. Reflective Assessment for Social Media

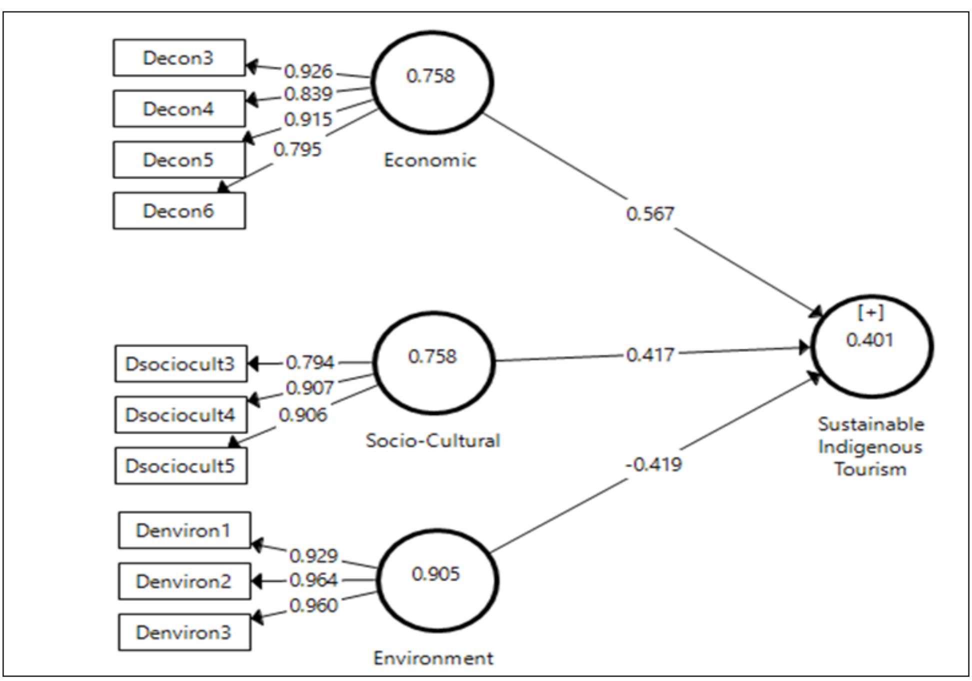

Figure 5. Reflective Assessment (PLS) Sustainable Indigenous Tourism

the culture and knowledge in developing and sustaining community-based tourism. However, Nair et al. (2012), Oswald et al. (2007), and Siow et al. (2015) stressed the negative effects of community-based tourism, which badly damages nature and the environment to cater for the demands of various tourists.

In line with this, path analysis was conducted through the PLS algorithm and bootstrapping calculation to evaluate the relationship between constructs. The testing of the three hypotheses in Table 1 of this study are a) the direct relationship between community source and sustainability, b) the direct relationship between social capital and sustainability, and c) the direct relationship between social media and sustainability. Table 1 demonstrates the hypothesised relationships of Hypothesis 1 (H1), Hypothesis 2 (H2), and Hypothesis 3 (H3). Figure 4 shows the path coefficient between exogenous and endogenous constructs.

As reflected in Figure 6, the findings of the direct effect of community resources towards sustainable Indigenous tourism (at t-value = 3.459) are consistent with previous studies which have validated the occurrence of the relationship between these two constructs (Baum et al., 2016; Kunasekaran et al., 2015, 2017; Lee & Jan, 2019b; Mtapuri & Giampiccoli, 2013). Studies by Kunasekaran et al. (2015, 2017) confirmed a significant relationship between community resources (including natural environment, culture and community knowledge) and tourism development. Crippen and Salevurakis (2019) revealed that tourism activities in rural and community-based areas help generate economic and social benefits for local communities through employment opportunities.

The paper's findings provided that the study's response rate was calculated, and the non-responses test was executed. Then, data screening and cleaning analysis were performed. Several tests, such as missing data analysis, outliers, normality, and multicollinearity, were conducted in this process. Demographic profile analyses were followed to elaborate on the respondent's profiles. Next, measuring and structural models were evaluated through SEM-PLS analysis. Both convergent and discriminant validities were used in the measurement

Table 1
Hypothesis testing

Hypotheses	**Relationship (Exogenous -> Endogenous)**	**Path Coefficients (β)**	**t-value**	**P-value***	**Decision**
H1	Community Source -> Sustainable Indigenous Tourism	0.250	3.456	0.000	Supported
H2	Social Capital -> Sustainable Indigenous Tourism	-0.441	5.877	0.000	Supported
H3	Social media -> Sustainable Indigenous Tourism	0.393	5.320	0.000	Supported

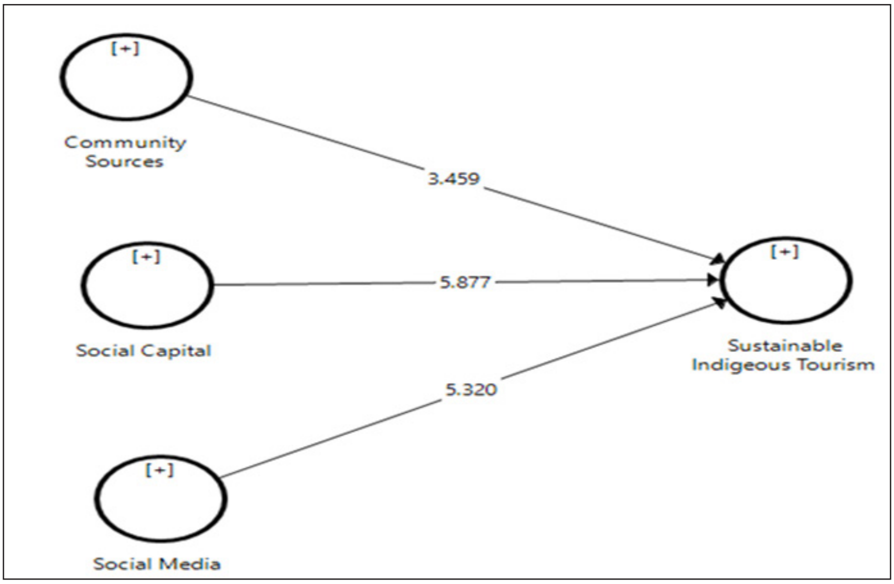

Figure 6. Path coefficient between exogenous and endogenous constructs

model analysis, and satisfactory results were illustrated. In the structural model, the direct effect or relationship between constructs was implemented. The outcomes of this analysis indicated that all three hypotheses were accepted. The moderating effects through Hierarchical Multiple Regression analysis demonstrated that income and educational level significantly influenced sustainable indigenous tourism. Hence, it clearly indicated that community sources, social capital and social media significantly influence sustainable indigenous tourism. Local communities illustrated full commitment and support to tourism development in their destination because the development brings more positive effects to the communities (Gunawijaya & Pratiwi, 2018).

The Malaysian government, Ministry of Tourism and Culture Malaysia (MOTAC), tourism authorities, Jabatan Kemajuan Orang Asli (JAKOA), and policymakers can get some insights on enhancing and sustaining community-based tourism. Although past studies illustrated a significant relationship between bonding, linking, bridging and sustainability, the findings provided new insight to tourism authorities by highlighting a non-significant relationship between these constructs. Therefore, they can’t fully depend on social capital to influence the sustainability of community-based tourism.

CONCLUSION AND RECOMMENDATIONS

The empirical analysis of the direct effects towards sustainable indigenous tourism is the main theoretical contribution to the research, especially to tourism literature. First, community resources (including culture, nature, and knowledge) and social media (adaption, participation, interactivity, and sharing) have significantly influenced sustainable Indigenous tourism. Secondly, the outcomes revealed that social capital did not influence sustainable indigenous tourism, although past literature demonstrated a significant relationship between these variables. Thirdly, the study also presented an extended research model that combined community resources, social capital, social media, and sustainable tourism, which had not been tested together in previous studies. Most of these constructs were tested separately or combined with two related constructs in the past literature. Thus, the findings of this study added new knowledge to the tourism literature.

The second contribution of this study is practical. The study is anticipated to offer managerial insights and suggest fundamental enhancements to the tourism industry, with a specific focus on community-based tourism. The study's primary objective was to examine the influences of community sources, social capital, and social media on the sustainable indigenous tourism of Mah Meri in Carey Island, Malaysia. The study's outcomes demonstrated direct effects between all these constructs, aligning with previous research. However, the study also revealed a negative relationship between social capital and sustainable indigenous tourism, contradicting most prior findings. On the other hand, community sources and social media showed a positive relationship with sustainable Indigenous tourism, consistent with earlier research. This study faced several limitations, such as difficulty data (rural setup) and female respondents, as many of the Orang Asli were uncomfortable being interviewed.

The policy implications and management for this research outcome contribute new insights to the body of knowledge, particularly in sustainable and community-based tourism fields. Importantly, the study enhances practitioners such as MOTAC, Majlis Perbandaran Kuala Langat and local communities in Carey Island's understanding of utilising and integrating community sources, social capital, and social media to sustain Indigenous tourism in the future. The model generated in this study should serve as a foundation and guide for future research in sustainable and community-based tourism fields. Additionally, the study furthers exploration in the prominent area of sustainable indigenous tourism.

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The Effects of COVID-19 on the Development and Well-being of the Maldives Guest House Community

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ABSTRACT

The effects of COVID-19 on the tourism industry are widely discussed in international literature, but research on its impact on small businesses, such as guest houses, remains limited. This study examines the effects of the pandemic on the development and well-being of the guest house community in the Maldives. It focuses on those affected by the temporary restrictive measures on the business. The qualitative study involves interviews with 10 Maldivian guest house owners conducted via Zoom and Google Meet. The data are analysed using content analysis, and common themes and patterns are identified from the participants' verbatim interview transcripts. The practical implications, limitations, and future research recommendations are discussed, including examining guest house tourism resilience. The findings reveal that most guest house managers were unprepared for a pandemic of this magnitude, and government assistance for guest house recovery was insufficient. This study provides valuable insights to decision-makers and policymakers, aiding in understanding the pandemic's impact on guest houses, formulating community recovery strategies, and preparing for potential natural or man-made disasters.

Keywords: COVID-19 pandemic, guest house community, Maldives, resilience, well-being

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INTRODUCTION

A severe acute respiratory syndrome coronavirus two infections (SARS-CoV-2) outbreak in December 2019 in Wuhan, Hubei Province, China (Zu et al., 2020) brought the world to a standstill. On 11 February 2020, the World Health Organisation (WHO) (2020) Director General announced the official name of COVID-19. As of 3 August 2020, the virus had spread to 213 countries, infected 18,370,333 people and caused 695,074 deaths, while 11,564,472 people recovered (Worldometer, 2020).

Maldives tourism has been known for the “one island, one resort” concept since 1972, and guest houses have been permitted on inhabited islands after the 2009 law amendment (Ahmed, 2018). This change opened the destination to middle- and low-income travellers, allowing locals to provide affordable accommodation (Chia & Muiz, 2020). Starting with the first guest house in K.Maafushi, the Maldives now has 530 guest houses, representing 65% of the accommodation sector (Ministry of Tourism, 2020). This shift has created substantial economic opportunities for island communities, making guest house tourism a crucial income source.

Guest houses in the Maldives are relatively small and have bed capacities of 3–24 rooms (Ministry of Tourism, 2020). As each guest house has a low bed capacity, the manager and owner usually are the same person. Sometimes, the guest house is the owner or manager’s home registered and operated as a guest house. The Maldivian Ministry of Tourism (2020) stated, “Tourist guest house refers to an establishment, other than a tourist hotel, that has been developed, in compliance with standards determined by the Ministry of Tourism, to provide board and lodging or [only] lodging for tourists for a payment decided at a certain rate per day of stay.”

The Maldives confirmed its first COVID-19 case on 12 March 2020 and declared a 30-day public health emergency (WHO, 2020). Travel restrictions and guest house shutdowns followed, especially in the Greater Malé Region (Ministry of Economic Development, 2020). While the lockdown was eased on 29 May 2020, guest houses remained closed, and travel was suspended (COVID-19 Response, 2020a). Guest houses reopened on 1 July 2020 for locals or residents on specific islands, with international tourists allowed from August, and inter-atoll and international flights resuming on 15 July 2020 (COVID-19 Response, 2020b). These measures significantly impacted the country.

The COVID-19 outbreak halted the income generated by guest houses, which raised concerns for many guest house operators burdened with bills without an income source or government relief (Avas, 2020). Concerns were also raised due to the lack of government information on resuming guest house operations. Before COVID-19, infrastructure, competition, policies, and regulations were considered challenges for guest house development (Chia & Muiz, 2020). Hence, the pandemic intensified these challenges, and the guest house sector competed with the resort sector. The effect of COVID-19 halted the income generation of the guest house community due to a lack of government support and the challenges of reopening the operations due to limited guidance.

Various academicians have studied the effects of COVID-19 on guest houses (Kiryakova-Dineva & Bozhkova, 2021; Schmid et al., 2022; Sucheran, 2021), but there is an absence of studies addressing how Maldivian guest houses were affected by the Global pandemic which highlights the need for this specific research. This study examines the pandemic's effects on the Maldivian guest house community business operations, disaster preparedness, and the perspectives of owners/managers on government actions. Looking at this community as one of the key drivers for local economies and well-being highlights the need for better crisis management. Furthermore, the findings would assist policymakers in drafting guidelines, allocating finances, and making prompt decisions in similar future events to manage the crisis.

LITERATURE REVIEW

Negative Effects of COVID-19 on Tourism

Domestic and international travel restrictions due to COVID-19 caused immense global losses to the tourism sector. The global tourism industry recorded a loss of 67 million international tourists by the first quarter of 2020, which reached approximately USD 80 billion in receipts (UNWTO, 2020a). The UNWTO (2020b) estimated that the potential effects of COVID-19 would result in a total loss of 850 million to 1.1 billion tourists globally in 2020. Worldwide, 100% of destinations implemented travel restrictions, and 97 destinations, including the Maldives, totally or partially closed their borders to tourists.

The International Labour Organisation (ILO) (2020a) reported that COVID-19 affected the hospitality and transport industries globally. Multiple hotels and resorts ceased operation as they were not receiving tourists. The tourism industry was one of the most job-secure industries globally but was most substantially affected by COVID-19. Lockdowns, mass unemployment, shutdowns, and bankruptcies significantly damaged the industry (Paul, 2020).

Pawlicz (2010) stated that decreased tourism demand would decrease occupancy and the number of employees required, which would affect the community's livelihood (cited in Napierała et al., 2020). The COVID-19 travel restrictions significantly affected livelihoods globally as most people are directly and indirectly connected to the tourism industry. The UNWTO (2020a) predicted the loss of 100–120 million direct tourism-related jobs.

Maldivian guest houses are situated on small, isolated islands and are crucial for local income as tourists spend money in local shops, cafés and restaurants, creating a beneficial multiplier effect (Travel Trade Maldives, 2019). On 17 March 2020, all city hotels and guest houses in the Maldives ceased operations, leading to the cancellation of 125,827 tourist bookings (Rehan, 2020). This shutdown severely impacted guest house revenue, especially for SMEs reliant on commercial loans or leased land (Maldives Insider, 2020). Since tourism constitutes 40% of the Maldivian economy, 80% of exports, and 50% of revenues, tourism significantly impacts the entire archipelago (Hadad-Zervos, 2022).

A study on the effects of COVID-19 in the Maldives resort sector revealed that approximately 22,000 local employees' job statuses were affected. Either the post was declared redundant; the employees were given no-pay leave or salary cuts were enforced (Ministry of Economic Development, 2020). This approach affected many locals' livelihoods. Many families of the resort employees living in the capital, Malé, had to move back to their islands as they could not afford their expenses. Many foreign workers working in Maldivian resorts also returned to their countries (Ministry of Economic Development, 2020).

Several destinations gradually opened their borders following the lockdowns (Kucheran, 2020; Kumar et al., 2023), which included European destinations (UNWTO, 2020c) and the Maldives (Cripps, 2020). Wen et al. (2020) discussed the negative effects of the pandemic on tourism and destination demands. The implication of departure, on-arrival policies, and the number of cases affiliated with each destination resulted in much hesitation regarding travel. These hesitations meant domestic tourism would recover more rapidly than international tourism (Napierała et al., 2020). Nonetheless, this might not be favourable for the Maldivian guest house sector, as it focuses on international rather than domestic tourists (Chang et al., 2024).

Positive Effects of COVID-19 on Tourism

Tourism-related workers rarely have family time, especially during the holidays, as it is the busiest time of the year. Nevertheless, the travel restrictions and lockdown implemented on all tourism-related establishments resulted in abundant time to spend with family members, catch up with friends, renovate, redesign, or plan for the lifting of lockdown and travel restrictions. Ministry of Economic Development (2020) data for research on resort-sector employees indicated the positive effects of the lockdowns regarding having more time to spend with family, especially during Ramadan, which was previously a busy time for the hospitality and tourism sector. The UNWTO (2020d) COVID-19 impact assessment stated that the lockdowns could be an opportunity to re-think business models and designs, digitalise hotel procedures, and prepare for the new normal. The tourism and hospitality industry survived through structural changes and innovative service and product transformation to diversify its business portfolio (Balasubramanian & Hanafiah, 2022).

COVID-19 and Travel Restrictions

Border closures and travel restrictions were the first governmental measures imposed as COVID-19 spread. By 31 March 2020, 142 countries had imposed border closures, while 78 countries imposed partial closures (Connor, 2020). These restrictive measures slowed the disease spread and gave policymakers much-needed time to draft policies in preparation for reopening borders. On 28 May 2020, the UNWTO (2020d) released a global guideline to reopen tourism that emphasised safe, seamless travel and restoring confidence as priorities. New Zealand was one of the first countries to eliminate COVID-19 transmission. On 8 June 2020, New Zealand Prime Minister Jacinda Ardern announced that there were no active COVID-19 cases in the country and that all containment measures except border control would be lifted (Menon, 2020). By 15 June 2020, 22% of all destinations eased on travel restrictions, a 3% increase since 18 May 2020 (UNWTO, 2020d). A Sabre Corporation survey of Asia-Pacific countries revealed that 11% of travellers would travel immediately once travel restrictions were lifted, while 20% planned to travel within 1–3 months, and 14% were willing to travel within 4–6 months, with millennials being the first to travel (Ong, 2020).

Policy Responses

On 31 March 2020, the WHO (2020) released a comprehensive guideline for the accommodation sector that could be adapted to local contexts. The American Hotel and Lodging Association (AHLA) (2020) released a "stay safe" guide, while The Hotel Association of Canada and the AHLA released a joint health safety protocol that highlighted new rules for cleaning, such as frequent disinfection of shared touch surfaces and cleaning rooms once per stay to minimise contact (Thibedeau, 2020). On 26 March 2020, the European Parliament approved measures to support tourism businesses and workers, including assistance packages, tax moratoriums, and wage subsidies (European Parliament, 2020a). Additionally, the European Council proposed lifting travel restrictions for 15 countries based on COVID-19 trends, which were reviewed bi-weekly (Januzi, 2020).

Considering the COVID-19 crisis, many Asia-Pacific countries also devised measures to mitigate the situation (Donbak et al., 2022; ILO, 2020a). Australia allocated AUD 1 billion in funds to support tourism, agriculture, and education and waived fees to the Great Barrier Reef marine park and other national parks (ILO, 2020b). Indonesia supported ten tourism destinations with financial aid and tax subsidies. Malaysia offered MYR 1,000 tax relief for tourist attractions. Thailand provided 1,000 THB via an app for tour packages with a one-night stay requirement. These measures, financial assistance, and marketing efforts were vital, especially at the beginning of the pandemic, to recover from the effects of the pandemic. Furthermore, monitoring and ensuring proper implementation of the strategies were essential to ensure that resources were directed towards the areas in greatest need, such as assisting small businesses—guest houses in communities depend on these businesses for their livelihood.

Disaster Preparedness

The hotel industry is globally interlinked and consumer-driven, which exposes it to various business interruptions (Poulaki et al., 2022; Segal et al., 2015). Various academicians and media commentators highlighted that the magnitude of COVID-19 upset the global tourism industry with a force similar to the Great Depression or World War I and II (Bisby, 2020; Hall et al., 2012; Higgins-Desbiolles, 2020; Hollingsworth, 2020) (cited in Carr, 2020). These interruptions were particularly destructive to island destinations (Bhaskara et al., 2020) as the size and isolated nature of the islands were a setback to the post-disaster recovery of tourism demand and supply (Hall, 2012; Kumar et al., 2024).

While individual governments or global communities cannot entirely prevent deadly infectious viruses, disaster preparedness can be strengthened (World Bank Group, 2020). Bhaskara et al. (2020) highlighted the importance of collaboration. They emphasised having an element of "tangibility", such as shared, pooled resources that could be used in recovery, better-integrated frameworks, knowledge-sharing, and exchanging good practices as readiness. Furthermore, the International Monetary Fund (IMF) emphasises the importance of infrastructure, health systems, disease surveillance, and international collaborations to monitor epidemic outbreaks and increase response preparedness (European Parliament, 2020b).

Smart technology has been important in the travel industry by making travel more convenient and accessible, facilitating the travel experience. Changing consumer behaviours in digital business means that it is important for hospitality service providers to create unique experiences to remain competitive and proactive (Balasubramanian & Konar, 2022).

MATERIAL AND METHODS

This exploratory qualitative study, which involved guest houses in the Maldives islands and was approved by the MNU ethics committee, examined the effects of the COVID-19 pandemic on the development and well-being of the Maldivian guest house community and investigated the effects of the pandemic on guest house owners or operators, their teams, and families.

The guest houses were selected for data collection based on the most recent guest house list published by the Maldives Ministry of Tourism. Participants across the Maldives were selected using stratified random sampling (Taherdoost, 2016) to ensure a diverse representation of guest house owners from different regions. Those near the capital may have different effects compared to other parts of the Maldives. The saturation point was determined by gathering data until no additional new information could be obtained from the participants to ensure the robustness and completeness of the data.

Pilot testing was conducted through two interviews before the data collection, where the interview questions required no changes. The 20 Atolls of the Maldives were divided into North, Mid-North, Kaafu (Capital), Mid-South, and South areas. The guest houses were distributed in table form to the five areas, and a number was assigned for each guest house. Two guest houses per area were selected using the Google random number generator. Once the consent forms had been collected from the participants through email, 45-minute to 1-hour interviews were conducted via Zoom or Google Meet due to COVID-19. The main interview questions focused on the effects, preparedness, and way forward from the pandemic. The interviews were conducted in the Maldivian language, Dhivehi, and then translated and transcribed manually. Transcription errors were prevented by having the second researcher review each transcription. Subsequently, the transcriptions were coded to identify themes.

RESULTS

Table 1 presents the respondents' demographic details. All participants were male, in management positions, and between 24 and 45 years old. The participants' education level varied from a Grade 7 dropout to a bachelor's degree, and they had 2–20 years of work experience in the hospitality industry.

Table 1
Participants' demographic data

Demographics						
Participant	**Age (years)**	**Gender**	**Qualification**	**Years in the industry**	**Location**	**Designation**
1	45	M	Bachelor of Arts	20	Hulhumalé	Managing director
2	44	M	Hotel school	15	Addu City	Managing director
3	36	M	Bachelor's degree	3	A.DH.Dhanghethi	Managing director
4	24	M	Bachelor's degree in Tourism Management	5	L. Gan	Managing director
5	35	M	O-Level	15	V.Keyodhoo	General manager
6	32	M	Bachelor's Degree (incomplete)	2	M.Maduvvari	Owner or manager
7	44	M	Grade 7	7	Aa. Ukulhas	Manager
8	29	M	A-Level	3	K.Gulhi	Owner
9	38	M	Secondary school	15	N. Fohdhoo	Managing director
10	34	M	MBA	4	Kulhudhuffushi	Operations manager

Table 2
Work structures of the guest houses

GUEST HOUSE DETAILS										
Participant	**No. of Years Running GH**	**No. of Rooms**	**Meal Plan Offered**	**Restaurant in GH**	**Restaurant Outsourced**	**No. of Cancellations Due to COVID**	**Post COVID: Earliest Booking Date**	**Occupancy Post COVID**	**Target Market**	**Other Services Provided at GH**
1	4	14	Offer all MP	Yes	Yes	A lot	Not yet	-	Chinese	Laundry and all other
2	7	8	Offer all MP	Yes	Yes	All bookings	Nov-Dec 2020	5%	Divers	All services
3	2	13	Offer all MP	Yes	No	56 bookings (152 pax)	Nov-Dec 2020	40%	Divers and Russian	Water sports (OS)
4	6	13	Offer all MP	Yes	No	120 bookings	Nov 2020	0%	Russian	Spa, excursions, and laundry
5	6	9	Offer all MP	Yes	No	50 bookings	Nov 2020	20 bookings	German & European	All services are available
6	2	4	Offer all MP	Yes	No	6 bookings	Not yet	0%	No specific market, though mostly Europeans	Excursions
7	3	3	Offer all MP	Yes	No	All bookings	Oct 2020	2 bookings	No specific market	Excursions
8	2	5	FB	No	-	All bookings	Not yet	-	No specific market	Excursions
9	3	9	Offer all MP	Yes	No	100% cancelled	Dec 2020	10-20%	Europe, Russia, and Italy	Excursions
10	6	17	Offer all MP	Yes	No	More than 70% cancelled	Not yet	Not yet	Italian	Excursions

Table 2 details the guest houses managed by the participants. The guest houses operated for 2–7 years and had 3–17 rooms. Most guest houses were constructed on the owners' housing plots, where the owners built the lot up to 2–3 stories and leased or rented out rooms. Thus, many of the guest houses had very few rooms.

Nine guest houses had in-house restaurants. Two guest houses outsourced their restaurants, and the guest house management operated the rest. All guest houses offered all types of meal plans. All bookings were cancelled due to the border closures. While the guest houses were required to cease operations temporarily, a few guest house managers kept the restaurant open for locals, which helped generate an income. At the time of the interview, the participants stated that they believed they could confirm bookings by November or December 2020. The target market included Chinese, Russians, Germans, and Italians (more towards the European market) and was diverse. Only two participants stated that they did not target specific markets. Most guest houses provided more than bed and breakfast services, such as laundry or excursions.

Impact on Guest House Operations

While the borders were closed due to the COVID-19 pandemic, half of the participants stated that they continued operations without completely shutting down. Few participants stated that they received local tourists for medical purposes. Before the pandemic, locals travelled to hospitals in Malé. Nonetheless, the lockdown and travel restrictions meant that locals had to find alternatives, which resulted in local medical tourism.

> "A new form of travelling is getting popular, which is medical tourism; other than Malé City, healthcare facilities are quite good here, and this island is quite accessible, so we have been getting many people across the nation if you go to Malé right now you are under lockdown so many people are coming to here, Right now we have like 500 people in this island seeking medical service and for other purposes. Even in

Table 3
A summary of the guest house operations

	OPERATING				NOT OPERATING	
	Domestic Medical Tourism	**Convert Business**	**Local Tourism**	**Renovating**	**Not Operating**	**Quarantine Center**
	1	1	1	1	1	1
	1				1	1
					1	
TOTAL	2	1	1	1	3	2
%	20	10	10	10	30	20

> my guest house, 50%–60% occupancy is locals from across the country. I have a couple from the Northern part of the country, too" (Participant #2).

Another participant stated that he chose to use the opportunity to halt guest house operations and shift the operation focus. Another used the lockdown for significant renovations. Some participants repurposed their guest houses as quarantine facilities for returning locals, with one charging a small fee to cover expenses. Despite the local tourism opportunities, a few participants stated that they ceased operations until the borders reopened. A summary of the guest house operations is provided in Table 3.

Disaster Preparedness: Managing the Crisis

The participants' level of preparedness was clarified using the following questions: What were their actions immediately after the COVID-19 lockdown, and what did they plan to do during and after the lockdown? Most participants stated that they stopped all reservations, cancelled their bookings, and put the business on standby.

> "We started to cancel all the reservations; our workforce is from the island, so we did not want to take any risk. Some people even have kids, there is the possibility that our workers might carry it to their home, so we did not want to take the risk. So, we cancelled all the reservations; per the booking policy, we cannot cancel bookings for seven days. So other than those bookings, we cancelled all bookings" (Participant #8).

The respondents stated they would target the Asian and European markets and group travellers post-pandemic. Nonetheless, some participants mentioned that they would continue targeting the same market. For example, Participant #4 stated, "We can manage occupancy from the European market; every year, we have 80% repeat customers, so we do not plan to target a different market since we can maintain occupancy from the European market."

Most participants stated they had prepared a standard operating procedure (SOP), while one said he would follow Ministry of Tourism guidelines. Another participant mentioned developing an SOP for when the borders reopened.

Workforce and Salary Deduction

A few participants' immediate actions in the workforce due to the pandemic were to send employees on no-pay leave. Some of these employees moved back to their islands and voluntarily quit their jobs. While some participants dismissed their employees, they assured them they would be rehired once the situation improved. Two participants mentioned terminating team members, although one assured the employee they would be rehired once the situation improved.

> "Since I was unable to pay them salary, I had to let go of the staff temporarily. I gave them a two-month salary, and now they are temporarily on leave" (Participant #2).

Most employees agreed to be paid some remuneration. Nevertheless, the disbursement period varied, with some owners paying one month in full while others paying for up to three months. Salaries were then deducted by 50% and remained the same even at the time of the interview.

> "We did inform all staff that we will try to give three months full salary; after three months, most of the staff are on a half salary basis; we informed the staff that since a date has not been set to re-open we do not want to let go of any staff, we will be unfortunate to see our staff go if we had to let go of the staff, we will do it only if we have to close down the entire guest house operations" (Participant #9).

A few participants confirmed requesting government financial assistance to pay employees, while the rest were paid the salaries out of their savings. The participants who requested financial assistance mentioned that the figures received from the government were insufficient for payroll and that their team members' salaries were unpaid. One participant who transferred all employees to the guest house restaurant operations stated that he faced no negative implications for the workforce. Only one participant hired a worker during the pandemic, as he used the opportunity to renovate his guest house.

All participants were eager to restore the team to the initial payroll once the travel restrictions were lifted, as they believed their team members were their greatest asset. Nonetheless, most participants mentioned that they would only be able to bring back the team depending on bookings, which were unpredictable at the time of the interview.

Financial Negative Impact

The pandemic led to the temporary closure of all Maldivian guest houses, which halted the operators' income source. More than half of the participants stated that they had been injecting money into the operations since March 2020. While some participants had paid expenses out of their savings, others requested financial assistance (loans) to pay rent, salary, and other expenses. However, these were barely sufficient to cover staff salaries. Thus, the participants stated that they had pending payments (utility bills and rent) even at the time of the interview. The participants stated that taking out the loans put them into debt, which exerted tremendous mental strain.

> "We had a four-year plan to recover the investment; the first year, we made many mistakes operational-wise, so we had a huge minus figure, so I involved myself in the operations and I was able to bring in a good cash flow in February, unfortunately starting from March we have been bleeding and bleeding, we have only been paying staff salary, electricity bills are pending, rent is on halt, we are in a huge debt" (Participant #3).

Only a few participants earned income from guest house operations during the lockdown period. These participants used their guest houses to cater to front-line staff, quarantine purposes, and domestic tourists travelling for medical purposes.

> "The normal operation is at a stop, but since health workers, front-line staff were here, we were able to pay salary and rent" (Participant #1).

All participants agreed that the income received from these few transactions was neither profitable nor sufficient to pay for expenses. Most participants agreed that closing the guest house resulted in no income for the household, and thus, personal expenses had to be reduced to the bare necessities. These participants stated that their personal lives were not affected, and they were conducting business or having government jobs.

Positive Effects on Operations

All participants agreed that the pandemic did not positively affect their business. One participant stated that the lockdown enabled him to conduct much-needed renovations, and another appreciated the ease of financial transactions and logistics.

> "I don't see any positive impact, I was managing my business very well, so I didn't see any area in which I needed to improve, had there was any waste of money or overspending maybe that could be a lesson the pandemic would have taught, so this disaster has not mainly made me re-think anything. I had to pay out salary for staff, rent, and all which did bring in anxiety" (Participant #2).

> "We have become quite familiar with online transactions while purchasing items for wholesale or retail, so now the effort that we have to put into bringing things here is less. Previously, we had to put much effort into searching for the items and bringing them here, so the process is now simpler. Even when the pandemic is over, I believe this process will remain" (Participant #8).

A few participants agreed that the lockdown gave them quality time to spend with their families, although excessive spare time was also an issue. While some participants focused on religious practice and exercise, others agreed that the pandemic was stressful.

Government Policy Actions

Several participants mentioned requesting and receiving government financial aid, while others did not request it. Opinions on the government's pandemic response were mixed, with suggestions for reopening borders sooner, increasing SME marketing, and implementing more feasible guidelines. Concerns included the impracticality of quarantine facilities for small businesses.

> "If guests are travelling inter-island, they must quarantine for 14 days, which is impractical for guest house operations and disrupts the island community. Guest houses rely on strong community ties, and guests enjoy the welcoming atmosphere. If guests feel unwelcome, local tourism suffers. It's crucial that rules do not conflict

with community life. Participants also worried about the island's ability to implement government guidelines and handle potential outbreaks" (Participant #6).

> "Honestly speaking, our health facilities are inferior, cannot even make a lab test here, and we have to send to nearby islands for that as well, so if someone gets sick here, we do not have a way to consult the doctor, in that case, we cannot reopen the guest house right now as per the HPA guideline. So I am not at all happy with the guidelines by the HPA, and it is going incur more losses for me since I will have to cancel all the bookings that are already made; guests will lose trust in me, but if even if we have to lockdown the entire island we are not going to do, because we will for sure prioritise the well-being of the community than our own business" (Participant #9).

One participant highlighted that while the government could not do everything for the guest houses, he was concerned that some actions regarding guest house operations were politically motivated.

DISCUSSION

The border closures due to the COVID-19 pandemic severely affected the Maldives tourism industry. Guest houses were the most affected as they were SMEs. Most guest houses paused operations and lost bookings immediately. Nonetheless, a few guest houses quickly diverted their operations, with some converting their guest houses into quarantine facilities and charging a small fee. Contrastingly, other operators welcomed guests travelling for medical purposes within the Atoll. This approach demonstrated the potential for developing medical tourism within the islands, which could pave the way for a more resilient business model to reduce external shocks' effects. Table 4 provides a summary of actions taken by guesthouses to boost occupancy during and after lockdown.

Encouraging domestic tourism could have helped balance the adverse financial effects of the pandemic. People started travelling domestically as many countries relaxed their regulations on people's movement within the country (WHO, 2020). Nevertheless, most guest houses did not take action for recovery mainly due to uncertainty and were unsure when people could start travelling or what the quarantine measures would be (Israeli & Reichel, 2003; Koliopoulos & Valeri, 2022; Kubickova et al., 2019). Moreover, restaurants could have been used to prevent the financial burden of accumulated expenses and suspended income. While most guest house operators stated they had in-house restaurants, only a few kept the restaurant operational and open to locals.

The pandemic significantly affected the tourism industry globally. A systematic review by Davahli et al. (2020) reported that 17 papers discussed the effects of COVID-19 on the tourism industry, such as the effects on revenue, job losses, access to loans, and even hostile behaviour towards foreign workers, which agreed with the results of this study. The 10 participants' actions regarding their workforce varied. Some participants immediately terminated employee contracts or levied half-pay and no-pay leave. These measures resulted in the employees seeking other employment or eventually quitting. The participants clearly took the time to communicate and release employees with a shared understanding (Rodríguez-Antón & Alonso-Almeida, 2020). The participants also communicated their interest in their employees returning to operations and that they would re-hire employees as soon as bookings began increasing. Thus, the guest house management and foreign workers had no hostile relationship. The foreign workers or employees were supportive, understanding, and willing to work with salary cuts.

Although the participants did not take action for recovery due to uncertainty, most invested time marketing their guest houses to their targeted markets (Chemli et al., 2022; UNDP, 2020). One participant stated that he spent much time during the lockdown educating and creating awareness among his team and the local community of what was expected and the required safety measures after the lockdown. He felt locals would be distressed and reluctant to welcome tourists amidst the pandemic. Another participant built his relationship with travel agents and tour operators as he believed that this was extremely important to increase bookings once the pandemic or restrictions were lifted. Table 5 provides a summary of actions taken by guesthouses for recovery.

The border closure closed the only source of income for most guest houses (International Air Transport Association, 2020; World Bank Group, 2020). Hence, the guest house operators had to use their savings, cut living expenses, and take loans to cover daily and monthly expenses, such as rent. Their financial obligations and excess time also led to stress and anxiety. Nonetheless, a few participants mentioned that staying home provided much-needed family time and self-care.

The government played a substantial role in virus containment, from providing financial assistance to implementing the necessary protocols to resume guest house operations. Contacts were traced quite easily in the case of a virus outbreak. Thus, the government could have encouraged domestic tourism, like many other countries (New Zealand), to help balance the adverse financial effects. Moreover, encouraging new forms of tourism by investing in health care or higher education on the island is essential as it would divert domestic tourists to the islands rather than towards the capital, where most of these services are heavily invested. While the Maldives is famous for its beaches and turquoise blue water, the tourism sector can offer much more that would pave the way for a more sustainable business model that minimises the effects of external shocks in the future.

Table 4
Actions taken by guesthouses to boost occupancy during and after lockdown

	Actions taken to boost occupancy during and after lockdown	
	Number	**Percentage**
Not relevant, as they shut down	1	10
Marketing	6	60
PR activities	1	10
Enhance links with travel agents and tour operators	1	10
No action taken	1	10

Table 5
Actions taken by guesthouses for recovery

	What are the actions taken for recovery?	
	Number	**Percentage**
Not relevant, shut down business	1	10
Follow HPA guidelines	1	10
Release the accommodation block to reduce expenses	1	10
Advertising through marketing	2	20
Maintenance and following guidelines	2	20
No action taken	3	30

CONCLUSION

The COVID-19 pandemic severely affected the Maldives tourism industry, specifically the guest house sector owned and operated primarily by SMEs. The border closures and movement restrictions led to financial struggles for many guest house operators, resulted in business shutdowns, and affected the owners' well-being—nevertheless, some operators adapted by converting their guest houses into quarantine centres or welcoming medical travellers. One of the limitations to highlight is the data collection carried out online during the lockdown, which makes it difficult to observe the participant's emotions and to extend deeper conversations.

The results revealed the potential for medical tourism within the islands, the vulnerability of the guest house tourism sector, and the fact that this sector needs government support more than the resort sector, which is owned and operated by large business enterprises. The results revealed the importance of diversification, such as medical tourism, to create a more sustainable guest house business model. Furthermore, guest house owners should focus on the neglected domestic market. They should use their restaurants or dive centres to alleviate the financial burden on the business in a potential crisis. Theoretically, this study highlights the preparedness of the guest house community to manage the disaster in future due to the geographical factor of the Maldives as well as their economic dependency on tourism. The findings also highlight the importance of new policymaking during any crisis as a recovery business strategy,

Limitations and Recommendations

The data were collected during the lockdown when movement restrictions were imposed, and all the interviews were conducted online. This setting made it challenging to grasp the participants' emotions during the interview. Additionally, studies on the effects of COVID-19 on guest houses in island countries are limited. Despite the numerous challenges, the government acted swiftly to contain the virus. The Maldives resumed guest house tourism with strict safety measures, and a record number of tourists visited the country since then, which indicated a promising recovery for the tourism industry. The vaccine roll-out was expected to increase numbers, but the recovery duration remains uncertain. Further research is necessary to understand the recovery and resilience of the guest house community and enhance preparedness for possible events.

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Exploring the Subjective Financial Well-Being of Indigenous People Communities in Malaysia

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ABSTRACT

This study explores the subjective financial well-being of Indigenous People in Malaysia. Although the concept of financial well-being is strongly established in past studies, the perception of well-being conceptualization from the indigenous people's view is still not clear. Fifteen heads of households of Indigenous People from the Mah Meri tribe participated in the study. A qualitative method uses an exploratory research design to present information obtained via the Nominal Group Technique. The results of the study on the concept of subjective financial well-being formed three major themes: (1) sufficiency, (2) comfort, and (3) satisfaction. Based on the study's findings, most informants have good financial socialization, implying Indigenous communities' ability to embrace well-being. The implication of this research finding is that knowledge and information regarding the utilization and management of finances ought to be assimilated by the Orang Asli Mah Meri so that they do not become victims of modern-world hedonism and luxury brought about by mainstream society. The contribution of this study to the existing body of knowledge can be seen theoretically from the perspective of multi-linear social change. According to multi-linear theorists, human culture has evolved along multiple lines. Meanwhile, contemporary sociologists argue that social changes or occurrences do not happen in a planned manner.

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INTRODUCTION

The evolution of sustainable development from an initial focus on environmental concerns during the Brundtland Commission (1987) to more community-focused goals in the Sustainable Development Goals

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2015–2030 reflects a shift in priorities. Community well-being has become a main agenda in Malaysia's national development. This paper explores subjective financial well-being as an indicator of development within the Orang Asli Mah Meri community in Pulau Carey, Selangor, Malaysia.

The Orang Asli are one of the most vulnerable communities in Malaysia. They live in suburban and rural areas, and developments in their surrounding areas affect their well-being. Thus, this study provides a different perspective by subjectively examining the concept of well-being, focusing on subjective financial well-being and its significance as an indicator of community development. It utilizes Evolution Theory and the framework of Social Change Theory to evaluate the continuous processes of social change.

Well-being is often defined in various ways. Some view it objectively (New Economic Foundation, 2013), while others take a subjective perspective (Yassin et al., 2015). Subjective well-being considers individual assessments and perspectives based on their life experiences across various dimensions, which aligns with the Orang Asli community, which has its customs, belief systems, and way of life.

Thus, assessing subjective financial well-being within the Orang Asli community offers insights into ongoing development processes and community resilience. Gaining insight into subjective financial well-being can provide valuable information for developing comprehensive community development programs that align with the particular needs of Orang Asli communities.

LITERATURE REVIEW

Orang Asli and Mah Meri Community

Indigenous people in Malaysia, known as Orang Asli in Malay, are defined as 'original people' or 'first people' (Nicholas, 2000; Rosnon et al., 2019). Orang Asli is considered a minority compared to the Indian and Chinese communities in Malaysia. In 2016, the Orang Asli population in Malaysia was 178,197, which represents 0.6% of the total population of 28.3 million (Jabatan Kemajuan Orang Asli [JAKOA], 2016). Act 134 in the Malaysian Constitution provides detailed explanations of the criteria and qualifications to be considered as Orang Asli under the law. Based on Sections 3a, b, and c, a person can only be considered an Orang Asli when they speak the Orang Asli language and follow the Orang Asli way of life, customs, and beliefs (Hasan, 2000; Rosnon, 2010; Rosnon et al., 2021, 2024; Wan Zawawi, 1996, 2004; William-Hunt, 1998). The Orang Asli communities are dispersed among 815 small villages throughout Peninsular Malaysia, excluding Penang and Perlis (Hasan, 2000). Most of them live in rural areas, which causes them to be marginalized by the current rapid development. The Orang Asli in Malaysia consists of 18 tribes and are divided into three main groups: Proto-Malay, Senoi, and Negrito.

Orang Asli Mah Meri is an ethnic Senoi Group ethnic (JAKOA, 2016). Most of Orang Asli Mah Meri live along the coastal areas in the western part of Selangor, from Sungai Pelek to Pulau Carey (Carey Island) (Zuhairi et al., 2020). The population of the Orang Asli Mah Meri

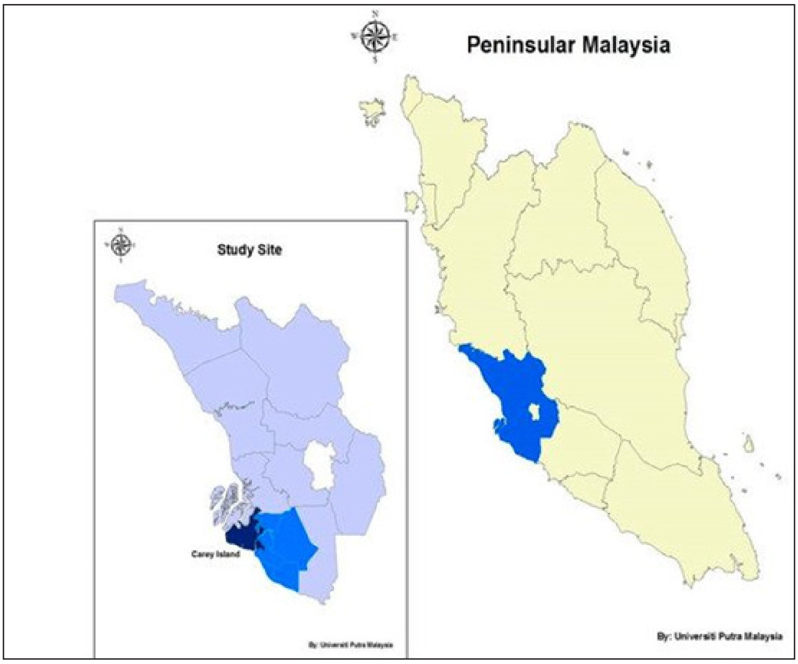

Figure 1. Map of Carey Island
Source: Kunasekaran et al. (2017)

in Pulau Carey is approximately 1,500 people (Figure 1). They are well known for their outstanding skills in traditional wood carving, transforming their community into a popular tourist destination. Therefore, in his works, Werner (1997) keeps and documents stories embedded in the carvings and the life stories of the Orang Asli Mah Meri. Pulau Carey's name originated from a Scotland-based company called Carey Island Co. Ltd that initiated coconut farming in the late 1890s (Carey, 1973; Rahim, 2007). Rahim (2007) explains that there are five main Mah Meri villages in Pulau Carey: (1) Kampung Sungai Bumbun, (2) Kampung Sungai Judah, (3) Kampung Sungai Kurau, (4) Kampung Kepau Laut, and (5) Kampung Rambai.

There are a number of studies and writings about the Mah Meri Community focusing on tourism (Chan, 2010; Majin et al., 2016; Puvaneswaran et al., 2013; 2017; Roddin et al., 2017; Roddin et al., 2015; Shah et al., 2018; Ting & Abella, 2017), culture (Azyantee, 2013; Carey, 1973; Ching, 2009; Radzi, 2003, 2004; Rahim, 2007; Stevens et al., 2006; Wardhana et al., 2014; Wazir-Jahan, 1981; Werner, 1997), health (Wan Norlida et al., 2007), environment (Haliza, 2010), economy (Lai, 2016) and well-being (Majin et al., 2016).

Previous studies on the Mah Meri community mainly focused on culture and tourism. It highlighted their traditions, languages, beliefs, and the potential of tourism to promote their handicrafts and cultural heritage. However, there are very few studies that specifically prioritize their well-being. While Majin et al. (2016) did explore aspects of their well-being, it was primarily from a tourism perspective. Therefore, there is a clear gap in the literature concerning the subjective well-being of the Orang Asli Mah Meri. This study aims to address this gap by focusing on individual assessments and personal experiences related to their financial situation and providing a more comprehensive understanding of their well-being, focusing on subjective financial well-being.

Subjective Financial Well-Being

Well-being is a comprehensive and interconnected experience that includes our internal state, the external world we interact with and even the afterlife. Well-being is often associated with tranquility, quality of life and happiness. It can be measured objectively (Joo & Garman, 1998) and subjectively (Laily & Jariah, 2003; Organization for Economic Cooperation and Development (OECD), 2013).

Financial well-being is frequently mentioned and used interchangeably, but the concept remains unchanged. It is also known as economic well-being (Walson & Fitzsimmons, 1993), financial satisfaction (Joo & Grable, 2004), and personal financial well-being (Joo & Garman, 1998). Internal and external factors contribute to subjective financial well-being (Buang et al., 2023; Godinho, 2014; Kurnosova et al., 2022; Zabelina et al., 2019, 2020, 2022). Studying the financial well-being of the Orang Asli Mah Meri from a subjective perspective is relevant, as they have unique views on financial well-being that differ from those of mainstream society. Their perspectives are crucial to ensure that development programs align with their aspirations and remain sustained.

Previous research on Orang Asli's well-being often relies on economic indicators (Rosnon et al., 2024; Vivien et al., 2020; Yassin et al., 2015), offering a narrow view of their well-being. Meanwhile, the development around this community has an impact on their well-being. Subjective financial well-being reflects how individuals perceive their financial situation, closely related to quality of life. Therefore, this study shows that feeling financially stable and capable of managing their resources shows progress development happening in this community and not only relying on economics as a measurement of well-being.

MATERIALS AND METHODS

This study was conducted qualitatively and used exploratory research design. This study was conducted at the Orang Asli Mah Meri villages in Pulau Carey, Selangor. The Pulau Carey settlement is in a rural area. However, it is experiencing rapid development due to industrial and agricultural growth in the vicinity. Thus, it is befitting for the researchers to look at and evaluate subjective financial well-being in the Mah Meri community. Purposive sampling was used in this study. The Department of Orang Asli Development Malaysia (JAKOA) determined the informants' selection criteria. The criteria for informants were (1) being Heads of Households (KIR) and (2) the ability to participate in more than one interview if needed. This sampling method was chosen because it is challenging to find informants due to the Orang Asli community's reluctance to be interviewed. As a result, a total of 15 informants participated in this study.

This study used the Nominal Group Technique (NGT) and in-depth interviews as data collection techniques. The NGT was carried out by asking informants to write down their ideas and take turns explaining them. Then, their ideas were discussed to make sure everyone understood. Similar ideas were grouped, and each option was ranked based on scores from 1 to 10. Finally, the top ten ideas were discussed again to get the informants' agreement. After analyzing NGT data, an in-depth interview was carried out using semi-structured questions with the informants who participated in NGT. Each interview session took more than 1 hour and 30 minutes to discuss questions related to the study objectives.

The data for this study were analyzed thematically. First, audio recordings were transcribed. Next, the transcriptions were read thoroughly to gain a general understanding of the content. Initial ideas and codes were generated and recorded, which were then applied to identify key ideas such as "Able to buy basic necessities," "Able to provide for children's education," and "Able to help others." The themes were identified by aggregating similar codes into overarching themes based on patterns and relationships. For example, "Able to buy basic necessities" was categorized under the theme of "Sufficiency." In contrast, "Able to provide for children's education" and "Able to help others" were categorized under the theme of "Comfort." The themes were reviewed to ensure consistency with the coded data and were compared with the original data to confirm accuracy and relevance. Finally, clear and concise definitions were created for each theme, ensuring alignment with this study's objectives and research question.

RESULTS AND DISCUSSION

Concept of Subjective Financial Well-being of Orang Asli Mah Meri Community

The following table presents the data collected using the Nominal Group Technique (NGT) to further understand the concept of financial well-being. Table 1 consists of the findings after the second-ranking process is completed.

The findings in Table 1 show that not being indebted to others or borrowing from others is the most important subjective financial well-being benchmark for the informants. It shows that this concept is integrated into their financial management knowledge. However, the Orang Asli community within the settlements is trying to improve their living status. Their needs and consumption should be satisfied so that they would be living comfortably, and this is used to elude negative perceptions towards outsiders who would look down on the community within the focused settlement. Hence, 'Enough to provide for the family although we do not have enough for savings' is also a part of their subjective financial well-being concept.

Table 1
Findings from the NGT on the Subjective Financial Well-being (n=15)

Statement	Ranking	Score
Not indebted to others or borrowing from others	1	142
Sufficient to be used for eating, clothes, and healthcare	2	130
Able to repay debts	3	119
Able to buy basic necessities	4	105
Able to provide for children's education	5	81
Enough to provide for the family, although we do not have enough for savings	6	71
Able to manage my money	7	70
Able to help others	8	51
Able to save for emergencies	9	34
Able to pay certain bills, depending on their abilities	10	22

Table 1 shows that the concept of subjective financial well-being within the Orang Asli Mah Meri community is changing as they are shifting their focus on education, too. It shows that the community is shifting to mainstream thinking as they look at education realistically; it can be seen as contributing to the community's well-being. Nowadays, society's dependencies on current trends can be clearly seen, and education may be able to change this perception within the Orang Asli community as they would acknowledge the importance of education in their daily life.

The study findings show that the Orang Asli Mah Meri in the study location experienced pressure due to the ongoing growth in their surrounding area, and they desire similar progress in their community. It would lead them to consume affordable technologies such as television, branded items, and fast food in the name of development. This phenomenon proves that the strength of group identity would affect the value within the identity of an individual (Ledgerwood et al., 2007), as the Orang Asli communities are located in rural areas and have to face new values that have been accepted by the general public thus making them succumb to the importance of said value and its necessities of the goods and services offered.

It suggests that the values of a cultural system are not static, making it malleable, especially under the impact of globalization (Abdul Rahman, 2006; Nazuri et al., 2022). In Table 2, three main themes, the subjective financial well-being of Orang Asli Mah Meri, emerged from the data obtained from the informants, and the themes are sufficiency, comfort, and satisfaction. These themes encapsulate subjective financial well-being, which shows that the financial aspect is reflected in the psychological assessment of the community. Sufficiency comes up as the dominant theme, where 6 out of 10 statements are related to this theme, proving that it has a substantial meaning to the community.

Thus, subjective financial well-being among the Orang Asli community provides a different contextual understanding. Based on the findings of the study, there are three major themes in discussing the concept of subjective financial well-being: (1)

sufficiency, (2) comfort, and (3) satisfaction. Changes after the change happened to the Orang Asli community, and we can see that it has affected their behavior as well as their way of thinking. It shows us that the Orang Asli community has started to get involved in the mainstream financial system to achieve targeted living standards.

Table 2
Themes within the subjective financial well-being concept

No	Statement	Theme
1	Not indebted to others or borrowing from others	Sufficiency
2	Sufficient to be used for eating, clothes, and healthcare	Sufficiency
3	Able to repay debts	Sufficiency
4	Able to buy basic necessities	Sufficiency
5	Able to provide for children's education	Comfort
6	Enough to provide for the family, although we do not have enough for savings	Sufficiency
7	Able to manage my money	Comfort
8	Able to help others	Satisfaction
9	Able to save for emergencies	Comfort
10	Able to pay certain bills, depending on their abilities	Sufficiency

Hence, subjective financial well-being is interconnected with the values dear to the Orang Asli community, which is important as it will help shape the community's thinking style and behavior when it comes to receiving and shaping development coming their way. The findings show that the subjective financial well-being concept is being looked at as a process instead of an object to facilitate development.

Subjective Financial Well-Being as One of the Indicators of Community Development

In this study, community development is viewed through external and internal development. Modernization has influenced the Orang Asli Mah Meri community's daily habits, leading to a more modern and convenient lifestyle. This study identifies three major themes of subjective financial well-being: (1) sufficiency, (2) comfort, and (3) satisfaction. These themes act as benchmarks for community development, reflected in two main elements: (1) value development and (2) resilience and empowerment.

Sufficiency relates to meeting basic needs, comfort addresses education and emergency preparedness, and satisfaction involves helping others. Together, these themes shape the community's understanding of financial well-being, which aligns with the community's exposure to modernization and mainstream services that aim to improve their quality of life.

Subjective financial well-being can indicate community development because it reflects how individuals perceive their ability to meet needs, adapt to changes, and thrive within the community. By assessing these perceptions, we can gauge the progress of development efforts and the resilience of the community in responding to external pressures.

Sufficiency

Most statements fell under the theme of sufficiency, where informants emphasize the ability to afford food, clothing, and healthcare, repay debts, buy basic necessities and avoid borrowing from others, reflecting the financial resilience of the Orang Asli Mah Meri. Most community members prefer to seek treatment from medical professionals rather than relying on traditional shamans, and they feel comfortable using modern medicine.

The community's adoption of consumption values is evident in their use of modern services such as fast food, hypermarkets and public transport. While brand choices may not directly indicate their subjective financial well-being, the ability to provide adequate food in their households serves as a key benchmark. It shows that the community prioritizes quality of life and sufficiency in their daily lives, which shows their acceptance of the ongoing development planned for them as the country progresses.

Most informants also agreed that avoiding debt contributes to their happiness. They acknowledged that some situations involving large amounts of money may necessitate debt. Nevertheless, the majority demonstrated an ability to prioritize needs over wants, reflecting that they understand and know how to manage their finances. Here are the words of the informant on this matter:

> "If possible, I have to avoid going into debt... it will be difficult to pay later, so I will decide which is more important… money first, pay the debt and then be happy" Informant 2.

> "When I buy, I buy what's important... we're not even rich... so arrange it so that the important things come first so that our hearts are happy… so we need to avoid debt" Informant 5.

Based on the interview, it was found that the informant is very concerned about purchasing in cash. Sufficient money available to pay debts should be prioritized. It is good financial knowledge among the Mah Meri community. Financial knowledge can be obtained from observing financial behavior performed by socialization agents such as parents because observing financial behavior will influence children's knowledge of finance. Thus, this feeling of sufficiency is always present in their lives, but it becomes a habit. Here are the words of the informant on this matter:

> "It's hard to save because it's just enough... the important thing is to be able to buy household goods, ok, that's enough to be happy... enough to use and eat is ok... I'm used to this" Informant 10.

This statement reflects the informants' financial vulnerability and sense of sufficiency in financial well-being. Despite limited resources, the feeling of having enough to meet basic needs is seen as a form of contentment. The informants also demonstrate empowerment by using the Internet in their daily activities, showing a positive adoption of ICT (Fang et al., 2022).

In terms of health, resilience and empowerment are also evident. The community actively chooses to utilize government hospitals and clinics without regard for status or brand as they recognize the importance of healthcare. The Orang Asli Mah Meri are increasingly accepting these services and are willing to travel if necessary to access healthcare, which positively responds to government initiatives.

Comfort

Several statements indicate a move towards a higher level of comfort. Emphasizing education and setting aside savings for education funds demonstrates resilience among the informants as they prepare for the future. Most informants recognize the importance of education. Therefore, prioritizing education in their daily expenses reflects community empowerment as they consciously allocate resources for their children's future. The amount saved is not the key issue. The focus is on raising awareness to ensure their children can enjoy comfort and happiness through education.

Financial allocation for education is a crucial component of subjective financial well-being within the Mah Meri community. Informants expressed the need to have sufficient funds to support their children's education as they are aware of its importance in ensuring a brighter and better future. It represents a shift in mindset among the Orang Asli, who have started to see the value of education for their children. While most informants did not pursue higher education themselves, the ability to provide financially for their children's education brings them a sense of comfort and fulfillment. This opinion can be seen from the informant's statement as follows:

> "I don't spend much, just like I used to, I don't waste... just like our mothers and fathers too... the important thing is to have money for the children to go to school... education is important... don't worry if you don't have money to give, they learn" Informant 13.

This study found that most informants are concerned about the comfort of using their money for their children's education. Many informants will feel happy when money is allocated for educational purposes, even if the informants themselves do not have a high education.

Satisfaction

Unlike the other themes, satisfaction was recorded only in the context of helping others. Although modern values have been introduced to the Orang Asli community to improve their living standards, mainstream development has not necessarily brought new and beneficial values. Unfortunately, there has been no mechanism to balance traditional and modern values, leading to the gradual fading of some traditional practices. However, the community still maintains satisfactory communication within society.

The strong familial ties within the community foster a sense of shared responsibility, particularly when it comes to providing financial support to one another. Here are the words of the informant on this matter:

> "We feel happy when we can help others... they are also our disabled tribe... there is more we can help...

we will definitely help... then we feel happy....” Informant 1.

“Well, we don’t have a lot of money... but we try to help if people ask for help... he’s happy and we’re happy too....” Informant 3.

The informants’ statements highlight a strong sense of community and togetherness, which reflects their willingness to support each other. For the Orang Asli Mah Meri, financial subjective well-being is about receiving and the satisfaction derived from the spirit of giving. Resilience and community empowerment are evident in their financial management and consumption patterns. Perceptions and understandings of basic amenities are used as key elements to assess the subjective financial well-being of the Orang Asli in their daily lives.

In terms of resilience, the findings show how the community regulates its consumption of goods and services based on necessity, with moderation in spending as a key component of financial well-being. The findings show that the community has begun adapting to more comfortable living conditions, incorporating better bedding, electronic appliances, kitchen equipment, and basic household facilities. Table 3 summarizes the concept of subjective financial well-being among Orang Asli Mah Meri and community development indicators.

Discourse on the Theory of Evolution and Subjective Financial Well-Being as One of the Indicators of Community Development

The Theory of Evolution explains how a society progresses from one stage to another.

Table 3
Concept of subjective financial well-being and indicators to community development

Themes	Concept of Subjective Financial Well-Being	Subjective Financial Well-Being as Indicators of Community Development	Community Development Indicators
Sufficiency	Not indebted to others or borrowing from others Sufficient to be used for eating, clothes, and healthcare Able to repay debts Able to buy basic necessities Enough to provide for the family, although we do not have enough for savings Able to pay certain bills, depending on their abilities	Belief in traditional medicine (shamans) and use of modern medicine Utilize technology public transport Fulfill necessities Utilize healthcare facilities	Value development Resilience & empowerment
Comfort	Able to provide for children’s education Able to manage my money Able to save for emergencies	Prioritizing education Managing finances for the future	
Satisfaction	Able to help others	Spirit of giving	

The Orang Asli Mah Meri community has begun to change based on the findings. Although this process is slow, they are making the most of the resources available at any given time. In terms of transformation, there has been a shift in subjective financial well-being. Several government efforts have been made to help the Mah Meri community adapt to the modern lifestyle. They gradually accept and embrace these changes (Faezah et al., 2017; Sarjit et al., 2010). It has led to a more modern mindset, which will help propel the community towards a higher standard of living in a globalized world.

The acceptance of modern life by the Mah Meri community aligns with the social change theory, which emphasizes the importance of multiple factors coming together to drive change gradually. Most informants have begun to realize the importance of financial management. For instance, they prioritize paying off debts and ensuring they have enough money to purchase goods and utilities to improve their quality of life. Even though the items they buy may be cheap or secondhand, they believe they are still useful, reflecting a sense of sufficiency, comfort, and satisfaction. This is what is referred to as subjective well-being in their lives. Their acceptance and belief in modern life show they are experiencing change and moving towards a better standard of living, driven by several factors that have influenced this shift.

CONCLUSION

In conclusion, some positive evolutionary changes have been detected mainly from sufficiency, satisfaction, and financial comfort, which indicate community development. The available benchmarks explain that changes have taken place, though it took a long time to take root within society. The opinions of various stakeholders are important for holistic community development (Ghorbanzadeh et al., 2018; Rosnon et al., 2024). This study focuses on the subjectivity of well-being through informants' experiences, perceptions and the conception of their financial well-being. Yet, this study provides a different perspective to determine their financial well-being by taking into account their perception and evaluation.

Well-being should not be limited to the individual level but should also be considered from a social and physical perspective. These three elements mutually complement each other in promoting overall well-being. Subjective financial well-being involves individual perceptions, attitudes and feelings about the financial situation, which are influenced by social factors: (1) the community's exposure to rapid development around them, (2) the community's adherence to cultural values and socio-cultural norms, and (3) the community involved in development programs by stakeholders.

This socialization and interaction have reshaped the living landscape of the Orang Asli Mah Meri, affecting their subjective financial well-being. It aligns with the theory of evolution, which suggests that societies change from one stage to another toward a better life. Hence, the findings of this study show the needs and aspirations of the Orang Asli Mah Meri and serve as a guide for stakeholders and policymakers to implement effective and comprehensive development programs for the community. It will help avoid misunderstandings between implementers and the target group (Orang Asli Mah Meri) and prevent the failure of development programs.

Limitations and Recommendations for Future Research

This study has provided a foundation for future research, especially for those interested in community development from the perspective of financial subjective well-being in the minority. Nevertheless, this study has several limitations. The study exclusively focused on the Mah Meri population residing in Pulau Carey. Consequently, these findings cannot be generalized to other tribes. Moreover, the selection of the study location also impacts the research findings. Pulau Carey is an area experiencing rapid development of industrial areas. It has affected their understanding and meaning of well-being.

Since this study has several limitations, some suggestions from theoretical aspects and research methods can be taken into account for future research. Based on the findings of the study, the quantitative approach becomes the best way to confirm the concept of well-being finance among the Orang Asli. Besides choosing one area only, future studies can also make comparisons between two different areas, which results in a more comprehensive study. In addition, it is hoped that future studies will be conducted to make a comparison between two different minority communities for comparison. In terms of respondent selection, it is hoped that future studies will focus on every age. The study is more focused and is able to assess each of the different age cohorts. Thus, the findings of the study will be more comprehensive.

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