



Do Microtakaful Schemes as Risk Management Tools Contribute to Halal Small Business Sustainability? Evidence from Malaysia

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Abstract

Microtakaful schemes have become increasingly crucial for risk management among halal small businesses. However, little is known about which of the schemes offered contribute to halal small business sustainability. Hence, this study intends to ascertain whether microtakaful schemes as risk management tools contribute to halal small business sustainability. This research adopts a quantitative research design by way of survey methodology to obtain data from halal small business owners and managers in Klang Valley, Malaysia. Additionally, exploratory factor analysis (EFA), confirmatory factor analysis (CFA), and structural equation modelling (SEM) were used to uncover which of the microtakaful schemes significantly contribute to halal small business sustainability. The results show that disability and family microtakaful schemes are positively and significantly related to halal small business sustainability. Whereas property and health microtakaful schemes are found to be positively, but insignificantly related to halal small business sustainability. Meanwhile, our findings on property and family microtakaful schemes reveal that more awareness and education should be prioritised by microtakaful operators.

Keywords: Property microtakaful, Health microtakaful, Disability microtakaful, Family microtakaful, Halal small business, Sustainability

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1. Introduction

There is no doubt that the emergence of Covid-19 pandemic, with its economic crisis, has added to business sustainability challenges all over the world, regardless of their sizes and locations (Engidaw, 2022). Among different categories of businesses, small businesses are mostly at risk due to their relatively limited financial resources, lack of good risk management strategy, and inadequate takaful coverage to survive unexpected crises (Dua et al., 2020). With the effect of Covid-19 on small businesses and given that they are crucial for any economy, it has become obvious that a good risk management strategy to protect this sector from unforeseen shocks is imperative to their success and sustainability (Harel, 2021).

Obviously, subscribing to an appropriate takaful coverages, in addition to implementing policies that value employee safety, avoidance of transactions with dubious customers, installing security system to guard against property losses, training potential managers on the roles and responsibilities of their superiors to protect against key person losses, etc. is crucial for risk management and sustainability of small businesses (Asai, 2019). Without such risk management in place, business owners may face devastating damages which would be financially costly and threaten the survival of their businesses, such as what was experienced during the recent lockdown due to the Covid-19. While there is enough evidence regarding the cruciality of the traditional takaful for the survival of businesses (Ahmed et al., 2022; Asai, 2019; Ismail et al., 2016), their premiums, which are

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Article history

Received: 12 December 2022

Accepted: 30 December 2022

perceived expensive for several small business owners and low-income households, have left many without a way to protect their businesses (Fikri et al., 2022), resulting into lower rate of financial inclusion.

As a result of the lower rate of financial inclusion and lesser demands for traditional takaful products due to the high premiums, microtakaful and microinsurance schemes were designed to support small businesses as well as disadvantaged people to effectively manage their risks (Alzain and Alshebami, 2022). Although microinsurance plays similar roles as microtakaful, the latter was designed to provide Shariah-compliant risk-pooling products for the protection of low-income Muslims and halal business owners at affordable premium (Abdul Razak et al., 2021). Briefly, halal small businesses are businesses in which the ingredients used, the operations, and products/services conform with Shariah principles (Jaiyeoba et al., 2021). While several microtakaful products were designed and named differently by different takaful operators to help protect halal small businesses and low-income earners from various risks, these microtakaful schemes can be grouped into four specific products, namely property, health, family, and disability microtakaful (Usman, 2012).

Although researchers have documented the importance of microtakaful schemes for the sustainability of halal small businesses (Gor, 2013; Usman, 2012), however, the extent as to which these schemes have contributed to the sustainability of halal small businesses is yet to be explored and hard to find. Besides, studies on microtakaful schemes as risk management tools in small businesses is limited even with the fact that they are more vulnerable in combating any economic or financial crisis or external events, as they are structurally weaker and extremely exposed to unexpected risks (Tan and Lee, 2022). As noted by Bank Negara Malaysia (BNM, 2016), many small businesses and low-income earners are not prepared to deal with unexpected costs and income loss due to the lack of protection plans. Against this backdrop, a regulatory framework was developed by the BNM in 2016 to facilitate financial inclusion, sustaining small and medium enterprises, and the growth of microtakaful market in Malaysia. Following the regulatory framework, adopting microtakaful schemes as risk management tools among small businesses has been growing based on the findings of Abdul Razak et al. (2021) that knowledge, attitude, subjective norms, and perceived behavioural control influencing microtakaful purchasing intentions.

However, little is known about which of the microtakaful schemes, when used as risk management tools, contribute to the sustainability of halal sustainability. Thus, this study endeavours to ascertain whether microtakaful schemes as risk management tools contribute to halal small business sustainability. With this study, halal small business owners and managers will be exposed to specific microtakaful schemes that could help to protect their businesses against unexpected shocks which could threaten their sustainability. This is because the adverse consequence of the absence of appropriate protection against risks can threaten the existence of halal small business, resulting into liquidation (Chłodnicka and Zimon, 2020). Given the findings of this study, takaful operators in Malaysia will be made aware of the specific microtakaful product(s) that contribute to halal small business resilient and sustainability. On this basis, the present study contributes to the body of knowledge by generating theoretical and empirical knowledge about the sustainability of halal small business.

Meanwhile, the next section discusses the theoretical background with respect to business (corporate) sustainability and risk management, as well as pertinent studies on microtakaful. Section three elaborates on the methodology and data collected for this study. Section four presents and interprets the analyses performed on the data collected for this study. Section five discusses the main findings and offers the implications for theory and practice. The final section highlights the limitations and recommendations for future studies.

2. Literature Review

2.1 Theoretical background: business (corporate) sustainability and risk management

The term “sustainability” is a complex concept and researchers need to specifically discuss how this concept has been conceived to avoid ambiguity (Adoukonou, 2019). Regardless of how sustainability has been applied, Aragon-Correa et al. (2017) note that this concept is related to something of long term. In business related literature, sustainability has been used to refer to businesses or corporations’ abilities to remain in operations over a long period of time. Specifically, Catlin et al. (2017) define business or corporate sustainability as business ability to employ appropriate tools, such as relevant risk management techniques, that could help them to remain in operation over a long period of time. Hansen and Schaltegger (2016) refer to business sustainability as business efforts to strike a balance between the dimensions of sustainability – planet, people, and profit. Similarly, a broader application of this concept, nowadays, is in sustainable development, which implies the

development that meets the needs of the present generation without threat to future generations' ability to meet their needs (Keeble, 1988).

To be precise, the application of sustainability in this study is in line with the operational definition provided by Catlin et al. (2017). By business sustainability, we are essentially referring to halal small businesses' ability to subscribe to appropriate risk management techniques, such as microtakaful products, so that they are adequately able to deal with potential risks to remain sustainable. As noted by Cheese (2016), small businesses' ability to effectively manage risk is *sine qua non* for their resilient and sustainability. Moraes et al. (2021) document that proper risk management enhances management of businesses, thereby contributing to their performance and sustainability (Rehman and Anwar, 2019). On this basis, halal small businesses can be said to be sustainable if they are able to effectively manage their risks in such a way that help them to continue to exist (Banker et al., 2014). This, therefore, suggests that risk management is crucial for small businesses' resilience and sustainability.

Meanwhile, risk management refers to a process that covers assessment, evaluation, and identification of risks that can be reduced and that which can be transferred through takaful (Deakins et al., 1997). Risks are inherent in any business and successful management of risk is dependent on the risk management framework established by small businesses, such as subscribing to appropriate microtakaful plans (Tan and Lee, 2022). The established risk management framework (covering risk identification, risk measurement, risk mitigation and risk monitoring and reporting) is extremely crucial for guiding small businesses to develop adequate strategies to mitigate, avoid, and control the effects thereof, particularly to ensure that businesses remain being classified as a 'going concern' should the unexpected happen (Masama et al., 2012). Meanwhile, given that small businesses are crucial for the economic stability of most developing countries, it is imperative that they take risk management more seriously. Compared to larger companies, Rostami et al. (2015) note that small businesses must take risk management more seriously as they lack resources required to respond promptly to either internal or external hazards that could potentially result in loss of property or liquidation.

Besides the use of takaful by halal small businesses to manage their risks, De Araújo Lima et al. (2020) considered enterprise risk management (ERM) as another complex and most innovative stream for managing risks compared to silo or traditional risk management technique, where each business unit leader is responsible for managing risks within his/her area of responsibility (Brown et al., 2019). With many aspects to risk management, De Araújo Lima et al. (2020) indicated that proper risk management is still challenging for small businesses due to the limitations in their resources. Despite the importance of risk management to the survival of small businesses, Abdul-Rahman et al. (2015) document that the implementation and proper risk management practices are still at low level among them in Malaysia.

Notwithstanding this finding, halal small businesses need to recognise that they are exposed to several risks, such as supply chain risk, interest rate risk, raw material price risk, technological risk, growth risk, e-business risk, etc. that may affect their performance and sustainability in this tough and ever-changing environment (Md Husin and Haron, 2020; Pathak and Ahmad, 2018). Since microtakaful schemes are important risk management tools that can be adopted to overcome these unforeseen risks, subscribing to appropriate microtakaful protection has become an important mechanism for healthy growth and continuity of halal small businesses. In this way, halal small businesses' assets, liabilities, and employees will be protected against risks that are associated with business operations.

2.2 Review of pertinent studies on microtakaful schemes

Microtakaful products are Shariah compliant instruments designed to offer protection to halal small businesses and low-income individuals (Mahmood et al., 2019). A discussion paper on regulatory framework to facilitate the growth of the microtakaful/microinsurance market was published by the Bank Negara Malaysia (BNM, 2016). While micro-takaful market is still at its nascent stage of development, it has been reported that there are huge untapped microtakaful market, since there are several small businesses and low-income earners without protection coverage in Malaysia as well as in other countries (Md Husin and Haron, 2020). Specifically, Mohd Yunus (2018) notes that there are at least around eight million working age individuals and over 700,000 businesses in Malaysia that need protection. Meanwhile, some studies have been conducted to investigate the opinions of small businesses owners on different policies offered by microtakaful/microinsurance around the world. Among others, Htay et al. (2015) analyse the viability of micro health takaful in Malaysia via questionnaire to the low-income earners. They found that participants are interested in subscribing to micro

health takaful, but unable to pay high premiums as demanded by takaful operators.

Bangaan Abdullah et al. (2021) examine the indicators of having a micro-family takaful plan among low-income earners based on the data collected from Selangor, Malaysia. They find that gender and knowledge about family microtakaful plans are significantly related to the tendency of having a micro-family takaful plan. Additionally, they also show that married and employed women are more likely to subscribe to family microtakaful plans compared to their male counterparts. In addition, Md Husin and Haron (2020) explore the perception of SMEs towards microtakaful. They find that interviewees were primarily concerned about the cost and the difficulty of choosing the best and most comprehensive coverage, implying that SMEs lack adequate financial resources and need guidance in selecting appropriate microtakaful plan. A recent study by Fikri et al. (2022) noted that family and permanent disability risks constitute more than 61% of small business owners and low-income earners' worries. Fikri et al. documented that family and permanent disability are the best microtakaful products for protection against temporary financial relief in the case of risks befallen the breadwinners, who are the primary income-earners in the family.

Zuliani and Rahman (2019) employed qualitative technique to examine the perspective of three parties, consisting of SMEs owners, academic experts, and low-income earners on microtakaful and its implementation in Banda Aceh in Indonesia. They find that there is a potential for microtakaful due to the needs among low-income groups, though they also noted some challenges that need to be overcome for successful implementation of microtakaful. Similarly, Abdul Razak et al. (2021) examine factors influencing micro, small, and medium enterprises' (MSMEs) intentions to purchase microtakaful scheme based on theory of planned behaviour using data from 135 MSMEs in Perak, Malaysia. They find that knowledge, attitude, subjective norms, and perceived behavioural control have a favourable impact on intentions to purchase microtakaful coverage. Furthermore, the study of Mohd Fauzi and Laldin (2022) confirms the importance of microtakaful schemes in protecting low-income earners in Malaysia; however, they showed that the focus of microtakaful operators is skewed towards the disability, health, and family protection schemes, as they show little interest in the provision of microtakaful schemes for the protection of properties belonging to low-income earners.

Salleh et al. (2017) formulated a comprehensive framework for property microtakaful schemes with the intention of protecting SMEs' assets in times of floods. According to them, their finding, which was based on the developed framework, indicates that approximately 89% of small business owners stated that they lost between RM1,000 and RM30,000 in the form of tangible assets, such as equipment, machinery, and inventory, due to the floods which directly impeded business recovery process. Mohd Rom and Abdul Rahman (2016) investigate public perception towards microtakaful, they find that small businesses subscribe to microtakaful schemes to cover against healthcare cost (with average score of 4.33 out of 5), protection for family members (with average score of 4.31 out of 5), coverage for disability (with average score of 4.31 out of 5), and coverage for property loss (with average score of 4.35 out of 5).

Furthermore, Usman (2012) notes that although microtakaful schemes may resemble microinsurance products in names, they are different in terms of concept. Accordingly, he noted that microtakaful schemes can be grouped into four, consisting of health microtakaful products, family microtakaful products, disability microtakaful products, and property microtakaful products. Gor (2013) suggests various sustainable microtakaful products in support of Usman (2012) and discusses cost-effective delivery channels that could help takaful providers to increase their access to halal small business and low-income households.

In a related study, Apostolakis et al. (2015) reviewed extant literature on microinsurance to help practitioners and researchers have better understanding of this important area; they find that microinsurance reduces low-income earners' vulnerability to poverty by providing them access to healthcare services and improving their income stability. They concluded that further research is necessary to reach concrete conclusions about the impact of microinsurance on sustainable development and financial sustainability of low-income earners. While several studies have been conducted on various issues bothering the perceptions and the importance of microtakaful coverages in alleviating poverty among business owners and low-income earners, there is no evidence as to which of the microtakaful schemes contribute to halal small business sustainability when used as risk management tools. To fill this gap, the present study is conducted based on the data from halal small business owners and managers in Malaysia. Thus, we intend to test the following hypotheses:

H1: Property microtakaful scheme is positively and significantly related to halal small business sustainability.

H2: Health microtakaful scheme is positively and significantly related to halal small business sustainability.

H3: Disability microtakaful scheme is positively and significantly related to halal small business sustainability.

H4: Family microtakaful scheme is positively and significantly related to halal small business sustainability.

3. Research Methodology

Based on the objective of this research and the nature of issue investigated, a quantitative research design was adopted to empirically unravel the issue of interest. According to [Delost and Nadder \(2014\)](#), adopting an appropriate research design is a critical issue that must be taken seriously by researchers. The adoption of quantitative approach is in line with similar other studies, such as ([Zourrig and Park, 2019](#); [Bangaan Abdullah et al., 2021](#); [O'Connor, 2016](#)). In line with the adopted approach, a survey questionnaire with a total of 46 items was developed to gather data from halal small businesses in Klang Valley, where about a quarter of Malaysia's total population reside ([Jaiyeoba et al., 2022](#)).

To develop our research instrument, items were adapted from other studies by [Salleh and Padzim \(2018\)](#), [Ishak \(2020\)](#), and [Htay et al. \(2015\)](#). Also, researchers and practitioners were engaged to ensure that our instrument is valid and reliable before subjecting it to data collection. Similarly, a pilot study involving 61 respondents from halal small businesses was also conducted and the outcome indicated that the developed instrument is reliable. In the end, data were collected from 238 halal small business owners and managers from the food and beverage sector using a convenient sampling technique. To arrive at the appropriate amount of sample size, the sample size recommendation by [Hair et al. \(2014\)](#) that a minimum of 150 sample size is required for a model of seven constructs or less was used as a guide, since this study is expected to generate five constructs based on the developed questionnaire.

Furthermore, to ensure the data collected were usable for analyses, our data were screened to ascertain that they are normally distributed, no multicollinearity concern, detect unengaged responses, absent of outliers, and confirm common method variance. It was discovered that the dependent variable is normally distributed and there is absence of multicollinearity concern as variance inflation factors were all less than 3.3. Similarly, there were no cases of extreme outliers, no unengaged responses, and common method variance was not an issue, based on Harman's single-factor analysis. Having ensured the usability of the data collected for this study for further analyses, exploratory factor analysis (EFA), confirmatory factor analysis (CFA), and structural equation modelling (SEM) techniques were employed to analyse our data, as subsequently reported in the next section.

4. Results

4.1 Descriptive analysis

This section reports the basic characteristics of our respondents. The percentage of female respondents is 53.4% and the percentage of male respondents is 46.6%, suggesting that more data were collected from female respondents than male respondents. With respect to the respondents' levels of education, 30.7% are Diploma holders, 30.3% are Degree holders, and 23.9% are Sijil Pelajaran Malaysia (SPM) holders. Regarding the respondents' knowledge of microtakaful schemes, more than half of them (52.5%) have excellent knowledge of microtakaful schemes, 28.2% have good knowledge of microtakaful schemes, 12.2% have medium knowledge of microtakaful schemes, and 7.1% have low knowledge of microtakaful schemes. While it can be concluded that most of our respondents are knowledgeable about microtakaful products, there is a need for more knowledge sharing campaigns to promote microtakaful schemes to halal small businesses. Finally, most of our respondents (99.6%) have high and somewhat confident that takaful operators would compensate them for a covered loss.

4.2 EFA, CFA and structural model assessment

Subsequent to the data screening as discussed, EFA was performed based on principal components analysis (PCA) to manage the items in the questionnaire and confirmatory factor analysis was undertaken to ascertain how well the measured variables represent the number of constructs. Beginning with the initial analyses

performed to meet the assumptions of EFA as indicated by Hair et al. (2014), the values of anti-image matrix support our earlier claim that there is no concern for multicollinearity issue. The Kaiser-Meyer-Olkin test (0.946) confirms that our sample size is adequate, the Bartlett test of Sphericity ($\chi^2 = 8302.376$, $df = 406$, $p\text{-value} = 0.000$) establish that there is good correlation between variables, and communalities values, as reported in Table 1, suggests that the variance shared are not highly compromised. Following the determination that EFA could be conducted with our data, the PCA with varimax rotation of the 29 items (all were positively worded) performed produced a five-factor structure. Using an eigenvalue cut-off of 1, the five factors generated explained an accumulated variance of 82.15%.

Table 1: Exploratory factor analysis

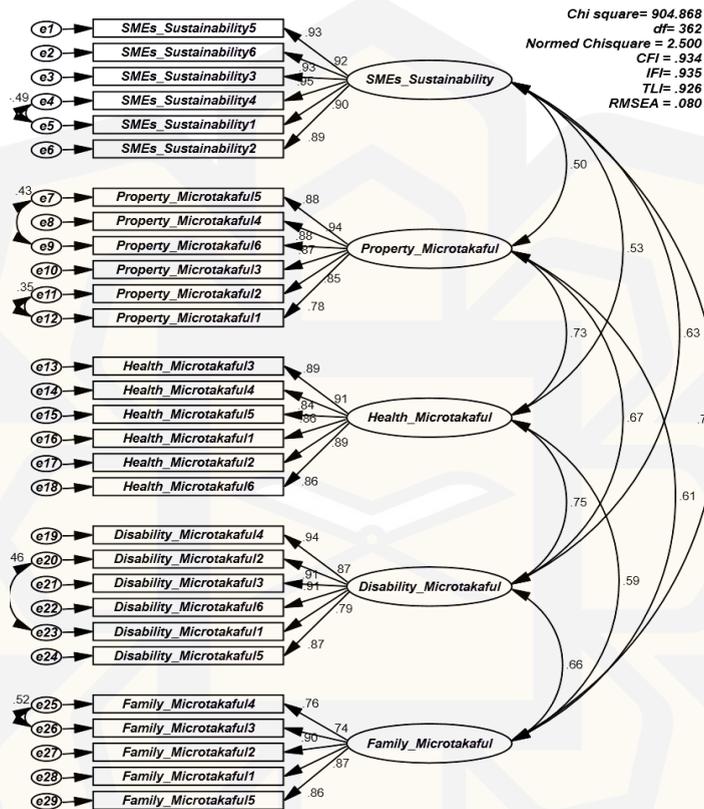
Indicators	Factor loadings					Communalities	CR	AVE	MSV
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5				
HSB_Sustainability5	.874					.894	0.970	0.845	0.513
HSB_Sustainability6	.855					.875			
HSB_Sustainability3	.854					.894			
HSB_Sustainability4	.837					.884			
HSB_Sustainability1	.832					.827			
HSB_Sustainability2	.788					.835			
Property_Microtakaful5		.833				.844	0.949	0.755	0.526
Property_Microtakaful4		.818				.876			
Property_Microtakaful6		.815				.842			
Property_Microtakaful3		.784				.804			
Property_Microtakaful2		.775				.793			
Property_Microtakaful1		.681				.727			
Health_Microtakaful3			.818			.850	0.952	0.768	0.565
Health_Microtakaful4			.815			.868			
Health_Microtakaful5			.777			.777			
Health_Microtakaful1			.738			.787			
Health_Microtakaful2			.727			.819			
Health_Microtakaful6			.678			.783			
Disability_Microtakaful4				.787		.871	0.955	0.779	0.565
Disability_Microtakaful2				.778		.851			
Disability_Microtakaful3				.778		.852			
Disability_Microtakaful6				.742		.841			
Disability_Microtakaful1				.724		.743			
Disability_Microtakaful5				.686		.772			
Family_Microtakaful4					.827	.807	0.917	0.689	0.513
Family_Microtakaful3					.824	.799			
Family_Microtakaful2					.702	.791			
Family_Microtakaful1					.691	.759			
Family_Microtakaful5					.689	.759			
Variance explained	19.20%	17.23%	16.44%	16.38%	12.91%				

Note: HSB=halal small business sustainability; CR=composite reliability; AVE=average variance extracted; MSV=maximum shared variance.

The first factor comprises six items with eigenvalue of 19.20%, the second factor consists of six items with eigenvalue of 17.23%, the third factor entails six items with eigenvalue of 16.44%, the fourth factor consists of six items with eigenvalue of 16.38%, and the final factor comprises five items with eigenvalue of 12.91%. Meanwhile, the eigenvalue for each factor is also reported in Table 1. In addition to the EFA, CFA was also conducted to assess the model fit, ascertain how well the measured variables represent the number of constructs, and discover the existence of the relationship between the observed variables and their underlying latent constructs (Jaiyeoba et al., 2021; 2022). As shown in Figure 1, the indices employed in testing the general fit of the model are χ^2 , incremental fit index (IFI), comparative fit index (CFI), root mean square error of approximation (RMSEA), and standardised root mean square residual (SRMR). These indices indicate a satisfactory model fit: normed chi-square = 2.500; IFI = 0.935; CFI = 0.934; RMSEA = 0.082; and SRMR = 0.044.

Besides, the results of reliability, which is measured in respect of consistency and repeatability, and validity, which is the extent to which the scores represent the intended variable (Che Embi et al., 2019), are reported in Table 1. According to Hair et al. (2014), reporting both composite reliability (CR) and average variance extracted (AVE) is necessary in a study where SEM is employed to analyse the relationship between the exogenous and endogenous variables. Accordingly, the CR values, as shown in Table 1, are all above the benchmark of 0.7. Likewise, the AVE values are all above 0.5 and respectively greater than the corresponding values of MSV. These results indicate adequate internal consistency and significant degree of convergent validity.

Figure 1: Measurement model



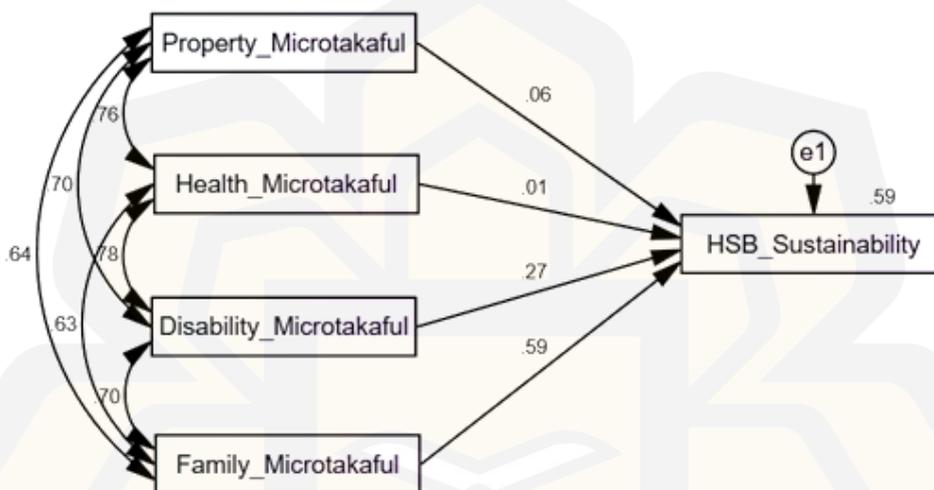
Finally, Analysis of moment structures (AMOS) software was used to determine the relationship between the exogenous variables (property microtakaful, health microtakaful, disability microtakaful, and family microtakaful) and endogenous variable (halal small business sustainability). As shown in Table 2 and Figure 2, disability microtakaful ($\beta = 0.285, p < 0.01$) and family microtakaful ($\beta = 0.821, p < 0.01$) are positively and significantly related to halal small business sustainability. Whereas property microtakaful ($\beta = 0.067, p > 0.05$) and health microtakaful ($\beta = 0.067, p > 0.05$) are positively but insignificantly related to halal small business sustainability. These results show that the only two exogenous variables that significantly contributed to halal small business sustainability when used as risk management tools are disability microtakaful and family microtakaful. Based on these findings, it can be concluded that our respondents considered coverage against the financial consequences of temporary or permanent invalidity as well as coverage for family protection as the main microtakaful schemes that contribute to their business sustainability.

Table 2. Regression weights

	Estimate	S.E.	C.R.	P
HSB Sustainability ← Property Microtakaful	.067	.079	.855	.392
HSB Sustainability ← Health Microtakaful	.009	.098	.090	.929
HSB Sustainability ← Disability Microtakaful	.285	.079	3.596	***
HSB Sustainability ← Family Microtakaful	.821	.084	9.768	***

Note: *** = $p < 0.001$

Figure 2. Structural model



4.3 Discussion and implications

This study ascertains whether microtakaful schemes as risk management tools contribute to halal small business sustainability. As noted by Mohd Rom and Abdul Rahman (2016) and Usman (2012), microtakaful schemes can be grouped into four categories, namely property microtakaful scheme, health microtakaful scheme, disability microtakaful scheme, and family microtakaful scheme. On this basis, a survey questionnaire was developed based on the extant literature. Following the analysis of the data that were collected from halal small business owners and managers, the results indicate that disability microtakaful and family microtakaful as risk management tools are the main microtakaful schemes that contribute to halal small business sustainability. Nevertheless, the relationship between property microtakaful and halal small business sustainability as well as the relationship between health microtakaful and halal small business sustainability are insignificant.

Specifically, we have found that disability microtakaful scheme as risk management tool is positively and significantly related to halal small business sustainability. Since the ability to earn a living is the most important asset in every situation and given the fact that disability microtakaful scheme provides invaluable protection for halal small business owners and managers in the event they are disabled and unable to work, such protection is perceived by our respondents as crucial for their business sustainability. Similarly, our findings show that family microtakaful scheme as risk management tool is positively and significantly related to halal small business sustainability. Obviously, these findings suggest that both family and disability microtakaful schemes are crucial for risk management, as they are possibly perceived as complementary microtakaful schemes that could help halal small businesses remain sustainable. These findings support Fikri et al. (2022) claim that family and disability microtakaful products are the best for risk management against temporary financial relief in the case of risks befallen the breadwinners who are the primary income-earners in the family.

Besides, we have also reported insignificant relationships between property microtakaful and halal small business sustainability as well as health microtakaful and halal small business sustainability. These findings possibly suggest that our respondents are more concerned about the livelihood of themselves and their family in the event of uncertainties. With respect to the result on insignificant relationship between property

microtakaful and halal small business sustainability, this finding confirms the result of [Mohd Fauzi and Laldin \(2022\)](#) where it was discovered that microtakaful operators show little interest in the provision of microtakaful schemes for the protection of properties belonging to low-income earners, as they focus more on other schemes, such as disability, health, and family protection schemes. Moreover, compared to other microtakaful schemes, property microtakaful may be perceived as expensive as in the case of regular property takaful. Similarly, since there is no compulsion to buy property microtakaful, several halal small businesses might be unwilling to opt in to avoid the monthly expense, causing them to suffer severe damage to vehicles, machinery, equipment, and stock due to floods or other disaster.

Regarding the insignificant relationship between health microtakaful and halal small business sustainability, this could be attributed to their sizes, as they relied more heavily on the part-time workforce and employ lower-wage workers compared to big businesses. Additionally, disability microtakaful might have been perceived as a better scheme in term of halal small business sustainability compared to health microtakaful, since the former offers financial protection against injuries and illnesses. This finding is in line with the study of [Htay et al. \(2015\)](#) where it was disclosed that participants were interested in subscribing to health microtakaful, but unable to pay high premium as demanded by takaful operators; thus, they may not see this product as potential contributor to halal small business sustainability.

Meanwhile, this study has made substantial contributions to the theory and practice. Unlike several extant studies, such as [Bangaan Abdullah et al. \(2021\)](#) and [Htay et al. \(2015\)](#), where only one aspect of microtakaful schemes was the main area of focus, the present study has investigated all aspects of microtakaful schemes, covering property, health, disability, and family. Besides, this study has employed SEM to reveal the microtakaful schemes (disability microtakaful and family microtakaful) that contribute to halal small business sustainability in Malaysia when used as risk management tools. Similarly, by documenting important findings with respect to which of the microtakaful schemes contribute to halal small business sustainability, the findings of this research have shown that disability microtakaful and family microtakaful are inevitable for sustaining halal small businesses, particularly in Malaysia.

Our findings that property and family microtakaful schemes are not significantly related to halal business sustainability reveal something interesting that halal small business owners and managers need more awareness and education to truly understand how microtakaful schemes work. Most halal business owners and managers might have remained in misplaced anxiety around how much property and family microtakaful schemes cost. When compared the cost of buying most of these microtakaful schemes to the potential risks faced by halal small business, it is really a smart thing that halal business owners and managers perceived all microtakaful schemes as crucial for their business sustainability because most of them cannot afford to take any kind of major hit to their businesses.

5. Conclusion, Limitations and Future Research

As microtakaful schemes have become increasingly crucial for risk management among halal small businesses ([Asai, 2019](#)), it is important to understand which of the schemes offered contribute to halal small business sustainability. To address this issue, a survey questionnaire was developed and used to collect data from owners and managers of halal small businesses in Malaysia. Based on the analysis performed using SEM, it was discovered that the sustainability of halal small businesses is significantly influenced by disability microtakaful and family microtakaful. Whereas property and family microtakaful schemes are insignificant contributors to the sustainability of halal small businesses. Overall, it can be established that subscribing to disability and family microtakaful schemes as risk management tools by halal small businesses would significantly enhance their sustainability.

To place the findings of this study in the proper context to which it should be interpreted, it is important to discuss the limitations of this study, especially since a convenient sampling technique was used during the data collection. In truth, the fact that our respondents were drawn from Klang Valley in Malaysia limit the generalisability of the findings of this study, despite that the population of Klang Valley represents about a quarter of Malaysia's total population. Thus, conducting further research based on adequate data from other cities in Malaysia would increase our understanding about the impacts of microtakaful schemes as risk management on halal small business sustainability.

Besides, we did not differentiate between male and female respondents, and this may have an effect since there are clear evidence that male and female do not share the same perceptions in similar issues as addressed

in this study (García-González et al., 2019; Jaiyeoba et al., 2020). Hence, future researchers may use sufficient data to shed light on this issue. Nonetheless, this study will benefit halal small business owners and managers, microtakaful operators, researchers and academicians, relevant agencies, and halal industry.

Acknowledgment

This research was supported by Universiti Malaysia Pahang (UMP) through IIUM-UMP-UITM Sustainable Research Collaboration Grant 2020 (SRCG20-021-0021).

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