

INVESTIGATION OF THE DETERMINANTS OF CLIENTS' INTENTIONS TO USE TAKAFUL SERVICES IN GOMBE STATE USING AJZEN'S THEORY: A STUDY USING PARTIAL LEAST SQUARE STRUCTURAL EQUATION MODELLING

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Abstract

This study explores the determinants of client intention to adopt Takaful services in the North-east geopolitical zone of Nigeria. The paper expands on Ajzen's (1991) Theory of Planned Behaviour by including subjective norms, religious influence, social and demographic influences, and perceived usefulness. The sample size of the study is 400 respondents who were proportionately selected from the 11 local government areas of Gombe State. Data collected through structured questionnaires was analyzed using partial least square structural equation modelling. The study concludes that attitude towards purpose has a greater effect on changing consumer attitudes towards behavioural intentions. The paper recommends building societal knowledge and awareness of Takaful and financial inclusion through campaigns. Financial inclusion is crucial to Nigeria's Vision 2020, which aims to reduce the financially excluded adult population to at most 20% by 2020. The study's findings provide valuable insights for Takaful insurance operators and relevant government agencies in the development of strategies for the growth of the insurance industry and financial inclusion in Nigeria.

Introduction

To complement its Vision 2020 (Central Bank of Nigeria, 2012), the Federal Government of Nigeria launched a Financial Inclusion Policy (FIS) in 2012. The FIS was planned to reduce the number of financially excluded from 46.3% in 2012 to a maximum of 20.0% by 2020. Just about 31 million people, representing 36.5% of the population, had access to some formal financial services during the base year (Sulaiman, 2012). Following the

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aggiornamento of the seventies, Islamic financial institutions have been recognized as important towards reducing financial exclusion (Islahi, 2015; Newaz, Raman & Fam, 2015; Okeke, 2016). In furtherance to this belief, Yusuf (2012) and Kawojue (2015) sees Islamic insurance as having more potential in reducing financial exclusion, while Kareem (2016) believes Islamic banking is the better option. This paper agrees with Yusuf and Kawojue from the sway of Nigerian captains of industry, according to the reports of Onuba (2017) and Tolu-Kusimo (2018).

A mere 1.5 to 2 percent of Nigerians have some insurance and its penetration remains at less than 1 percent; a figure abysmally lower than in most other emerging markets, Enhancing Financial Innovation & Access (EFInA) (2012) estimates for example, in 2012 it was 15% for South Africa while Kenya had a 3.5% insurance penetration (EFInA, 2012). The situation of Nigeria is more disquieting. In particular, the low insurance penetration may be attributable to the fact that Northern Nigerians are predominantly Muslims who may have misgivings against mercantile insurance for religious consideration such as 'Gharar' (uncertainty), 'Maysir' (gambling) and 'Riba' (investments dependent on interest). The need to address these issues led to Takaful's emergence. Under the Business Growth and Consolidation Programme, the National Insurance Commission (NAICOM) has introduced market development strategies for the insurance industry project (Ayeleso, 2012) and the development of Takaful operational framework is one of the strategies for the insurance sector. NAICOM (2013) operational and registration guidelines for Takaful operators provides for Takaful windows to be operated by mercantile insurance companies to be referred to as 'operator window'. Niger Insurance Plc, Cornerstone Insurance Plc and African Alliance Insurance Company have all been licensed to operate such Takaful windows (NAICOM, 2013). So, the availability of Islamic insurance avenues is not a serious hindrance to participation. However, EFInA (2017) unveils a new aspect of the problem; adult population growth is faster than financial inclusion increment. By 2016, there were 40.1 million adults in Nigeria that were financially excluded representing 41.6% of the adult population. This calls for a higher rate of inclusion if Nigeria is to achieve its vision 2020:20 targets. The report though indicated an increase (from 1.1% in 2014 to 1.9% in 2016) in insurance penetration, was still dismal.

There is a clear difference between Takaful and mercantile insurance but there still seems to be a misconception and an attendant low acceptance of the Takaful (Abdu-Rahman, Ali, Che-Seman, & Wan-Ahmad, 2008; Abdul-Hamid, Osman & Amin-Nordin, 2009) which, could hinder future consumer participation. Razak, Idris, Yusuf, Jaapar and Ali (2013), Husin and Rahman (2013) and Maiyaki and Ayuba (2015) investigated this misconception. Razaket al. (2013) conducted their investigation in Malaysia by utilising descriptive statistics. They concluded perception as an important determinant of participation in Takaful. Husin and Raman's (2013) study was also based in Malaysia but with a particular bias to family Takaful schemes. In order to evaluate that the decision to buy a Takaful family is not only influenced by attitude but also by subjective norms and perceived behavioral influence, they relied on literature triangulation. Maiyaki and Ayuba (2015) based their analysis in Kano metropolis, a town located in Nigeria's north-west geopolitical region, the worst place in the financial inclusion index (EFInA, 2017), using the multiple regression methodology. They concluded that perception, awareness, trust and confidence significantly relate to attitude towards Takaful. In order to enable an individual to choose Takaful products in the most efficient way, this study presumes that there is a need to recognize the variables that an individual considers to be important in making the decision to participate in Takaful. To this end, we sought to determine the factors influencing the intention of consumers to adopt Takaful services in the North-east geopolitical zone of Nigeria through partial least square structural equation modeling.

Conceptual Review

The Takaful Concept

Takaful, whose root is Kafala as it appears in the Quran relating to Zakariyya and Maryam (the blessing of Allah be upon them both), denotes a bringing into a fold for care and nurturing to fare well. Advocates of Takaful further cite the injunction of Allah for mankind to congregate in doing well and not to congregate to do evil. Takaful is a reciprocal guarantee offered by a group of people living in the same community in the Islamic contract (Aqd) against a certain danger to life or property (Mahmood 1991; Billah 1998; and Hassan 2011). It is a mutual assistance arrangement. Takaful's fundamental aim is to compensate for a certain loss from the fund driven by the Islamic faith's principles of socially responsible investment (Newaz et al., 2015). Unlike mercantile insurance. In general, Takaful is a religious and ethically focused financial commodity that abhors confusion, *riba*, and exploitation. In its approach to pricing and some moral injunctions, it varies from merchant insurance (Billah, 1998). For Takaful, if the insured is unable to pay the insurance payment three times, after deducting any relevant fees, the previous sums charged will be returned to him or her. The theories and the practices underlying Takaful are based on religious injunctions. Because of these distinctions, Takaful's policies are meant to act like other traditional insurance products, but work differently in order to avoid prohibitive elements. Sulaiman (2012) claims that the Takaful industry is relatively new and constitutes just 1% of the worldwide insurance sector, but helps to increase the penetration of the insurance market in Nigeria (Kawojue, 2015).

Intention to adopt behaviour

Rogers (2003) opined that an adoption is a decision to utilise an idea as a course of action while a rejection is a decision to avoid the idea. Kotler and Keller (2012) refer to adoption as the intention of an individual to become a regular product user. The key determinant of individual behaviour is intention (Armitage and Christian, 2003; Sheeran, 2002). The action of an individual is therefore a result of what she plans to do (Sheeran, 2002). It is believed that aim is a result of attitude and social pressure converted into actual actions. The Theory of Reasoned Action (TRA) of Fishbein and Ajzen (1975) offers further rationale and, if further modified, involves actions over which an individual has no conscious control to become the theory of planned behavior (Ajzen, 1991).

How difficult people are willing to try and the efforts they make to perform a behavior is another way of viewing Intention (Ajzen, 1991). This depends on three separate backgrounds, namely: the mindset of the user, subjective norm, and perceived behavioral regulation (Ajzen, 1991; Ajzen, 2002; Ajzen, 2011; Amin, AbRahman, & AbdulRazak, 2012). The higher the degree of behavioral intent, the greater the likelihood of real behavior occurring. Several empirical studies have been carried out in Islamic finance (Rahim and Amin, 2011), Islamic home financing (Taib, Ramayah, and Razak, 2008; Alam, Janor, Zanariah, Ahsan, 2012; Amin, 2012, 2013; Amin, Abdul-Rahman, & AbdulRazak, 2013), Islamic personal financing (Amin, Ghazali, & Supinah 2010; Amin, 2012, 2013; Amin, Abdul-Rahman, & AbdulRazak, 2013) under the theory of planned behavior using behavioral intention as the dependent variable. Islamic credit cards (Amin, 2012, 2013), Islamic mobile phone banking (Sun, Goh, Fam & Xue, 2012), Islamic Pawn Shops (Amin and Chong, 2011) and enrollment in the Islamic accounting course (Amin, Rahman, & Ramayah, 2009). Amin, Rahman, Sondoh, & Hwa, 2011). For the Takaful subsector, a diligent search did not turn up a similar study.

Methodology

Research Design and Population of the study

We utilised the survey design via a structured questionnaire to measure the indicated variables. Our primary focus is Nigeria, but for brevity and the fact that AFInA (2017) report indicates the lack of achievement for the financial

inclusionary target to the north, the focus shifted to the Northern Nigeria geopolitical zones. Also as Maiyaki and Ayuba (2015) studied the North-west, it fell on us to face the North-east from where we conveniently selected Gombe state. The population of Gombe State was estimated at 2,250,000, out of which further estimate that adults between the ages of 18 (as the legal age of maturity) to 60 (as the retirement age from public service) are within the range of 1,100,000 and 1,300,000 (GMSG, 2013). Therefore an average of 1,200,000 was taken as the population of adults in Gombe State. One-third of these populations were housewives who were not operating any form of business and neither gain any form of income. As such the population of this was estimated at 800,000 adults residing in the 11 local government areas of the state.

Sample Size and Sampling Techniques

Zango (2006) indicated that a sample size of 400 respondents at a 95 percent confidence interval and a 0.05 margin of error is considered appropriate for a population of 500,000 to 1,000,000. Therefore, our sample size for this study is 400 since our target population is 800,000 people which are consistent with the above reference. Stratified probability sampling technique was adopted. This technique allows the researcher to select proportionate respondents from each stratum; therefore the 400 respondents was proportionately selected from the 11 local government areas of the state according to their population sizes.

Data measurement and Collection

The research model is adapted by further breaking up subjective norm into attitude, social influences and religious influences. A restriction is also imposed to the behavioural intentions only. The structural model exhibit five constructs, as the independent variables, which are held by the extant literature to be the determinants of the dependent variable. There are five definite and direct relationships tested that we did not pretend exhaust the possibilities but are the most recurring in the literature of behavioural influences. All the six constructs are exogenous with referent measures, to be measured via a structured questionnaire.

Tools for Data Analysis

The data collected were analysed using Partial Least Square (PLS) software. PLS software is a second generation, variance-based structural equation modelling tool that is used to analyse interrelationship among latent variables especially when mediation or moderating effect is present among the constructs. The reason for choosing PLS to test structural equation models, according to Urbach and Ahleman (2010) as cited in Ramayah (2015), includes the following:

1. It makes less demand on sample size
2. Normal-distributed input data is not needed.
3. With a large number of constructs, it is applicable to complex structural equation models.
4. It can manage structures that are both reflective and formative.
5. It is better suited to the development of theory and the explanation of theory.
6. Especially when the research includes human behaviour, it is useful for prediction.

Model and hypothesis development

We adapted the conceptual construct framework (figure 1) from the Theory of Planned Behaviour (TPB) of Ajzen (1991). It explains that any purpose toward Takaful is the product of consumers' attitude toward the Islamic insurance method, their subjective norms, and perceived behavioral power. We hypothesized, therefore, that these outstanding factors of belief are positively linked to Takaful's attitude and therefore affect the purpose. Although we emphasize the factors that influence the intention of consumers to follow Takaful, also to be under the belief factors that influence the development of an attitude towards intention. Thus, the proposed model incorporates

main belief considerations, i.e. religious responsibilities, demographic variables and perceived benefits of services in the TPB model, as a new approach to evaluating customer attitudes in the Takaful context.

Perceived benefits of service

Perceived costs / benefits are measured by the cost of goods, the rate of return, and the availability of favorable terms of services, lower service fees, high loss compensation payments, and lower monthly payments (Al-Ajmi, Hussain, & Al-Saleh, 2009). Hamid and Masood (2011) further argue that lower monthly payment and service charges have an effect on customers' preference of Islamic home financing. As a result, perceived cost advantages can have a positive effect on customer perceptions towards Islamic insurance methods. Therefore, we hypothesized:

H₁: Perceived benefit has no significant influence on consumers' attitude towards the adoption of Takaful services

Attitude towards Takaful

Attitude refers to an individual's favorable or unfavorable appraisal of actions (Ajzen & Fishbein, 1980; Ajzen, 2001; Fishbein, & Ajzen, 2005). Amin, Abdul Rahman, Sondoh, and Chooihwa(2011) argue that this attitude is positively related to the intention to use Islamic personal financing. It is created by perception and understanding. Knowledge is an understanding and understanding of a scenario or reality. Knowledge is described as knowledge gained through experience or education (Writz & Matilla, 2003). We have suggested that the degree of customer awareness and knowledge of Takaful in terms of current gaps in mercantile insurance affects their attitude towards Takaful, hence, we hypothesized that:

H₂: Consumers attitude have no significant influence on their intention to adopt Takaful services

Socio-economic and demographic variables

Socioeconomic status of an individual is determined by his income, education, occupation and wealth, while demographics are factors such as his age and gender. These characteristics are helpful predictors of consumer spending trends (demodirt.com). Researchers and business enterprises utilise such information about consumers in order to understand their behaviour and needs. Thus we hypothesised that;

H₃: Socioeconomic and demographic factors of consumers have no significant influence on their attitude towards adoption of Takaful services

Perceived Behavioural Control

The perception of ease of performing a contemplated behavior is perceived behavioral control (Ajzen , 1991). Perceived behavioral control implies that if they believe they have control over their actions, or are prevented from implementing Takaful in which they have no control, customers are likely to accept Takaful in their business. Therefore, we hypothesized that:

H₄: Perceived behavioural control has no significant influence on consumers' intention to adopt Takaful services

Religious obligation

Religious obligations determines an individual's choices or activities as the person supposes are the dictates of religion (Amin et al., 2011). In the case of Islam, avoidance of riba, investment in Halal business and fair distribution of resources (Butt, Ahmed, Altaf, Jaffer & Mahmood 2011), religious responsibilities include the perception of complying with religious values. This research shows that the more willing an individual is to comply with these principles, the more favorable his attitude to Takaful services is. We have also speculated the following:

H₅: Religion has no significant influence on consumers' attitude towards their intention to adopt Takaful services

The Proposed Research Model:

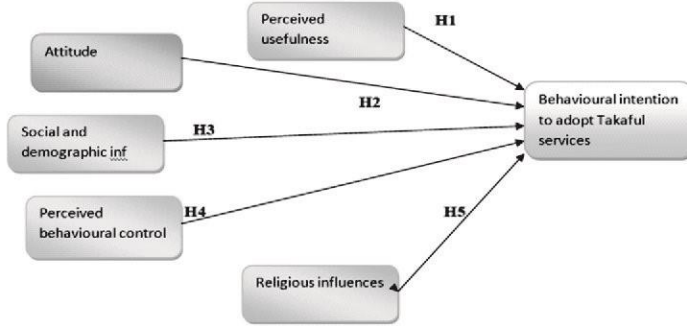


Figure 1: Research Model Adapted from the theory of planned behaviour

Source; Adapted from Ajzen (1991).

Results and Discussions

Measurement Model

The measurement model typically identifies how each indicator block relates to its latent variables (Hair, Hult, Ringle & Sarstedt, 2017). It includes the unidirectional predictive connection between each latent construct and the indicators observed. Specifically, the measurement model consists of evaluating the reliability of individual objects, internal consistency, validity of information, convergent validity and validity of discriminants. Accordingly, we used composite reliability to gauge the constructs' individual item reliability. Following Hair et al. (2017)'s thumb rule of the threshold of 0.4 and above, as their loadings are 0.4 and above, we maintained all 23 items measuring both dependent and independent variables (Figure 2).

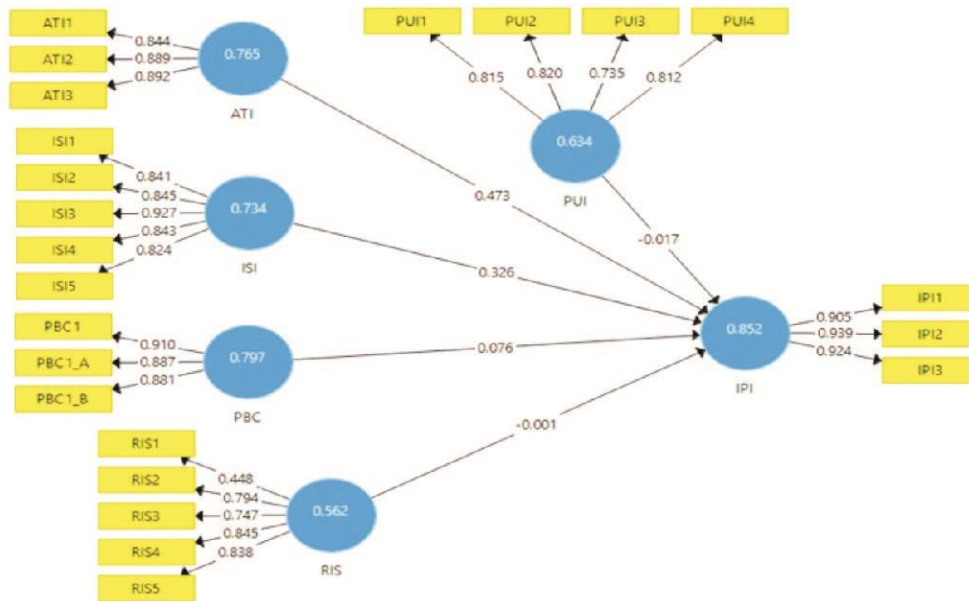


Figure 2: The algorithm of the factors influencing the intention to participate in Takaful services

Table 4.1 Construct Reliability and Validity

Constructs	Cronbach Alpha	Composite Reliability	Average Variance Extracted (AVE)

Intention	0.913	0.945	0.852
Perceived Behavioural Control	0.873	0.922	0.797
Social Influence	0.909	0.914	0.734
Religious Influence	0.802	0.860	0.562
Perceived Usefulness	0.810	0.874	0.634
Attitude Towards Intention	0.848	0.907	0.765

Source: Authors computations (2020)

Similarly, using Average Variance Extracted (AVE), convergent validity was assessed. Consequently, the findings (Figure 2 and Table 1) indicate ample convergent validity as each construct's AVE exceeds 0.5 (Hair Jr. *et al.*, 2017). Finally, using the Heterotrait- Monotrait (HTMT) correlation ratio, discriminant validity was assessed (Henseler, Ringle & Sarstedt, 2015). Therefore, the findings (Table 1) exhibits that the discriminant validity has been established as the values of the correlations among the constructs are less than 0.85 (Henseler *et al.*, 2015).

Table 2

Heterotrait-Monotrait (HTMT) Ratio Criterion of Discriminant Validity

	INT	PBC	SI	RI	PUI	ATI
Intention						
Perceived Beh Control	0.649					
Social Influence	0.779	0.742				
Religious Influence	0.678	0.662	0.793			
Perceived Usefulness	0.674	0.803	0.717	0.722		
Attitude Towards Intention	0.844	0.740	0.840	0.850	0.787	

Source: Authors computations (2020)

From the Table 4.2, the result shows that all the HTMT values are less than the cut-off of 0.85 suggesting that discriminant validity has been established (Clack & Watson, 1995; Kline, 2011).

Structural Model

R-square (R^2) estimation, predictive relevance (Q^2) effect size (f^2), and the degree of importance of the path coefficient (Hair *et al.*, 2017) are the evaluation criteria for the structural model. This study therefore used the standard bootstrapping method to produce samples (i.e. 5,000) (Hair *et al.*, 2017) and 253 cases to determine the significance of the coefficients of the model. In Table 4.3, below the R^2 value of the endogenous latent variable is presented.

Table 3

Variance Explained in the Endogenous Latent Variables

Latent Variable	Variance Explained (R^2)
Intention	62%

Source: Authors computations (2020)

The outcome shows that about 62 percent of the total variance in the goal is explained by the current research model. This claims that 62 per cent of the variation of intent to patronize Takaful was jointly clarified by all the independent variables. This outcome, therefore, indicates an appropriate R² value that is considered moderate (Hair et al., 2017). In addition, it is possible to investigate f-square (f²) to see whether or not the effect of a specific independent latent variable on the dependent latent variable is significant.

Table 4 evaluation of the effect size (f²).

Effect Sizes (f-Square) of the Latent Variables based on Cohen's (1988) Recommendation

	f-Square	Effect Size
Perceived Behavioural Control ->Intention	.050	Small
Social Influence ->Intention	.024	Small
Religious Influence -> Intention	.084	Small
Perceived Usefulness -> Intention	.151	Moderate
Attitude Towards Intention -> Intention	.167	Moderate

Source: Authors computations (2020)

As shown in Table 4, the effect size of independent variables (i.e. PBC, SI, RI, PU, and ATI) on Takaful 's intention to patronize are respectively .05, .02, .084, .151 and .167. Therefore, consistent with Cohen's (1988) recommendation, the effect-size of these exogenous latent variables on purpose can be regarded as a range between small to moderate. In addition, the capacity of the model to forecast is an additional criterion for evaluating the structural model. Consequently, Stone-Geisser's Q² (Geisser 1974; Stone, 1974; as cited in Hair et al . , 2017) is the most common measure of predictive relevance, which assumes that the model must be able to adequately predict the indicators of each endogenous latent construct.

Table 5

Cross-validated Redundancy

Total	SSO	SSE	
Intention	300.00	156.176	.479
Q ² (=1-SSE/SSO)			

Source: Authors computations (2020)

Table 5 shows the assessment of predictive relevance and the result shows that the Q² of the endogenous latent construct is greater than zero, thus indicating the model's predictive relevance (Hair et al., 2017); Henseler *et al.*, 2009).

Finally, the outcome of the hypothesized model is represented in Table 6. The results indicate that four out of five hypothesized associations were found to be statistically important (Table 6).

Table 6: Path Coefficient

Path	Original	Std.	T-	P-
	Sample	Deviation	Statistics	Value.
Perceived Behavioural Control ->Intention	0.34	0.06	5.11	0.00*
Social Influence ->Intention	0.32	0.10	3.14	0.00*
Religious Influence -> Intention	0.17	0.21	2.81	0.01*
	0.01	0.12	.139	.445

Perceived Usefulness ->
Intention

Attitude Towards Intention -> Intention	0.47	0.13	3.56	0.00*
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Source: Authors computations(2020)

Specifically, the relationships between attitude towards intention and intention to patronize *Takaful* is statistically significant ($\hat{\alpha}=0.473$ $t=3.563$ $P<.000$). Furthermore, as anticipated the relationship between social influence and intention is also significant ($\hat{\alpha}=0.326$ $t=3.144$ $P<.001$). Similarly, both religious influence as well as perceived behavioural control have a significant relationship with the intention ($\hat{\alpha}=0.17$ $t=2.81$ $P<.01$) and ($\hat{\alpha}=0.34$ $t=5.11$ $P<.00$) respectively. However, the relationship between perceived usefulness and intention is not statistically significant ($\hat{\alpha}=-0.017$ $t=-0.139$ $P<.445$).

Discussions

Perceived behavioural control has a positive effect on intent. This implies that the greater an individual's perceived behavioral control, the greater the intention to patronize *Takaful*, thus supporting one hypothesis. Similarly, as we assumed a positive relationship between social power and intention to patronise *Takaful* in Gombe state. The outcome demonstrates a positive and important relationship between social influence and *Takaful*'s intention to patronize. This finding indicates that an individual's behaviour and intentions are influenced by the society to which she belongs. Thus, for the effective patronage of *Takaful* in Gombe state, firms need to educate the society regarding their services. Religion's effect on purpose is positive and significantly linked. This means that the greater the urge to adhere to religious values, the greater the sponsorship of *Takaful*. Similarly, this research found that *Takaful*'s attitude toward *Takaful* has a positive and essential link with the purpose of patronizing *Takaful*. The theory of planned behaviour (Ajzen, 1991) is further justified by this research. In addition, these results are in line with previous results (Ajzen and Fishbein, 1980; Amin et al 2011). This study, however, did not find a significant relationship between perceived usefulness and the intention of patronizing *Takaful* in comparison to other studies cited.

Implications of the Study

The primary objective of this study was to identify factors influencing the intention of an individual to adopt *Takaful*. In the method, in deciding the intention to patronize *Takaful*, we explored the power of attitude, subjective norm, perceived behavioral influence, faith and perceived usefulness. This has a variety of consequences divided into theoretical and managerial consequences.

Theoretical Implications

Designed behavior theory may promote the prediction of a certain behavior's intent. It was shown that the TBP model could explain 62 percent of the variance in the intention to patronize *Takaful*. Statistically, the model was significant and the outcome showed that the model was helpful in predicting *Takaful*'s intention to patronize. This is compatible with the TPB model used in other studies (Ajzen & Fishbein, 1980; Amin et al. 2011). In addition, a crucial finding is that in the model, the beta of attitude towards purpose is greater than the beta of the remaining constructs. This shows that the perceived behavioral regulation component is a stronger predictor of intention to patronise *Takaful*.

Managerial Implication

Takaful operators need to intensify efforts on enlightenment and awareness creation about the products and benefits of *Takaful*. This will help in enhancing positive attitude towards patronizing the products. Also, *Takaful*

operators need to engage the services of religious leaders so as to intensify preaching on the need to patronize Takaful products, thereby enhancing the contribution of subjective norm towards intention and subsequent behaviour in patronizing Takaful.

Conclusion and Recommendations

The significance of this study lies in adding new insights into the variables influencing the intention of consumers to adopt Takaful. It incorporates the TPB 's prominent belief factors as an a systematic approach in examining the attitude of consumers and predicting their intention to adopt Takaful. The research findings provide a forum for understanding the factors that impede the adoption of Takaful, thereby assisting the development of strategies for the growth of the insurance industry by Takaful insurance operators and relevant government agencies that are necessary for financial inclusion and wealth creation. This should increase the financial inclusion pace.

In more specific terms,

- 1) We confirm the significance of attitude and perceived behavioural control towards the intention to adopt *Takaful* services, in Gombe state.
- 2) We also submit that breaking up subjective norms in component influences provides insights into areas of efficacy. Thus, perceived usefulness of the *Takaful* services does not add significantly to the positive decision to participate while religious beliefs and social influences contribute positively towards the decision to partake in *Takaful* services.
- 3) An important insight is the seeming importance of Knowledge and awareness, a recurring measure of our constructs.

This therefore dictates our major recommendation to *Takaful* practitioners for an awareness drive. Emphasis should be laid on the benefits of financial inclusion and on abiding by the laws of the land through ethical platforms that conform to religious dictates.