Acceptance level of takaful insurance products among non-Muslims in Malaysia

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Abstract. Non-Muslims in Malaysia have a lower participation rate in takaful insurance. The purpose of this paper is to examine the factors that influence acceptance level of takaful insurance products among non-Muslims in Malaysia. In this paper, independent variables: awareness, attitude, service quality and relative advantage were examined using the Multiple Linear Regression (MLR) model to analyze the effect of dependent variable: non-Muslim acceptance level. The methodology used was a purely quantitative survey using convenience sampling with data collected from a sample of non-Muslims participants in Malaysia. The findings revealed that attitudes and relative advantage are found to be the significant factors that influence the acceptance level on takaful insurance products while awareness and service quality do not account for acceptability on takaful. It was also discovered that attitude is the most significant factor towards acceptance level on takaful insurance products among non-Muslims in Malaysia. The paper provides insight for understanding the factors that lead to consumers’ purchase intention of takaful insurance products in Malaysia. Furthermore, this study gives valuable ideas for takaful insurance companies to develop appropriate takaful insurance and build marketing strategies to enhance takaful insurance participation in Malaysia. Keywords: Takaful Insurance, Acceptance Level, Awareness, Attitude, Service Quality, Relative Advantage, Multiple Linear Regression

1 Introduction

Insurance is one of the most essential aspects of our lives, which protects us from the lost due to accidents and uncertainties. Conventional insurance and takaful insurance are the two primary types of insurance in the market. Takaful insurance, often known as Islamic insurance, is one of the key topics of this research. The researcher will begin by introducing the research title and providing some background information on the takaful insurance industry, followed by the discussion on the issues of accepting takaful and indicate the variables in this chapter. It will also further explain the importance of the study, scope and limitations and defining the major key terms used in the study.

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1.1 Background of the Study

The name Takaful comes from the Arabic word ‘Kafalah’ with the meaning of ‘guarantee’. The whole notion relies around this phrase, which refers to the idea of providing one another with assured safety and security (Darbelles, 2021). Takaful, an Islamic insurance, always referred to a Shariah-compliant insurance policy. Takaful is a newer insurance product marketed as an Islamic alternative to traditional insurance. It is built on mutual cooperation, with the insured and insurer sharing both risks and funds. Participants jointly guarantee each other against loss or harm, and they fulfil their obligations by making a donation (tabarru) to a fund (Wahab, 2021). The donations are gathered into a pool that is overseen by a takaful operator. Takaful, in general, provides Shariah-compliant services such as medical takaful, motor takaful, family takaful and includes life takaful (Razak et al., 2013).

1.2 Problem Statement

The majority of non-Muslims in Malaysia, particularly those who are not employed in the banking or insurance industries, are unfamiliar with Islamic or takaful ideas. Most of them still believe that Islamic insurance can only be adopted by Muslims, despite the fact that takaful insurance was initially developed with a Muslim market in mind. Most of the non-Muslims who have not considered purchasing takaful insurance have done so, owing to a lack of information about takaful. Moreover, they may believe that purchasing takaful insurance is strange to non-Muslims. Furthermore, non-Muslims may be unwilling to accept takaful insurance as an insurance alternative due to religious reasons. This is also due to the fact that most people's minds are so ingrained with the concept of traditional insurance that they will prefer to get traditional insurance first. Therefore, there is a reason for the low participation rate on takaful insurance compared with conventional insurance in Malaysia.

Previous research has looked into the elements that affect takaful insurance acceptability in various nations including Nigeria, Pakistan, the United States, and Malaysia. The majority of researchers concentrate on whole states or nations, with a particular concentration on the Muslim population. However, no one has investigated the level of acceptability among non-Muslim communities or the non-Muslims' perceptions of takaful. Although takaful insurance was initially provided to Muslims, it was welcome for the adoption of non-Muslims as well. The researcher wants to conduct a study that focuses on non-Muslims' perceptions in Malaysia. Furthermore, the researcher wishes to rank the most important variables that influence takaful insurance purchasing behaviour of non-Muslims. By carrying out the study, the researcher will be able to learn more on the takaful insurance industry, as well as help respondents become more knowledgeable and aware about takaful insurance products in Malaysia. After doing the research, the researcher will have a better understanding of non-Muslims' takaful insurance buying intentions.

1.3 Objectives of the Study

1.3.1 General Objective

The purpose of this quantitative study is to identify the level of acceptance towards takaful insurance products among non-Muslims in Malaysia. Also, the study wants to identify the most important element that influences non-Muslims’ choice to accept takaful insurance.
1.3.2 Specific Objective

a. To examine the relationship between awareness and acceptance level of takaful insurance products among non-Muslims in Malaysia.

b. To examine the relationship between attitude and acceptance level of takaful insurance products among non-Muslims in Malaysia.

c. To examine the relationship between service quality and acceptance level of takaful insurance products among non-Muslims in Malaysia.

d. To examine the relationship between relative advantage and acceptance level of takaful insurance products among non-Muslims in Malaysia.

1.4 Significance of Study

This study was conducted to present knowledge on takaful and Islamic as one of the options for non-Muslims in the insurance industry. Moreover, the research tends to help future researchers and policy makers looking for additional information about non-Muslims’ opinions and their attitude towards takaful products. In addition, this study also provides valuable ideas for takaful insurance companies to prepare suitable takaful insurance and build marketing strategies to enhance takaful insurance participation in Malaysia. It was helpful to let people know more about takaful and the purchasing behaviour of takaful insurance.

2 Literature Review

This chapter examines the literature and previous research in the field of takaful insurance and factors influencing the acceptance of takaful insurance. Takaful insurance is common in the 21st century especially in Islamic countries including Malaysia. But conventional insurance still plays an important role and more people are buying it compared to takaful. For accepting takaful from conventional insurance, there are few factors that could be used to determine the acceptance level on takaful products.

2.1 Dependent variable: The Concept of Acceptance Level

In this research, the level of acceptance serves as a dependent variable. It may be measured using four independent variables: awareness, attitude, service quality, and relative advantage, which were used for this study. All independent variables must be ranked in order to determine which variable has the greatest impact on non-Muslims' acceptance and uptake of takaful insurance.
takaful insurance products in Malaysia. Individuals’ acceptance intentions can be supported by the Theory of Reasoned Action (TRA) and Theory of Planned Behaviour (TPB), which state that attitude, subjective norms, and perceived behaviour control influence acceptance intentions (Ibrahim et al., 2021; Kazaure & Abdullah, 2019; Mas’ud; 2017). Many previous researchers employed acceptance level as a dependent variable in their studies to investigate purchasing behaviour or acceptance of takaful insurance. To determine the level of acceptability of takaful in Nigeria, Kehinde and Sharofiddin (2021) adopted a new product adoption theory. Khan et al. (2020) were curious about people's attitudes toward Islamic insurance and how to determine the most crucial elements influencing consumer choice. In Malaysia, Haji Wahab (2018) performed a survey to determine the level of consumer interest in utilising medical takaful cards.

### 2.2 Independent variable 1: Awareness

Past researchers have made awareness as one of the significant factors that influence the acceptance of takaful insurance products. A survey conducted by Salman et al. (2018) using snowball and convenience sampling method of 909 individuals among Muslim and non-Muslim in India to identify the internal factors including product awareness that influence consumers to take part in Takaful insurance. The results have been analysed using linear regression model which indicated a positive relationship between awareness and takaful participation’s willingness but non-Muslims seem a bit less motivated compared to Muslims. Ali and Jama (2016) focused the awareness of the Somali community on takaful insurance and the factor influencing adoption decision by using convenient sampling of a sample of 179 Mogadishu respondents in Somalia. The study found that all factors including awareness have a significant positive relationship with the intention to adopt takaful. Ibrahim et al. (2021) had conducted 2 different surveys using Smart Partial Least Square Structural Equation Modelling (PLS-SEM) technique from 414 and 421 respondents respectively in Bumiputera contractors in Malaysia. Both findings showed that awareness significantly affects the acceptance of the Contractor’s All Risks (CAR) takaful insurance by Bumiputera contractors which analysed with the SmartPLS and SPSS respectively.

### 2.3 Independent variable 2: Attitude

Attitude is another important variable to influence humans towards the adoption of takaful insurance products. Ibrahim et al. (2021) had carried out 2 different surveys using PLS-SEM technique from 414 and 421 respondents respectively in Bumiputera contractors in Malaysia. Both findings showed the attitude affected Bumiputera contractors to choose CAR takaful products. From the second survey, the researchers also stated that attitude is the most significant component to influence takaful acceptance. Ab Rahim and Amin (2011) collected data among 176 Malaysian bank customers to identify the factors influencing takaful insurance acceptance. In the reliability test, attitude was deemed reliable and found that it has a strong influence on takaful insurance acceptance in regression analysis. In Malaysia's Klang Valley, convenience sampling techniques were used to conduct a study of 384 Muslims who did not have life insurance or a family takaful programme. The findings revealed that one's attitudes toward family takaful have a significant impact in determining one's willingness to join in the family takaful plan (Md Husin & Ab Rahman, 2016).

### 2.4 Independent variable 3: Service Quality

There were researchers who agreed with other past researchers that service quality is an important factor to affect decision making on adoption of takaful insurance. Saidon et al.
(2019) had carried out a study in Malaysia to investigate the key variables impacting the participants’ choice of family takaful. The respondents came from one takaful operator and most of them agree with the service quality which will attract them to buy takaful insurance products. Haji Wahab (2018) examined the relationship between performance of takaful providers throughout the service quality and level of acceptance towards takaful using a disproportionate stratified random sampling of 313 governmental agencies in Kedah, Malaysia. The results indicate that takaful operation’s performance including service quality has a highly significant positive impact with consumer acceptance in using takaful medical insurance.

2.5 Independent variable 3: Relative Advantage

There were a few surveys conducted in Pakistan which agree with the statement that relative advantages provide a substantial influence on takaful insurance acceptability and purchasing behavior. The researchers calculate Cronbach’s Alpha coefficient of relative advantage in the reliability test which shows significance to determine adoption behaviour. They did a hypothesis testing on the p-value of perceived relative advantage and found out the value is significant at 0.01 in the data analysis. Raza et al. (2019) used theory of planned behaviour to conduct a Partial Least Square SEM by collecting data from 305 individuals. The outcome was found that relative advantages were positively influencing the takaful products acceptability because most respondents, especially Muslims believe that the takaful insurance system, which is advantageous to them, does not involve interest. (Raza et al., 2019).

3 Methodology

The instrument that is used in this research is a self-administered and closed-ended questionnaire. Firstly, the researcher was going to do descriptive statistics for demographics information and insurance status by calculating the mean, standard deviation, skewness which will aid the researcher in finding absolute figures to synthesize personal characteristics and identify trends.

3.1 Reliability Testing of Data

To check the reliability testing of data, Cronbach’s alpha coefficient, created by Lee Cronbach in 1951, is the most widely used measurement of internal consistency (Pallant, 2010). A Cronbach’s alpha value of more than 0.7 is deemed acceptable, while more than 0.8 is considered good. A value of higher than 0.9 is excellent and shows extremely high measurement consistency.

3.2 Pearson Correlation Analysis

Pearson Correlation test assesses the strength of the relationship between independent and dependent variables with a value between -1 and 1. A correlation of 0 implies that there is no correlation between two variables, whereas a correlation of 1 shows that they are perfectly correlated (Pallant, 2010). Correlation values of (±0.1- ±0.3) are considered weak, (±0.4- ±0.6) are considered moderate, and (±0.7- ±0.9) are considered strong (Dancey & Reidy, 2011). The correlation coefficient should not be used to determine cause and effect relationships since correlation does not indicate causality (Green, 2012).


3.3 Multiple Linear Regression

Multiple linear regression is a regression model that estimates the relationship between a dependent variable and two or more independent variables using a straight line. It is a statistical technique that uses several explanatory variables to predict the outcome of a response variable, which suits well with our purpose of study. Before applying multiple regression analysis, some assumptions of linear regression such as normality test, outlier, homodecasicity and multicollinearity are tested. The regression equation for dependent and independent variables are being developed as below:

\[ Y = a + \sum_{i=1}^{j} b_i X_i \]

Where some \( i = 1, 2, 3, \ldots, j \)

\( Y \): Dependent variable
\( a \): Constant
\( b_i \): \( \beta \) values of independent variables
\( X_i \): independent variables

4 Result and Findings

The data and information collected through online questionnaires has been imported to statistical software SPSS and analyzed through a series of tests between variable awareness, attitude, service quality, relative advantage and acceptance level of takaful insurance.

4.1 Reliability Testing of Data

Table 1. Cronbach’s Alpha Value of All Variables. Each variable in this study is subjected to individual reliability testing.

<table>
<thead>
<tr>
<th>Variables of The Study</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness (AW)</td>
<td>0.859</td>
</tr>
<tr>
<td>Attitude (AT)</td>
<td>0.858</td>
</tr>
<tr>
<td>Service Quality (SQ)</td>
<td>0.861</td>
</tr>
<tr>
<td>Relative Advantage (RA)</td>
<td>0.781</td>
</tr>
<tr>
<td>Acceptance Level of Takaful Insurance Products (AL)</td>
<td>0.910</td>
</tr>
</tbody>
</table>

As shown in Table 1, Cronbach’s alpha values for all variables are greater than 0.7. As a result, all variables for this study are regarded as reliable, and the instrument for this study enabled for additional analysis and exploration of the research.
4.2 Descriptive Statistic for Variables

According to Table 2, it showed the descriptive statistics of Awareness (AW), Attitude (AT), Service Quality (SQ), Relative Advantage (RA) and Acceptance Level of Takaful Insurance Products (AL) which included minimum, maximum, mean value and standard deviation for each variable. The table shown awareness had mean value of 20.8562 and standard deviation of 5.08405, attitude had mean value of 20.5686 and standard deviation of 3.88615, service quality had mean value of 15.8105 and standard deviation of 2.70173, relative advantage had mean value of 15.4706 and standard deviation of 2.46037 while the dependent variable, acceptance level had mean value of 13.9281 and standard deviation of 3.05025.

<table>
<thead>
<tr>
<th>Table 2. Descriptive Statistic for Variables.</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
</tr>
<tr>
<td>Minimum Statistic</td>
</tr>
<tr>
<td>AW</td>
</tr>
<tr>
<td>AT</td>
</tr>
<tr>
<td>SQ</td>
</tr>
<tr>
<td>RA</td>
</tr>
<tr>
<td>AL</td>
</tr>
</tbody>
</table>

Valid N (listwise) 153

4.3 Pearson Correlation Analysis

Table 3. Pearson Correlation coefficient between IVs and DV.

<table>
<thead>
<tr>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL</td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td>AW</td>
</tr>
<tr>
<td>AT</td>
</tr>
<tr>
<td>SQ</td>
</tr>
<tr>
<td>RA</td>
</tr>
</tbody>
</table>

From table 3, since the p-value of all variables were lesser than 0.05, all variables showed a significant correlation with one another. Between awareness and acceptance level, there

**. Correlation is significant at the 0.01 level (2-tailed).
was a moderate positive correlation \( (r = 0.561, \text{p-value} < 0.000) \). Attitude had the strongest correlation to acceptance level of all the independent variables, with a strong positive coefficient \( (r = 0.780, \text{p-value} < 0.000) \). Furthermore, service quality and acceptance level had a moderate positive correlation \( (r = 0.512, \text{p-value} < 0.000) \), whereas relative advantage and acceptance level had a moderate positive correlation \( (r = 0.641, \text{p-value} < 0.000) \). Overall, it suggests a moderate or strong positive correlation between all independent variables and the dependent variable.

### 4.4 Normality Testing

**Table 4. Skewness and Kurtosis of Variables.**

<table>
<thead>
<tr>
<th>N</th>
<th>Skewness Statistic</th>
<th>Skewness Std. Error</th>
<th>Kurtosis Statistic</th>
<th>Kurtosis Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>AW</td>
<td>153</td>
<td>-.219</td>
<td>.196</td>
<td>-.712</td>
</tr>
<tr>
<td>AT</td>
<td>153</td>
<td>.365</td>
<td>.196</td>
<td>-.040</td>
</tr>
<tr>
<td>SQ</td>
<td>153</td>
<td>-.321</td>
<td>.196</td>
<td>-.166</td>
</tr>
<tr>
<td>RA</td>
<td>153</td>
<td>-.041</td>
<td>.196</td>
<td>-.525</td>
</tr>
<tr>
<td>AL</td>
<td>153</td>
<td>.254</td>
<td>.196</td>
<td>-.501</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>153</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fig. 2. Normal P-P Plot.**

The skewness of the variables was between -0.321 and 0.365, and the kurtosis was between -0.712 and -0.040, according to Table 4. As skewness and kurtosis both fall within this range, the data was assumed to be normally distributed. The skewness in the range of -0.5 to 0.5, indicates that data is approximately symmetric. Meanwhile in Figure 2, the data was close to the diagonal line, indicated that all of the factors were drawn near the line or sit
on the linear line in a pretty straight diagonal line from bottom left to top right. This would indicate that there was no significant departures from the norm. As a result, the residuals' normal probability plot was almost linear, indicating that the error terms are normally distributed.

### 4.5 Homoscedasticity

![Scatterplot](image)

**Fig. 3.** Residual Scatter plot.

From Figure 3, the residuals were roughly rectangular distributed, with the majority of the scores clustered in the centre (along the 0 point). The residuals did not display a clear or systematic trend. Scatterplots may also be used to determine the existence of outliers. There was no outlier in this study since the residuals were not bigger than 3.3 or lesser than -3.3.

### 4.6 Multicollinearity

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
</tr>
<tr>
<td></td>
<td>AW</td>
</tr>
<tr>
<td></td>
<td>AT</td>
</tr>
<tr>
<td></td>
<td>SQ</td>
</tr>
</tbody>
</table>

According to Table 5, the tolerances for variables awareness, AT, SQ, and RA were 0.548, 0.442, 0.494, and 0.431, respectively, with all values more than 0.25. Variables AW,
AT, SQ, and RA had variance inflated factor (VIF) values of 1.825, 2.263, 2.025, and 2.318, respectively, all of which were less than 5. It implied that all of the independent variables were not too correlated and did not have collinearity, indicating that multiple linear regression models may be used.

4.7 Multiple Linear Regression

Since all the assumptions had been followed, multiple linear regression is an adequate model to be applied. From SPSS analysis as indicated in Table 6, the R-square value for independent variables is 0.657, implying that independent factors can explain 65.7% of the variation in dependent variable. The adjusted R-square statistic changes the statistic based on the number of independent variables in the model to indicate the generalisation of the results. The adjusted R-square in this model is 0.648, indicated that 64.8% of the variation in the acceptance level of takaful insurance products was explained by awareness, attitude, service quality, and relative advantage. However, some additional factors that were not included in this study were explained by the remaining 35.2%.

Table 7. ANOVA test of Multiple Regression.

The number of independent variables in the research is represented by the degree of freedom (df) in the Table 7, which was four. Meanwhile, the F-test was employed in the study to see if the model fitted the data well. In the ANOVA test, the F-value was 71.018. The p-value of the ANOVA test was 0.000, which was less than 0.05, indicating that this model was well-fitting for the data and has a substantial impact on the acceptance level of takaful insurance products.
The obtained multiple linear regression model from Table 8 is:

Acceptance Level of Takaful Insurance Products = -1.311 + 0.029 (Awareness) + 0.463 (Attitude) + 0.005 (Service Quality) + 0.326 (Relative Advantage)

which indicates that:

a. Acceptance Level of Takaful Insurance Products will increase by 0.029 units when Awareness increases by one (1) unit and vice versa (positive impact).
b. Acceptance Level of Takaful Insurance Products will increase by 0.463 units when Attitude increases by one (1) unit and vice versa (positive impact).
c. Acceptance Level of Takaful Insurance Products will increase by 0.005 units when Service Quality increases by one (1) unit and vice versa (positive impact).
d. Acceptance Level of Takaful Insurance Products will increase by 0.326 units when Relative Advantage increases by one (1) unit and vice versa (positive impact).

4.8 Discussion

Table 9 showed the hypothesis testing of the study. The hypothesis is accepted when the p-value is smaller than 0.05 while hypothesis is rejected when the p-value is greater than 0.05. According to the multiple linear regression analysis, hypothesis H1 between awareness
and acceptance level of takaful insurance products is rejected ($\beta=0.048$, $t=0.735$, $p=0.463$). Hypothesis H2 related to attitude and acceptance level of takaful insurance products is accepted ($\beta=0.589$, $t=8.144$, $p=0.000$). Hypothesis H3 between service quality and acceptance level of takaful insurance products is rejected ($\beta=0.004$, $t=0.062$, $p=0.951$). Hypothesis H4 related to relative advantage and acceptance level of takaful insurance products is accepted ($\beta=0.263$, $t=3.595$, $p=0.000$). It can be concluded that there is a significant relationship between attitude and acceptance level of takaful insurance products among non-Muslims in Malaysia. Also, there is a relationship between relative advantage and acceptance level of takaful insurance products among non-Muslims in Malaysia.

5 Conclusion

After conducting multiple regression analysis, acceptance level of takaful insurance products are strongly affected by attitude and relative advantage. The Adjusted R square in this study showed that 64.8% variation can be explained by the model. As shown earlier, attitude (AT) is the most important element towards acceptance level of takaful insurance products (AL) with 0.589, followed by relative advantage (RA) with 0.263, awareness (AW) with 0.048 and service quality (SQ) with 0.004. Based on ANOVA, significance or p-value, hypothesis H2 and H4 are accepted while H1 and H3 are rejected in the study. Attitude and relative advantage have significant relationship with acceptance level of takaful insurance products while awareness and service quality do not have significant relationship with acceptance level of takaful insurance products.

5.1 Implication of Study

Other researchers may use this as a guide to learn about non-Muslims' attitudes regarding takaful acceptance. They can have a better understanding of non-Muslims' opinions regarding takaful insurance products. It may be advantageous to the reader in that the reader may expand his or her understanding about takaful and obtain further information or benefit as a result of reading this article. Furthermore, it raises non-Muslims' understanding of takaful insurance products and fundamental concepts such as profit-sharing and Shariah compliance. Once they are aware of it, they have the option of applying for takaful service in Malaysia.

5.2 Limitations of Study

To begin, due to resource constraints, the scope of this study is limited; there are only four variables that may be investigated during the research: awareness, attitude, service quality and relative advantage. It may not be able to address all of the variables that impact takaful insurance acceptance level. All terms in TRA and DOI are also unable to be taken into account. The results show that 65.7% of the changes in dependent variables may be explained by these four independent variables, leaving 34.3% to other possible factors that were not included in the study. Therefore, other factors can be included in this study. Second, due to time constraints, the sample size in the study is quite small, limiting the recruitment of more volunteers in order to acquire more perspectives from each responder. Not all non-Muslims will be covered and allowed to participate in the study. The majority of survey participants are younger teenagers, and the survey's limited sample size prevents it from covering other categories of respondents. It will prevent the study from obtaining more accurate results when compared to a bigger sample size. Third, this study used convenience sampling, which allowed all non-Muslim to participate, although not all non-Muslims have purchased takaful insurance. It does not focus on non-Muslims who have actually purchased takaful insurance.
and it may have an impact on non-Muslims who have purchased takaful insurance and hold differing viewpoints on the study's topic.

References