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## Moderating role of religiosity on Zakat compliance behavior in Nigeria

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Role of religiosity on Zakat compliance

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#### Abstract

**Purpose** – This paper examines the moderating effect of religiosity in the theory of reasoned action (TRA) on intention to comply with the Zakat on employment income (ZEI).

**Design/methodology/approach** – A survey of civil servants in Kano State, Nigeria was carried out and 474 valid observations were retrieved from the 700 distributed questionnaires. Partial least squares structural equation modeling (PLS-SEM) was used to validate the instrument that measures the variables, examined the structural model and the predictive relevance of the study's model.

**Findings** – The results revealed the suitability of both the TRA and the PLS-SEM in the study of ZEI behavioral intention in a developing country. All the hypothesized direct relationships were supported on the one hand. On the other hand, one of the two indirect relationships, subjective norm and behavioral intention moderated by religiosity was supported, but the other tests for moderating effects of religiosity on the relationship between attitude and behavioral intention was not.

**Practical implications** – Public and private Zakat institutions in Muslim majority societies in Nigeria and in other Muslim countries may use the findings to focus their attention on the formulation of policies based on the findings of the study to strengthen eligible Zakat payers' intention to comply to further boost their Zakat collections.

**Originality/value** – This study extends the TRA in the context of ZEI by proposing religiosity as a moderator in the predictive capacity of TRA on ZEI. Moreover, the suitability for the use of PLS-SEM as a statistical tool in investigating the extended TRA with religiosity as a moderating variable as well as its implications for theory and practice were also discussed.

Keywords Nigeria, Religiosity, Theory of reasoned action, Zakat on employment income

Paper type Research paper

#### Introduction

Zakat is a topical issue that has the capacity for poverty reduction but is grossly underresearched (Johari *et al.*, 2014). This underscored the growing calls for empirical examination of Zakat in the Muslim majority countries (Ammani *et al.*, 2014), the use of different context, bigger sample and different environment for generalization (Oladimeji *et al.*, 2013). As a result of the prevalence of poverty in developing countries, a lot of efforts and strategies have been put in place by successive governments to effectively fight poverty, but little has been achieved (Ammani *et al.*, 2014). However, according to Sohag *et al.* (2015), it is evidently clear that religious leaders always have a role particularly in African societies in solving the multi-dimensional poverty issues in areas of creating awareness, health issues, educational



International Journal of Islamic and Middle Eastern Finance and Management © Emerald Publishing Limited 1753-8394 DOI 10.1108/IMEFM-05-2017-0122 issues and so on. It was therefore concluded that religious beliefs have a considerable impact and could well be integrated for effective utilization to crack the hard nut of poverty in those kind of societies. Accordingly, some researchers are of the view that *Zakat* could conveniently fit into being used as a tool in fighting poverty and achieving economic prosperity more especially in Muslim majority societies (Sohag *et al.*, 2015). This necessitated scholars to focus attention on the hidden potentiality of Zakat as a tool for poverty alleviation and how to make the *Zakat* system functional in addressing the perennial problem of poverty and its attendant vices in the Muslim world. It has been argued that *Zakat* – if well harnessed – could be the silver bullet, which if used could yield interesting results in the social security system of Muslim majority developing countries such as Nigeria (Farouk *et al.*, 2017a).

According to Heikal *et al.* (2014), it is estimated that US\$600 bn could be generated annually from *Zakat* if appropriately implemented. The gap between estimated and actual collection of *Zakat* is apparently very wide, leading to a colossal loss of wealth that could effectively be used to fight poverty. This scenario is a reflection of almost all Muslim majority nations. For instance, in Kano state (one of the 36 states in Nigeria), a historically strategic business nerve centre in sub Saharan Africa, with a population of over 15 million people, where 99 per cent of its inhabitants are Muslims, *Zakat* collection has continuously been very low (Farouk *et al.*, 2017a). But then, the fundamental question is, why are Muslims unexcited and indifferent in complying with *Zakat*? This is more worrying with respect to civil servants parts of who are the enactors and implementers of the *Zakat* law.

Perhaps a common ground has been settled by scholars from both religious and nonreligious perspectives as to the importance of intention in every aspect of human endeavor (Ajzen, 2012; An-Nawawi, 2014; Nevrinck et al., 2010). Thus, the root of every action of individual could be traced to the behavioral intention. It is the key to every reasoned action. It has been confirmed theoretically and empirically that if intention is strong then compliance shall be high and vice versa (Ajzen, 2012). As a result, past studies on behavioral sciences have dwelled so much and strenuously investigated the determinants of intention employing a number of theories, frameworks and methods to explicate on factors that could influence intention. Research is still ongoing in this direction, as some scholars have emphasized the importance of more empirical studies on behavioral intention as a key to compliance behavior on all aspects of human interactions. Thus, some studies have argued on the suitability of theory of reasoned action (TRA) in predicting intention and behavior in many areas including Zakat (Ajzen, 2012; Saad and Haniffa, 2014; Teng et al., 2015). However, many studies have shown concern on the limitations of the TRA particularly on contexts and time and have cautioned on the generalization of findings (Saad and Haniffa, 2014; Khamis and Yahya, 2015; Levine and Pauls, 1996; Orr et al., 2013; Sniehotta et al., 2014; Yang, 2012).

Accordingly, there were many attempts to fill in this gap. Nevertheless, to the best of researchers' knowledge, there is no previous study that investigates the inclusion of religiosity as a moderator in the TRA on *Zakat* on employment in Muslim majority developing countries generally, more especially in Nigeria. It is therefore anticipated that findings from this study shall be useful in developing relevant and cogent policies to strengthen behavioral intention and consequently boost *Zakat* collections that could be employed in fighting poverty in those domains. Hence, in this paper, the direct relationship between the variables and the dependent variable as well as the moderating effect of religiosity in the TRA on *Zakat* on employment income (ZEI) by civil servants in Kano State, Nigeria is examined. The study also adds to the scanty literature in the field and shall

practically serve as a catalyst to formulate policies that may further strengthen the functionality of *Zakat* for poverty reduction.

#### Literature review

#### Intention

Intention signifies the amount of effort a person is willing to commit to performing a given behavior. It is used as an indicator to capture the factors that have an influence on the desired behavior. It is the cognitive representation of an individual's readiness in the performance of a certain behavior (Ajzen, 2006). It serves as a link between a particular person and a specific behavior through the individual's subjective probability dimension (Ajzen, 2012). From Islamic perspective, there is an established link between behavior and intention. Islam attaches great importance to the issue of the consequences of the behavior of a person's action in the form of reward or punishment from Allah SWT.

Moreover, Islam recognizes the difference between a deliberate/planned action and accidental action. Reasoned or planned behavior is traceable to Islamic injunctions. In one of the traditions, the Messenger of Allah (PBUH) declared that "Actions are (judged) by motives/intentions (*niyyah*), so each man will have what he intended" (Bukhari, 1987). Thus, planned behavioral intention is an integral part of all Islamic actions and must at all times precede the actual action.

Accordingly, on *Zakat* which is the third pillar of Islam suffering from noncompliance, intention could be the key suspect. A good illustration that may further confirm the assertion is Kano, Nigeria, where the capacity of ZEI to reduce poverty in Kano State if well harnessed is not doubtful (Ammani *et al.*, 2014). Although, 99 per cent of its civil servants are Muslims, there is little patronage of paying *Zakat* to the government-established commission while the majority in the society continue to suffer amidst plenty(Farouk *et al.*, 2017a). *Zakat* collection has remained poor and not yielding the desired result. In this kind of scenario, there is the need to scientifically investigate the *Zakat* intention compliance of the civil servants to confirm determinants and develop policies that could strengthen the intention to comply.

#### Attitude

Attitude is referred to as "the degree of favorableness or unfavorableness towards a certain action" (Ajzen, 2012). Further to this definition, Ajzen (2015) redefined attitude "as a latent disposition or tendency to respond with some degree of favorableness or unfavorableness to a psychological object". In a nutshell, there are two key aspects concerning attitude; the direction of feelings toward an object in a negative or positive way and the intensity (the degree or level) of the feeling toward the object (Anderson *et al.*, 2011). However, there are growing fundamental concerns that are still unresolved such as generalization capacity, the effect of time lag and the strength of the individual's attitude (Petty and Krosnick, 2014). Thus, Lau (2002) argued that environments and culture affect attitude significantly. Therefore, attitude is tied to context, time and environment.

Furthermore, literature has confirmed that there are a lot of studies on attitudes in several fields but few on *Zakat*, in terms of context, time and environment (mostly in Asia, and few in Nigeria). Most of these studies were on few groups and few observations. For instance Idris and Ayob (2001) and Saad and Haniffa (2014) have revealed that attitude is positively related to *Zakat* compliance behavior. Although some studies have confirmed attitude as a very strong predictor of intention and behavior, some others have cautioned that general attitudes are weak in predicting specific behaviors (Huda *et al.*, 2012; Saad and Haniffa, 2014). Thus, broad attitudes do not explain behavioral validity even if specific

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behaviors are aggregated, but they do have an impact on specific behaviors by influencing the more closely linked factors to the specific behavior.

Admiringly, the unique attitude of a typical Kano man can be distinguished from others based on the influence of the triple heritage; the native, the western and the Islamic cultures (Barau and Poor, 2008). Westernized in the formal school or working place, Islamized in the *Islamiyya* school and *Hausanized* (domesticated) at home and in the streets (Barau and Poor, 2008). Consequently, the attitude of a typical Kano indigene is a mixture of these conflicting civilizations. It is therefore postulated that the more positive of this unique attitude of eligible *Zakat* payers toward *Zakat* compliance the greater the behavioral intention to comply.

*H1.* There is a relationship between attitude and the intention to pay ZEI by civil servants in Kano state, Nigeria.

#### Subjective norms

There are strong theoretical and empirical evidences on the contributions of subjective norms in the TRA in the prediction of intention in many fields of study including *Zakat*. Perhaps results from studies on subjective norm from different empirical studies are mixed, indicating opposing positions on its impact and power of prediction on behavioral intention (Bagozzi *et al.*, 1991; Sniehotta *et al.*, 2014). This could also be linked to the nature of the society where such investigations are conducted.

According to previous studies (Muzaffar, 2015; Saeri *et al.*, 2014; van der Linden, 2011), research has indicated that subjective norm has little influence on an individual's behavioral intention. The major reasons for this weak prediction as found by different authors were summarized by van der Linden (2011) which includes the use of single-item measures; those among respondents who are strongly influenced by social pressure are not many and usually the measurement of the subjective norm construct is made in a global perspective (general in nature); hence, a very direct and strong social pressure to act in a certain way may be lacking. As a collectivist society, it is envisaged that in Nigeria important others shall constitute pressure for intention to comply with the *Zakat*. Accordingly, the more pressure from important others to comply, the more the strength of intention toward Zakat compliance. Nevertheless, this has to be tested empirically. It is therefore guessed as follows:

*H2.* There is relationship between subjective norms and the intention to pay ZEI by civil servants in Kano state, Nigeria.

#### Religiosity

According to Baron and Kenny (1986), a moderating variable is a third variable introduced to influence the relationship between an independent and a dependent variable. In this study, religiosity is utilized as a moderator in the relationship between attitude and intention to pay *Zakat* and as well between subjective norm and intention to pay *Zakat*. This is because *Zakat* is not just a tool meant to achieve economic and social goals, but primarily a financial worship (*Ibadah*).

In Islam, it is declared that there is no compulsion in religion (Ali, 2004). Furthermore, in Nigeria, religious laws can be made but cannot be enforced because it is a multireligious country where everybody has the freedom to join, practice and exit any religion at his own will. Therefore, to examine the behavioral intention using religiosity as a moderator requires the support of a theory that emphasizes on voluntary compliance. Consequently, this study used the socio-economic theory of regulatory compliance (SETRC) to support the underpinning theory. Thus, as identified by Khamis *et al.* (2014), the worship factor

(religiosity/religious practices) is one of the primary motivations and determinants of intention for carrying out a religious duty such as *Zakat*. In Islam, a person's intention to pay *Zakat* as a religious obligation depends highly on the strength of the person's belief and commitment to the religion itself. As a result, a hypothesis was formulated to test the direct relationship between religiosity and the dependent variable, intention to comply, while two other hypotheses were developed to test the indirect relationship. The higher the influence of a person's religiosity on the independent variables of the TRA, the stronger will be hihe/sher intention to perform ZEI as a religious responsibility. It is thus postulated that:

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- *H3.* There is a relationship between religiosity and the intention to pay ZEI by civil servants in Kano state, Nigeria.
- *H4.* Religiosity moderates the relationship between attitude and the behavioral intention of civil servants in Kano state, Nigeria, to pay ZEI.
- *H5.* Religiosity moderates the relationship between subjective norms and the behavioral intention of civil servants in Kano state, Nigeria, to pay ZEI.

#### Underpinning theory

Several theories were developed by researchers on intention. However, the basic assumption of theTRA is that individuals reflect on the consequences of their behavior before action. According to the TRA, two constructs determine intention, namely the attitude toward behavior and the subjective norms. Attitude is defined as the individual's overall evaluation of the behavior while subjective norm is the individual's estimated social pressure to perform the behavior (Ajzen, 2015). However, theorists acknowledged that the two constructs are somewhat relative, and may vary from one individual to the other (Hennessy *et al.*, 2012).

Although the TRA has been functionally around and widely in use by many researchers in different fields and on several scenarios, one of the major limitations of the TRA is that there are some factors which are usually referred to by social scientists in their studies, but were excluded from the TRA. Such factors include, personality uniqueness (extrovert or introvert, authoritative, etc.), social status, demography, religiosity and the likes (Ajzen, 2012). Accordingly in this study, religiosity as a moderator has been introduced to the basic model to test its moderating effect on the relationship between the predictors and the criterion variable. Saad and Haniffa (2014) argued on the suitability of using TRA in *Zakat* compliance studies because *Zakat* is similar to the conventional taxation.

#### Supporting theory: Socio-economic theory of regulatory compliance

Perhaps, the influence of morality on economic outcomes has been proved throughout societies and times (Bobek, 1997). The relevance of SETRC in this study is to solely justify religiosity as the moderating variable. The SETRC is one such model on behavioral intention and actual behavior compliance developed to give explanation for social influences and moral obligation, apart from other predictable revenues and costs of unlawful behavior (Sutinen, 1999). It addresses the question and practicability of voluntary compliance.

For instance, empirical investigations on tax compliance of individuals in Malaysia have found that there is significant positive impact of religiosity on voluntary tax compliance, as many Malaysians hold religious values strongly which helps them to internalize the behavior of giving out. According to Saad and Haniffa (2014), although paying *Zakat* in Malaysia is voluntary, a good Muslim ready to pay *Zakat* may possibly face some obstacles in the exercise of the noble intention to carry out the religious obligation as ordained.But IMEFM

notwithstanding, that may not weaken his conviction in executing the religious obligation (Figure 1).

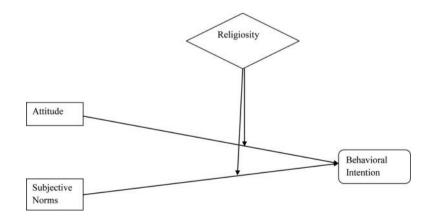
#### Methodology

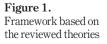
This study uses the partial least square structural equation (PLS-SEM) path modeling to appraise the direct relationship between the exogenous variables and the endogenous variables of the study as well as the moderating effect of religiosity on the relationship between the predictor variables; attitude and subjective norms, and the criterion variable; behavioral intention of civil servants to pay ZEI. PLS is a statistical tool that is gaining prominence among researchers being used to analyze empirical data in several fields of study including tax and *Zakat* (Farouk *et al.*, 2017b).

The units of analysis are those working on full time basis for the government of Kano State, Nigeria as civil servants. Thus, the population of this study consists of 49,913 government workers for Kano state, Nigeria, government. According to Hair *et al.* (2010), the minimum acceptable ratio of a sample size to the variables for an empirical research study is ten-to-one. In other words, the sample size should be at least ten times the number of variables of the study. However, according to the table developed by Krejcie and Morgan (1970) to determine sample size for research purposes, the rule of thumb on the minimum sample size for a population of study such as of 50,000 is 381. The sample size was increased to 700 to take care of non-response bias and other problems associated with data collection and retrieval. Thus, a total of 493 responses were retrieved out of the 700 distributed. However, 19 responses were found to be problematic and were therefore discarded. Thus, only 474 responses from the data gathered were found suitable for analysis representing 67.7 per cent of the distributed questionnaire. This is considered to be sufficient in environments such as Nigeria where responding to research instruments such as questionnaires is very low (Alabede, 2012).

#### Measurement instrument

The survey instrument developed for this study consists of 45 measurement items. The measurements were adapted from previous studies as depicted in Table I. All the items with the exception of demographic variables were measured on a five-point Likert scale; from strongly disagree (1) to strongly agree (5). The demographic factors were scaled on a categorical scale. To test the appropriateness of the instrument, a pilot study was conducted





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Latent construct	Operationalization	Source
Attitude	The positive or negative direction and the intensity of the perceived favorable or unfavorable Adapted from Ajzen (2006), Alabede discossification of a necessaria on object	Adapted from Ajzen (2006), Alabede
Subjective norms	The pressure from important others which is referred to in this study as the parents references, the colleagues referents, the employers referents and the spouse referents to	Adapted from Rhodes <i>et al.</i> (2006)
Religiosity	periorin a behavior person's routine religious activities and his/her beliefs in the results of fulfilling a given	Adapted from Muhamad et al. (2006),
Behavioral intention	benavior appropriatery An individual's readiness to perform a behavior or action	Adapted from Ajzen (2006)
Source: Researcher		

Table I.Measurementsinstrument

IMEFM and this results in detecting, removing and adjusting ambiguities in the questionnaire. Consequently, minor adjustments were made to the instruments prior to the main study based on the pilot study carried out. Moreover, as depicted in Table I, in the process of testing the validity and reliability of the questionnaire in the main studies, 27 items were further dropped to achieve convergent validity, discriminant validity and reliability of the items and the constructs.

#### Analysis method

PLS-SEM as a widely accepted method of analysis has remained unused in the study of ZEI in the past. Thus, PLS-SEM was selected as analytical tool for data analysis. As a multivariate analysis tool, it is powerful and has numerous advantages including its capacity to test complex relationships (Hair *et al.*, 2014). It is capable to analyze a small sample and does not essentially require data normality. Furthermore, variables can be analyzed simultaneously to find the fundamental structure of the whole set of variables. Unlike others it does not necessarily require other forms of analysis, like the detection of outliers, to provide very clear, meaningful and valid results (Hair *et al.*, 2014).

#### **Result and discussions**

#### Evaluation of PLS-SEM results

For the purpose of this study, PLS-SEM results are evaluated in three stages; the examination of measurement model, then the evaluation of the structural model and the evaluation of predictive relevance (blindfolding). If results obtained from the examination of the measurement model signifies satisfactory outcomes then the validity and reliability of sthe data is established. This paves way for the second stage of the analysis which involves the examination of the structural model to determine the significance of the structural relationship and also to test the support or otherwise of the developed hypotheses (Hair *et al.*, 2014). The next stage is the blindfolding which is to determine the predictive relevance of the model, that is, its capacity to predict the dependent variable. Any value larger than zero (0) of the reflective dependent (endogenous) latent variable depicts the path model's predictive relevance of the specific construct.

#### Measurement model

The measurement model is aimed at establishing the validity and reliability of the items of the variables. The analysis consists of the convergent validity and discriminant validity. Convergent validity is about the internal consistency of the items of each construct. It is achieved when the items of a construct are in harmony, not contrasting each other and contributing in building a conceptual meaning to the construct (Hair *et al.*, 2014). It assesses the loadings and cross loadings, composite reliability and average variance expected. The discriminant validity on the other hand, evaluates factor loading and latent variable of correlation. Hence, content validity is achieved through the examination of convergent validity and discriminant validity. To confirm the content validity of the measurement model, the factor loadings of the items could be used (Hair *et al.*, 2014).

#### Convergent validity

Several criteria have been used in this study to test for convergent validity. Convergent validity refers to the extent to which the measurement items for the latent construct truly represents and measures the latent construct and can be able to correlate with other measures (Hair *et al.*, 2014). In this procedure, the first step is to examine the indicator

loadings which explain the percentage indicator's variance explained by the construct. Hair *et al.* (2014) recommended loadings of above 0.70, though 0.50 is also acceptable provided its average variance expected (AVE) is up to 0.5. The reliability of the constructs was also examined. Higher values are indications of higher reliability values. Accordingly, values between 0.70 and 0.95 are satisfactory to good, while values ranging between 0.60 and 0.70 are considered as acceptable (Hair *et al.*, 2014). However, the values that are above 0.95 depict the redundancy of items and are therefore considered as problematic, as they lead to undesirable patterns of response.

The result for convergent validity is presented in Table II and Figure 2. From Table II, loadings for all the items were above 0.50. The figures reported on composite reliability were higher than the recommended 0.70 and the AVEs were all greater than the suggested 0.50. Therefore, it could be concluded that based on the statistical significance and the parameter estimates, all measures being used in this study for the respective constructs are valid measures.

#### Discriminant validity

Discriminant validity refers to the degree to which items measure distinct concepts or differentiate among constructs (Hair *et al.*, 2014). It is achieved by assessing the correlations of measures of potential overlapping variables. Where there is consistency in the loadings of the indicators being highest in the associated construct, it could be said that the construct shows discriminant validity (Hair *et al.*, 2014). To ensure discriminant validity in this study, the square root of AVE was calculated and the results have exceeded the inter correlations of construct with other constructs that are in the proposed model. The  $R^2$  for this study (0.294) is approximately 0.3 which according to Cohen (1988), is categorized as medium. In a nutshell, result as captured in Table III, revealed satisfactory evidence of reliability, convergent validity as well as discriminant validity. It therefore allows for moving further for hypotheses testing to prove the model of the research (Table III).

Latent variable	Items	Loadings	CR	AVE
Attitude	AT14	0.821	0.773	0.539
	AT15	0.803		
	AT4	0.546		
Behavioral intention	B1	0.849	0.913	0.724
	B2_1	0.863		
	B3	0.848		
	B4	0.843		
Religiosity	R1	0.884	0.922	0.747
	R2	0.87		
	R3	0.881		
	R4	0.82		
Subjective norms	SC10	0.762	0.88	0.515
	SC5	0.727		
	SC6	0.719		
	SC7	0.688		
	SC8	0.802		
	SC9	0.775		
	SP1	0.51		

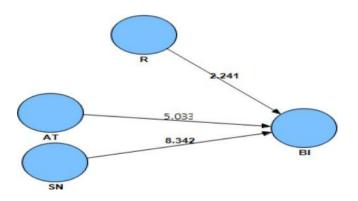
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Table II. Summary of the measurement model

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Figure 2. Measurement model (algorithm)		0.000 AT 0.000 SN		0.294 BI	
	Variable	AT	BI	R	SN
	AT	0.734			
	BI	0.367	0.851		
	R	0.065	0.177	0.864	
Table III.	SN	0.314	0.483	0.164	0.717
Lable III					

#### Structural model assessment

The objective of examining the structural model is to test the impact or influence of the independent variables on the dependent variable (Hair *et al.*, 2014). In evaluating the structural model, collinearity is first examined. It is important because path coefficients are estimated on the basis of the ordinary least square regression (Hair *et al.*, 2014). In Figure 3, and Table IV, the results of direct relationship revealed a significant relationship between attitude and subjective norm ( $\beta = 0.241$ ; t = 5.033; p = 0.000). Similarly, religiosity is found to have significant relationship with behavioral intention ( $\beta = 0.101$ ; t = 2.241; p = 0.038)



**Figure 3.** Structural model (bootstrapping at 5,000 samples) and subjective norms were also found to have significant relationship with behavioral intention ( $\beta = 0.388$ ; t = 8.342; p = 0.000). Thus, the direct relationship hypotheses (H1, H2 and H3) are all supported. Moreover, it was established that subjective norms was a significant predictor of behavioral intention followed by attitude. The more pressure from important others, the stronger the intention to pay Zakat by government employees. Interestingly, the results are new compared to findings in similar other non-African geographical settings such as Malaysia, were attitude was found to be stronger than subjective norm in influencing behavioral intention to the extent that in some cases subjective norm was found to be weak and not having impact on behavioral intention of Zakat payers (Saad and Haniffa, 2014).

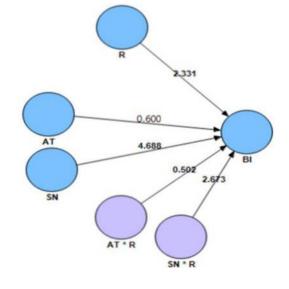
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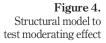
#### Moderating effect

Figure 4 and Table V provide details of the moderating effect. In Figure 4, and Table V, the results of the moderating effect of religiosity on the relationship between attitude and behavioral intention did not show a significant result ( $\beta = 0.126$ ; t = 0.502; p = 0.282). Thus, the indirect relationship between attitude and behavioral intention moderated by religiosity (*H4*) is not supported because the *t-values* is below the standard 1.96 (Hair *et al.* 2010). Likewise, the moderating effect of religiosity on the relationship between subjective norm

Path coefficient	Beta	Standard error	<i>p</i> -value	<i>t</i> -value	Decision
$\begin{array}{l} AT \rightarrow BI \\ R \rightarrow BI \\ SN \rightarrow BI \end{array}$	0.241	0.047	$0.000^{***}$	5.033	Supported
	0.101	0.043	0.389	2.241	Supported
	0.388	0.047	$0.000^{***}$	8.342	Supported

**Note:** *H1* & *H3* are significant at 1% (\*\*\**p*-value @ 1%) **Source:** Researcher Table IV. Structural model (bootstrapping)





and behavioral intention revealed a significant result ( $\beta = -0.780$ ; t = 2.673; p = 0.003). Thus, H5 is supported.

Based on the results, although a moderating variable is effective in cases where the direct relationship between the independent variable and the dependent variable is weak, in this study, religiosity adds strength to the relationship between subjective norm and behavioral intention. This is a confirmation of the collectivist nature of the Nigerian society where social interaction and religiosity are inseparable and are given prominence (Farouk *et al.*, 2017b).

#### Predictive relevance of the model

Using blindfolding procedure is another criterion used to further evaluate the model's quality through the generation of the cross validated redundancy and the cross validated communality. Predictive relevance is designed to eliminate some data and hold them as missing data to estimate the parameters of the model which are later used to reconstruct the assumed missing values (Hair *et al.*, 2014). On that basis, comparison will be made to evaluate the closeness of the real to the implied results and then the values of  $Q^2$  is calculated. If cross redundancy value is greater than zero (0) then the model is said to have predictive quality or else the model's predictive relevance could not be concluded. The results obtained from this study as captured in Table VI, was 20.4 per cent which by implication is in support of the argument on the model's prediction quality.

#### Assessment of the effect size

Effect size is a quantitative measure of the effect of exogenous variable on the endogenous variable in respect of variation in  $R^2$  (Cohen, 1988). In this study, the formula indicated below was used to compute the effect size as suggested by Cohen (1988):

$$Effect Size (f^2) = \frac{R^2 Inclusive - R^2 Exclusive}{1 - R^2 Inclusive}$$

The benchmark for the effect size as opined by Cohen (1988) is that the value of 0.02 is small, 0.15 is medium and 0.35 and above is large. The results of the effect size as shown in Table VII for attitude, religiosity and subjective norm were 0.05, 0.02 and 0.19 reflecting small, small and medium sizes, respectively.

	Path coefficient	Beta	Standard error	<i>p</i> -value	<i>t</i> -value	Decision			
		$0.126 \\ -0.78$	0.312 0.286	0.282 0.003 <sup>**</sup>	0.502 2.673	Not supported Supported			
Table V.   Moderating effect	Note: <i>H5</i> is significant at 5% (** <i>p</i> -value @ 5%) Source: Researcher								
	Total	SS	60	SSE		1-SSE/SSO			
<b>Table VI.</b> Predictive relevance	BI	1,8	396	1,509		0.204			
(blindfolding)	Source: Researcher								

**IMEFM** 

In view of the foregoing to plot the moderation interaction, the coefficient values to use are (Table VIII).

On slotting in these values into a Microsoft excel template, results are as indicated above in Figure 5. It shows that though religiosity influences the relationship between subjective norm and behavioral intention, the influence is negative. This means that when the relationship between subjective norms and behavioral intention is low, the moderating effect of religiosity is high and when subjective norm is high, the moderation is low. Accordingly, the hypothesis that religiosity moderates the relationship between subjective norms and behavioral intention is accepted.

#### Conclusion, implications, limitations and suggestions for future research

This study extended the existing TRA in the context of ZEI by proposing that religiosity as a moderator in the predictive capacity of TRA in respect of ZEI. This has been confirmed particularly on the direct relationship of attitude, subjective norms and religiosity to behavioral intention. Another contribution in this study is the confirmation of the moderating effect of religiosity on the relationship between subjective norms and behavioral intention. However, the hypothesized moderating effect in the relationship between attitude

Latent variables	f <sup>2</sup>	Decision
AT R SBN	0.05 0.02 0.19	Small Small Medium <b>Table V</b> Effect size of t
Source: Researcher		latent variabl

Variables	Interaction coefficients	Table VIII.
Exogenous variable: Subjective norms	0.388	Coefficient values for
Moderator: Religiosity	0.101	plotting moderation
Interaction	-0.78	interaction

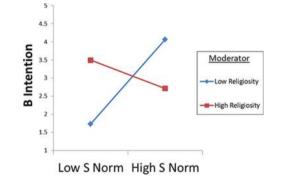


Figure 5. Moderating effect of religiosity on the relationship between subjective norms and behavioral intention **IMEFM** 

and behavioral intention is not supported. It can therefore be concluded that extending TRA with the introduction of religiosity is suitable. This is in line with the recommendations of previous studies on extending the TRA (Orr *et al.*, 2013; Teng *et al.*, 2015; Thoradeniya and Rebecca, 2015).

Similarly, the suitability for the use of PLS-SEM as a statistical tool in investigating the extended TRA with religiosity as a moderating variable has been established. For instance, the statistical results reveal that there is a direct relationship between religiosity and intention. Thus, including religiosity as a predictor of intention is justified. Accordingly, future studies may find it useful under other research conditions, such as sample size, environment and timing, to compare the findings between the covariance-based SEM and PLS-SEM with respect to the TRA model with moderation effect or mediation effect. This is expected to provide a platform on developing models with reflective and formative constructs that may be suitable for predicting behavioral intention not only on ZEI but also several other fields of human endeavor.

Moreover, although the generation of the needed *Zakat* funds is an important step that policy-makers should focus attention on, further steps are required to be taken more especially on the effective utilization of the potential *Zakat* fund, if at all *Zakat* is to serve its main purpose of fighting poverty in the studied society and by extension all Muslim majority societies in general (Sohag *et al.*, 2015). Nevertheless, as this is beyond the scope of this paper (a limitation of this study), further research is recommended in this area. Further research should also reflect on the employment of other factors that may also further explain methods through which this scenario could be clarified.

On a final note, other achievements of this study is the hope that public and private Zakat institutions in Kano, Nigeria and other similar Muslim communities may use the findings in further boosting Zakat collections especially civil servants by developing policies based on the determinants of intention as detailed in this study. Specifically, the government may embark on sensitization program to create sufficient awareness on the significance of Zakat to the society and the socioeconomic benefits derivable from compliance. Furthermore, government may work on formulating policies that shall make civil servants disposition toward Zakat compliance intention more favorable. It may also work on educating the general populace on ZEI because subjective norm is a strong determinant. It is expected that if considered important others have the required knowledge on the issue at stake, it is only then that they may approve and/or serve in exerting pressure for civil servants to have strong intention on Zakat compliance. Religious leaders could as well be engaged in educating their followers on the religiosity as a determinant of intention to complyas well as a moderator to other determinants stronger.

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