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An Application of the Theory Reasoned Action (TRA) in Determining Factors Influencing  
*Muslim* Public Services Employees' Intention to Participate in Motor Takaful

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#### **Abstract**

Although the majority of Malaysian are Muslims, data shows that the *takaful* penetration rate was much lower than the conventional insurance. Motor takaful as an important segment in the general insurance sector which was offered as an alternative to conventional is supposedly becoming the preferred choice for *Muslim*. For that, this study aims to look at the factors that influenced the intention to participate in motor *takaful* among public services employees. Applying the Theory of Reasoned Action (TRA), this study analysed respondents' intention to participate in motor *takaful*. The variables used are based on TRA that are risk awareness, attitude and subjective norms. Multiple Linear Regression (MLR) was carried out to analyse the relationship between the independent variables and the dependent variable. The results showed that subjective norm does not significantly affect the dependent variable. Risk awareness and attitude significantly influence the intention to participate in motor *takaful*. This study provides a better understanding of the factors influencing the intention of vehicle users in choosing *takaful*. This study is important as one of the small contributions, especially to *takaful* operators in empowering *takaful* industry, specifically, and for Islamic financial system, generally, in Malaysia.

*Keywords:* Motor Takaful ; theory of reasoned action ; intention

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#### **1. Introduction**

General insurance market in the Malaysian insurance industry has four main sectors with motor insurance as the largest sector followed by aviation and transit, marine, fire, and miscellaneous. Insurance and takaful products share similarities in functions, from the concept of helping each other of which is found in Islamic teachings and insurance. Both motor insurance and motor takaful offer same services to vehicle users, which are schemes or policies that insured the policyholders for a claim by the

third party due to an accident caused by their vehicle or to their own or claim for bodily injuries or death caused to other person or for losses and damages of property.

However, there are many differences noted from the operational and conceptual perspective between insurance and takaful. Islamic teaching forbids contracts with elements of usury (riba), uncertainty (gharar), and gambling (maysir). Hence, to avoid prohibitive elements, motor takaful was designed to meet the criteria of permissible contract or shariah compliance insurance functioning as conventional insurance product but differently operated. For example, the policyholder is known as a participant because he willingly joins to voluntarily contribute certain amount of money to a special fund and mutually agrees to share risks amongst the participants. Meanwhile, the policy holder in conventional insurance has to pay the premium and transfer the risks to the insurer.

The largest sector in general insurance and general takaful industry is motor insurance. This sector contributes the highest net premium towards overall industry around 54% average of the total net premium contributions collected between 1986 and 2004. Nowadays, there are 16 takaful operators in Malaysia and only five operators offer motor takaful (MTA 2017). Despite the increasing number of takaful companies, Muslims' understanding and awareness about the takaful industry are still low. In fact, only 10% of the Malaysian population chose takaful products although Islamic banking and takaful have been introduced over 30 years ago.

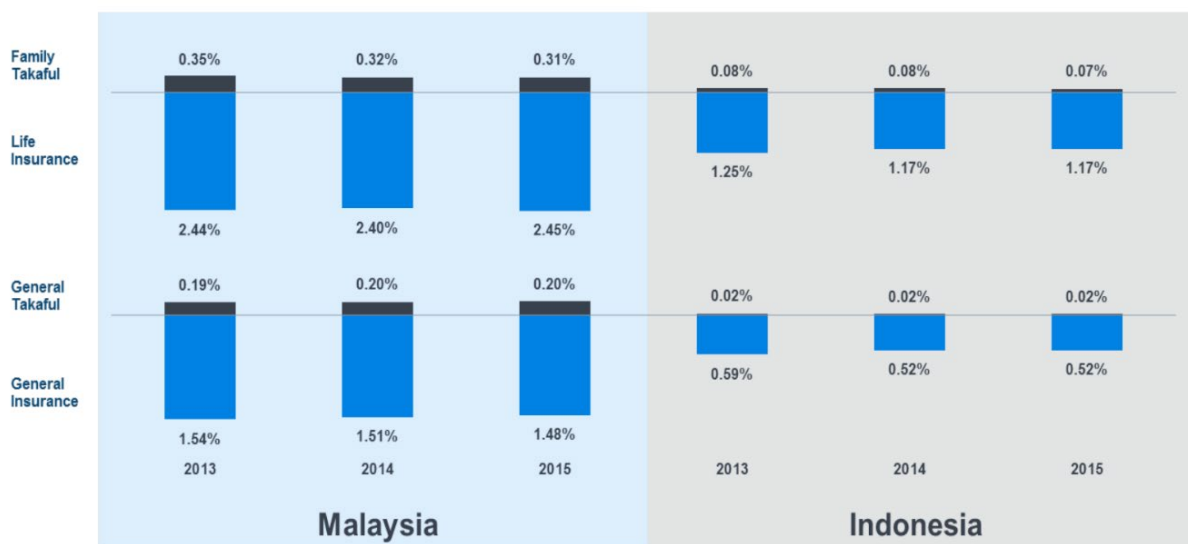


Figure 1 Penetration Rates between Insurance and Takaful (Family and General) Malaysia and Indonesia  
Source : Milliman Global Takaful Report 2017

An analysis of Malaysia and Indonesia as reported by Miliman (2017) (refer Figure 1) on market penetration of insurance similarly gave obvious gap where life and general insurance largely penetrated the market in 2013, 2014, and 2015. The takaful (family and general) constituted only less than 0.32% and 0.2% for Malaysia and less than 0.08% and 0.02% for Indonesia. Although the majority of Malaysian and Indonesian market are Muslims, the takaful penetration rate was much lower than the conventional insurance penetration rate. As reported by PIAM (2019), only four out of 25 motor insurance providers were takaful operators in Malaysia. Table 1 displays three types of scheme offered both by insurance and takaful.

Table 1 Comparison between General Takaful and General Insurance Operator for 3 Types of Scheme

| Type of Scheme | General Takaful (Motor Takaful) | General Insurance (Motor Insurance) |
|----------------|---------------------------------|-------------------------------------|
| Comprehensive  | 4 companies                     | 21 companies                        |
| Fire And Theft | 4 companies                     | 21 companies                        |

|             |             |              |
|-------------|-------------|--------------|
| Third Party | 3 companies | 21 companies |
|-------------|-------------|--------------|

Source: MTA (2019) and PIAM (2019)

In addition to the above, the annual contribution payment for motor takaful is far low compared to Muslim population and registered vehicles. Besides, lower market penetration rate for general *takaful* and fewer takaful operators contributed to the unbalanced difference between conventional and *takaful*, as well as the Muslim-majority population. Therefore, there is a need to investigate the factors that influence the intention of consumers in choosing motor *takaful* to increase the market penetration and raise the demand for *takaful*. The motor takaful operators offering motor takaful scheme are also not as many as conventional general Insurance. Despite the positive growth of *takaful* market in Malaysia, there are still untapped *takaful* market and percentage of market penetration also very low compared to conventional insurance (Earnst and Young, 2015).

A review of current research revealed that limited studies that applied TRA to investigate general takaful, specifically in motor takaful segment. This study attempts to test the relationship between an intention to participate and various factors in the theory reasoned actioned (TRA). Specifically focuses on motor takaful, intention of public service employees in Putrajaya is analysed. This study differs from other studies by examining the factor based on assumption in TRA and public services employees of Jabatan Kemajuan Islam Malaysia (JAKIM) in Putrajaya headquarters were chosen as respondents. The remaining discussion of this paper is as follows. Section 2 discusses the theoretical underpinning highlighting the previous literatures. Section 3 discusses the data and methodology. Section 4 present results and findings. Finally, section 5 concludes the overall discussion.

## 2. Underpinning Theory

To determine a person's decision on the intention to participate in Islamic insurance products, the TRA is a suitable tool of measurement. It is based on the greater a person's attitude, the more he will prefer to engage in behavioral intention. This is commonly discussed in Theory of Planned Behavior (TPB) of behavioural predictions on individual. However earlier, attitude was as an important role in influencing the intention (Ajzen, 2002) where TRA concept were developed. The TRA concept in based on prevailing assumptions "attitude and behavior were strongly related". TRA and TPB both propose concept of intention and the following term came out; behavioural control, volitional control, attitude and subjective norms to relate to the intention. The behavioral control is the extend of ease or difficulty one believe the performance of behavior to be. While volitional control is the extend to which one can decide to do something. The revised of TRA comes as it fails to explain behaviours not under volitional (wilful) control. However, TRA has got widespread acceptance for the assumption that there is strong correlation between the attitude and subjective norms to the intention of individual.

Major studies that used TRA are Ab. Rahim and Amin (2011), Amin (2012), Razak and Taib (2008b), Amin et al. (2009). Ab. Rahim and Amin (2011) confirmed the applicability of TRA on Islamic insurance by measuring attitude and subjective norm. Amin (2012) stated that attitude and subjective norm are the key antecedents in explaining a person's willingness to choose Islamic insurance products. He added that attitude, subjective norm, and amount of information provide the best accuracy of data to be considered as important factors of determining participation in Islamic insurance. Additionally Razak and Taib (2008b) also reveals, perception of *takaful* is among the significant predictors of *takaful* acceptance intention

In Malaysia, study on takaful focuses on knowledge and perception to takaful acceptance can be referred to Wan Abdul Aziz et al. (2011). Additionally, earlier, Ab. Rahman et al. (2008) also studied the perceptions on comparison between conventional and motor takaful. Religiosity found to be an important determinant that may changed the perceptions towards insurance product. In other country, Mas'ud (2017) investigates individual risk awareness on takaful acceptance intention. He found that attitude, perceived behavioural control, and individual's risk awareness have a significant correlation with takaful acceptance intention in Nigeria.

## 3. Data and Methodology

Realising the fact that all staff in JAKIM were *muslim*, the intention of JAKIM staff was of interest as JAKIM is a religious department besides most of them have a religious study background. This study believes that their participation in motor *takaful* might be greatly influenced by the selected variables used in this study.

350 sets of questionnaires were distributed among JAKIM staff in Putrajaya with the criteria determined as the following; Respondents must be JAKIM staff, ii) Respondents must be working in Putrajaya; iii) Respondents must own a private vehicle (car or motorcycle). A total of 253 were returned and 218 is available to be used for the data analysis. As illustrated in Table 2, JAKIM staff involved in this study is summarised as follows:

Table 2: Profile of the Respondents

| Items            | Category             | Frequency | Percentage % |
|------------------|----------------------|-----------|--------------|
| Gender           | Male                 | 107       | 49.1         |
|                  | Female               | 111       | 50.9         |
| Age              | 25-29                | 56        | 25.7         |
|                  | 30-34                | 50        | 22.9         |
|                  | 35-39                | 49        | 22.5         |
|                  | 40-44                | 31        | 14.2         |
|                  | 45-50                | 32        | 14.7         |
| Job level        | Senior officers      | 27        | 12.4         |
|                  | Junior officers      | 98        | 45           |
|                  | Supporting/Technical | 93        | 42.7         |
| Status           | Single               | 48        | 22           |
|                  | Married              | 165       | 75.7         |
|                  | Divorced             | 5         | 2.3          |
| Education        | PhD                  | 7         | 3.2          |
|                  | Master               | 29        | 13.3         |
|                  | Degree               | 119       | 54.6         |
|                  | Diploma              | 39        | 17.9         |
|                  | STPM/SPM/PMR/UPSR    | 24        | 11           |
| Household income | <1000                | 7         | 3.2          |
|                  | 1000-1999            | 24        | 11           |
|                  | 2000-2999            | 27        | 12.4         |
|                  | 3000-3999            | 37        | 17           |
|                  | 4000-4999            | 34        | 15.6         |
|                  | > 5000               | 89        | 40.8         |
| Monthly saving   | < 100                | 32        | 14.7         |
|                  | 100-199              | 43        | 19.7         |
|                  | 200-299              | 38        | 17.4         |
|                  | 300-399              | 23        | 10.6         |
|                  | 400-499              | 29        | 13.3         |
|                  | > 500                | 53        | 24.3         |

This study develops a model in investigating factors influencing intention based on TRA as follows:

$$INT = \beta + \beta_1 RSK + \beta_2 ATT + \beta_3 SN$$

Where  $\beta$  = constant, INT= Intention, ATT = Attitude, SN = Subjective Norms with the following hypothesis: -

- H1. Risk awareness significantly determined the intention to participate in motor takaful.
- H2. Attitude significantly determined the intention to participate in motor takaful.
- H3. Subjective norm significantly determined the intention to participate in motor takaful.

The questionnaire contains two sections; Section on demographic questions and Section B where respondents were requested to answer questions relating to the degree of their risk awareness, attitude, and subjective norm based on a five-point Likert scale, ranging from 1 to 5 where 1 indicates “strongly disagree”, 2 indicates “disagree”, 3 indicates “neutral; either agree or disagree”, 4 indicates

“agree”, and 5 indicates “strongly agree”. All items, intended to measure the variables in this study, were taken from previously validated instruments<sup>5</sup>.

#### 4. Results and Findings

Table 3 below shows the mean and standard deviation for each of the variables that were Intention, Risk Awareness, Attitude, and Subjective Norm. The standard deviation is also important in indicating the degree of each variable and also to point out the distribution of the score of the mean. If the value of standard deviation is small, therefore the responses in a sample distribution of numbers fall very close to the mean. Thus, the less the value of the standard deviation, the better. Attitude showed the highest mean with the value of 4.3578 and the standard deviation value of 0.66156. Meanwhile, the lowest mean (3.7599) was the subjective norm with the standard deviation value of 0.73375. From these figures, it has been shown that JAKIM staff’s intention to participate in motor *takaful* was influenced by attitude consideration.

Table 3: Result for Each Variable

| Variables | Mean   | Standard Deviation |
|-----------|--------|--------------------|
| INT       | 4.1404 | 0.84936            |
| RSK       | 4.1573 | 0.72076            |
| ATT       | 4.3578 | 0.66156            |
| SN        | 3.7599 | 0.73375            |

Table 4 : Results of the Pearson Correlation between JAKIM Staff’s Intention to Participate in Motor Takaful and Independent Variables

| Variables | Correlation Coefficient | Sig. (2-tailed) |
|-----------|-------------------------|-----------------|
| RSK       | .558**                  | 0.000           |
| ATT       | .612**                  | 0.000           |
| SN        | .466**                  | 0.000           |

Significant level  $p < 0.01$

Table 4 above shows the results of Pearson Correlation of the variables. It is reported that all hypotheses failed to be rejected as the p-value was below 0.01 ( $p < 0.01$ ). The risk awareness, attitude, and subjective norm have a significant relationship, but with moderate relationship ( $0.40 \leq r \leq 0.59$ ). The correlation coefficient was 0.558\*\* (risk awareness), 0.612\*\* (attitude), and 0.466\*\* (subjective norm).

Table 5 Regression Results

| Model             | Coefficients <sup>a</sup>   |            |                           |       | t                 | Sig. |
|-------------------|-----------------------------|------------|---------------------------|-------|-------------------|------|
|                   | Unstandardized Coefficients |            | Standardized Coefficients |       |                   |      |
|                   | B.                          | Std. Error | Beta                      |       |                   |      |
| $\beta$           | .210                        | .311       |                           | .674  | .501              |      |
| RSK               | .254                        | .085       | .216                      | 2.984 | .003*             |      |
| ATT               | .501                        | .091       | .390                      | 5.517 | .000*             |      |
| SN                | .184                        | .072       | .159                      | 2.555 | .011              |      |
| R                 |                             |            |                           |       | .658 <sup>a</sup> |      |
| R Square          |                             |            |                           |       | .433              |      |
| Adjusted R Square |                             |            |                           |       | .425              |      |
| Std Error         |                             |            |                           |       | .64395            |      |

Significant level ( $P < 0.01$ )\*

Table 5 summarises the results of multiple regression with intention as the dependent variable for risk awareness, attitude, and subjective norm. The results showed that both attitude and risk awareness were statistically significant. The standardised regression coefficient revealed that attitude (Beta=0.501,  $t=5.517$ ,  $p=0.000$ ) made the strongest contribution in explaining intention, followed by risk awareness (Beta=0.254,  $t=2.984$ ,  $p=0.003$ ). Subjective norm (Beta=0.184,  $t=2.555$ ,  $p=0.011$ ), had no significant

<sup>5</sup> Questionnaires were available upon request by email [naim9319@yahoo.com](mailto:naim9319@yahoo.com)

influence with intention as the p-value showed more than 0.01. Two variables were statistically significant which were attitude and risk awareness as both p-values <0.01 with 0.000 and 0.003, respectively. Thus, attitude and risk awareness significantly influenced the intention to participate in motor *takaful* among JAKIM staff and correlated in a positive direction. Coefficient correlation was 0.658 and coefficient determination or R square was 0.433 implies 43.3% of the changes in the dependent variables can be explained by these three variables. It also indicates that risk awareness, attitude, and subjective norm which collectively explained 43.3% variation in intention. The remaining 56.7% can be explained by other variables. Additionally, the better the attitude, the higher the risk awareness of JAKIM staff leading to a higher intention to participate in motor *takaful*.

## 5. Conclusion

Based on this study, it was found that attitude and risk awareness strongly influenced the intention to participate in motor *takaful* applying theory of reasoned action (TRA) to the public services employees, specifically JAKIM staff at Putrajaya. The results can be used by *takaful* operators for marketing decisions on how to attract potential consumers especially *muslim* to participate in *takaful* knowing that risk awareness and attitude in this study importantly contributes to the prediction of intention to participate in motor *takaful*. The intervention strategies targeting risk awareness and attitude would certainly improve individual intentions to participate and the subsequent behaviour as applied in TRA. Knowing intention is not at satisfactory level, public acceptance toward *takaful* products may be improved and *takaful* companies should take the opportunity and give more effort to build consumer confidence in this product. Additionally, *takaful* companies may be benefited based on this findings in improving their service delivery and quality consistent with government aims for motor *takaful* as preferred choice since new policy commenced on July, 2017 by liberalization of the insurance and *takaful* sector as well as separation between life and general insurance among *takaful* companies in 2018.

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