

DETERMINANTS OF ISLAMIC INSURANCE ACCEPTANCE: AN EMPIRICAL ANALYSIS

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ABSTRACT

This study is aimed at investigating the factors influencing the Islamic insurance acceptance among Malaysian bank customers. It focuses on the relationships among attitude, subjective norm, amount of information (AOI) and acceptance of Islamic insurance. For the purpose, the study used existing theory to identify factors, which are of paramount importance to explain the Islamic insurance acceptance. Multiple regression analyses are employed in order to confirm the relationship of the antecedents involved. We collected 176 valid survey responses. The study found that that attitude, subjective norm, and AOI are influential predictors of Islamic insurance acceptance. The study provides an insight into the understanding of factors leading to the customers' acceptance of Islamic insurance. Importantly, it is also of interest for future planning of Islamic insurance products. Policy implications, limitations and future research directions of the study are provided.

Keywords: Attitude; Subjective Norm; AOI; Islamic insurance; Malaysia

1. INTRODUCTION

By definition, the noun *takaful* is derived from *takafala* which means literally translates to "looking after one another" (Hamid and Othman 2009). It is visualized as a pact among a group of members or participants who agree to jointly guarantee among themselves, against loss or damage that may be inflicted upon any of them as defined in the pact (Yusof, 1996). Participants mutually agree to guarantee each other against defined loss or damaged by contributing funds known as the as *tabarru* (Billah, 2001). *Tabarru* is the core of the *takaful* system that makes the uncertainty element allowable under the *takaful* concept. Explained in more detail, under *takaful* scheme, participants mutually agree to guarantee and to protect each other against a defined loss or damaged, by jointly providing financial assistance to any members suffering from a loss (Redzuan, et al., 2009). In other words, *takaful* is a financial transaction based on

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the principles of co-operation, *mudarabah*, and *tabarru* whereby the *takaful* operator and participants or the beneficiaries share profits made on the contribution accordingly (Billah, 2001).

For *muslims*, conventional insurance is not consistent with their religion of Islam. The reasons are twofold. Firstly, the contract between the insurer (e.g. insurance company) and the insured (e.g. policyholder) contains some degree of avoidable uncertainty. This is termed as *gharar*. Secondly, the insurance contract *per se* is *riba* since the investment made by the insurance companies involves the element of *riba*. Thirdly, the excessive element of *gharar* can lead to the issue of *maysir* or gambling. Consequently, majority of the juristic scholars came to an agreement that the practice of the conventional insurance is not in line with Islamic business philosophies and thus it is not allowed by the religion of Islam (Hamid and Othman, 2009). Avoidance of these elements is essential in an insurance system acceptable by the *Shariah*, and this is where *takaful* differs when compared with conventional insurance (Redzuan, et al., 2009). The presence of *tabarru*, makes the business of *takaful* devoid of *gharar* and gambling tendencies. At the outset, *takaful* is a type of co-operative insurance based on profit sharing and interest-free investment (Yassin, 1995).

The current study is aimed at explaining the patronage factors for Islamic insurance. For the purpose, the study is of utmost importance to examine the appropriateness of the TRA model to a newly context of Islamic insurance. The study on the other hand, provides evidence pertaining to the importance of “amount of information” in the Islamic insurance acceptance. It is anticipated that the research renders an important insight into the understanding of factors influencing one’s acceptance on Islamic insurance.

2. AN OVERVIEW OF TAKAFUL DEVELOPMENT IN MALAYSIA

The concept of *takaful* was first introduced in Malaysia 1985 when Syarikat *Takaful* Malaysia Berhad (STMB) was established to cater the financial need of the public. The legal basis for the establishment of *takaful* operators was the *Takaful* Act, which came into effect in 1984 (Laldin, 2008). The Malaysian *Takaful* Act 1984 acknowledges that *takaful* is a scheme based on brotherhood, solidarity and mutual assistance which provide for mutual financial aid and assistance to the participants in case of need whereby the participants mutually agree to contribute for the purpose (Redzuan, et al., 2009). As noted earlier, Bank Islam Malaysia Berhad (BIMB) established STMB, commenced its operation in August 1985. It was operationalised based on *mudarabah* principle (Kassim, 2005).

Owing to the remarkable and stable growth over the first eight years of the STMB, a second *takaful* operator notably *Takaful* Nasional entered the industry in 1993. Moreover, the Malaysian government and regulators are looking to accelerate the expansion of *takaful* business in tandem with the rapid development of Islamic banking. Among its key initiatives, BNM over the last two years, has increased the number of *takaful* operators from two to eight and it is expected to increase it to 10 with the issuance of two new family *takaful* licenses to foreign participants by 2010 (Bank Negara Malaysia, 2009). Currently, there are ten *takaful* operators in Malaysia including one international *takaful* operator. The *takaful* business carried out by the Malaysian

takaful operators is broadly divided into family *takaful* business (Islamic “life” insurance) and general *takaful* business (Islamic general insurance) (Laldin, 2008). In particular, *takaful* life insurance works both as a savings instrument where participants set their own target amount to accumulate over a certain period and as a protection mechanism in which all participants guarantee each other against certain events that would alter their financial status. In contrast, *takaful* non-life insurance work more like a joint guarantee in which all participants contribute their own shares of premiums into a pool and mutually agreed to indemnify those participants who suffer from an insured peril. Muslim jurists generally agree that *takaful* insurance is accordance with the *Shariah*, as *halal* concepts of *tabarru* and *takaful* are deeply embedded on it (Maysami and Kwon, 1999).

Takaful business is one of the fastest-growing segments of the insurance market, with annual growth of 20 percent globally (Redzuan, *et al.*, 2009). *Takaful* grew at a compound annual growth rate of 39 percent over 2005-08 in terms of global *takaful* premiums, 45 percent in the Gulf Coast Countries, and 28 percent in South East Asia. The comparative growth of global insurance was 7 percent, for the Gulf Coast Country 20 percent and for South East Asia 23.5 percent. The estimated size of the global *takaful* premium was USD5.3 billion in 2008 and USD8.9 billion in 2010. *Takaful* is still a small sub-set of the global insurance premiums which stood at \$4.2 trillion in 2008, but it is growing fast (Bhatty, 2010). It has been observed that the principles and practices of *takaful*, Islamic Insurance is still in the developmental stage but in some countries, it has made significant progress (Billah, 2001). The *takaful* industry in Malaysia has consistently registered strong growth in the last 20 years. It has been proven that the *takaful* industry to be resilient in the face of intense competition from the more advanced insurance industry. New business premiums for life and family *takaful* business recorded an increase of 5.4 percent to amount to RM9.9 billion on 2009 (2008: RM9.4 billion) driven by the growth in ordinary life products of 23.9 percent. The revival of the FTSE Bursa Malaysia KLCI (FBM KLCI) performance led to higher investment income and unrealized capital gains, which contributed to 25.2 percent of total income of the industry. This is, in turn, translated into 40 percent improvement in the excess of income over outgo for life insurance and family *takaful* business to RM12.3 billion in 2009 (2008: RM8.8 billion). The *takaful* industry has achieved commendable progress with the *takaful* funds assets amounting RM 12.4 billion as of 2009 (Bank Negara Malaysia, 2009).

Prior to the greater development of *takaful* industry the need to understand the factors affecting the existing customers using *takaful* is of paramount importance. Various studies have documented *takaful* as an interesting research field in Islamic finance (Hamid, *et al.*, 2009; Noor and Abdullah, 2008; Billah, 2001). Despite the interests, these studies have paid little attention to that of consumer acceptance on *takaful*. For instance, Hamid, *et al.* (2009) investigated the determinants of corporate demand for Islamic Insurance in Malaysia using the existing secondary data. In a similar vein, Billah (2001) focused on the theory development of *takaful* industry and less attention was given to the consumer acceptance. Similarly, Noor and Abdullah (2008) investigated the ownership of the *takaful* benefit and the issue of *hibah* in nomination without mentioning the acceptance of *takaful* between *muslim* and *non-muslim*. Owing to these discrepancies, the research of consumer acceptance of Islamic insurance is remained inconclusive, and further work is needed to fill the research gap.

3. LITERATURE REVIEW

3.1. *Takaful and Insurance Researches*

Hamid (2010) examined the factors which explaining the corporate demand of conventional insurance in which it is focused on the property insurance. The study found out that leverage, expected bankruptcy costs, tax considerations, company size, and managerial ownership were the big pivotal predictors in determining the corporate demand for conventional insurance in Malaysia. Although the study is of interest to detail the corporate demand, the survey of consumer acceptance, however on the Islamic insurance is found to be overlooked.

Rahman and Daud (2010) investigated the consumer buying behavior and claim pattern of “medical and health insurance” and “medical and health *takaful* policies”. The study also examined a query whether the moral hazard could be existed among policyholders during the claim of the compensation. The study used two groups of respondents. Firstly, the first group consists of individual participants who were pre-selected from a *takaful* operator's database and the second group comprises of “medical and health insurance” claims experience from the conventional insurers. Results show that most of the claims were rejected due to the discovery of some irregularities by the managed care organizations whilst the Islamic insurer's claims experience, was otherwise. Certain moral hazards also occur when claims were made for longer disability durations than necessary, and having high average claims as per person even for shorter duration of disabilities.

An interesting study by Hamid, *et al.* (2009) points out an imperative findings pertaining to the Islamic Insurance in Malaysia. Hamid, *et al.* (2009) investigated the determinants of corporate demand for Islamic Insurance using secondary data from Bursa Malaysia. The study however is lacking with regard to empirical survey, which can be explicitly found in its methodology. Evidently, the study reported that leverage, growth opportunities, expected bankruptcy costs, company size, managerial ownership, tax consideration, and regulated effects were statistically significant in determining the corporate demand. It is also worth noting that the research is only focused on corporate demand rather than a consumer acceptance. In particular, the study fails to offer evidence of Islamic insurance purchasing behavior among consumers.

A study by Redzuan, *et al.* (2009) is aimed at identifying the driving force of family *takaful* consumption in Malaysia. Similar to that of Hamid (2010) and Hamid, *et al.* (2009), the study used the secondary data over the period 1985-2007. The study found out that income per capita was a robust predictor of family *takaful* demands, and long-term interest rate and composite stock index had significant relationship with family *takaful* consumption. Others factors such as inflation and saving rates did not appear as the significant factors influencing the family *takaful* consumption. In more detail, they used contribution per capita and contribution per worker as their dependent variables. Income, interest rate, inflation, savings, and stock became as their independent variables. The study however is particularly focused on macroeconomics as a factor influencing the consumption rather than consumer's perception factors.

Hamid and Othman (2009) examined the level of knowledge and understanding with regard to *takaful* business among muslims in Malaysia. To meet these, level of awareness in the existence of *takaful* and participation in the *takaful* products among the respondents would be tested and addressed. Interestingly, findings show the majority of the respondents have agreed with the use of Arabic terms in *takaful* products. It is found that the most reason of accepting the use of Arabic and *Shariah* terms is to differentiate the *takaful* from conventional insurance and to demonstrate that *takaful* promotes the Islamic finance products. In addition the majority of the respondents did not know and understanding about *tabarru*. Moreover, about 68 percent and 62 percent of the respondents did not know and understand about the elements of *gharar* and *maysir* respectively. This study is a preliminary study made on the level of knowledge and understanding of people among *muslims* in Malaysia towards *takaful* knowledge, but it may not totally suitable to explain the performance market share of *takaful* industry in Malaysia. Moreover, the findings of this study may not be necessarily representing the actual level of knowledge and understanding among *muslims* towards the *takaful* products.

Sen (2008) examined life insurance demand determinants in selected countries. The study is of interest to reassess the validity of arguments emerging from the existing theoretical and empirical research works that there are a few variables, which can significantly explain the current and future demand pattern for life insurance products. The study found out that the demographic variables, the life expectancy, young and old dependency ratio, adult literacy rate and rate of urbanization were significant determinants of life insurance demand. However, the result cannot be concluded from the time series analysis on India as only urbanization had some significant relation to the demand proxies. The study particularly focused on the life insurance demand whilst the attention paid to that of Islamic insurance acceptance is meager. It is probably *takaful* product is still at infancy stage in these countries.

Wang and Rosenman (2007) examined the conventional health insurance need and demand by introducing the subsistence consumption, and analyze survey data from Ningxia and Zhejiang rural areas using Simultaneous Logit model to explore the insurance need and demand by Chinese rural residents. The study reported that the indispensable factors affecting the need for health insurance were the education level of the family head, the location, and diversification of income sources. Location and predisposition towards need affecting the actual purchase. It was of the opinion that the location variable largely represents differences in income between the two provinces and show that affordability of insurance greatly mitigates the ability to turn the need to purchase. Overall, the authors believed only less than half of the rural residents realize the need of health insurance and only fifth of them actually purchase it. Although the study details the demand for health insurance among rural Chinese resident, it may not suitable to apply to others country due to different perspective and culture. Furthermore, Islamic insurance is appeared not important in this study.

3.2. Theory of Reasoned Action (TRA)

Fishbein and Ajzen, (1975), introduced theory of reasoned action (TRA). Importantly, the theory established a relationship among belief, attitude, intentions, and behaviors (Md. Taib, *et al.*, 2008). TRA is the fundamental theory used to explain human behavior (Venkatesh, *et al.*, 2003).

This model has been extended into many contexts (Calisir, *et al.*, 2009; Amin, *et al.*, 2009; Lada, *et al.*, 2009; Law, 2010; Ramayah, *et al.*, 2010). For instance, Lada, *et al.* (2009) proof TRA is a valid model in the prediction of the intention to choose *halal* products. Furthermore, a recent study by Ramayah *et al.*, (2010) used TRA model to examines how individual values and attitudes in a developing country influence purchase intention of a green product.

In the TRA model, two unique factors that are contributing to behavioral intention are determined by attitude towards the behavior and subjective norm. According to Ajzen and Fishbein, (1980), in order to gain deeper understanding of the factors influencing behavior, it is required to look into beliefs that individuals hold about themselves and their environment. Therefore, beliefs are viewed as underlying a person's attitude and subjective norm, and ultimately determine the intention and behavior (Md. Taib, *et al.*, 2008). Nevertheless, for better explained result of acceptance of this study, the framework model is tailored from TRA model. The approach is consistent to that of previous studies (Md. Taib, *et al.*, 2008; Summers, *et al.*, 2006).

Summers, *et al.* (2006) revealed attitude and subjective norm were significantly predictors of purchase intention of a controversial luxury apparel product. Furthermore, positive attitude or degree of favorableness towards the diminishing partnership concept and religious and social influence were jointly responsible in determining the intention to engage in diminishing partnership though the former commands greater influence (Md. Taib, *et al.*, 2008). Moreover, positive attitude towards internet apparel shopping had greater intentions to purchase apparel over the internet (Yoh, *et al.*, 2003). Similarly, college students with prior experience purchasing apparel online had greater favorable attitudes towards shopping online (Xu and Pauline, 2005). This study integrates “external variable” namely “amount of information on Islamic Insurance” in addition to “attitude”, “subjective norm”, and “behavioral intention”. The explication of these constructs is detailed below:

3.3. Attitude

According to the TRA model, attitude is determined by his or her salient beliefs about the results of performing the behavior multiplied by the evaluation of those results (Fishbein and Ajzen, 1975). Attitude toward behavior refers to the degree to which person has a favorable or unfavorable evaluation or appraisal of the behavior in question (Mohd Suki, 2010). The attitude construct is often used as a predictor of consumer intention and behavior (Phau, *et al.*, 2009). Attitude plays the important roles in order to determine individual’s intention and behavior usage toward product/service. The attitude theory suggest that the more favorable attitude a person has toward a given product/service, the more likely that person is to buy or use that product/service. The importance of the attitude in influencing the product/service acceptance has been proven in various studies (Md. Taib, *et al.*, 2008; Jamal and Ahmed, 2007; Bagozzi and Warshaw, 1990; George, 2002; Towler and Shepherd, 1992).

Various studies have reported that attitude towards computers influence both attitude towards online banking and actual behavior (Karjaluoto, *et al.*, 2002). Davis (1989), Venkatesh and Davis (1996), Succi and Walter (1999) proven that attitude as the critical elements on successful information system (IS) adoption. Furthermore, Amin, *et al.* (2009) found that attitude was significantly associated with the intention of students to enroll in the Islamic accounting course. Moreover, Zhang, *et al.* (2009) found out that attitude had a significant impact on the individual's intention to comply with information security policy. Similarly, positive attitude towards the diminishing partnership home financing concept found responsible to influence the intention to engage in diminishing partnership (Md. Taib, *et al.*, 2008). Gopi and Ramayah (2007) carried out attitude had a direct positive impact on intention to use an online trading system. Furthermore, Ramayah, *et al.* (2009) study shown that attitude towards behavior and subjective norm have a direct significant positive relationship with behavioral intention to use in internet stock trading.

In sum, attitude is the important determinant of acceptance on a particular use of a system, similar to the case of Islamic insurance.

3.4. Subjective Norm

Subjective norm refer to the individual's perception of the likelihood that the potential referent group or individuals approve or disapprove of performing the given behavior (Fishbein and Ajzen, 1975). Subjective norm controls that behavior that is instigated by the desire to act as others think you should act. Subjective norm is therefore, internally controlled, it does not operate through external reinforcement such as the overt congratulations or hostility of others (Malhotra and Galletta, 1999). The different referents involved in the subjective norm may be friends, parents, religious organizations, etc (Kalafatis, *et al.*, 1999). Summers, *et al.* (2006) found that subjective norm was a function of an individual's beliefs that specific individuals or groups think he/she should or should not perform the behavior. Furthermore, Ajzen, (1991) defined subjective norm as the social pressure to perform or not to perform the behavior.

Gopi and Ramayah (2007) found that subjective norm had a direct positive relationship towards behavioral intention to use internet stock trading. Summers, *et al.* (2006) proven that subjective norm was significantly related to purchase intention. Furthermore, Amin, *et al.* (2009) as noted earlier found that subjective norm had a significant effect on the intention to enroll in the Islamic accounting course. In a similar vein, Amin (2009) found subjective norm had a significant relation on the behavioral intention to use Internet banking. Further, subjective norm also became as the important factor determining of behavioral intention to use enterprise resource planning (ERP) system (Calisir, *et al.*, 2009).

3.5. Amount of Information

It is worth noting that, the amount of information amount pertaining to a product or service has a significant effect on the behavioral attention usage among individuals. In a context of marketing plan, information on the benefit of using product/service became as the essential service/product promotion strategy. It has been given a proper attention by previous researchers.

Pikkarainen, *et al.* (2004), in this context, had proven that amount of the information on online banking was the most influential factor explaining the use of online banking services.

In light with the Pikkarainen, *et al.*'s (2004) study, Amin (2007) supported that amount of information was essential in order to determine a consumer intention to use mobile credit card. In addition, the study also reported that 82 percent of the respondents felt that the information received influence them to making a decision pertaining to the mobile credit card adoption. Information on Islamic accounting, on the other angle, explains the direct affect the intention students to enroll in the Islamic accounting course (Amin, *et al.*, 2009). An interesting study by Smith, *et al.* (1998) reported that information had a valuable impact on the corporate decision-making within insurance industry. The study found out that 46 percent of the decision was handled differently as a result of the information received.

4. RESEARCH METHODS

4.1. Sample

With respect to convenience sampling, self-administered questionnaires were distributed to 180 respondents in 2010. The respondents were customers of banks in Labuan who have used Islamic banking products but yet to have for Islamic insurance products. In this study, the participation of bank customers was voluntary. With respect to data collection, the respondents were politely invited to participate in the survey. If the respondents agreed to participate, the researcher distributed the questionnaire and left the respondents alone until the questionnaire was completed. There were 4 customers who did not participate when invited, mainly due to time constraints. Eventually, 176 participants offered their views for the survey.

The demographic distribution shows that 27.8 percent of the respondents were male and the remaining 72.2 percent of the respondents were female. With respect to ethnicity, most of the respondents were Malays with 45.45 percent. In terms of marital status, 44.32 percent of the respondents were single and 55.68 percent of the respondents were married respondents.

4.2. Measures

The questionnaire items were extracted from selected studies. Questionnaire items were adapted from prior studies, which are described as follows: attitude (Gopi and Ramayah, 2007; Ramayah, *et al.*, 2009), subjective norm (Gopi and Ramayah, 2007; Ramayah, *et al.*, 2009) and the amount of information on Islamic insurance (Pikkarainen, *et al.*, 2004). In the questionnaire, the respondents were required to rate their level of agreement with statements and/or propositions on a 5-point Likert Scale, ranging from '1' representing 'strongly disagree' to '5' representing 'strongly agree'. Prior to the study, the questionnaire was pre-tested using four lecturers majoring in banking and marketing.

Table 1: Demographic Results

Attributes	Demographic distribution	
	Frequency	Percentile
<i>Gender</i>		
Male	49	27.84
Female	127	72.16
<i>Ethnic</i>		
Malay	80	45.45
Kadazan-Dusun	32	18.18
Bajau-Suluk	43	24.43
Chinese	11	6.25
Other	10	5.68
<i>Marital status</i>		
Single	78	44.32
Married	98	55.68

5. HYPOTHESES TESTING AND DISCUSSION OF RESULTS

5.1. Factor Analysis

Factor analysis was conducted prior to the regression analysis in order to identify the proper items for the analysis. According to Chatfield and Collins (1992), factor analysis is defined as a data reduction technique that accepts correlations between data variables. The underlying assumption of factor analysis is that a number of factors exist to explain the correlations or inter-relationships among observed variables. The study performed factor analysis using a Principal Component Analysis (PCA) alongside with Varimax with Kaiser Normalization rotation method until the Eigen value of each factor was equal to one or more. According to Tabachnick and Fidell (1996), there are several methods of rotation accepted in a research-based study such as Quartimax, Direct Oblimin and Varimax rotation. Varimax rotation is most commonly accepted and it aims to maximize the variance of factor loadings by making a high loading higher and low ones lower for each factor.

We conducted two phases for factor analysis. The reason of conducting the two phases is based on the argument by Hair et al. (2010). Hair et al. (2010) argued that a researcher needs to remove item if it cross-loaded on other factor(s). After remove it, the researcher needs to re-run the data reduction process until there is no cross-loaded item. In the second phase, all research variables were found to be located according to their group and there were no cross-loaded items. The tested items, the independent variables' items were reduced from 15 original items to 14 items as reported in Table 2. It is reported that factor 1 could be labeled as "subjective norm", factor 2 could be labeled as "attitude" while the last factor could be labeled as "AOI".

The results for reliability test are presented in Table 2. According to Black (1999) “reliability is an indication of consistency between two measures of the same thing”. To comprehend the relationship between the two groups of data, it is necessary to quantify the reliability of the data. The reliability of the factors needs to be determined in order to support any measures of validity that may be employed (Nunnally, 1978). The employed items in this research were found to be reliable. All values ranged from 0.879 to 0.921. Explained in more detail, the results for the tested items were as follows: attitude 0.879 (4), subjective norm 0.921 (5), AOI 0.879 (5) and Islamic insurance acceptance 0.899 (5). Thus, all items were deemed reliable (Ramayah, *et al.*, 2003).

Table 2: Factor Loadings

Item	Factor loadings		
	Factor 1	Factor 2	Factor 3
SN2	.848		
SN1	.847		
SN3	.796		
SN5	.764		
SN4	.760		
AOI3		.845	
AOI4		.826	
AOI2		.792	
AOI5		.774	
AOI1		.663	
A2			.849
A5			.735
A3			.686
A1			.654
Eigenvalue	7.725	1.721	1.115
Variance explained	55.179	12.290	7.963
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.871	-	-
Bartlett's Test of Sphericity	Chi-square 2061.38 (df 91, p-value=.000)	-	-
Cronbach alpha (α)	.921(5)	.897 (5)	.879 (4)

Further, the study reported the Kaiser-Meyer-Olkin (KMO) for the independent variables and the dependent variable of the study. Table 2 and Table 3 provide the outcomes. The Kaiser-Meyer-Olkin (KMO) measure for the combined items of the independent variables show a value of 0.854, indicating that the sampling adequacy was greater than 0.5 and therefore satisfactory. Bartlett's Test showed a χ^2 of 2061.38 with a significance level of 1 percent, where the total variance explained was 75.432 out of 3 components. On the other hand, KMO for the dependent variable depicts a value of 0.854 which tells us that the sampling was satisfactory.

Barlett's Test showed a χ^2 of 545.654 with a significance level of 1 percent, where the total variance explained was 71.554.

Table 3: Factor Loadings (the dependent variable)

Item	Factor loadings
IIA5	.894
IIA4	.890
IIA3	.860
IIA1	.813
IIA2	.765
Eigenvalue	3.578
Variance explained	71.554
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.854 (85%)
Bartlett's Test of Sphericity	Chi-square 545.654 (df 10, p-value=.000)
Cronbach alpha (α)	.899

Notes: IIA denotes Islamic insurance acceptance

5.2. Multiple Regression Analyses

We performed multiple regression analysis for two phases. The first phase consists of the confirmation of the appropriateness of the TRA constructs to the Islamic insurance acceptance context. The second phase, in more detail, includes the added construct notably AOI into the current research framework. The results of the first phase and the second are presented in Table 4 and Table 5 respectively.

Table 4: Multiple Regression Analysis

Construct	Standardized β	<i>t</i> -value	<i>p</i> -value
Attitude	.537	8.617	.000**
Subjective norm	.333	5.336	.000**
<i>F</i> -value		157.667 (.000)	
R square		.646	
Adjusted R square		.642	

*Notes: **p* < 0.05; ** *p* < 0.01, ns not significant*

As depicted in Table 4, attitude was found to have a significant effect on the Islamic insurance acceptance ($t=8.617$, p -value=0.000) at the 1 percent significance level. These outcomes are consistent with previous studies of Gopi and Ramayah (2007), Ramayah and Mohd Suki (2006) and Ramayah, *et al.* (2003). It is concluded that the more positive attitude, the more likely that Islamic insurance to be accepted by bank customers. Subjective norm was also found to have

a significant effect on the Islamic insurance acceptance ($t=5.336$, $p\text{-value}=0.000$) at the 1 percent significance level. These outcomes are parallel with previous studies of Nysveen, *et al.* (2005) and Kleijnen, *et al.* (2004). This simply means that the greater subjective norm, the more likely bank customers accept Islamic insurance. Overall, it is claimed that attitude and subjective norm have strong influence over the Islamic insurance acceptance. The findings indicate that the TRA model is tolerable to explain one's acceptance of Islamic insurance.

Table 5: Multiple Regression Analysis

Construct	Standardized β	t -value	p -value
Attitude	.369	6.269	.000**
Subjective norm	.238	4.272	.000**
AOI	.382	7.478	.000**
F -value	157.125 (.000)		
R square	.733		
Adjusted R square	.728		

*Notes: * $p < 0.05$; ** $p < 0.01$, ns not significant*

As reported in Table 5, AOI was found to have a strongest significant effect on the Islamic insurance acceptance ($t=7.47$, $p\text{-value}=0.000$) at the 1 percent significance level. The result concurs with the findings of (Pikkarainen, *et al.*, 2004; Smith, *et al.*, 1998; Amin, 2007; Amin, *et al.*, 2009) where AOI was of value to affecting the utilization of Islamic insurance. This means, the more positive AOI, the more likely intention to accept Islamic insurance. Table 5 also reports the R^2 . The R^2 was 0.733 indicating that 73.3 percent of the variation in intention to accept Islamic insurance could be explained by the three independent variables and the F -value of 157.125 was significant at the 1 percent significance level.

Table 6: Hierarchical Regression Analysis

Dependent Variable	Variables	Std. beta without AOI (model 1)	Std. beta with AOI (model 2)
<i>Islamic insurance acceptance</i>	<i>Independent Variables:</i>		
	Attitude	.537**	.369**
	Subjective norm	.333**	.238**
	AOI		.382**
R^2		.646	.733
Adjust R^2		.642	.728
R^2 change		.646	.087
F change		157.667**	55.926**
Sig. F Change		.000	.000

*Notes: * $p < 0.05$; ** $p < 0.01$, ns not significant*

Results provided in Table 6 indicated that the beta coefficients of attitude ($\beta = .369$, $p < .01$) and subjective norm ($\beta = .238$, $p < .01$) decreased after the inclusion of AOI in the model of step 2. In addition, the R^2 change was significant that indicating that the addition of the AOI into the TRA model is relevant.

6. CONCLUSION, POLICY AND LIMITATION

The study has reviewed the factors determining Islamic insurance acceptance. Importantly, AOI was found to be the essential predictor affecting Islamic insurance acceptance. In light with the outcome, two fundamental determinants from TRA model were of value to have the significant influence on the Islamic insurance acceptance. It is therefore, valid to claim that this study will offer insights to *takaful* operations in Malaysia in future planning of Islamic insurance products.

The study also leads to two contributions:

1. Firstly, it successfully confirms the applicability of the TRA to Islamic insurance. Traditional TRA measures were found to be significant factors of the Islamic insurance acceptance. The measures were attitude and subjective norm.
2. Secondly, this study supports Pikkarainen, *et al.*'s (2004) research that found a significant direct relationship between AOI and Islamic insurance acceptance, and extends its generalizability to Islamic insurance.

The current study provides benefit for both academicians and practitioners. The former means that the present study is able to communicate the importance of the study outcomes as the guidelines for the planning of future research by prospective researchers. Perhaps it is of value to extend it to other setting of Islamic insurance researches in order to produce more comparable and interesting findings. Importantly, the relevancy of the theory used in the present study could also be further tested in a different context. What is more the added construct AOI would be useful to be tested in terms of its applicability to prospective researchers' research framework. On the practitioners' point of view, the outcomes are of beneficial to the *takaful* operators to better future planning of Islamic insurance products and services to their customers. For the purpose, a special caution with regard to attitude of the customers, and the people who are influencing their purchase decision should be given a due care. The officers of the insurance companies should learn on how to treat the customers fairly and properly in order to cultivate positive attitude to the customer. The officers are of advantage to monitor the attitude of the existing customers, in order to ensure that they can positively influence the potential users of the *takaful* products. Indoor training is of utmost importance to effectively enhance the quality of the officers in managing the product offerings to the customers. AOI, as added in the research framework should closely monitor to ensure the customers obtain the reliable, accurate and beneficial information concerning to *takaful*. Placing a set of television for the *takaful* information advertisement in the waiting space of the bank branch can be considered. The advertisement is time-saving to the customers as whilst they are waiting, they can also spend a little bit of time to comprehend *takaful*.

To be specific, *takaful* operator may need to work on improving AOI, attitude and subjective norm. With regard to AOI, the *takaful* operator needs to build an information base to create AOI expectations amongst customers. The *takaful* operator may work with other financial institutions to integrate AOI of the *takaful*. This explains that when a prospective user intends to use *takaful* products, the financial institutions may help to distribute proper information for the right decision by consumers. Concerning attitude, the *takaful* operator should improve their services to promote consumers' positive attitude. Providing better consultation services to consumers can help to promote words of mouth with regard to *takaful* services, thus improving one's attitude. With respect to subjective norm, the *takaful* operator may need to build up *takaful* user base and conduct referral champions to create subjective norm expectations. It is also worth to pointing out that encouraging the existing users to influence prospective users is valuable to carry out. To materialize this, the *takaful* operator may provide financial incentives to the existing users for the efforts.

Although the study had met its objectives of interest, the study however has several limitations. The first limitation is owing to the fact that the current study is not provided an indirect effect of the AOI to the acceptance, from attitude. To tackle the limitation, future studies are recommended to establish such effect in their framework. Secondly, the study is used limited number of measures used to explain their impacts on the Islamic insurance acceptance. Future researches are calling to include perceived financial cost and religiosity to better test the model of Islamic insurance acceptance. The third limitation is based on the fact that it is confined to a narrow geography area, in which the findings of the current research cannot be generalized into other settings. The inclusion of other cities and conducting a cross-the country survey would be beneficial to be implemented in order to enrich findings in Islamic insurance area. Despite the said drawbacks, the study has presented the latest insight into the understanding of factors leading to Islamic insurance acceptance.

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