BEHAVIOURAL INTENTION DETERMINANTS OF BUSINESS TAKAFUL ADOPTION AMONG MICROENTERPRISES

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ABSTRACT

The research explores the factors that affect microenterprises' decision to participate in business Takaful using the Theory of Planned Behaviour framework (TPB). Individual behaviour mostly stems from three critical constructs according to the TPB theory, which include attitudes (ATT), subjective norms (SN), and perceived behavioural control (PBC). An analysis of a dataset from microenterprise owners was conducted using Partial Least Squares Structural Equation Modelling (PLS-SEM) to examine their intentions (INT) to participate in general business takaful products. The study results found PBC to be the strongest indicator of INT, which demonstrates that microenterprise owners with higher control beliefs toward adopting general business takaful are more likely to show intention to participate. The factors of ATT and SN appeared non-significant for predicting INT, so personal beliefs about takaful and social pressures exert minimal influence in this context, even though theory suggests otherwise. The research produces significant results that guide policymakers and practitioners who want to build up general business takaful adoption among microenterprises. Stakeholders should utilise their knowledge about the central position of perceived behavioural control to create specific interventions that build up microenterprise owners' capabilities to enhance Takaful's business participation. Research develops existing knowledge on general business takaful participation and microenterprise development through an assessment of psychological elements affecting financial decisions within this sector. The study demonstrates the requirement for an unobtrusive approach to promote takaful because owners of microenterprises need improved perceived behavioural control to boost adoption rates. Future studies should investigate further variables that could affect Takaful adoption, as well as the possible influence of other interventions and contextual elements on the TPB framework in the domain of Islamic finance.

Keywords: Business Takaful, Microenterprises, Partial Least Squares Structural Equation Modelling, Perceived Behavioural Control, Theory of Planned Behaviour

1.0 INTRODUCTION

The International Labour Organisation (ILO) estimates that in developing countries, microenterprises were responsible for a notable share of overall employment, hence significantly contributing to poverty reduction and economic growth (Burchell & Coutts, 2018). Financial shocks, market instability, and unanticipated hazards often threaten their survival. By providing reasonably priced and ethically sound risk mitigation plans, business takaful offers a feasible answer, hence allowing microenterprises to preserve financial stability and operational continuity. Its capacity to provide a safety net against many risks, including natural disasters, market changes, and health crises, underscores the need for business takaful among microenterprises (Raza et al., 2019). Furthermore, the expansion of the takaful sector reflects a more general movement towards ethical finance, which is becoming more popular globally. Consequently, it is essential to examine the determinants of behavioural intention regarding the adoption of business takaful among microenterprises.

Previous research has validated the efficacy of TPB in predicting behavioural intentions across various domains, including health, environmental practices, and financial decision-making (Conner & Armitage, 1998). In the context of Islamic finance, studies have shown that TPB effectively explains consumers' willingness to adopt Sharia-compliant financial products such as takaful, Islamic banking and microfinance (Amin et al., 2011; Boubker et al., 2021). This presents a unique research opportunity to understand the interplay of ATT, SN, and PBC in shaping the behavioural intentions of microenterprise owners. Given that microenterprises often face unique challenges, such as limited financial literacy, resource constraints, and cultural influences (Nkote & Jakweyo, 2024; Maishanu & Siti-Nabiha, 2020), it is imperative to examine how these factors influence their intention to participate in takaful. Although many microenterprises claim to have a comprehensive understanding of their business operations, their comprehension of risks is noticeably low, which results in insufficient risk mitigation strategies (Salleh et al., 2021). This inadequate comprehension of risk management appears to cause substantial financial losses in microenterprises, underscoring the urgent need for enhanced practices.

Therefore, achieving a profound understanding of these key determinants is not merely beneficial but imperative for critical stakeholders. These would include policymakers for crafting supportive regulations, takaful operators to design competitive products, and financial advisors in their effort to guide client financial decisions. This deep comprehension empowers them to develop targeted, evidence-based strategies that effectively overcome barriers, unlock latent demand, and ultimately drive the successful adoption and sustained utilisation of general business takaful, especially in this context among microenterprises. Targeted interventions, including awareness campaigns, capacity-building initiatives, and streamlined product offerings, may address the current gap and enhance the inclusion of microenterprises within the takaful ecosystem. The insights from this study may inform broader strategies for promoting takaful adoption specifically and Islamic finance in wider contexts, thereby contributing to the global objectives of financial inclusion and sustainable economic development.

2.0 LITERATURE REVIEW

2.1 Business Takaful

(Ta'awun) and shared responsibility (Tabarru'), aligning with the ethical and legal principles of Sharia law. It functions as a risk-sharing mechanism where participants contribute to a common pool, providing financial protection against potential risks while upholding Islamic values of justice and equity. Contrasting with conventional insurance, takaful is free from elements of gharar (uncertainty), maysir (gambling), and riba (usury), thus making it particularly appealing to Muslim-majority markets (Widigdo, 2024). This approach

provides microenterprises in developing Muslim communities, including Malaysia, with an ethical risk management system based on Islamic principles. Boubker (2021) has reported that takaful benefits its participants by providing financial protection together with enhanced community solidarity. The competitive nature of uncertain markets, together with their uncertain operational environment, makes microenterprises better to have systematic risk management strategies by participating in general business takaful. Through their shared risk participation structure, takaful enables microenterprises to both increase their resilience and ensure business sustainability (Boubker et al., 2021). Small business owners can leverage this strategic financial instrument because it delivers powerful advantages to businesses that frequently face impediments with formal risk management products and uncertain operating business conditions.

Takaful providers have notable chances to increase their reach into microenterprise sectors, given the rising knowledge of Islamic finance concepts and the need for Shariah-compliant goods (Cahyandari et al., 2023). Stakeholders must create focused plans that raise knowledge and comprehension of takaful among microenterprise owners as the takaful market changes, therefore enabling more use of these financial products. Statistics have shown that the takaful sector in Malaysia has been growing at a remarkable rate, outpacing conventional insurance growth. The Malaysian takaful industry recorded a gross contribution of RM7.52 billion in 2016, up from RM5.86 billion in 2012, reflecting a significant increase in market penetration and consumer acceptance (Yazid et al., 2018). Furthermore, the Takaful market in Malaysia is projected to continue its upward trajectory, with an expected compound annual growth rate (CAGR) of 15% over the next five years, driven by increasing awareness and demand for Sharia-compliant financial products (Alam, 2023). Moreover, the Twelfth Malaysia Plan (2022-2026) prioritises promoting and enhancing financial inclusion (Bank Negara Malaysia[BNM], 2022). This objective is crucial for providing individuals and microenterprises, particularly those with limited financial resources, with access to financial services.

In a business environment, comprehensive business takaful plans will provide coverage for operational disruptions resulting from unanticipated circumstances. The risks involved in this microenterprise's context span a wide range, from natural disasters, accidents, economic downturns, and unforeseen instances. The business risks that may affect microenterprises are such, supply chain risk, interest rate risk, basic material price risk, technological risk, growth risk, and e-business risk, all of which are associated with microenterprise businesses (Basir, 2023; Ismail et al., 2013).

Theory of Planned Behaviour

The Theory of Planned Behaviour (TPB), proposed by Ajzen in 1991, posits that behavioural intention is influenced by three key constructs: attitudes (ATT), subjective norms (SN), and perceived behavioural control (PBC) (Alam & Sayuti 2011). ATT signifies a belief and an individual's positive or negative evaluation of a behaviour. Meanwhile, SN captures the perceived social pressure to engage in the behaviour, and PBC represents the perceived ease or difficulty of performing the behaviour (Martin et al., 2010). The study area of intention to participate in general business takaful typically includes microenterprise owner perceptions regarding both Takaful advantages and moral aspects in their conceptual model (Huraira & Jahan, 2021). Their behavioural participation intention stems from peer influence alongside family and community support (Huraira & Jahan, 2021). The perceived obstacles and enabling factors that affect the possibility of takaful adoption represent PBC aspects, including financial understanding, information availability and existing takaful product choices (Kazaure & Abdullah, 2019).

TPB has been widely used in predicting behaviour through its comprehensive framework that integrates cognitive and social factors influencing decision-making. By addressing the psychological dimensions of behaviour, TPB provides constructive insights into why individuals may or may not participate in specific actions, such as adopting takaful. This

is particularly relevant in the context of microenterprises, where decision-making is often influenced by both personal beliefs and social pressures (Husin & Rahman, 2016). Moreover, Kazaure & Abdullah (2019) demonstrated that the TPB effectively predicts various behaviours, including the acceptance of Islamic health insurance (Takaful), highlighting its versatility across different contexts. Moreover, the TPB's constructs have been justified in numerous studies, reinforcing its relevance in understanding the end user behaviour from financial perspectives. Research by Raza et al. (2019) has utilised the TPB to examine the acceptance of Islamic insurance among microenterprises, found that attitudes, subjective norms, and perceived behavioural control significantly influenced adoption intentions. This aligns with findings from Lin (2023), who stressed the importance of perceived behavioural control in predicting self-directed learning behaviours among insurance customer service representatives, showcasing the model's applicability in the insurance sector.

TPB also plays a vital role in determining targeted areas for intervention. Understanding the factors that influence attitudes, subjective norms, and perceived behavioural control enables stakeholders to formulate targeted strategies for promoting takaful participation. For instance, enhancing financial literacy can improve perceived behavioural control, while community engagement initiatives can strengthen subjective norms (Shabiq & Hassan, 2016). This focused strategy is essential for enhancing the adoption of general business takaful within microenterprises, which frequently encounter distinct obstacles in obtaining financial products.

2.2 Relationship between Attitude and Microenterprises' intention to Participate in Business Takaful

Various studies have shown that attitude is positively correlated with intention (Kazaure, 2017; Musa et al., 2020; Raza et al., 2020). Conclusive data indicates that individuals do acts when such actions seem advantageous and align with their objectives. Ibrahim et al. (2021) assert that users' propensity to participate is increased by their favourable attitudes toward Islamic financial services, such as takaful. Subsequently, Microenterprise proprietors markedly increase their inclination to engage in takaful, as they regard this ethical service as a favourable alternative to conventional insurance (Nufus, 2024). Therefore, microenterprises that possess favourable attitudes toward takaful are considerably more inclined to articulate their intentions to implement it. Previous research studies have demonstrated that favourable perceptions of Islamic financial products are highly associated with increased adoption rates (Kim & Kim, 2021). Positive views may arise from multiple sources, including perceived advantages, ethical congruence with Islamic beliefs, and confidence in the takaful system. Previous research conducted by Aziz et al. (2022) revealed that customers' opinions towards takaful schemes are markedly affected by their perceptions of the associated benefits and ethical implications of these products. Boubker et al. (2021) established a direct and positive correlation between attitudes towards Islamic financing and the intention to embrace these financial products, hence underscoring the significance of ATT in the context of takaful. Positive attitudes may derive from various sources, including perceived benefits, congruence with Islamic ethical ideals, and trust in the takaful system. Studies indicate that microenterprise proprietors who perceive takaful as an advantageous and ethical substitute for traditional insurance exhibit a considerable increase in their intention to utilise it (Aziz et al., 2019). Moreover, research suggests that increasing awareness and comprehension of takaful can foster more positive attitudes, thereby facilitating its adoption (Ortiz-Medina & Maldonado-Guzmán, 2020). A recent survey revealed that 60% of respondents demonstrated a lack of understanding regarding takaful, which significantly influenced their attitudes and intentions to use it (Alam, 2023). The preceding explanation suggests that Attitude (ATT) favourably affects the intention of microenterprises to adopt business Takaful. Therefore, hypotheses 1 (H1) is formulated as follow.

H1: There is a significant relationship between Attitude and Microenterprises' intention to Participate in Business Takaful.

2.3 Relationship between Subjective Norms (SN) and Microenterprises' Intention to Participate in Business Takaful

The social pressure felt from within the community and peer group strongly affects how microenterprise owners intend to adopt business takaful. The psychological concept stands as a fundamental element within collectivist societies for financial choices (Poan et al., 2021). Pham et al. (2023) proved that social pressure influences entrepreneurial intentions because social forces can affect people's takaful adoption choices. The influence of SN on intention stands out when studying microenterprises because such businesses tend to follow family and community-based directions in their operational activities. The adoption likelihood of takaful increases when important figures from microenterprise owners' social networks encourages its use. According to Rifas et al.(2023) and Aziz et al. (2020) subjective norms have been shown to boost the intention of adopting family takaful schemes because people rely on social approval for financial decisions. Meanwhile, the study conducted by Basir (2023) demonstrates how subjective norms impact takaful agents' ethical behavioural intentions because social pressures affect this professional group the same way they influence microenterprise owners. The findings from this discussion show that SN leads to positive intentions for microenterprises to approve business takaful as their risk management strategies. The following hypothesis 2 (H2) arises from the above deductions.

H2: There is a significant relationship between Subjective Norms and Microenterprises' intention to Participate in Business Takaful.

2.4 Relationship between Perceived Behavioural Control (PBC) and Microenterprises' Intention to Participate in Business Takaful

Owners of microenterprises demonstrate higher intentions of adopting business takaful when they feel they have a stronger sense of control regarding the level of confidence in their ability to execute the behaviour successfully. According to research conducted by Rifas et al. (2023), perceived behavioural control (PBC) is an excellent predictor of intention across a variety of service situations, particularly in the financial industry. According to Rifas et al. (2023), the owners of microenterprises are more likely to be eager to adopt takaful when they believe they have the resources and skills for engagement. The ease or difficulty with which a person sees the adoption of takaful has a direct influence on the intentions of microenterprises to participate in general business takaful. It is further backed by (Alhamami, 2019), which defines perceived behavioural control (PBC) as an individual's idiosyncratic evaluation of the ease or difficulty of engaging in a particular behaviour, taking into consideration elements that may either help or hinder the behaviour. Amin et al. (2011), for example, discovered that while subjective standards had a minor impact on decisions, PBC greatly affected customers' acceptance of Islamic financial instruments. In addition, the adoption of takaful products is significantly impacted by three aspects, including the levels of financial literacy, the availability of information, and the accessibility of the products, which represent the contribution of the PBC to the customers' financial decision-making (Muhammad et al., 2024). By the findings of Otache et al. (2019), the adoption rates of takaful increase when organisations work to increase public awareness about takaful products. The findings of research conducted by Husin and Rahman (2016) indicate that higher levels of knowledge and awareness of takaful schemes have a direct impact on the decisions made by participants, hence indicating the significance of PBC in the decision-making process regarding the adoption of takaful. As a result, it is possible to conclude that PBC acts as a beneficial influence on the intentions of

microenterprises to take part in business takaful. The following hypothesis 3 (H3) stems from the previous research as follows:

H3: There is a significant relationship between Perceived Behavioural Control and Microenterprises' Intention to Participate in Business Takaful.

3.0 RESEARCH METHODOLOGY

A quantitative, cross-sectional survey was utilised to investigate the factors influencing business takaful adoption among Malaysian microenterprises. Data was collected using a structured, self-administered questionnaire via Google Forms after identifying the potential respondents. The population consisted of proprietors of registered microenterprises in the services sector who (i) have annual sales of < RM300,000, (ii) employ less than five full-time employees, and (iii) have been operational for a minimum of one year. The judgmental sampling technique was employed, and to ensure that respondents met the appropriate criteria, a screening question was implemented to filter participation exclusively to business owners who satisfied the specified requirements. Items for the independent variables were measured on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree), whereas the dependent variable employed a seven-point Likert scale (1 = strongly disagree, 7 = strongly agree). All items were adapted from validated prior studies. Subsequently, a pre-test was performed before the final data gathering process to evaluate the reliability of the questionnaire. To achieve a high response rate and data accuracy, each question within the survey is designed to be mandatory in the online survey form. This measure ensures that no questions are skipped, preventing missing data and enhancing the completeness and consistency of responses. 207 responses were collected, 47 cases were removed because the respondents fell outside the target criteria, leaving 160 responses for further scrutiny.

Partial Least Squares Structural Equation Modelling (PLS-SEM) was selected because it aligns with the study's predictive aim, accommodates a complex framework with both reflective and formative constructs, and remains robust under non-normal data conditions. Unlike covariance-based SEM or traditional techniques such as multiple regression and ANOVA, PLS-SEM excels when theory testing is exploratory and the research model includes many latent variables and moderating paths—here, attitude, subjective norms, perceived behavioural control, perceived value, and the moderating role of government assistance (Henseler et al., 2014; Malik et al., 2021). It can estimate models in which the number of parameters approaches or exceeds the sample size, avoid identification problems common to CB-SEM, and compute interaction effects directly (Peng & Lai, 2012). Moreover, PLS-SEM imposes no multivariate-normality requirement, ensuring consistent path and loading estimates even with ordinal scales and multicollinearity (Hair et al., 2017; Richter et al., 2022). Collectively, these advantages make PLS-SEM the most appropriate analytic approach for investigating microenterprise owners' intention to adopt business Takaful.

4.0 DATA ANALYSIS

Measurement and structural models were analysed using partial least squares structural equation modelling (PLS-SEM) in SmartPLS 4, a technique that performs effectively without the assumption of multivariate normality (Chin et al., 2003; Ringle et al., 2022). Data were collected from a single source; accordingly, common method bias was evaluated using collinearity tests as recommended by Kock and Lynn (2012) and Kock (2015). The analysis includes steps where variables connect to one universal variable to determine whether the VIF results stay below 5 levels (Hair, 2016). The VIF results show values lower than 5, indicating that a single data source does not affect our research findings negatively.

Table 1. Collinearity Testing

ATT	SN	PBC	INT
2.131	2.522	3.350	4.198

Note: ATT = Attitude, SN = Subjective Norms, PBC = Perceived Behaviour Control, INT= Intention to participate in Business Takaful

The results of the collinearity test demonstrate that there is no significant common method bias affecting the relationships among the constructs in this study. This is crucial for ensuring the validity of the PLS-SEM results, as CMB can distort the relationships being examined (Kock, 2015). The VIFs for ATT, SN, PBC and INT were found to be below the threshold of 5, indicating that there is no significant multicollinearity affecting this construct. The absence of multicollinearity allows for a clearer interpretation of how ATT, SN, and PBC influence the INT to adopt business Takaful.

Table 2. Measurement Model for the Constructs

Constructs	Items	Loadings	AVE	CR
Attitude	ATT1	0.935	0.818	0.964
	ATT2	0.890		
	ATT3	0.929		
	ATT4	0.914		
	ATT5	0.929		
	ATT6	0.827		
Subjective Norms	SN1	0.839	0.765	0.929
	SN2	0.911		
	SN3	0.896		
	SN4	0.925		
	SN5	0.793		
Perceived Behaviour Control	PBC1	0.917	0.845	0.956
	PBC2	0.944		
	PBC3	0.918		
	PBC4	0.897		
Intention	INT1	0.942	0.831	0.961
	INT2	0.938		
	INT3	0.900		
	INT4	0.921		
	INT5	0.852		

In the evaluation of the measurement model, this study conducted a thorough assessment of the loadings, average variance extracted (AVE), and composite reliability (CR) for the constructs utilised in this study. Acceptable measurement concept values were specified through the following parameters: all loadings must be 0.5 or higher, and AVE must reach 0.5 and CR must maintain 0.7 or better (Hair et al., 2009). All AVE values as shown in Table 2 surpass the required threshold of 0.5, showing that constructs effectively explain the variance

within their measurement indicators. The internal consistency and reliability of the measurement model are verified because the CR values exceed the minimum requirement of 0.7 for all constructs (Hair et al., 2022). The evaluation of indicator loadings showed evidence of meaningful values. Most of the loadings exceeded the recommended threshold of 0.708 for strong indicator reliability; however, two loadings approached this threshold and instead exceeded 0.5, indicating minimum acceptable reliability. This observation aligns with the findings of Hair et al., who suggest that loadings in the range of 0.5 to 0.7 can still be considered adequate, particularly in exploratory research contexts where the goal is to identify potential relationships rather than confirm existing theories. The constructs assessed in this study include three first-order constructs: 1) Attitude, 2) Subjective Norms, 3) Perceived Behavioural Control, and 4) Intention to Participate in Business Takaful. Table 2 demonstrates the validity and reliability of these constructs, which demonstrate their status as reliable measures for the theoretical concepts. This robust measurement model provides a solid foundation for the subsequent structural model analysis, allowing for a more accurate examination of the relationships among the constructs and their influence on the intention among microenterprises to participate in general business takaful.

Table 3. Discriminant Validity (HTMT)

Constructs	1	2	3
1. Attitude			
2. Intention	0.665		
3. Perceived Behaviour Control	0.569	0.875	
4. Subjective Norms	0.736	0.747	0.696

In this study, the Heterotrait-Monotrait ratio (HTMT) has been used to assess discriminant validity among the constructs of Attitude, Intention, Perceived Behavioural Control, and Subjective Norms. According to the HTMT criterion, values below 0.90 indicate adequate discriminant validity, suggesting that the constructs measure different concepts. The discriminant validity using the HTMT criterion suggested by Henseler et al. (2015) and updated by Franke and Sarstedt (2019) should be ≤ 0.85; the stricter criterion and the mode lenient criterion are that it should be ≤ 0.90. The HTMT values from Table 3 fell below ≤ 0.90, and therefore, the research findings enable the conclusion that the participants were able to distinguish between the different constructs. The validity assessment, as well as the reliability assessment of both tests, demonstrate that the measurement items consistently deliver precise results.

Table 4. Construct Reliability and Validity

	Cronbach Alpha	Composite reliability (rho_c)
ATT	0.956	0.964
INT	0.949	0.961
PBC	0.939	0.956
SN	0.922	0.942

Composite Reliability (rho_c) provides an alternative measure of reliability that is often considered more robust than Cronbach's Alpha, particularly in the context of structural

equation modelling. The rho_c values reported for the constructs ranged from 0.942 for SN to 0.964 for ATT, indicating excellent reliability as values above 0.70 are also deemed acceptable (Peterson & Kim, 2013). This is consistent with the findings of Peterson and Kim, who observed that composite reliability often yields higher estimates than Cronbach's Alpha, particularly when dealing with multidimensional constructs (Peterson & Kim, 2013). Furthermore, the high rho_c values found in this research indicate both reliability and validity as criteria for constructs that measure theoretical concepts effectively. The research integrity depends on this methodology because reliable constructs make the structural model stronger and improve the validity of tested relationships. Misalignment between hidden and visible variables within the measurement model of PLS-SEM impacts the analysis outcomes negatively (Shahzad 2023).

Table 5. Hypothesis Testing Direct Effects

Hypothesis	Relationship	Std Beta	Std Error	t-values	p-values	BCI LL	BCI UL	f^2	VIF	Decision
H1	ATT INT	0.185	0.196	1.385	0.166	-0.082	0.439	0.072	2.131	**Not supported**
H2	SN INT	0.186	0.189	1.095	0.273	-0.173	0.496	0.061	2.522	**Not supported**
H3	PBC INT	0.611	0.608	4.838	0.000	0.349	0.859	0.881	3.350	**Supported**

Note: This study used 90% confidence interval with a bootstrapping of 10,000

For H1, ATT INT, the standardised beta coefficient for the relationship between ATT and INT is 0.185, with a p-value of 0.166. This indicates a positive but statistically insignificant relationship. The confidence interval (BCI LL: -0.082, BCI UL: 0.439) further supports this conclusion, as it includes zero, suggesting that the effect of ATT on INT is not robust in this analysis. Previous studies have shown that while ATT can influence INT, the strength of this relationship can vary significantly depending on the context and the specific behaviours being examined (Boubker et al., 2021; Deb & Lomo-David, 2014). For instance, Boubker et al. found a positive association between ATT and intention to adopt Islamic financing, which aligns with the general expectation that positive attitudes lead to higher intentions (Boubker et al., 2021). However, the lack of significance in this case suggests that other factors may be more influential in determining INT.

Tests of H2: SN → INT reveal a standardised beta value at 0.186 with a p-value level of 0.273, thus demonstrating this relationship lacks statistical significance. The results show an effect range between -0.173 and 0.496, which implies the effect might be non-existent. Earlier studies demonstrate that subjective norms influence intentions; however, their impact does not consistently produce substantial effects (Ilmiyah et al., 2022; Ellis et al., 2012). The study performed by Ilmiyah et al. (2022) showed that subjective norms act as powerful predictors for intentions, although the present research found no significant effects.

In contrast, for H3 PBC → INT, the relationship between PBC and INT is notably strong with a standardised beta of 0.611 and a p-value of 0.000, indicating a significant relationship. The confidence interval (BCI LL: 0.349, BCI UL: 0.859) does not include zero, reinforcing the robustness of this finding. This aligns with the TPB, which posits that perceived behavioural control is a critical determinant of intention (Ellis et al., 2012; Liao et al., 2022). Studies have unswervingly shown that PBC significantly influences intentions across various contexts, including technology adoption and health behaviours (Schrage et al., 2022; and Bianchi & Andrews, 2018). For instance, research by Schrage et al. (2022) supports the belief that PBC is a strong predictor of intention in technology-related contexts.

Table 6. PLS Predict

		PLS	**LM**	
Item	Q²_predict	RMSE	RMSE	PLS-LM
INT1	0.646	0.698	0.870	-0.172
INT2	0.627	0.644	0.947	-0.303
INT3	0.476	0.759	1.160	-0.401
INT4	0.610	0.654	0.837	-0.187
INT5	0.306	0.878	1.831	-0.953

Table 6 presents the analysis of the predictive capabilities of Partial Least Squares (PLS) and PLS Linear Models (PLS-LM) for measuring intention, indicating that the PLS model exhibits superior predictive performance relative to the PLS-LM model. Specifically, the PLS model shows lower root mean square error (RMSE) values and higher predictive relevance (Q²_predict) for items INT1 to INT5, indicating its effectiveness in predicting intentions. Referring to the table, INT1 and INT2 reveal notable advantages in predictive accuracy, while INT5, despite lower predictive relevance, still shows a significant RMSE difference. These findings suggest that researchers should consider the PLS model for predictive analyses in intention-related studies, as it effectively balances predictive power and theoretical consistency (Hair et al., 2019; Sharma et al., 2018; Shmueli et al., 2019). PLSpredict serves as a holdout sample-based process according to Shmueli et al. (2019) to generate case-level predictions across item or construct levels through PLS-Predict applications that perform a 10-fold procedure to validate predictive relevance. The PLS-LM comparisons allow for to determination of predictive power strength through item differences analysis (Shmueli et al. 2019). Strong predictive power emerges from complete item differences below zero levels, but predictive relevance remains unverified when all items show positive differences. A moderate predictive power exists when most item differences fall below zero, while low predictive power exists when a minority of items compare. All errors from the PLS model fall beneath the ones from the LM model, which demonstrates strong predictive power of our model, per Table 6.

5.0 CONCLUSION

The findings reveal that Perceived Behavioural Control (PBC) emerged as the most significant predictor of Intention (INT) to participate in general business takaful among microenterprises. It indicates that microenterprise owners who perceive a higher level of control over their ability to adopt takaful are more likely to intend to do so. Importantly, all PLS prediction errors are less than the PLS-LM benchmark, which shows that the PLS-Predict approach (Shmueli et al., 2019) has good predictive potential. These validated results demonstrate that the PLS model offers enhanced accuracy in predicting intention in this research context. Conversely, the roles of Attitudes (ATT) and Subjective Norms (SN) were found to be not supported, suggesting that personal beliefs and evaluation about general business takaful as well as social pressures may not play as critical a role in this context as previously assumed (Aziz et al., 2020; Boubker et al., 2021; Kim & Kim, 2021)

This study validates previous research because PBC stands as a fundamental predictor of intentions according to scholarly works. Researched by Purboningrum et al. (2023) demonstrated a positive connection between financial knowledge that enhanced PBC, which

ultimately influenced the intentions of financial decision-making behaviour. The study showed that takaful products would attract microenterprise business owners when they attain better control of their choice opportunities. Research findings show that microenterprise owners maintained similar intentions toward using takaful since they prioritise functional factors during financial choice processes as identified in Ganesan et al. (2020). The conclusions offer essential knowledge to improve the adoption of Islamic financial instruments for microenterprises. Moreover, regulators, takaful operators, and SME development agencies must develop unique empowerment programs which support microenterprise owners through specific intervention programs based on perceived behavioural control knowledge. Teaching microenterprise owners through financial literacy programs about takaful principles and advantages allows them to feel their control over financial decisions better thus enabling them to select takaful products more easily. This strategy echoes Fitriaty's (2023) evidence that financial behaviour mediates the link between literacy and investment choices, underscoring the value of PBC-oriented training.

The research adds to Islamic financing and microenterprise development by identifying key psychological components which influence financial decision processes in this field. The results demonstrate a need for an organised approach to advertise general business takaful products for small businesses. The enhancement of PBC in microenterprise owners will function as a strategic key to boost adoption rates. Further research should analyse additional variables, including culture and context and how the TPB framework interacts with financial literacy to determine willingness to participate in takaful. The research findings show that microenterprise owners base their decision to participate in general business takaful on their perceived ability to exercise control over the product. Anchoring policy and marketing efforts in these psychological levers promises not only higher takaful penetration but also broader financial inclusion and resilience for the microenterprise sector.

6.0 SUGGESTION FOR FUTURE RESEARCH

This study proposes future research directions to overcome methodological and theoretical limitations. Longitudinal designs are essential to elucidate how participation rates, policyholder behaviour, and market responses fluctuate during economic cycles, regulatory reforms, and targeted interventions, thereby uncovering causal mechanisms overlooked by cross-sectional analyses. Secondly, broadening the investigation to specific sectors will reveal the unique risk profiles and financial structures of manufacturing, agriculture, construction, technology, and other industries, which would enable takaful providers to develop sector-specific coverage and risk-mitigation instruments. Third, incorporating socio-demographic moderators such as ethnicity, education, income, and geography can further elucidate how cultural norms, financial literacy, and information accessibility will influence business takaful uptake by facilitating more targeted marketing and instructional efforts. Fourth, comparative assessments of governmental assistance programs across areas can reveal which combinations of regulation, tax incentives, and awareness initiatives most successfully enhance market depth and stability, offering a foundation for policy reform. Ultimately, mixed-method techniques that integrate quantitative modelling with interviews, focus groups, and case studies will elucidate the intricate motivations, trust dynamics, and contextual obstacles influencing business takaful adoption trends, providing actionable insights for practitioners. Collectively, these research avenues offer a deeper, more pragmatic comprehension of business takaful adoption that can foster sustained growth and resilience within Islamic financial systems.

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