

Ibrahim, Mohd Azizi; Nor, Alias Bin Mat; Raja Rizal Iskandar Raja Hisham

Article

Factors influencing Bumiputera contractors' acceptance of the contractor's all risk takāful product

ISRA International Journal of Islamic Finance

Provided in Cooperation with:

International Shari'ah Research Academy for Islamic Finance (ISRA), Kuala Lumpur

Suggested Citation: Ibrahim, Mohd Azizi; Nor, Alias Bin Mat; Raja Rizal Iskandar Raja Hisham (2021) : Factors influencing Bumiputera contractors' acceptance of the contractor's all risk takāful product, ISRA International Journal of Islamic Finance, ISSN 2289-4365, Emerald, Bingley, Vol. 13, Iss. 3, pp. 364-377,
<https://doi.org/10.1108/IJIF-09-2020-0188>

This Version is available at:

<https://hdl.handle.net/10419/302018>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by/4.0/>

Factors influencing Bumiputera contractors' acceptance of the contractor's all risk *takāful* product

Mohd Azizi Ibrahim, Alias Mat Nor and
Raja Rizal Iskandar Raja Hisham

Islamic Business School, Universiti Utara Malaysia, Sintok, Malaysia

Abstract

Purpose – This research aims to investigate the factors that can influence Bumiputera contractors' acceptance of the Contractor's All Risks (CAR) *takāful* (Islamic insurance) product using the theory of reasoned action (TRA).

Design/methodology/approach – Using the method of quantitative surveys, 414 questionnaires were collected from targeted Bumiputera contractors in Malaysia (grade G1 to grade G7), except in Sabah and Sarawak, that are registered with the Construction Industry Development Board (CIDB) and are also members of Persatuan Kontraktor Melayu Malaysia (PKMM). The data was analysed using the partial least squares structural equation modeling (PLS-SEM) technique.

Findings – The findings from the PLS-SEM analysis show that attitude, subjective norm, religiosity and awareness have a positive relationship with Bumiputera contractors' acceptance of the CAR *takāful* product. Religiosity appeared to be the most significant factor influencing Bumiputera contractors' acceptance of the CAR *takāful* product.

Research limitations/implications – The respondents in this study only comprised Bumiputera contractors in Peninsular Malaysia, excluding those from Sabah and Sarawak. Therefore, it is not possible to generalise the findings to a broader population.

Practical implications – *Takāful* operators and their sales and marketing departments need to act proactively in promoting the benefits of investing in CAR *takāful* that follows Sharī'ah (Islamic law) rules and principles. They should create mechanisms to market CAR *takāful* better, thus accelerating its acceptance rate among contractors.

Originality/value – The paper uses the proposed extended TRA model, which includes the variables of religiosity and awareness in the TRA model. These variables were successfully integrated in the model, and the findings show that they have significantly contributed to the acceptance of the CAR *takāful* product among Bumiputera contractors.

Keywords Attitude, Awareness, CAR *takāful*, Religiosity, Subjective norm, Theory of reasoned action (TRA)

Paper type Research paper

Introduction

The construction industry is riskier than other industries. The primary method to cover for risks in construction projects is through construction insurance (Babu and Kanchana, 2014). The Contractor's All Risks (CAR) insurance policy, which provides complete insurance policies for construction projects, is well-known in the construction industry (Perera *et al.*, 2008). It is a short-term insurance policy that is especially designed to insure building



construction works and other civil engineering works. It protects all parties involved in the construction project against any loss or physical damage that may arise for various reasons (Musundire and Aigbavboa, 2015).

Conventional insurance, however, involves elements of *ribā* (usury), *maysir* (gambling) and *gharar* (uncertainty) (National Fatwa Committee Malaysia, 1972). *Takāful* has been identified as a permissible alternative by the Shariah Advisory Council of Bank Negara Malaysia (SAC-BNM, 2010). Thus, CAR *takāful* represents a Shari'ah-compliant alternative to CAR insurance, covering against loss or damage at the construction site during the construction period, including third party liabilities such as property damage and physical injury (Zulkifli *et al.*, 2012).

The total number of contractors who registered with the Construction Industry Development Board (CIDB) in Malaysia was 81,086 as at 31 December 2019. This figure, however, excludes contractors in Sabah and Sarawak. Of this number, 46,704 contractors (57.60%) represent Bumiputera contractors (CIDB, 2020).

Non-Muslim contractors are free to select either *takāful* or conventional insurance. With the availability of *takāful*, which provides an option over conventional insurance and allows Muslims to abide by the commands of Allah (SWT), it has become an obligation for Muslim contractors to choose the CAR *takāful* product.

Unfortunately, Mohd Fauzi *et al.* (2016) found low awareness of the *takāful* concept and its principles among contractors. Bank Negara Malaysia's statistics report (BNM, 2021) shows that CAR *takāful*'s share of gross contributions in the local insurance industry were only around RM96.5 million as at end-2020 as compared to CAR insurance, whose share of gross premiums reached RM575.2 million. Moreover, CAR *takāful*'s due contribution of RM21.0 million was much lower than the earned premium income of CAR insurance at RM304.6 million (BNM, 2021). Furthermore, Mohamed and Alhabshi (2015) observed that *takāful* penetration rates are still relatively low and are far behind the conventional insurance market. Md Husin (2019) further added that the *takāful* penetration rate is low among B40 households, although the rate increased by 0.7% from 14.5% in 2017 to 15.2% in 2018.

This study focuses on the CAR *takāful* product in construction projects and identifies factors that can influence Bumiputera contractors in choosing the CAR *takāful* product using the theory of reasoned action (TRA). Four variables are studied, including attitude, subjective norm, religiosity and awareness, by distributing questionnaires to selected Bumiputera contractors in Malaysia. The contractors located in Sabah and Sarawak were, however, excluded in the study.

This paper is accordingly structured as follows: the next section discusses previous studies and the study's hypotheses. The third section focuses on the methodology of the research. The fourth section discusses the study's results, and the final section summarises the findings of the research and suggests some recommendations.

Literature review

CAR *takāful*

CAR *takāful* is categorised under the general *takāful* product (Zulkifli *et al.*, 2012). The CAR *takāful* certificate covers any damage or loss during the construction and maintenance period, including third party liabilities (BNM, 2005). The basic cover and exclusion of the CAR *takāful* certificate is shown in Table 1.

There are four *takāful* operators offering the CAR *takāful* product in Malaysia:

- (1) Syarikat Takaful Malaysia Am Berhad
- (2) Etiqa General Takaful Berhad

(3) Takaful Ikhlas General Berhad

(4) Zurich General Takaful Malaysia Berhad

The number of registered general *takāful* agents was 9,278 as at 31 December 2020 (Malaysian Takaful Association, 2020).

366*Theory of reasoned action*

The TRA assumes that humans are always rational and use information systematically (Fishbein and Ajzen, 1975). A key aspect of the TRA is that human behaviour is influenced by subjective norms and attitude towards the behaviour. The TRA argues that intention to perform a behaviour directly influences the behaviour (Ajzen and Fishbein, 1980).

The TRA has been applied in *takāful* to explain human behaviour (Ab. Rahim and Amin, 2011; Amin, 2012). Nevertheless, there are limited studies on the application of TRA in the *takāful* literature. More so, there are no published studies that use TRA in the CAR *takāful* field. Thus, this research is the first to examine the factors that could affect contractors' behaviour. Moreover, the authors identified two additional variables, namely religiosity and awareness, as contributions to the TRA. These variables are expected to influence the acceptance of Bumiputera contractors of the CAR *takāful* product.

Attitude

Attitude is defined by Fishbein and Ajzen (1975) as the effect of one's feelings on a particular behaviour, whether positive or negative. Ajzen and Fishbein (1980) added that attitude affects one's behaviour, whether it is good or bad behaviour. Besides, Doane *et al.* (2016) suggested that attitude is a form of mental preparation for responding positively or

| Product | Basic cover | Exclusion |
|--------------------------------|--|--|
| CAR <i>takāful</i> certificate | Loss or damage to plants, materials, temporary works and anything brought to the site by the contractor <i>Third party liability</i> : Property damage and bodily injury to third parties | <ol style="list-style-type: none"> (1) Loss due to strike, civil commotion, warlike operations and war (2) Loss or damage due to faulty designs (3) Loss or damage to waterborne vessels or vehicles licensed for aircraft or general road use (4) Excess to be borne by the participant (5) Loss or damage to drawings, files, bills, accounts, cheques, notes, currency and securities (6) Loss discovered at time of taking inventory (7) Loss due to wilful acts of any manager, director, or site official (8) Cost of replacement of workmanship and/ or defective material (9) Consequential loss howsoever caused (10) Loss or damage due to electrical and/or mechanical breakdown of construction machinery and plant (11) Nuclear risks (12) Wear and tear, corrosion and deterioration |

Table 1.

Basic cover and exclusion of the CAR *takāful* certificate

Source(s): Zulkifli *et al.* (2012)

negatively through the experience of an object or idea. [Ajzen \(1991\)](#) outlined three steps to predict attitude:

- (1) To measure how people rate the outcome of each belief,
- (2) To measure the strength of beliefs by asking for people's views to indicate the likelihood that the behaviour will produce results and
- (3) To multiply the product for each evaluation result with the same belief to predict a person's attitude.

Within the *takāful* literature, several studies have shown significant influence of attitude towards the selection of *takāful* products ([Md Hussein and Ab Rahman, 2016a, b](#); [Razak et al., 2018](#); [Aziz et al., 2019](#); [Farhat et al., 2019](#); [Bhatti and Md Hussin, 2020](#)).

Therefore, the authors believe that attitude may affect Bumiputera contractors' choice of CAR *takāful*. Hence, following these empirical results, the first hypothesis is developed as follows:

H1. Attitude has a positive relationship with CAR *takāful* acceptance.

Subjective norm

According to [Ajzen \(1991\)](#), subjective norm means one's perception of social pressure in doing the behaviour and it is determined by normative beliefs. [Ajzen \(2002\)](#) argued that normative beliefs refer to beliefs of individuals or significant reference groups such as teachers, physicians, supervisors and colleagues. Moreover, [Chu and Wu \(2004\)](#) associated subjective norms with normative beliefs (those of family and friends) as well as secondary normative beliefs (those of supervisors and peers). [Rhodes and Courneya \(2003\)](#) suggested that subjective norm is influenced by social pressures from family members, peers and colleagues without differentiating between primary and secondary influences.

Past studies conducted by [Amin \(2012\)](#), [Md Husin et al. \(2016\)](#), [Razak et al. \(2018\)](#), [Raza et al. \(2019\)](#), [Farhat et al. \(2019\)](#) and [Bhatti and Md Hussin \(2020\)](#) have shown that the subjective norm relationship with *takāful* products' selection is positive and significant. Subjective norm is also a motivating factor for customers' acceptance of a product ([Amin et al., 2013, 2014](#); [Ganesan et al., 2020](#)).

Thus, the second hypothesis is proposed as follows:

H2. Subjective norm has a positive relationship with CAR *takāful* acceptance.

Religiosity

[Achour et al. \(2019\)](#) who studied the role of religiosity on the well-being of elderly Muslims in Malaysia defined religiosity as the elderly's perceptions of religious beliefs, worship and prayer. [Khraim et al. \(1999\)](#) argued that religiosity is an element of culture that pervades every aspect of society and permeates individuals' lives, whether they are believers or non-believers.

Findings from previous research in the context of *takāful* suggested that the relationship between religiosity and *takāful* adoption is positive and significant ([Jaffar and Musa, 2013](#); [Bassir et al., 2014](#); [Yusoff and Kamdari, 2014](#); [Mansor et al., 2015](#); [Ali et al., 2019](#); [Hassan and Abbas, 2020](#); [Shaikh et al., 2020](#)).

In the case of CAR *takāful*, [Mohd Fauzi and Abd Rashid \(2012\)](#) found that 69% of their sampled respondents considered procuring CAR *takāful* in construction projects as it is an Islamic product that all Muslims should support.

Therefore, the third hypothesis is developed based on the above discussion:

H3. Religiosity has a positive relationship with CAR *takāful* acceptance.

Awareness

Awareness means the individual's passive involvement to increase interest in something (Bickford and Reynolds, 2002). Abdullah (2006) added that the subjective idea of one's experience of something can be developed through the factor of awareness. Ambali and Bakar (2014) further argued that everyone has a different level of awareness.

Muhamad *et al.* (2016) suggested that public awareness is an essential factor in improving the financial and *takāful* market. Prior research has supported the impact of awareness upon adoption of *takāful* products (Md Hussein and Ab Rahman, 2016a; Salleh and Laksana, 2018; Ali *et al.*, 2019; Raza *et al.*, 2019; Hassan and Abbas, 2020; Shaikh *et al.*, 2020). With regard to CAR *takāful*, Mohd Fauzi and Abd Rashid (2012) argued that most contractors are generally aware of it.

It is noted that the results of some of the past studies were contradictory whereby awareness had a negative impact on the acceptance of *takāful*, such as in the case of Akhter and Hussain (2012), Ismail *et al.* (2013), Soualhi and al-Shammari (2015), Md Hussein and Ab Rahman (2016b) and Salleh and Laksana (2018). Nonetheless, due to mixed and inconclusive results from past empirical studies, this study develops the following proposition about the expected relationship between Bumiputera contractors' awareness and its influence on their selection of the CAR *takāful* product:

H4. Awareness has a positive relationship with CAR *takāful* acceptance.

Research methodology

Sampling procedure

The respondents in this study were selected among Bumiputera contractors (grade G1 to grade G7) in Malaysia, excluding Sabah and Sarawak, that are registered with CIDB and are members of PKMM. As mentioned earlier, according to CIDB (2020), as of 31 December 2019, the total number of Bumiputera contractors throughout Malaysia (except for Sabah and Sarawak) was 46,704. Therefore, guided by Krejcie and Morgan (1970), 760 sets of questionnaire were distributed between April and June 2020 to the respective Bumiputera contractors, who are authorised company officers in the registration license. 471 questionnaires were returned, of which 414 responses (54.47%) were found to be complete and could be used for data analysis.

In this study, all variables are adapted from previous studies involving more than one author, including: Md Husin *et al.* (2016), Aziz *et al.* (2019), Ali *et al.* (2019), Farhat *et al.* (2019), Bhatti and Md Hussin (2020), Hassan and Abbas (2020) and Shaikh *et al.* (2020).

Technique of analysis

The authors used the PLS-SEM technique because PLS-SEM can analyse abnormal data and complex models as well as analyse a small sample size (Hair *et al.*, 2019). All data obtained were analysed using the SmartPLS 3.0 (Ringle *et al.*, 2015) to evaluate the measurement and structural model (Hair *et al.*, 2019).

Findings

Respondents' profile

The respondents comprised 287 male (69.32%) and 127 female (30.68%) Bumiputera contractors. The largest group of respondents (30.68%) belonged in the category of 41–50 years. The remaining were in the following age groups: 51 and above (26.81%), 31 to 40 (20.53%) and 20 to 30 (7.49%). The 414 respondents were also registered with CIDB, as categorised in the grades mentioned in Table 2.

Assessment of the measurement model

The assessment of the measurement model was conducted based on the guidelines set by Hair *et al.* (2019) and Hair *et al.* (2020), including evaluation of internal consistency reliability, indicator loadings, convergent validity and discriminant validity.

Internal consistency reliability. The recommended value of composite reliability should be higher than 0.70 while the construct indicators' loadings need to be above 0.70 (Hair *et al.*, 2020). Table 3 shows that the composite reliability for each variable exceeds the recommended 0.70 threshold value and is therefore acceptable.

Indicator loadings. The indicator loading value above 0.708 is recommended (Hair *et al.*, 2020). Table 3 illustrates the correlation between items with loading values from 0.731 to 0.967. The results performed on 38 indicators show that two indicators, i.e. ACT8 (0.596) and ACT9 (0.432), were removed from the construct because their loadings were below 0.708.

Convergent validity. Convergence validity was tested based on the average variance extracted (AVE). The AVE threshold value higher than 0.50 is recommended (Hair *et al.*, 2019). Table 3 shows AVE values with a high loading value above 0.50 per construct, where the AVE value for each construct is between 0.748 and 0.872. These results indicate that all indicators used have achieved convergent validity for each variable in this study.

Discriminant validity. Heterotrait–monotrait ratio criteria (HTMT) were tested to evaluate discriminant validity. The HTMT value less than 0.85 is recommended (Hair *et al.*, 2019). Table 4 depicts that the value of all variables in the HTMT test is lower than 0.85, hence fulfilling the discriminant validity requirement. This further enables the researchers to proceed with subsequent analysis at the structural model assessment stage for hypothesis testing.

Assessment of the structural model

Next, the structural model assessment is presented for further analysis, involving an evaluation of the coefficient of determination (R^2), effect size (f^2), predictive relevance (Q^2) and structural model path relationships (hypotheses testing).

R^2 value. Hair *et al.* (2019) suggested that the R^2 value will determine the predictive power of the structural model based on the following guidelines: 0.25 (weak), 0.50 (moderate) and 0.75 (substantial). The research finds that attitude (ATD), subjective norm (SN), religiosity (RGS) and awareness (AWN) were able to explain 58.0% of the total variance in acceptance of CAR *takāful* (ACT) and can be categorised as “moderate approaching substantial” based on Hair *et al.* (2019).

f^2 value. The f^2 effect size test is to see the change in strength that occurs to the value of R^2 in making predictions based on the study model. Specifically, it looks at the dependent variable's effect when an independent variable is dropped from the study model. Hair *et al.*

| Grade | No. of respondents | Percentage of respondents |
|-------|--------------------|---------------------------|
| G1 | 137 | 33.09 |
| G2 | 76 | 18.36 |
| G3 | 32 | 7.73 |
| G4 | 23 | 5.56 |
| G5 | 24 | 5.80 |
| G6 | 34 | 8.21 |
| G7 | 88 | 21.26 |
| Total | 414 | 100.00 |

Source(s): Authors' own

Table 2.
Respondents'
registration with CIDB

| Variables | Indicators | Loadings | Composite reliability (CR) | Average variance extracted (AVE) |
|--|---|----------|----------------------------|----------------------------------|
| Acceptance of CAR <i>takāful</i> (ACT) | 1 I accept the CAR <i>takāful</i> product because it is a way of my life | 0.923 | 0.954 | 0.748 |
| | 2 I accept the CAR <i>takāful</i> product because it is beneficial | 0.946 | | |
| | 3 I accept the CAR <i>takāful</i> product because it is under my control | 0.818 | | |
| | 4 I accept the CAR <i>takāful</i> product because I am aware about it | 0.959 | | |
| | 5 I accept the CAR <i>takāful</i> product because I understand it | 0.731 | | |
| | 6 I accept the CAR <i>takāful</i> product because it is free from <i>ribā</i> | 0.795 | | |
| | 7 I accept the CAR <i>takāful</i> product because people recommended it to me | 0.856 | | |
| Attitude (ATD) | 1 I feel that choosing the CAR <i>takāful</i> product is a brilliant idea | 0.942 | 0.980 | 0.858 |
| | 2 I feel that choosing the CAR <i>takāful</i> product is the best idea | 0.943 | | |
| | 3 I love the idea of choosing the CAR <i>takāful</i> product | 0.920 | | |
| | 4 I feel that choosing the CAR <i>takāful</i> product is beneficial | 0.942 | | |
| | 5 I feel that the CAR <i>takāful</i> product is a pleasant idea | 0.939 | | |
| | 6 I feel that the CAR <i>takāful</i> product is an appealing idea | 0.967 | | |
| | 7 I feel that the CAR <i>takāful</i> product achieves the objectives of Shari'ah | 0.872 | | |
| | 8 I feel that the CAR <i>takāful</i> product is one of the best insurance products | 0.880 | | |
| Subjective norm (SN) | 1 Those who influence my behaviour expect me to accept the CAR <i>takāful</i> product | 0.879 | 0.962 | 0.785 |
| | 2 Those who are important to me expect me to accept the CAR <i>takāful</i> product | 0.907 | | |
| | 3 Those who are close expect me to accept the CAR <i>takāful</i> product | 0.925 | | |
| | 4 Those who influence my decisions expect me to accept the CAR <i>takāful</i> product | 0.953 | | |
| | 5 I am influenced by my family to choose the CAR <i>takāful</i> product | 0.871 | | |
| | 6 I am influenced by my close friends to choose the CAR <i>takāful</i> product | 0.852 | | |
| | 7 It is expected by others that I should accept the CAR <i>takāful</i> product | 0.808 | | |

Table 3.
Loadings (after deletion)

(continued)

| Variables | Indicators | Loadings | Composite reliability (CR) | Average variance extracted (AVE) |
|-------------------|--|----------|----------------------------|----------------------------------|
| Religiosity (RGS) | 1 The CAR <i>takāful</i> product is based on the Qur'an and <i>hadith</i> | 0.900 | 0.982 | 0.872 |
| | 2 The CAR <i>takāful</i> product is compliant with Islamic law | 0.943 | | |
| | 3 The CAR <i>takāful</i> product meets the objectives of Shari'ah | 0.930 | | |
| | 4 The CAR <i>takāful</i> product is free from <i>riba</i> | 0.944 | | |
| | 5 The CAR <i>takāful</i> product is free from gambling | 0.923 | | |
| | 6 The CAR <i>takāful</i> product is free from fraud | 0.937 | | |
| | 7 The CAR <i>takāful</i> product is free from any doubt in the way the transaction is performed | 0.952 | | |
| | 8 The CAR <i>takāful</i> product follows the Islamic principles of doing business | 0.941 | | |
| Awareness (AWN) | 1 I receive enough information about the CAR <i>takāful</i> product | 0.849 | 0.965 | 0.822 |
| | 2 I receive enough information about the benefits of the CAR <i>takāful</i> product | 0.856 | | |
| | 3 I know that the CAR <i>takāful</i> product offered is Shari'ah-compliant | 0.904 | | |
| | 4 I know that the CAR <i>takāful</i> product is free from <i>riba</i> | 0.930 | | |
| | 5 I know that the CAR <i>takāful</i> product is according to the needs of customers | 0.953 | | |
| | 6 I know that the CAR <i>takāful</i> product really helps in the promotion of Islamic values to customers and the public | 0.943 | | |

Source(s): Authors' own

Table 3.

| | ACT | ATD | AWN | RGS | SN |
|-----|-------|-------|-------|-------|----|
| ACT | | | | | |
| ATD | 0.661 | | | | |
| AWN | 0.738 | 0.770 | | | |
| RGS | 0.730 | 0.706 | 0.840 | | |
| SN | 0.460 | 0.395 | 0.491 | 0.403 | |

Note(s): ACT = Acceptance of CAR *takāful*; ATD = Attitude; AWN = Awareness; RGS = Religiosity; SN = Subjective norm

Source(s): Authors' own

Table 4.
Discriminant validity
analysis by HTMT

(2019) categorised the f^2 effect size according to the following guidelines: 0.35 (large), 0.15 (medium) and 0.02 (small). The respective effect sizes of the latent variables are shown in Table 5.

Q^2 value. The predictive relevance assessment tested the model prediction ability using Stone–Geisser’s analysis to test the Q^2 value (Hair *et al.*, 2019). Hair *et al.* (2020) suggested that a study model having a Q^2 greater than zero (>0) is considered of predictive relevance. Besides, the study model with a more positive Q^2 value shows more predictive relevance. The result of the Q^2 cross-validated redundancy test analysis for this study is shown in Table 6 where $Q^2 = 0.426$, i.e. $Q^2 > 0$.

Structural model path relationships

The hypotheses were analysed using path coefficient analysis. The sample size of 4,999 was used for the bootstrap as suggested by Henseler *et al.* (2016). Table 7 shows the path coefficient test analysis in the structural model assessment based on beta (β), t -values and p -values (Hair *et al.*, 2017; Raja Hisham, 2017). The value of β is shown by “Original Sample (O)” while the value of t is indicated by “ T Statistics” (Raja Hisham, 2017). The value of t is determined by the significance level of a relationship, namely $*t > 1.65$ ($p < 0.10$), $**t > 1.96$ ($p < 0.05$) and $***t > 2.57$ ($p < 0.01$) (Hair *et al.*, 2017; Law and Fong, 2020). Table 7 presents the bootstrapping results and Figure 1 presents the structural model.

The results of the study show that the TRA model explains 58.0% of the variance in CAR *takāful* product acceptance (ACT). The result of R^2 suggests that Bumiputera contractors’ acceptance of the CAR *takāful* product is significantly explained by the variables ATD, SN, RGS and AWN. However, another 42.0% can be translated by other variables.

Table 5.
 f^2 of factors

| Exogenous variable | ACT | Effect size (f^2) on | Rating |
|--------------------|-------|--------------------------|--------------|
| ACT | | | |
| ATD | 0.032 | | Small effect |
| AWN | 0.038 | | Small effect |
| RGS | 0.081 | | Small effect |
| SN | 0.027 | | Small effect |

Source(s): Authors’ own

Table 6.
The construct’s cross-validated redundancy

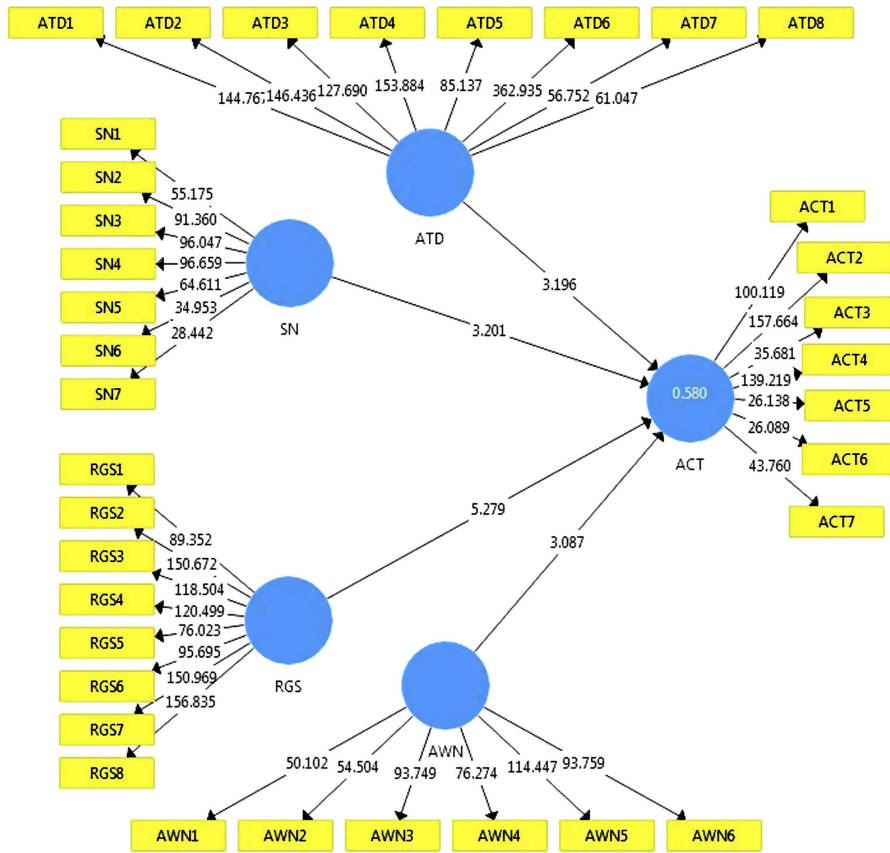
| | SSO | SSE | $Q^2 (=1-SSE/SSO)$ |
|-----|----------|----------|--------------------|
| ACT | 2898.000 | 1663.654 | 0.426 |

Source(s): Authors’ own

Table 7.
Hypotheses testing results

| Hypothesis | Relationship | Path coefficients (β) | Std. error | t | p | Supported |
|------------|--------------|-------------------------------|------------|-------|----------|-----------|
| H1 | ATD → ACT | 0.180 | 0.056 | 3.196 | 0.001*** | Yes |
| H2 | SN → ACT | 0.122 | 0.038 | 3.201 | 0.001*** | Yes |
| H3 | RGS → ACT | 0.326 | 0.062 | 5.279 | 0.000*** | Yes |
| H4 | AWN → ACT | 0.252 | 0.082 | 3.087 | 0.002*** | Yes |

Note(s): *** $p < 0.01$ (2-tailed)



Source(s): Authors' own

Figure 1.
Structural model

This study shows that the variables ATD ($\beta = 0.180, t = 3.196, p = 0.001$), SN ($\beta = 0.122, t = 3.201, p = 0.001$), RGS ($\beta = 0.326, t = 5.279, p = 0.000$) and AWN ($\beta = 0.252, t = 3.087, p = 0.002$) significantly affect Bumiputera contractors' acceptance of the CAR *takāful* product. Hence, hypotheses H1, H2, H3 and H4 are supported respectively.

Based on the findings, RGS scored the highest beta value and represents the most significant factor that affects Bumiputera contractors' acceptance of the CAR *takāful* product.

Conclusion and recommendation

The proposed extended TRA, which includes the religiosity and awareness factors within the TRA model, shows that these factors have a positive relationship with acceptance of CAR *takāful*. The results demonstrated that attitude, subjective norm, religiosity and awareness positively influence Bumiputera contractors' acceptance of the CAR *takāful* product. Moreover, the results of this study have shown a moderate R^2 value of 0.58. The authors argue that the R^2 value would be more substantial if other constructs are included in the

model such as perceived behavioural control as suggested by Ajzen (1991). Therefore, future research should consider including the perceived behavioural control factor in their model.

The study results show that religiosity significantly affects Bumiputera contractors' acceptance of the CAR *takāful* product. The results suggest that the majority of contractors are Muslims, and Bumiputera contractors, in particular, are very concerned about religious values. This result indicates that most Bumiputera contractors do not choose conventional insurance due to Shari'ah non-compliance. Therefore, CAR *takāful* is the best option for those in construction projects. Besides, the study also reported that subjective norm obtained the lowest beta value of 0.122. These findings suggest the high level of knowledge possessed by the respondents on CAR *takāful*. Therefore, the respondents do not depend on the opinion of others when deciding to participate in CAR *takāful* or not. Acceptance of CAR *takāful* is not mandatory so far; Bumiputera contractors still adopt CAR *takāful* on a voluntary basis.

These findings mean that *takāful* operators and their sales and marketing department should go one step further in promoting the benefits of investing in CAR *takāful* that follows Shari'ah rules and principles and they should develop mechanisms to market CAR *takāful* better, thus accelerating its acceptance rate among contractors. It can be achieved effectively through modern methods such as billboard advertising, mobile advertising, i.e. Facebook, WhatsApp messenger, Telegram messenger and twitter, to create a positive perception of the CAR *takāful* product. Moreover, *takāful* operators need to further strengthen customer loyalty and develop retention programs by adding financial benefits to enhance customer relationships. *Takāful* operators can also offer marketing programs that reward loyal customers.

The findings concluded that religiosity is considered the most significant factor in Bumiputera contractors' acceptance of CAR *takāful*. It shows that *takāful* operators must remain steadfast in their compliance to Islamic principles. *Takāful* operators should emphasise religious values such as ethics and manners. The *takāful* operator and its agent must also clearly explain the contract details to customers without hiding any facts before they proceed with signing of the contract. Thus, customers will have a better understanding of the content of the contract and it may increase customers' satisfaction with and confidence in *takāful* services.

The authors suggest that *takāful* operators and *takāful* agents should provide customer-oriented services to ensure a sustainable model of operations. The industry's nature requires agents to provide advisory services to new and existing customers. Agents need to build a good and lasting communication network to provide customer satisfaction, especially in the case of Bumiputera contractors.

References

- Ab Rahim, F. and Amin, H. (2011), "Determinants of Islamic insurance acceptance: an empirical analysis", *International Journal of Business and Society*, Vol. 12 No. 2, pp. 37-54.
- Abdullah, A.N. (2006), "Perception and awareness among food manufacturers and marketers on halal food in the Klang Valley", Unpublished Master dissertation, Universiti Putra Malaysia, Selangor.
- Achour, M., Ab Halim, A.B., Ali, A.R.H., Sa'ari, C.Z.B. and Al-Nahari, A.A.A.Q. (2019), "Religiosity and subjective well-being towards a balanced civilization: a study among Muslim older adults in Malaysia", *Journal of Al-Tamaddun*, Vol. 14 No. 2, pp. 153-165.
- Ajzen, I. (1991), "Theory of planned behaviour", *Organization Behavior and Human Decision Process*, Vol. 50, pp. 179-211.
- Ajzen, I. (2002), "Perceived behavioural control, self-efficacy, locus of control, and the theory of planned behaviour", *Journal of Applied Social Psychology*, Vol. 32 No. 4, pp. 665-683.
- Ajzen, I. and Fishbein, M. (1980), *Understanding Attitudes and Predicting Social Behaviour*, Prentice-Hall, Englewood Cliffs, NJ.

- Akhter, W. and Hussain, T. (2012), "Takāful standards and customer perceptions affecting *takāful* practices in Pakistan: a survey", *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 5, pp. 229-240.
- Ali, M., Raza, S.A., Puah, C.H. and Amin, H. (2019), "Consumer acceptance toward *takāful* in Pakistan", *International Journal of Emerging Markets*, Vol. 14 No. 4, pp. 620-638.
- Ambali, A.R. and Bakar, A.N. (2014), "People's awareness on halal foods and products: potential issues for policy-makers", *Procedia-Social and Behavioral Sciences*, Vol. 121, pp. 3-25.
- Amin, H. (2012), "An analysis on Islamic insurance participation", *Jurnal Pengurusan*, Vol. 34, pp. 11-20.
- Amin, H., Abdul Rahman, A.R. and Abdul Razak, D. (2013), "An integrative approach for understanding Islamic home financing adoption in Malaysia", *International Journal of Bank Marketing*, Vol. 31 No. 7, pp. 544-573.
- Amin, H., Abdul Rahman, A.R. and Abdul Razak, D. (2014), "Consumer acceptance of Islamic home financing", *International Journal of Housing Markets and Analysis*, Vol. 7 No. 3, pp. 307-332.
- Aziz, S., Md Husin, M., Hussin, N. and Afaq, Z. (2019), "Factors that influence individuals' intentions to purchase family *takāful*: mediating role of perceived trust", *Asia Pacific Journal of Marketing and Logistics*, Vol. 31 No. 1, pp. 81-104.
- Babu, M.A. and Kanchana, D.S. (2014), "Role of insurance in construction and infrastructure projects", *International Journal of Civil Engineering and Technology*, Vol. 5 No. 12, pp. 206-210.
- Bassir, N.F., Zakaria, Z., Hasan, H.A. and Alfian, E. (2014), "Factors influencing the adoption of Islamic home financing in Malaysia", *Transformations in Business and Economics*, Vol. 13 No. 1, pp. 155-174.
- Bhatti, T. and Md Hussin, M. (2020), "An investigation of the effect of customer beliefs on the intention to participate in family *takāful* schemes", *Journal of Islamic Marketing*, Vol. 11 No. 3, pp. 709-727.
- Bickford, D.M. and Reynolds, N. (2002), "Activism and service-learning: reframing volunteerism as acts of dissent pedagogy", *Critical Approaches to Teaching Literature, Language, Composition and Culture*, Vol. 8 No. 2, pp. 229-252.
- BNM (2005), "General *takāful*: a conceptual framework", available at: <https://www.bnm.gov.my/documents/20124/792374/booklet.en.pdf> (accessed 22 May 2020).
- BNM (2021), "Monthly highlights and statistics", available at: https://www.bnm.gov.my/documents/20124/3628704/ebook_4.pdf (accessed 2 June 2021).
- Chu, P.Y. and Wu, T.Z. (2004), "Factors influencing tax-payer information usage behaviour: test of an integrated model", *Proceedings from Pacific Asia Conference on Information System*, Shanghai.
- CIDB (2020), "Heights: construction from a new angle", available at: <https://www.cidb.gov.my/sites/default/files/2020-03/CIDB-Jan-Mar2020-FA-Compress.pdf> (accessed 22 November 2020).
- Doane, A.N., Kelley, M.L. and Pearson, M.R. (2016), "Reducing cyberbullying: a theory of reasoned action-based video prevention program for college students", *Aggressive Behaviour*, Vol. 42 No. 2, pp. 136-146.
- Farhat, K., Aslam, W. and Sanuri, B.M.M.S. (2019), "Predicting the intention of generation M to choose family *takāful* and the role of *halal* certification", *Journal of Islamic Marketing*, Vol. 10 No. 3, pp. 724-742.
- Fishbein, M. and Ajzen, I. (1975), *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*, Addison-Wesley, Reading, MA.
- Ganesan, Y., Pitchay, A.B.A. and Nasser, M.A.M. (2020), "Does intention influence the financial literacy of depositors of Islamic banking? A case of Malaysia", *International Journal of Social Economics*, Vol. 47 No. 5, pp. 675-690.
- Hair, J.F.J., Hult, G.T.M., Ringle, C.M. and Sarstedt, M. (2017), *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, 2nd ed., Sage Publications, Thousand Oaks, CA.

- Hair, J.F., Risher, J.J., Sarstedt, M. and Ringle, C.M. (2019), "When to use and how to report the results of PLS-SEM", *European Business Review*, Vol. 31 No. 1, pp. 2-24.
- Hair, J.F. Jr, Howard, M.C. and Nitzl, C. (2020), "Assessing measurement model quality in PLS-SEM using confirmatory composite analysis", *Journal of Business Research*, Vol. 109, pp. 101-110.
- Hassan, H.A. and Abbas, S.K. (2020), "Factors influencing the investors' intention to adopt *takāful* (Islamic insurance) products", *Journal of Islamic Marketing*, Vol. 11 No. 1, pp. 1-13.
- Henseler, J., Hubona, G. and Ray, P.A. (2016), "Using PLS path modeling in new technology research: updated guidelines", *Industrial Management and Data Systems*, Vol. 116 No. 1, pp. 2-20.
- Ismail, N., Othman, A.A., Yousop, N.L.M., Mat Din, S.Z., Abu Bakar, N., Noh, M.K. and Shafi, R.M. (2013), "A study of the awareness level of *takāful* products among micro enterprises in Malaysia", *Journal of Modern Accounting and Auditing*, Vol. 9 No. 11, pp. 1535-1542.
- Jaffar, M.A. and Musa, R. (2013), "Determinants of attitude towards Islamic financing among *halal*-certified micro and SMEs: a proposed conceptual framework", *International Journal of Education and Research*, Vol. 1 No. 8, pp. 1-10.
- Khram, H.S., Mohamed, O. and Jantan, M. (1999), "Measuring religiosity in consumer research", *Proceedings of the 3rd Asean Academy of Management Conference*, Terengganu, pp. 652-661.
- Krejcie, R.V. and Morgan, D.W. (1970), "Determining sample size for research activities", *Educational and Psychological Measurement*, Vol. 30, pp. 607-610.
- Law, L. and Fong, N. (2020), "Applying partial least squares structural equation modeling (PLS-SEM) in an investigation of undergraduate students' learning transfer of academic English", *Journal of English for Academic Purposes*, Vol. 46, p. 100884.
- Malaysian Takaful Association (2020), "Annual report 2020", available at: <https://www.malaysiantakaful.com.my/sites/default/files/mta-annual-report-final.pdf> (accessed 2 June 2021).
- Mansor, K.A., Masduki, R.M.N., Mohamad, M., Zulkarnain, N. and Aziz, N.A. (2015), "A study on factors influencing Muslim consumers' preferences towards *takāful* products in Malaysia", *Romanian Statistical Review*, Vol. 2, pp. 78-89.
- Md Husin, M. (2019), "The dynamics of Malaysian *takāful* market: challenges and future prospects", *Journal of Islamic Finance*, Vol. 8, pp. 131-137.
- Md Husin, M., Ismail, N. and Ab Rahman, A. (2016), "The roles of mass media, word of mouth and subjective norm in family *takāful* purchase intention", *Journal of Islamic Marketing*, Vol. 7 No. 1, pp. 59-73.
- Md Hussein, M.M. and Ab Rahman, A. (2016a), "Do Muslims intend to participate in Islamic insurance? Analysis from theory of planned behaviour", *Journal of Islamic Accounting and Business Research*, Vol. 7 No. 1, pp. 42-58.
- Md Hussein, M.M. and Ab Rahman, A. (2016b), "Predicting intention to participate in family *takāful* scheme using decomposed theory of planned behaviour", *International Journal of Social Economics*, Vol. 43 No. 12, pp. 1351-1366.
- Mohamed, O.E.B. and Alhabshi, D.D.S.O. (2015), "Low market penetration of *takāful* among Malaysians: non-*takāful* customers' perspective", *International Journal of Ethics in Social Sciences*, Vol. 3 No. 1, pp. 5-22.
- Mohd Fauzi, P.N.F.N. and Abd Rashid, K. (2012), "The understanding of *takāful* among the contractors of the Malaysian construction industry", *Management in Construction Research Association (MiCRA) Postgraduate Conference*, Kuala Lumpur.
- Mohd Fauzi, P.N.F.N., Abd Rashid, K., Sharkawi, A.A., Hasan, S.F., Aripin, S. and Arifin, M.A. (2016), "*Takāful*: a review on performance, issues and challenges in Malaysia", *Journal of Scientific Research and Development*, Vol. 3 No. 4, pp. 71-76.
- Muhamad, S.F., Abdullah, N.A., Abdul Aziz, N.A. and Azmi, N.F. (2016), "The perception and awareness on *takāful*: a descriptive analysis between the gender", *Intercontinental Journal of Marketing Research Review*, Vol. 4 No. 10, pp. 58-63.

- Musundire, S. and Aigbavboa, C. (2015), "Management of construction risk through contractor's all risk insurance policy: a South Africa case study", *Bernard Price Institute for Palaeontological Research*, Vol. 38, pp. 1-17.
- National Fatwa Committee Malaysia (1972), "Draw minutes of meetings", *5th National Fatwa Committee Conference Meeting on 15th June 1972*, Kuala Lumpur.
- Perera, B.A.K.S., Rathnayake, R.M.C.K. and Rameezdeen, R. (2008), "Use of insurance in managing construction risks: evaluation of Contractors' All Risks (CAR) insurance policy", *Built-Environment - Sri Lanka*, Vol. 8 No. 2, pp. 24-31.
- Raja Hisham, R.R.I. (2017), "Kepimpinan dan tadbir urus pengendali *takāful* di Malaysia", Unpublished PhD thesis, Universiti Kebangsaan Malaysia, Selangor.
- Raza, S.A., Ahmed, R., Ali, M. and Qureshi, M.A. (2019), "Influential factors of Islamic insurance adoption: an extension of theory of planned behavior", *Journal of Islamic Marketing*, Vol. 11 No. 6, pp. 1497-1515.
- Razak, A.A., Muhammad, F., Hussin, M.Y.M., Ramdan, M.R. and Hadi, F.S.A. (2018), "Applying Ajzen's theory of planned behaviour on the participation of micro-entrepreneurs in micro-takaful", *International Journal of Academic Research in Business and Social Sciences*, Vol. 8 No. 11, pp. 1666-1679.
- Rhodes, R.E. and Courneya, K.S. (2003), "Investigating multiple components of attitude, subjective norm, and perceived control: an examination of the theory of planned behaviour in the exercise domain", *The British Journal of Social Psychology*, Vol. 42, pp. 129-146.
- Ringle, C.M., Wende, S. and Becker, J.M. (2015), "SmartPLS 3", *SmartPLS GmbH*, Boenningstedt, available at: <http://www.smartpls.com> (accessed 22 May 2020).
- SAC-BNM (2010), *Shari'ah Resolutions in Islamic Finance*, 2nd ed., Bank Negara Malaysia, Kuala Lumpur.
- Salleh, M.C.M. and Laksana, N.N.M. (2018), "Awareness of flood victims in the East-Coast region of Malaysia towards the *takāful* flood policy: a crosstabulation analysis based on demographic variables", *Management and Accounting Review*, Vol. 17 No. 1, pp. 45-58.
- Shaikh, I.M., Noordin, K.B., Arijo, S., Shaikh, F. and Alsharief, A. (2020), "Predicting customers' adoption towards family *takāful* scheme in Pakistan using diffusion theory of innovation", *Journal of Islamic Marketing*, Vol. 11 No. 6, pp. 1761-1776.
- Soualhi, Y. and Al Shammari, A.A.R. (2015), "Indicators of *takāful* awareness among Kuwaitis", *Journal of Islamic Banking and Finance*, Vol. 3 No. 2, pp. 75-89.
- Yusoff, R. and Kamdari, N.A. (2014), "Selection factors of the acceptance *al-ijarah thumma al-bay* (AITAB) in Kota Bharu, Kelantan", *Malaysian Journal of Business and Economics*, Vol. 1 No. 2, pp. 23-50.
- Zulkifli, A.M., Abd Rahman, B.H., Yassin, N. and Ramly, J. (2012), *Basic Takāful Practices: Entry Level for Practitioners*, IBFIM, Kuala Lumpur.

About the authors

Mohd Azizi Ibrahim is a PhD scholar in Islamic Banking and Finance at Universiti Utara Malaysia. He is the corresponding author and can be contacted at: zizie01@hotmail.com

Alias Mat Nor, PhD, is a Senior Lecturer at the Islamic Business School, College of Business, Universiti Utara Malaysia. Formerly he was Assistant Rector of Kolej Universiti Islam Perlis. He is a Coordinator for Professional Certificate (IFP) and presently is Coordinator for postgraduate at the Islamic Business School.

Raja Rizal Iskandar Raja Hisham, PhD, is a Senior Lecturer at the Islamic Business School, College of Business, Universiti Utara Malaysia. He is a Certified Innermetrix Consultant (CIC) specializing in psychometric assessments.

For instructions on how to order reprints of this article, please visit our website:

www.emeraldgrouppublishing.com/licensing/reprints.htm

Or contact us for further details: permissions@emeraldinsight.com