An Analysis on Islamic Insurance Participation

(Satu Analisis Penyertaan Insurans Islam)

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ABSTRACT

The paper tests the effects of attitude, subjective norm and amount of information on the Islamic insurance participation. Drawing upon the theory of reasoned action (TRA), this study proposes a model to examine the factors within the Islamic insurance participation context. The model is tested using survey data from 206 respondents. Importantly, the results suggest that attitude, subjective norm and amount of information provide the best fit to the data and are of value to be considered as the indispensable factors in determining the Islamic insurance participation. The findings of this study shed some light on the consumers' acceptance level of an Islamic insurance. It also provides valuable insights for takaful operators to manage the Islamic insurance services effectively. Limitations and future research directions are outlined.

ABSTRAK

Kajian ini menilai kesan gelagat, norma subjektif dan jumlah maklumat terhadap penyertaan insurans Islam. Berpandukan kepada teori tindakan beralasan, kajian ini mengemukakan satu model yang menguji faktor-faktor dalam konteks penyertaan insurans Islam. Model ini dinilai berpandukan kepada data dari kaji selidik yang melibatkan 206 responden. Mustahaknya, dapatan kajian ini menunjukkan bahawa gelagat, norma subjektif dan jumlah maklumat menyediakan padanan terbaik bagi data dan penting untuk dipertimbangkan sebagai faktor terpenting dalam menentukan hasrat menyertai insurans Islam. Dapatan kajian ini memperincikan tahap penerimaan pengguna terhadap insurans Islam. Ia juga menyediakan pengetahuan bernilai kepada pengendali-pengendali takaful dalam mengurus perkhidmatan-perkhidmatan insurans Islam dengan efektif. Kekangan dan hala tuju penyelidikan masa depan turut diperincikan.

INTRODUCTION

By definition Islamic insurance or *takaful* refers to the mutual guarantee or assurance based on the principles of *aqd* provided by a group of people living in the same society against a defined risk or catastrophe befalling life, property or any form of valuable assets (e.g. Billah 1998; Hassan 2011; Mahmood 1991). According to Rosly (2005) *takaful* simply means joint guarantee. It is not a contract but an agreement for mutual help among members of the group; and can be perceived as a pact among consumers who agree to jointly indemnify themselves against any loss or damage that may befall on any of them. The basic objective of *takaful* is to pay for a defined loss from a defined fund (Rosly 2005). Unlike conventional insurance, Islamic insurance is generally a religion oriented financial product in which the elements of uncertainty, *riba* and exploitation are strictly prohibited. In fact, Islamic insurance gives more emphasis on helping one another based on a mutual agreement.

Islamic insurance differs from the conventional insurance in a number of ways (Billah 1998). Firstly, Islamic insurance has a different approach when imposing a pricing strategy on its products. For instance, if one is unable to meet the premium payment for three times, the previous money invested will be given back to him/her after deducting some related fees. This is not practiced in conventional insurance, in which case the money

invested is considered spent. Secondly, the theories and the practices of Islamic insurance are based on the *Quran* and the *Hadith*, whilst conventional insurance has a limited link to the spirit of any religion. Hence, *takaful* products are designed to function as any other typical insurance products, but operated differently to avoid the prohibitive elements and can be operated based on the concept of *mudharabah* (Ab-Rahman et al. 2008; Billah 1998).

Although Islamic insurance is different than that of the conventional one, there is criticism that Islamic insurance and conventional insurance are essentially the same. This misconception has produced a negative image to Islamic insurance, and in turn could mar the corporate image and the consumer participation decision on the Islamic insurance products in the future. For this purpose, investigating the factors affecting one's decision to participate in Islamic insurance is important to refute such misconception. In order to encourage an individual to opt for *takaful* products in the most effective manner, a *takaful* operator needs to identify what are the factors that an individual considers to be most essential in making decision. This study identifies those key factors by investigating the relationships between the attitude, subjective norm, amount of information and Islamic insurance participation.

Previous researches (e.g., Ab-Rahman et al. 2008; Abdul-Hamid, Osman & Amin-Nordin 2009) have investigated Islamic insurance but from different

approaches than the framework proposed in this study. For instance, a study by Ab-Rahman et al. (2008) examines Malaysian undergraduates' perceptions on the differences between auto *takaful* and conventional auto insurance. However, so far very little is known about the actual reasons why people participate in Islamic insurance. Therefore, this research is conducted in order to address the gap empirically by purposing two objectives. Firstly, it attempts to examine the effects of attitude, subjective norm and amount of information on the intention to participate in Islamic insurance. Secondly, it attempts to examine the factors influencing the risk averse and risk taker nature in individuals.

REVIEW OF LITERATURE

ISLAMIC INSURANCE

An interesting study by Abdul-Hamid (2010) presents the key factors influencing the corporate demand for insurance in Malaysia. The study employs generalized least squares (GLS) in order to estimate the effects of the factors on the insurance demand. Using a five-year data range from 2002 to 2006, the study finds that leverage, expected bankruptcy costs, tax considerations, company size and managerial ownership are influential in determining the corporate demand for insurance policies. To insurance operators particularly, this finding is critical as it gives a novel understanding about which factors they must concentrate on in order to create demand for insurance among Malaysian companies.

In an earlier study, Abdul-Hamid et al. (2009) examine the corporate demand for *takaful*. Using the same method (GLS), they identify the key factors influencing the Islamic insurance corporate demand. The study finds that leverage, growth opportunities, expected bankruptcy costs, company size, managerial ownership, tax consideration and regulated effects are influential predictors for corporate demand on Islamic insurance in Malaysia. In a separate study, Abdul-Hamid and Othman (2009) also examine *takaful* but from a *takaful* literacy's angle amongst 232 bank customers in Kuala Lumpur (the capital city of Malaysia). The study finds that most of the respondents have difficulty in understanding the specific terminologies of *takaful*. For instance, only 32 percent of the respondents are familiar with the terms *gharar* (or uncertainty) and *maysir* (or gambling or speculating). The findings of this study are important to provide a direction to *takaful* operators on how to strategize their marketing plans because rationally information is the basic element for generating greater participation.

Rahman and Daud (2010) offers one if its kind study in Malaysia on the effect of adverse selection on medical and health insurance, and *takaful*. The study employs two groups of respondents in which the first set comprises 150 participants while the second set comprises 150 claimants of medical and health *takaful* (MHT). The study finds that

most claims are rejected due to irregularities discovered by the managed care organizations (MCO). Surprisingly, it is the opposite for the Islamic insurers. With respect to the behaviour at the buying stage of MHT, consumers have lesser tendencies to withhold information. However, during the claiming stage, the policy holders tend to submit excessive claims. One possible explanation is because of the generous compensation. The study also reports the presence of moral hazard issue when claims are made for unnecessarily long disability duration and high average claims per person even for short duration disabilities.

A study by Redzuan, Rahman and Aidid (2009) presents economic determinants which impact the consumption of family *takaful*. The study uses time series data over the period of 1985 until 2007, and finds that income per capita is an influential determinant to family *takaful* demand in Malaysia. On the same note, long-term interest rate and composite stock index have significant relationship with family *takaful* consumptions. Inflation and saving rates are viewed as unimportant. The study contributes to the literature by suggesting the economic factors which could affect the family *takaful* consumption in Malaysia.

What lacking in these studies is a study on the effect of attitude, subjective norm and amount of information on the intention to participate in Islamic insurance products. This explains why studies pertaining to consumer behaviour remain inconclusive, and thus requires further investigation.

ATTITUDE, SUBJECTIVE NORM AND AMOUNT OF INFORMATION

Many studies have recognised the importance of attitude, subjective norm and also the role of information to the decision of using or employing a particular system (Gopi & Ramayah 2007; Pikkarainen et al. 2004; Ramayah et al. 2009; Ramayah et al. 2010; Ramayah & Ling 2002; Ramayah & Mohd-Suki 2006; Sathye 1999; Yan et al. 2009). These studies however, have yet to examine the effects of the factors within the Islamic insurance context. As such, this research extends the theory of reasoned action (TRA) to the Islamic insurance context.

The TRA model is developed and proposed by Fishbein and Ajzen (1975, 1980). The TRA model is based on three constructs namely behavioural intention, attitude and subjective norm. This model explains what leads a consumer to a certain buying behaviour (Ha 1998). According to Ramayah et al. (2004), two basic factors that determine a person's behavioural intention are: (1) the person's attitude toward the behaviour, and also (2) the subjective norm. In further detail, the person's attitude toward behaviour is jointly determined by his/her salient beliefs that the behaviour leads to certain outcomes and by that person's evaluation of the outcomes (Ajzen & Fishbein 1980; Ramayah et al. 2004). From another angle, a person's belief is mostly influenced by subjective norms. This refers to the importance of others in affecting one's

thinking on how he/she should (or should not) perform the behaviour in question (Ajzen & Fishbein 1980; Ramayah et al. 2004). This also means that the influences of others in one's environment could create pressure on how he/she performs the behaviour in question.

This study chooses the TRA model for two reasons. Firstly, the theory has received strong empirical supports owing to its parsimony and popularity. Secondly, the theory is a common theory of human behaviour which can be extended to various contexts of studies (Bidin, Md-Idris & Mohd-Shamsudin 2009; Law 2010; Zainuddin, Noresma & Ramayah 2004). For instance, Law (2010) uses the theory to examine accounting students' career choice in public accounting practices, in the post-Enron conflict period. Bidin et al. (2009) use the theory to examine one's compliance intention to *zakah* on employment income in Malaysia. Zainuddin et al. (2004) use the theory to examine one's decision in utilizing Islamic banking products. In the same spirit of these studies, the present study extends the theory to the context of subscribing to or participating in Islamic insurance. Based on the TRA argument, attitude, subjective norm and the amount of information are expected to have positive relationships with the Islamic insurance participation.

ATTITUDE

Fishbein and Ajzen (1975) define attitude as the evaluative effect of positive or negative feeling of individuals in performing a particular behaviour. Further, there are many studies that have been done to examine the relationship between attitude and behavioural intention. An interesting research conducted by Ramayah et al. (2009) examines the intention to use internet stock trading among Malaysian investors. The study finds that attitude has a direct positive influence on behavioural intention to use internet stock trading. The research lends support to Ramayah and Mohd-Suki (2006) who examine MBA students' intention to use mobile personal computer and find that attitude is significantly related to behavioural intention. Further, a study by Gopi and Ramayah (2007) find that attitude has a direct positive impact on intention to use an online trading system.

Zainuddin et al. (2004), Lada, Tanakinjal and Amin (2009), and Md-Taib, Ramayah and Abdul-Razak (2008) are considered as the pioneers in extending the applicability of the TRA to Islamic banking, *halal* food and *musharakah mutanaqisah*, respectively. Zainuddin et al. (2004) examine 123 bank customers in Penang, Malaysia with regard to their perceptions on Islamic banking products. The study reveals that users generally have a better attitude toward Islamic banking compared to the non user. The two groups differ significantly on the items like "Islamic banking facility is rewarding," "safe" and "wise," but not on items like "Islamic banking facility." This explains that attitude is also important in understanding one's decision to use Islamic banking products.

Lada et al. (2009) test the applicability of the TRA in predicting the intention to opt for *halal* products amongst Malaysian consumers. The respondents are 485 Labuan's locals who patronize restaurants, supermarkets and wet markets. Uses a multiple regression model, the study finds that attitude is an influential predictor in determining the reason why people select *halal* foods. Meanwhile, Md-Taib et al. (2008) examine 300 post-graduate students from local universities (e.g. International Islamic University Malaysia, Universiti Teknologi MARA and Universiti Putra Malaysia) in terms of their acceptance level with regard to *musharakah mutanaqisah* home financing. The study confirms that attitude is a significant factor in determining the acceptance level.

Another interesting paper by Alam and Sayuti (2011) provides the latest empirical support pertaining to the effect of attitude on the behavioural intention to use. The study examines *halal* food purchasing behaviour in Malaysia using 251 respondents who are Malaysian public university students. Based on our observation, this study is the first of its kind to extend theory of planned behaviour (TPB) model to a new context of *halal* food. Alam and Sayuti (2011) reveal that attitude is significant in determining one's acceptance on *halal* food. This finding is consistent with that of Bidin et al. (2009) and Lada et al. (2009) who assert that attitude is an important predictor to explain one's behaviour in intention to use.

Although these studies have examined the impact of attitude, they have not explicitly modelled the relationship between attitude and the Islamic insurance participation. On the basis of these studies, the following hypothesis will be examined:

H_1: There is a positive relationship between attitude and the Islamic insurance participation.

SUBJECTIVE NORM

According to Fishbein and Ajzen (1975), subjective norm refers to the individual's perception of the likelihood that the potential referent group or individuals approve or disapprove in performing the given behaviour. A recent research by Ramayah et al. (2010) provides a detail explanation pertaining to the relationship between subjective norm and behavioural intention. Using discriminant analysis, the study finds that subjective norm is significantly associated with the intention to share knowledge. In a similar vein, a research conducted by Yan et al. (2009) provides evidence with regard to the association between subjective norm and behavioural intention. The study reports that subjective norm is the predictor for the mobile payment solutions usage.

In a different setting, Nysveen, Pedersen and Thorbjornsen (2005) examine mobile chatting usage in Norway, and find that subjective norm or social norm is found to be an important driver for mobile chatting usage among Norwegian. Nysveen et al. (2005) argue that users employ mobile chatting to demonstrate their

personal values as well as the influences of others on them. Similarly, in a study by Kleijnen, Wetzels and de Ruyter (2004) on wireless finance in Netherlands, subjective norm is essential in the development of people's intention to use wireless finance. This explains that one is easily influenced by people even with respect to banking transactions.

From an Islamic practice perspective, Bidin et al. (2009) examine the compliance intention for *zakat* payment amongst M*uslims* who are working in public and private sectors in Kedah. The study reveals that subjective norm is important in determining one's decision to pay *zakat* on employment income. Thus, if applied on the issue of the present study, this positive relationship indicates that the more positive the subjective norm, the more likely that an Islamic insurance be chosen. On the same note, Amin, Abdul-Rahman and Ramayah (2009) examine the acceptance level of Islamic accounting course among 135 undergraduate students. Using structural equation modelling and regression analysis, the study reports that subjective norm is pivotal in explaining why students choose Islamic accounting course. The results of these studies are consistent with that of Md-Taib et al. (2008) and Zainuddin et al. (2004). On the basis of these studies, the following hypothesis will be examined:

H_2: There is a positive relationship between subjective norm and the Islamic insurance participation.

AMOUNT OF INFORMATION

Information by definition refers to the data whose form and content are appropriate for a particular use (Alter 2002). The importance of information availability for a certain Islamic financial product is particularly essential to affecting one's decision to use the product, which in this research is Islamic insurance or *takaful*. There is limited evidence pertaining to the Islamic insurance adoption and its link to communication tools, i.e. information, advertisements and word of mouth. Prior studies have examined the impact of information and knowledge available to an individual on patronizing internet banking (e.g. Sathye 1999; Ramayah & Ling 2002; Pikkarainen et al. 2004).

A study by Sathye (1999) finds that 69 percent of business customers are not using internet banking because they are not clear about the benefits of internet banking. Therefore, low awareness of internet banking is a factor in causing people not to adopt internet banking. The result is also in line to the study by Pikkarainen et al. (2004). They argue that amount of information is positively correlated with the intention to use internet banking. The study also claims that the amount of information on internet banking is the most influential factor in explaining the utilization of online banking services. Hence, in adopting internet banking, it is necessary for the banks that offer this service to create customer awareness on the availability of such product; and explain how it adds value relative to their other products or that of the competitors. As such,

the availability of information on Islamic insurance is anticipated to tell us why people would use Islamic insurance.

Further, Ramayah, Md-Taib and Ling (2006) point out that awareness which is associated with information is insignificant as the study notes that most of the respondents are aware of internet banking. The study is not in line with the findings by Sathye (1999) and Pikkarainen et al. (2004). The result however is consistent with that of Ramayah and Ling (2002). They conduct a research in Penang, Malaysia and find that awareness is not an issue because their respondents are aware of internet banking. This means the banks have been successful in promoting and creating awareness of the products and services they offered through the internet (Ramayah & Ling 2002). The added values in internet banking are convenience, save time and lower cost.

A study by Amin et al. (2009) find that amount of information which is adapted from Pikkarainen et al. (2004) is an important factor in Islamic accounting course selection by students. This explains that the effect of information is somewhat essential when we are thinking about attracting students to opt for certain course(s). The results from the previous studies are expected to be applicable in the context of Islamic insurance. As such, this study hypothesizes that the amount of information will affect the acceptance of Islamic insurance.

H_3: There is a positive relationship between amount of information and the Islamic insurance participation.

METHODOLOGY

SAMPLE AND PROCEDURE

This study uses primary data collected through a survey in the form of a structured questionnaire. The questionnaire uses 5-point Likert type scale to gather data for the constructs suggested in the model of the study. The respondents are undergraduate students in Labuan who are aware of Islamic insurance products but have yet to be associated with products participation. The decision to choose students as a sample is also supported by Singhapakdi et al. (1996) who claim that students are considered as a valid sample for exploratory study and when items in the questionnaires are pertinent to the respondents who answer. Similarly, in a more recent study by Ab-Rahman et al. (2008), the authors assert that students are appropriate when a study is exploratory in nature.

With regard to sample size, the recommendation overtly made by Hatcher (1994) is employed. According to Hatcher (1994), the sample size for a research should be five times the number of variables. In this study, 20 items times by 5 will result in 100 respondents which according to Based on Hatcher (1994) is a sufficient sample size. Owing to the time and financial constraints,

only 250 questionnaires are printed and distributed. Of these, 44 questionnaires are discarded due to incomplete data, resulting in final response rate of 82.4 percent.

Prior to distributing the questionnaires, all respondents are informed that their participations for the study are voluntary and their responses would be kept confidential and used only for the purpose of this study. Results are based on the aggregated data. The respondent profile is presented in Table 1. Amongst the 206 respondents, 28.6 percent are male whilst 71.4 percent are female. Pertaining to the ethnicity, majority of the respondents are Malay at 35 percent, followed by Chinese at 28.3 percent. As for religion, most of the respondents are *Muslims* (63.6 percent).

TABLE 1. Profile of respondents

Item	Frequency	Percent (%)
Gender		
• Male	59	28.6
• Female	147	71.4
Ethnic		
• Malay	72	35.0
• Kadazan-Dusun	24	11.7
• Bajau	2	1.0
• Chinese	58	28.3
• Other	50	24.3
Religion		
• Islam	131	63.6
• Christian	43	20.9
• Buddhist	32	15.5

MEASUREMENT

An important consideration in consumer behaviour research and questionnaire design is to ensure that measurements are carefully constructed and that considerations are taken to ensure and maintain validity, consistency and reliability (Churchill 1979). All instruments are adapted from various literatures and are modified for the adaptation of the Islamic insurance context (e.g. Ramayah et al. 2009). The items for dependent variable are adopted from Shimp and Kavas (1984). Attitude is measured using the five items adopted from Ramayah et al. (2009) and Gopi and Ramayah (2007). Similarly the items for subjective norm are also adopted from Ramayah et al. (2009) and Gopi and Ramayah (2007). The added construct that is "amount of information" is measured using five items adopted from Pikkarainen et al. (2004). Importantly, the items are adjusted to better reflect an Islamic insurance context. For instance, "I feel using *internet stock trading* is a wise idea" is changed to "I feel using *Islamic insurance* is a wise idea."

In the questionnaire, respondents are asked to rate their level of agreement with statement using 5-point Likert scale of 1 (strongly disagree) to 5 (strongly agree).

Prior to the actual fieldwork, a pilot test is conducted in order to improve the reliability and validity of the research instrument. This is based on Churchill's (1979) recommendation. The outcomes of the test are that all of the selected respondents understand the questionnaire with only format and position of the items are amended.

MULTIPLE REGRESSION ANALYSIS

Multiple regression analysis is employed to examine the relationship between a single dependent variable and three independent variables. Multiple regression analysis is also used by Ramayah et al. (2009) when examining the intention to use internet stock trading among Malaysian investors. So do Gopi and Ramayah (2007) who use this method in analyzing the relationship between the intention to trade online and attitude, subjective norm and perceived behavioural control. For the purpose of this research, the multiple regression analysis can be written as follows:

$$IIP = \varphi_0 + \psi_1 A_1 + \delta_2 SN_2 + \phi_3 AOI_3 + \zeta$$

where *IIP* is the respondents' perception of the Islamic insurance participation, A_1, SN_2, and AOI_3 represent the independent variables a*ttitude*, s*ubjective norm*, a*mount of information, respectively.* ζ denotes the error terms. Meanwhile, ψ, δ, and ϕ are the coefficients assigned to each of the stated explanatory variables, respectively.

The goal of regression is to arrive at the set of regression coefficients values for the said variables that bring the *IIP* values predicted from the equation as close as possible to the *IIP* values obtained by measurement (Tabachnick & Fidell 2007). According to Tabachnick and Fidell (2007), the computed regression coefficients in the study are to accomplish two intuitively appealing and highly desirable goals: they minimize (e.g. the sum of the squared) deviations between predicted and obtained *IIP* values; and they optimize the correlation between the predicted and obtained *IIP* values for the data set.

In employing a multiple regression analysis, a study should ensure that the data fulfill the four assumptions that are suggested by Hair et al. (2006): (1) outliers, (2) normality linearity, (3) *homoscedasticity* and

TABLE 2. Collinearity statistics

Construct	Tolerance	VIF
Attitude (overall)	.431	2.321
Subjective norm (overall)	.471	2.122
Amount of information (overall)	.591	1.692
Attitude (risk taker)	.590	1.694
Subjective norm (risk taker)	.484	2.065
Amount of information (risk taker)	.672	1.489
Attitude (risk averse)	.320	3.127
Subjective norm (risk averse)	.524	1.910
Amount of information (risk averse)	.498	2.010

(3) multicollinearity. With regards to multicollinearity, the results of the study reveal no such problem for attitude, subjective norm and amount of information since the tolerance values for these variables are greater than 0.1 (Pallant 2005) and all the VIF values are below 10. Thus, we can conclude that there is no collinearity issue with the data.

insurance. As reported in Table 3, the Kaiser-Meyer-Olkin (KMO) measure for the factors' combined items demonstrate a value of 0.883, indicating that the sampling adequacy is greater than 0.5 and therefore is satisfactory (Tabachnick & Fidell 2007). Barletts Test shows χ^2 of 2675.07 with a significance level of 0.000, where the total variance explained is 75.041 out of 3 dimensions (Hair et al. 2006). The KMO for the dependent variable depicts a value of 0.857 which tells us that the sampling is satisfactory. Barletts Test is also significant at the 1 per cent significance level.

FINDINGS

A factor analysis with varimax rotation is next conducted to delineate patterns of patronage factors for Islamic

TABLE 3. Factor analysis for independent variables

Item	Subjective norm	Amount of information	Attitude
SN1	.842		
SN2	.831		
SN3	.801		
SN5	.752		
SN4	.751		
AOI3		.838	
AOI4		.821	
AOI5		.795	
AOI2		.765	
AOI1		.652	
A2			.826
A5			.745
A3			.716
A1			.689
A4			.672
Variance explained	55.714	11.335	7.992
Eigenvalue	8.357	1.700	1.199
Alpha	.920(5)	.895(5)	.907(5)
KMO Measure of Sampling Adequacy.	.883		
Bartlett's Test of Sphericity	$\chi^2 = 2675.07$, df = 105, sig = .000		

Note: SN = subjective norm, AOI = amount of information, A = attitude and KMO = Kaiser-Meyer-Olkin.

The factor analysis produces three factor groups. The titles given to each factor group are named and described as follows:

1. The items grouped under *Factor 1* could be called "subjective norm." It has the highest eigenvalue and variance of 8.357 and 55.714 percent, respective. It necessarily represents the more important factor perceived by the respondents in selecting Islamic insurance.
2. *Factor 2* relates to "amount of information." It has the second highest eigenvalue and variance of 1.700 and 11.335 percent, respectively. It necessarily represents an important factor perceived by the respondents in selecting Islamic insurance.

3. *Factor 3* relates to the element of *attitude*. This dimension consists of five items. It has the third highest eigenvalue (1.199) and the variance explained is 7.992 percent.

In brief, since most of the factor loadings for each instrument exceed 0.6, the instruments meet the essential significant level of convergent validity (Nunnally 1978).

Next, the item-to-total correlation and internal consistency analysis (Cronbach's alpha) are employed to confirm the reliability of each research factor. A Cronbach's alpha of 0.70 and an item-to-correlation of 0.50 are used as general guidelines throughout the computation (Hair et al. 1998; Nunnally 1978). As depicted by Table 3, all

variables of a factor tend to have high coefficient of item-to-total correlation and high coefficient of Cronbach's alpha, supporting the reliability of the measurement items. The Cronbach's alpha values for the three independent variables range from 0.895 to 0.920 whilst that of the dependent variable is 0.904, exceeding the minimum alpha of 0.6 (Hair et al. 1998). Thus, the constructs measures are considered reliable.

Similarly, Table 4 shows that all the proposed items for the dependent variables are significant and there is no single item with a value of less than 0.60. Consequently, these items qualify for the regression analysis stage in which the items are transformed as factor scores using "data reduction" method in order to come up with a composite construct for the dependent variable.

TABLE 4. Factor analysis for dependent variable

Item	IIP
IIP5	.899
IIP4	.892
IIP3	.861
IIP1	.811
IIP2	.787
Variance explained	72.430
Eigenvalue	3.621
Alpha	.904(5)
KMO Measure of Sampling Adequacy.	.857
Bartlett's Test of Sphericity	$\chi^2 = 662.2$, df = 10, sig = .000

Note: IIP = Islamic insurance participation and KMO = Kaiser-Meyer-Olkin

Table 5 illustrates that subjective norm is significantly related to the Islamic insurance participation ($t = 12.977$, *p*-value = 0.000). This confirms the opinion that people influences are essential in explaining one's decision towards the participation of Islamic insurance (Amin et al. 2009; Ramayah et al. 2010; Yan et al. 2009). The results also indicate that attitude is significantly associated with the Islamic insurance participation ($t = 14.654$, *p*-value = 0.000). This outcome is consistent to that of Alam and Sayuti (2011), Bidin et al. (2009), Lada et al. (2009), Ramayah et al. (2009), and Ramayah and Mohd-Suki (2006) where attitude is found to be significantly associated with the Islamic insurance participation. It is believed that the greater the attitude among individuals, the more likely that Islamic insurance is adopted by them.

The results also indicate that the amount of information on Islamic insurance is positively related with the Islamic insurance participation ($t = 14.362$, *p*-value = 0.000) which supports previous study in the area such as Pikkarainen et al. (2004) and Sathye (1999). In this study, the amount of information on Islamic insurance has a great ability to forecast and explicate the participation of the consumers to adopt the product. It is imperative, therefore, for *takaful*

TABLE 5. Regression results

Construct	Standardized β	t-value	*p*-value
Subjective norm	.461	12.977	.000**
Amount of information	.511	14.362	.000**
Attitude	.521	14.654	.000**
F-value		196.468 (.000)	
R square		.745	
Adjusted R square		.741	

Note: *p < 0.05 and ** p < 0.01

operators to disseminate the information available for Islamic insurance products in a relevant way. For instance, improving the information dissemination channel for Islamic insurance will improve the quality of perceptions of students pertaining to the decency of Islamic insurance products. *Takaful* operators may also opt to employ SMS promotions to improve their communication with their existing and potential customers.

This study is extended to analyze the effects of risk profiles amongst respondents. The reason of such inclusion is owing to the fact that the "insurance product" is generally relevant to that of risk profile amongst individuals. In this study, a risk taker customer is defined as someone who is excited about risks. In the case of *takaful*, a risk taker tends to participate in order to gain benefits in the case of occurrence of event. A person who is risk averse on the other hand, is someone who dislikes risk and will keep away from being involved in risks. These statements are consistent with that of Kahneman and Tversky (1979) who argue that people are risk averse if the potential losses are high and risk prone if the potential gains are high. In the case of *takaful*, the risk-averse individuals tend to participate in *takaful* for emergency purposes rather than speculations. Table 6 reports regression results for those risk-takers whilst Table 7 reports regression results for the risk-averse individuals. Overall, the results show that all hypothesized parameters are statistically significant regardless of risk profiles of the respondents.

A further comparison at the individual variable level based on the respective coefficient values indicates that subjective norm has stronger effect for those risk-

TABLE 6. Regression results for risk taker

Construct	Standardized β	t-value	*p*-value
Subjective norm	.472	9.333	.000**
Amount of information	.321	6.124	.000**
Attitude	.712	13.582	.000**
F-value		91.574 (.000)	
R square		.701	
Adjusted R square		.694	

Note: *p < 0.05 and ** p < 0.01

TABLE 7. Regression results for risk averse individuals

Construct	Standardized β	t-value	*p*-value
Subjective norm	.447	7.773	.000**
Amount of information	.716	12.226	.000**
Attitude	.300	5.163	.000**
F-value		78.502 (.000)	
R square		.744	
Adjusted R square		.735	

Note: *p < 0.05 and ** p < 0.01

takers (0.472) than for risk-averse individuals (0.447). This suggests that people influences are viewed more significantly by risk-takers when using Islamic insurance products. That is, the more positive the subjective norm, the more likely that an Islamic insurance product is chosen by this group of students. This outcome is in consonance with the finding by Powell (2007) who asserts that group norms and the social acceptability of behaviour may act as powerful determinants of risk-taking behaviour. Risk taking behaviour may be rewarded through factors such as social approval and enhanced esteem (Powell 2007). In response to this finding, *takaful* operators are called to work with the management of mosques, Islamic religious schools, universities and government organizations with activities that will create an atmosphere that can influence individuals to participate in Islamic insurance policies.

On the other hand, those who are risk-averse are less influenced by people around them. They have fondness to solicit the information rather than to depend on third parties. As viewed in Table 7, amount of information is the key predictor in determining the risk-averse individuals' willingness to accept the Islamic insurance products. The reported beta value of 0.716 is greater than that of the risk-takers. This explains that the information available for Islamic insurance products plays a pivotal role in influencing those who are risk-averse. The greater and more reliable the information is, the higher the likelihood of those risk-averse individuals to utilise Islamic insurance products. They have the so-called tendency to depend on the accuracy of information when selecting Islamic insurance products. This finding is supported by Renn (1998) who argues that the significance of the information to the individual leads to the perception of risk. Renn (1998) further asserts that risk managers should place a major effort to improve their trustworthiness and credibility in the community via information dissemination particularly to serve those risk-averse individuals better. On the same note, *takaful* operators are thus encouraged to build trust with those who are risk-averse via advertisements and consultations. The information provided through the media should be tailored to better reflect the characteristics of the risk-averse individuals. The provision of such information may have an impact on their participation in Islamic insurance policies.

Finally, attitude is found to be more important for risk-takers than their risk-averse counterparts. For risk-takers, their views particularly on the Islamic insurance products are of utmost importance to justify their willingness to opt for Islamic insurance products This study supports Alhakami and Slovic's (1994) research findings that there is a significant negative relationship between perceived risk and benefit of an activity and general effective evaluation of a hazard. Their finding implies that people base their judgments on two bases, *what they think of* and *how they feel on* a certain issue, which are related to attitude. This implication can be extended to the Islamic insurance participation. As such, *takaful* operators should integrate their operation with their consumers' attitude. To market *takaful* products successfully, they should employ appropriate communication tools and maintain better relationships with the potential subscribers. The fact that attitude has a minimum impact on those who are risk-averse indicate that the attitude is perceived as less important among these individuals. On the contrary, this group of individuals relies on the size of information provided by the *takaful* operators when participating in Islamic insurance products (e.g. Renn 1998; Powell 2007).

CONCLUSION AND PRACTICAL IMPLICATION

This research examines the factors-attitude and subjective norm-based on the previous literature and adds amount of information to generate a more accurate prediction relating to the patronage factors for Islamic insurance products. Evidently, attitude and subjective norm are found to be the key antecedents in explaining one's willingness to use Islamic insurance products. The theory of reasoned action (TRA) is found to be superb in determining one's decision pertaining to the intention to participate in Islamic insurance products. This study demonstrates that the fundamental elements of TRA are appropriate in an Islamic insurance context. The reported *t*-values for the said predictors indicate strong linear relationships between the two antecedents and the Islamic insurance participation. Similarly, the added variable amount of information is also found to be a significant determinant in Islamic insurance participation. Overall, the three hypotheses put forward are supported, confirming that attitude, subjective norm and amount of information have positive and significant relationships with Islamic insurance participation. It is also worth noting that the subjective norm and attitude are essential for risk-takers, whilst amount of information is fundamental for those who are risk-averse.

Concerned with the practical values of the research, this study provides a clear direction for the practical strategies which could be added into the current list of the *takaful* operators. Three recommendations are offered. Firstly, it is important to provide relevant and essential information to prospective users and also to the existing

clients for instance via electronic database. Secondly, educating the existing and prospective subscribers pertaining to the advantages of Islamic insurance products is necessary to inculcate positive attitude towards the products. Appointing well-versed and knowledgeable agents or employees is an effective way for the *takaful* operators to handle this issue. Thirdly, the role of people in the context of subjective norm is also imperative to be taken care of. Treating the existing consumers professionally and ethically and appointing them as the "agents" for the *takaful* operators are among the positive approaches to spread the words and attract more consumers to participate in Islamic insurance.

Further, these recommendations should also be fine-tuned according to the risk profiles of the consumers. For the solution, the two strategies are essential to appease the discrepancies of the risk profiles. Specifically, *takaful* operators must strengthen the information dissemination process to risk-averse individuals through a number of approaches such as electronic database for *takaful* consumers, monthly newsletter and SMS advertisement. The information must be credible and reliable to make the risk-averse individuals feel comfortable with the Islamic insurance products. For risk-takers, *takaful* operators are recommended to improve their services in order to promote positive attitude among these individuals. For example, *takaful* operators could build a good relationship with the risk-takers by offering personalised services that meet their needs. This is to improve the role of subjective norm in impacting the participation of prospective customers in Islamic insurance products.

From another perspective, this research contributes to the body of knowledge in which it provides evidence that the TRA theory can be generalised in the context of Islamic insurance. It also opens a new dimension of Islamic insurance research which is not only limited to qualitative, but also to theory testing and theory confirmation. Consequently, more new studies pertaining to Islamic insurance products could be generated in the future.

The present research acknowledges two main limitations. Firstly, the research model evidently only reports an R^2 value of 70 percent. This suggests that 30 percent of the unexplained variations in the participation of Islamic insurance need to be explained by other factor(s). The inclusion of richer set of variables is recommended in future studies in order to achieve a greater enlightenment in Islamic insurance participation. Secondly, the sample used is confined to a particular geographical area and a category of respondents. The finding may not be generalized to other user groups in other geographies. It is important for the future researches to include other geographical areas and group of respondents to produce a more robust result that can be generalized to a wider scope of consumers.

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