

## Conceptualizing Religiosity Influence on Whistle-Blowing Intentions

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### Abstract

Religiosity values have been previously debated for biasness towards certain religion, making generalization difficult especially in a setting where the respondents come from different belief and faiths. This paper reports preliminary findings of an on-going study, which examines the Muslim religiosity scale developed by Krauss, Hamza and Idris (2007). An exploratory factor analysis results strongly suggest that the Muslim religiosity values clustered into four categories: personality traits; attitude; religious practices; and interpersonal relationship. We suggest that the usefulness of this new Muslim religiosity scale can be tested empirically in relation to the whistle blowing intention in the Islamic financial institutions.

**Keywords:** Religiosity values, whistle-blower, Malaysia, religion

### Introduction

Religion and spirituality play an active role in work-related behaviours. Religious values shape our behaviour which may differ from person to person in different societies. Monotheist religions – Islam, Christianity and Judaism have divine rules for the followers. Ntalianis and Raja (2002) argue that followers of these three religions exhibit specific organizational behavior, such as obedience to authority, limited anti-social behaviour, and citizenship behaviour. The main objective of this paper is to first, re-examine the work of Krauss and Idris (2007) that produced a Muslim Religiosity Personality Inventory (MRPI) in a pilot study, and second to propose usefulness of specific Muslim religiosity values in relation to whistle-blowing in Islamic financial institution context. Our work is in line with Ntalianis and Raja (2002) who discuss how religious individuals from Christianity, Islam, and Judaism may exhibit citizenship behaviour and whistle-blowing in organizational context. Our main argument is whistle blowing intention is based on the premise that conscious and deliberate attempt to report corporate malpractices and accounting fraud originate from religiosity of a person.

Most of the studies have been carried out to examine the relationship between religiosity and human behaviour such as drug abuse (Kendler, et al., 2003; Stylianou, 2004; Chu, 2007); offending (Koster, Goudriaan, & Schans, 2009); development of adulthood (Barry, Nelson, Davarya & Urry, 2010); stress (Barhem, Younies, & Muhamad, 2009) and entrepreneurship (Galbraith & Galbraith, 2007). We know little about what differentiates whistle-blowers from those who observe a wrongdoing but chose not to report it in the context of Islamic financial institutions. Specifically, our aim is to investigate those Muslim religiosity values which influence and raise concerns about another peer work-related behaviour and practices that propel another peer to report such a wrongdoing in Islamic financial institutions.

This paper is organized as follows: section 2 provides review of related literature; section 3 explains our methodology; section 4 reports our findings of pilot study. Section 5 presents a framework linking the modified MRPI to whistle-blowing intention and section 6 concludes.

**Review of related literature**

Religiosity has been closely associated with spiritual values. Fukuyama and Sevig (1999) mentioned that spiritual contexts should to be explored from different cultural perspectives. This might be true in the sense that culture can influence to what extent one is willing to embrace one's religious doctrines. How do we measure someone's religiosity? According to Benson et al. (1993), religiosity is maturity of one's faith which indicates the degree of commitments and perspectives on certain religious traits or events. One's faith maturity can be identified based on adherence to religious doctrines. In this regard, a number of scales have been developed. Initially, religiosity and religious values have fallen under the rubric of Christianity and the study of Christian people (Krauss et al, 2005). As such much of the instrumentation of religiosity reflect Judeo-Christian religious worldview in terms of concepts, constructs and items (Spilka *et al.*, 2003; Ghorbani *et al.*, 2000).

Table 1: Spiritual values and multicultural values

<i>Spiritual Values</i>	<i>Multicultural Values</i>
Connectedness with others	Cultural Similarities
Contact and conflict with reality	Cultural differences
Compassion and love	Understanding and empathy
Relationship outside of self	Movement from ethnocentrism toward cultural pluralism
Social justice	Dealing with issues of oppression, advocacy
Faith	Flexibility and patience
Grace, intimacy, creativity	Commitment and humour
Sacredness and mystery	Tolerance for ambiguity
Detachment	Observational skills
Paradox	Bicultural and multicultural skills

Adapted from Fukuyama & Sevig (1999)

[Insert Table 2 here]

There has been limited work on the instrumentation of religiosity and relevant scales derived from non-Judeo Christian (Hill and Hood, 1999, Grace, 2000). In order to overcome this limitation, some authors have proposed adaptation of Judeo-Christian religious framework, however it has been a complex challenge to make sure that the methodological approaches adapted from Judeo-Christian studies are valid to explain non-Christian religious experience (Kuçukcan, 2000). Some authors claim that religiosity scales claiming to be universal may in fact not be. In measuring its impact on human behaviour, the role of assumptions stemming from one's overall religious worldview is vital (al-Attas, 2001) as it might reflect the religious worldview and the religious tradition of the person.

Another challenge is well explained by Family Development Foundation (2002) that one of the difficulties relates to the different perspectives relating to religiosity of people, individuals differ in their ways of being religious, as one person might express religion by meditating regularly, another by attending church, another by reading certain literature, and another by participating in a civil rights demonstration (McGuire 1992). Next challenge is to decide on whether the measurement of religiosity is

one-dimensional or multidimensional. Much of the early research on religiosity and delinquency, have used a single item of the religious affiliation to indicate religious commitment.

A major breakthrough was the Glock and Stark (1965)'s model of religiosity which put forward the idea of multidimensional definition of religiosity. Their model has been used in many studies despite its limitations. Indeed, Johnson *et al.* (2001) reviewed 40 published studies on religiosity on the number of factors used to measure religious commitment, they noted that most of the studies were not using multidimensional factors with more than half of the studies reviewed used only one or two factors. This type of research obviously has psychometric shortcomings (Emmons 1999) and therefore is too limited (Weaver *et al.* 1998). It is not a question of relevancy but rather of methodologically desirable goal (Gorsuch and McFarland 1972).

Similar patterns can be observed in Muslim religiosity studies where most of the studies use quite ambiguous, arbitrary or sometimes subjective single-item definition of religiosity. Samandari (1982) developed religiosity measure of forty items but only used five items for analysis without robust internal validity and scale reliability of the measurements used. Albelakhi (1997) constructed a new scale for measuring religiosity among Muslims using an exploratory Principal Components Analysis (PCA). Six components were extracted: the religious dimensions of practice, societal value of religion, belief in central tenets, personal need for religion, reliance on practical guidance, and unquestioning acceptance. Predictions regarding multidimensionality of Muslim religiosity were generally supported as well as predictions regarding differences in levels of religiosity.

Glock and Stark's model of religiosity has been used for Muslim religiosity by Wilde and Joseph (1997) who devised a 14-item 'Muslim Attitudes towards Religion'. Serajzadeh (1998) also adapted Glock and Stark's model for development of instrument for the Iranian Muslim youth and crime. His assumption is that the three monotheistic religions (namely Judaism, Christianity and Islam) seem to share similar elements in their structural tenets and thus, some items developed by researchers for Christianity and Judaism seems to be applicable to Islam too. Though the model provides a more universalize set of primary religiosity dimensions (Glock and Stark, 1965), it neglects the uniqueness and spirit of the individual religious tradition (Krauss, et al, 2005). Krauss, et al (2005) argue that the Glock and Stark's model may be inadequate for generalizability and commonalities with other traditions. There is a need to capture the unique qualities and the most relevant dimensions of religiosity from the perspective of Islam as its concept of religion is fundamentally different from the worldview concept of religion (Shamsuddin, 1992).

Krauss et al (2005)'s study is one of the earliest to propose a basic religiosity model rooted in the *tawhidic* worldview of Islam. The concept of Muslim religiosity values was introduced by Krauss et al in 2005 which was further refined in 2007 after Head of different faiths validated their instrument. This instrument is then used in their studies of Malaysian youth with the aim of enhancing the aspects of the youth religiosity. Krauss et al (2005) carried out the pioneering study on the Muslim religiosity scale. Their study selected groups of Malaysian Muslim youth in the three-phase initiative in an effort to: 1) define religiosity from the Islamic perspective; 2) develop an instrument for assessing Islamic religiosity; and 3) obtain religiosity normalized scores for the selected groups of Muslim youth. As the scale was originally created for Muslims, Krauss, Hamzah and Idris (2007) have invited other non-Muslim religiosity leaders to participate and provide their inputs which resulted in addition of 35 items to their original 101 items.

Muslim Religiosity Personality Inventory (MRPI) was developed to meet the need for a Muslim religiosity scale whose items derived from the two prominent knowledge sources of Islam: the Qur'an and Hadith (sayings) of the Prophet Muhammad. In their study, they have involved expertise of religious leaders from each faith communities. The adapted scale utilized a five-point Likert scale ranging from

Never (1) to Always (5) to measure respondents' frequency of behaviours, attitudes, or intention to commit behaviours.

Krauss, Hamzah and Idris (2007) claim that the Religious Personality subscale reflects the manifestation of one's religious worldview and God-consciousness in "righteous works," as promoted by all major religions and that refer to a wide variety of behaviours. Such actions or behaviours can be analyzed at four levels: actions towards God; actions towards fellow human beings; actions toward non-human beings (animals, the environment, etc.); and actions towards oneself (Family Development Foundation 2002). Nonetheless, although the current scale was "approved" by religious leaders from other faith communities, there may yet be a certain level of bias inherent within the scale based on the religious worldview of the tradition that guided the scale's creation (Krauss et al., 2005). Limitations of the adapted religious values as discussed in the previous section highlighted the limitation that no single scale can entirely capture the multiple dimensions of religiosity. There are also unresolved issues of construct validity and reliability.

### Methodology

A pilot study was conducted for 6 weeks starting from 16 December 2010 to 30 January 2011. The pilot study was conducted: (a) to assess respondents' understanding of the meaning of the questions; (b) to decide appropriateness of response categories for both Muslim and non-Muslim respondents, and (c) to know effectiveness of data capture. We selected 20 academic staff (volunteers) from five faith groups (Muslim, Buddhist, Hindu, Catholic and Sikh). Questionnaires were hand-delivered to these respondents. Of the 20 questionnaires, 14 were returned, yielding a response rate of 70%. However, out of 14 questionnaire returned, only 10 questionnaire were completed, yielding a response rate of 50%. Reliability was tested using Cronbach's alpha. According to Sekaran (2003), an alpha value of less than 0.60 is poor, between 0.70-0.80 range acceptable, and over 0.80 good. We are mindful of the fact, there is need to refine the questionnaire's items since the Cronbach's alpha value for each scale was 0.65. In particular, the traits representing the religiosity values were not well-received during our pilot study, indicating further work needs to be done so that element of biasness towards any religion is minimized. In the next section, we report the comments given by the respondents. In order to preserve anonymity of the respondents, we used Arabic numeral for each respondent.

### Findings

The respondents commented on the general structure of the questionnaire, arrangement, and the number of feasible questions. To be precise, for each inventory item, we provided two statements, the first statement is for Muslim to answer and the second statement is for Non-Muslim to answer. Respondent 2 raised the issue of whether the same "objective" can be achieved if similar question for Muslim and non-Muslims are addressed in the same number. For example, the issue of ablution (*wudhu*) is only applicable for Muslim but that does not mean that the non-Muslim have to perform similar 'cleansing' procedure to be cleaned. This is further supported by Respondent 12 who questioned similar meanings of *wudhu* to Muslims and 'clean' to non-Muslims. Since this question is relevant only to the Muslims, it is incorporated in Religious Practice Cluster of the final Questionnaire (see Appendix B) for Muslims, and excluded in the final questionnaire for the non-Muslims. Respondent 12 suggested that one statement for each number and specific for each religion.

Similar issue was raised for statement 18 which reads: "*I make effort to always follow the Islamic code of dress*"; "*I always follow the latest fashion code of dress*". Respondent 7 highlighted that only Muslims have certain dressing code especially for the *Muslimah* (female Muslims). Thus, this question is maintained for the Muslims (Appendix B) but excluded for Non-Muslims (Appendix C). There were also

concerns on the biasness of the questions towards Muslim and Islamic teachings as indicated below. For example, Respondent 2 explained, *“to have ‘Islamic-based’ question together with ‘other religion’ question does add a discomfort to me as a non-Muslim respondent (no offence meant to Muslim).”* We received the same comment from Respondent 4 and Respondent 5. Respondent 2 mentioned that statement no 8 which reads *“I try to understand the teaching of my religion in my holy book”* should be clear enough to people who have a religion. The question might not be suitable if the respondent is an atheist. We have addressed this issue by asking the respondent to indicate, whether they follow a religion or otherwise (atheist). If a respondent is an atheist, he or she will be excluded from the survey since the final survey is intended to examine the influence of religiosity values on their willingness to become a whistle-blower. This has also been highlighted by other respondent as some religions do not have Holy Book but Scriptures. Some respondents had concerns with the contradictory nature of statement no 28, which are *“I tend to rely on others when faced with difficulty.”* and *“I will seek for God’s help first then to others when faced with difficulty.”* Respondent 1 argued that in some religions, a person needs God’s direction and this may involve reliance on others. Also in some circumstances, regardless of any religion, a person might do both when faced difficulties, therefore it was not a question of religion but personal belief and ways of dealing with difficulties. It was also corroborated by Respondent 7 that both statements should be dealt separately. This issue has been resolved by clustering them where the former sentence is clustered under Personality traits and the latter is clustered under the Attitude cluster (see Appendix B and C).

Respondent 2 argued that statement 79 *“I make a serious effort to fulfil wedding invitations”*. The respondent argued *“Is fulfilling wedding invitation has significance on religiosity values of a person in any religion?”* Also the word of fulfilling wedding invitation is also confusing - does attending and/or giving presents can be considered as fulfilling wedding invitation. Does a person dislikes attending a wedding considered not to be religious? Due to ambiguity in wordings, meaning and significance of the item, the researchers agreed to exclude this statement in the final questionnaires. Respondent 7 commented that the statement no 34, *“I make sure all my family members are following the teachings of my religion”* is quite tricky, when not all of your family members embrace same religion. In order to address this issue, we change the statement to *“I make sure all my family members are following their beliefs”*, as in cluster Attitude (see Appendix B and C).

Respondent 3 commented that the questionnaire items are more relevant to Muslim respondents and so he suggested that a separate set of questionnaire should be used for non-Muslims. Thus, some of the questions have been thoroughly scrutinised and omitted if researchers agreed that they posed some biasness. The final questionnaires for Muslims and Non-Muslim were finalised (Appendix B and C) and were sent to three banking officers for in-depth interviews as the target respondents are staff of Islamic banks and financial institutions in Malaysia. We made minor revisions based on the comments received from Muslim and non-Muslim bankers. However, one of the respondents suggested that the inventory items to be further clustered such as, questions related to families and community to let the reader to have a better place to go about answering the questions. This comment has been incorporated in the final questionnaires (Appendix B and C).

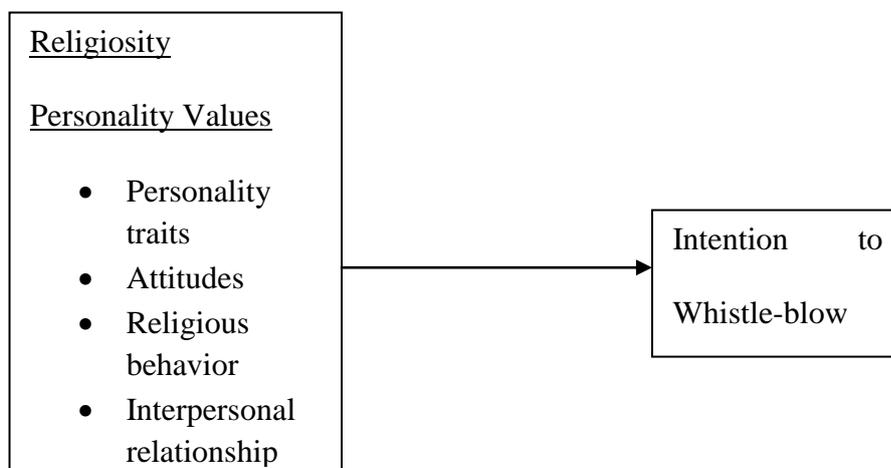
### **Proposed conceptual framework**

In this section, we propose that religiosity is potential correlate of altruistic human behaviour such as whistle-blowing. It is defined as *“organizational members disclosing illegal, immoral, or illegitimate practices ... to parties who may be able to effect actions”* Miceli and Near (1985) describe whistle-

blowing as a process rather than an event because it evolves gradually over a long period of time. Most of the studies have investigated the relationship between individuals and situational characteristics and how the latter affect employees' intention to engage in whistle-blowing (Miceli and Near, 1985). Others have examined the relationship between whistle-blowing and organizational commitment (Somers and Casal, 1994). Ntalianis and Raja (2002) suggest that Muslims are not expected to start blowing the whistle as soon as they see something that could be objectionable. They have to first analyze the situation, and talk to the person whose action is objectionable. Since Islam emphasises tolerance and forgiveness more than anything else therefore it is likely that such situation would be resolved internally to preserve the existing peace and authority structures. However, we argue that in Islamic financial institutions the behaviours of Muslim employees are scrutinised for their compliance with *Shari'ah* principles, thus deviation of an employee would provide significant momentum for whistle-blowing.

We use the notion of religiosity and its consequential affect on employees' intention to whistle-blow in Islamic financial institutions in Malaysia. We argue that Malaysia provide a unique setting to study this relationship due to the following reasons. Malaysia introduced Whistleblower Protection Act in 2010 as a mean to combat corruption and wrongdoings. Section 6 of the Whistleblower Protection Act 2010 defines a "Whistleblower" as "any person who makes a disclosure of improper conduct to the enforcement agency". This bold step resonates with international trend of making legislations to protect whistle-blowers. The key aim of Malaysian act is to facilitate disclosures of improper conduct and to protect persons making those disclosures from detrimental action. This act is quite contentious with the cultural norms of introvertness and secrecy shared by Malaysian society at large, which has roots in Asian culture (Luo, 2002). Thus, the Whistleblower Act completes the justification for the employees to fulfil their obligation to whistle-blow wrongdoings.

Whistle-blowing is a form of pro-social behaviour, involving both egoistic and altruistic motives on the part of the actor. There are certain individual traits or personality characteristics that may interact with their perception of wrongdoings in an organization and their whistle-blow intention (Dozier and Miceli, 1985). We argue that modified Krauss, Hamzah and Idris (2007) Muslim Religiosity Personality Inventory (MRPI) can be used to examine the impact of religiosity values on employees' intention to become whistle-blowers. The MRPI were clustered into four categories: *personality traits* (Maddi, 1980; Wafa and Tee, 1997); *attitudes* (Barnett, Bass and Brown, 1994), *religious behavior* (Fichter, 1969) and *interpersonal relationship* (Carls, 1962) as important attributes of religiosity that could contribute to the intention of becoming a whistle blower. *Personality traits* are qualities and characteristics that define a person's unique character and behaviour pattern.



### Figure 1: Religiosity personality Values and Intention to Whistle-blow

#### *Propositions*

This section proposes a number of testable propositions in relation to the impact of religiosity on whistle-blowing in Islamic financial institutions.

*Proposition 1: Muslim employees with commitment to religious practices are expected to engage in more whistle-blowing within their institutions than those Muslim employees with no commitment to religious practices.*

An early definition of personality traits was provided by Maddi (1980), as a stable set of characteristics and tendencies that determines those commonalities and differences in the psychological behaviour (thoughts, feelings and actions) of people that have continuity in time and that may not be easily understood as the sole result of the social and biological pressures of the moment. Wafa and Tee (1997) concluded that both managers and employees in a multicultural work setting such as, Malaysia have to recognize that their own values, perception and personalities influence the way they handle conflict. Rothschild and Miethe (1999) claim that there are no considerable differences across the four groups in terms of their educational attainment, religiosity, number of promotions, and supervisory position within the organization. They also concluded that individual socio-demographic attributes do not explain differences in individuals' exposure to occupational deviance very well, nor do they explain their response to this deviance. However, they show that there are some differences across groups of employees in their general attitudes and values for whistle blower such as non-observer, silent observer, Internal Whistle-Blowers and External Whistle-Blowers. Nonetheless, these differences are not significant enough to qualify as support for a presumed whistle-blowing personality. We have categorized 51 religious personality items that fit into personality traits' definition to be in the cluster.

[Insert Table 3 here]

*Proposition 2: Muslim employees with religious attitude are expected to engage in more whistle-blowing within their institutions than Muslim employees with no religious attitude.*

*Attitude* is a mental position with regard to a fact or state; a feeling or emotion toward a fact or state; a person's positive or negative feelings, thoughts, and ideas about a subject under consideration (Merriam-Webster, 1996). The willingness of employees to assert their religious convictions at work and

the increasing diversity of religious views are two of the principal factors contributing to the challenges of religious diversity for business and military leaders (Morgan, 2004). Carr-Ruffino (2003) noted an individual with attitudes open to other cultures and ideas will become more flexible and will experience personal growth. In terms of ethical judgement, Barnett, Bass & Brown (1994) suggested that the ethical judgement of individuals dealing with several business-related issues varied, depending upon their ethical ideology. They found that individuals attitude can be classified as highly idealistic and low relativistic were more likely to consider reporting a peer's cheating as ethical. Individuals who believed reporting a peer's cheating was ethical, were more likely to say they would report a peer's cheating. Solomon (1984) investigate the relationship of certain factors such as reading attitude, religious background, class standing, and type of school as they relate to the Bible reading habits of college students. Individual commitment as found in religious experience and church participation seems most related to sustaining Bible reading habits. Therefore, we believe that attitude can to a certain extent influence an individual's religiosity values. Twenty five of the religious personality items have been categorized into attitude cluster as shown in Table 4.

[Insert Table 4 here]

*Proposition 3: Muslim employees with religious behavior are expected to engage in more whistle-blowing within their institutions than Muslim employees with divergent religious behavior.*

Fichter (1969) proposed that *religious behavior* is the best measure of religious involvement. He noted that, while religiosity is measurable, it must be broken down into a specific aspect, such as “extrinsic religious ritual” in order to be valid. According to Barnett et.al (1994) stated that religiosity is regularly defined in terms of (1) cognition (religious knowledge, religious beliefs), (2) affect, which has to do with emotional attachment or emotional feelings about religion, and/or (3) behaviour, such as church affiliation and attendance, Bible reading, and praying (Cornwall et al., 1986). We have categorized 12 religious personality items that reflect religious behaviour in the cluster as shown in Table 5.

[Insert Table 5 here]

*Proposition 4: Muslim employees having strong religious interpersonal relationship are expected engage in more whistle-blowing within their institutions than less religious employees.*

*Interpersonal relationship* is an association between two or more people that may range from fleeting to enduring. This association may be based on love liking, and regular business interactions, or some other type of social commitment. Carl (1962) argues that the quality of the personal encounter is probably, in the long run, the element which determines the extent to which this is an experience which releases or promotes development and growth. All 10 religious personality items that describe interpersonal relationship are clustered together as shown in Table 6 below.

Table 6: Interpersonal Relationship of Religiosity Personality (10 items)

Construct	Main reference
I establish good relations with my neighbours.	(Krauss, Hamzah, & Idris, 2007)
I like to help my relatives.	(Krauss, Hamzah, & Idris, 2007)

I care about my good relations with my siblings.	(Krauss, Hamzah, & Idris, 2007)
I speak politely to my parents when I am angry at them.	(Krauss, Hamzah, & Idris, 2007)
My siblings and I compete in serving our parents.	(Krauss, Hamzah, & Idris, 2007)
I like to take advantages of opportunities to understand my religion with my family.	(Krauss, Hamzah, & Idris, 2007)
I follow the advice of my parents even though it may not be what I want.	(Krauss, Hamzah, & Idris, 2007)
I follow the advice of my parents even though it may contradict my religious conviction.	(Krauss, Hamzah, & Idris, 2007)
I incline toward taking a side when my friends quarrel.	(Krauss, Hamzah, & Idris, 2007)
I pay more attention to my friends than my parents.	(Krauss, Hamzah, & Idris, 2007)

## Conclusion

Extensive discussion with panel members and pilot study results reveal that there are still some biasness embedded in MRPI though it has been used with four local different faith communities. Further refinement resulted in some items to be dropped and the remaining items to be clustered accordingly into four headings: personality traits, attitudes, religious practices, and interpersonal relationship. Further studies need to be carried out to test the usability of the concepts in depicting religiosity values of multiple faiths of respondents in business management settings rather than psychological religious setting, the origin of these concepts.

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Table 2: Review of religiosity measurements

Author (Year)	Main contribution
Lenski (1961)	<p>proposed four dimensional model in religious orientation and group involvement:</p> <ul style="list-style-type: none"> <li>(a) ‘ associational’ aspect,                             <ul style="list-style-type: none"> <li>- includes frequency of religious involvement in worship and prayer services;</li> </ul> </li> <li>(b) ‘communal’ dimension,                             <ul style="list-style-type: none"> <li>- relates to the preference and frequency of one's primary-type relations;</li> </ul> </li> <li>(c) ‘doctrinal orthodoxy’,                             <ul style="list-style-type: none"> <li>- refers to intellectual acceptance of the prescribed doctrines of the church;</li> </ul> </li> <li>(d) ‘devotionalism’,                             <ul style="list-style-type: none"> <li>- involves private or personal communion with God through prayers, meditation and religious behaviour.</li> </ul> </li> </ul> <p>-unique model of religiosity, as most early conceptualizations were uni-dimensional in nature.</p>
Glock and Stark (1965)	<p>The core dimensions of religiosity:</p> <ul style="list-style-type: none"> <li>(a) Ideological (religious belief)                             <ul style="list-style-type: none"> <li>- encompasses beliefs that are expected to be held by the followers.</li> </ul> </li> <li>(b) Ritualistic (religious practice)                             <ul style="list-style-type: none"> <li>- includes the specific religious practices, such as worship, prayer, participation in special sacraments, fasting and so on, which are expected to be performed by the believers.</li> </ul> </li> <li>(c) Experiential (religious feeling)                             <ul style="list-style-type: none"> <li>- perceptions and sensations of having communication with a divine essence (i.e. with God) ultimate reality or transcendental authority.</li> </ul> </li> <li>(d) Intellectual (religious knowledge)                             <ul style="list-style-type: none"> <li>- encompasses the basic information and knowledge about the tenets of the faith and its sacred scriptures that are expected to be known by the believers.</li> </ul> </li> <li>(e) Consequential (religious effects)                             <ul style="list-style-type: none"> <li>- includes the effects of religious belief, practice, experience and knowledge on the believer's everyday life.</li> </ul> </li> </ul>
Samandari (1982)	<p>the measure consisted of forty items.                      No report on the internal validity and the reliability of the scales                      only five items of forty were used</p>
Pouryoussefi (1984)	<p>Used 31-item Likert scale of Glock and Stark's model of religiosity (excluding the intellectual dimension)</p>

Author (Year)	Main contribution
	No report on internal validity and reliability of the scale
Evans <i>et al.</i> 1995; Tittle and Welch 1983 Johnson <i>et al.</i> 1987;	Religiosity has often been measured with a single-item, such as church attendance or level of participation in various Christian-based religious activities. Much of the early research on religiosity and delinquency, for example, used church attendance as the sole measure of the religious commitment.
Shamsudin (1992)	proposed a model of Islamic religiosity" represented by the concept of <i>taqwa</i> (God-consciousness) a multidimensional variable of religiosity: (a) knowledge (' <i>ilm/ ma 'rifah</i> ), (b) belief ( <i>iman</i> ), (c) practice (' <i>amal</i> ), (d) consequences ( <i>natajah</i> ) (e) realization of excellence ( <i>ihsan</i> ).
Albelaikhi (1997)	Employed an exploratory Principal Components Analysis (PCA) on a set of questionnaire items of Islamic religiosity. Six components were extracted: (a) religious dimensions of practice, (b) societal value of religion, (c) belief in central tenets, (d) personal need for religion, (e) reliance on practical guidance, (f) unquestioning acceptance. Predictions regarding multidimensionality of Muslim religiosity were generally supported. Predictions regarding differences in levels of religiosity were also generally supported.
Serajzadeh (1998)	Adapted Glock and Stark (1965) applied the aspects of the Islamic faith.
Hill and Hood (1999)	aggregated and analyzed 126 different psychological measurements for religiosity.
Grace (2000)	finding measures applicable to the non-Western religions and spirituality not available in Hill and Hood (1999).
Spilka <i>et al.</i> (2003)	Made assumption that people from all religious traditions express their faith in three ways: through behaviour (e.g. rituals), belief (e.g. belief in the supernatural) and experience (e.g. mystical states). A single definition of 'religion' itself remains elusive for

Author (Year)	Main contribution
	psychologists of religion.

Table 3: Personality Traits Attributes of Religiosity Personality (51 items)

Construct	Main reference	Explanation
I get enthusiastic about doing good deeds when people praise me.	(Krauss, Hamzah, & Idris, 2007)	For Muslim .Openness – incentive Do dakwah.
I am willing to help people when in need.	(Krauss, Hamzah, & Idris, 2007)	Agreeableness – cooperative change sentences.
I avoid something if I am unsure about its legal status.	(Krauss, Hamzah, & Idris, 2007)	Conscientiousness -efficient.
I immediately apologize if I wrong someone.	(Krauss, Hamzah, & Idris, 2007)	Openness.
If I borrow money from someone, I will make a contract with them.	(Krauss, Hamzah, & Idris, 2007)	Conscientiousness-efficient. In Muslim, we must do this.
I do all jobs assigned to me to the best of my ability.	(Krauss, Hamzah, & Idris, 2007)	Conscientiousness -efficient
I am particular about doing good deeds consistently even though they may be small.	(Krauss, Hamzah, & Idris, 2007)	Conscientiousness -efficient
I easily forgive my siblings when they hurt me.	(Krauss, Hamzah, & Idris, 2007)	Extraversion
I always obtain the facts before passing judgements.	(Krauss, Hamzah, & Idris, 2007)	Neuroticism – secure
I tend to rely on others when faced with difficulty.	(Krauss, Hamzah, & Idris, 2007)	Neuroticism – secure
I will seek for Allah’s help first then to others when faced with difficulty.- <b>Muslim</b>	(Krauss, Hamzah, & Idris, 2007)	Neuroticism – secure
I make effort not to display my personal good deeds.	(Krauss, Hamzah, & Idris, 2007)	Agreeableness – coldness
I frequently discuss religious issues with my friends.	(Krauss, Hamzah, & Idris, 2007)	Openness- incentive / Agreeableness – compassionate Do <i>dakwah</i> .
I frequently share my religious values with my friends.	(Krauss, Hamzah, & Idris, 2007)	Openness – incentive Do <i>dakwah</i> .
I do not expose the shortcomings of other.	(Krauss, Hamzah, & Idris, 2007)	Neuroticism – secure

Construct	Main reference	Explanation
I avoid offending in any way when joking around with others.	(Krauss, Hamzah, & Idris, 2007)	Neuroticism – secure/sensitivity
I worry if I cannot pay debt on time.	(Krauss, Hamzah, & Idris, 2007)	Conscientiousness – efficient –to act dutifully, planned
I fulfil all my promises.	(Krauss, Hamzah, & Idris, 2007)	Conscientiousness – efficient –to act dutifully, planned
I make effort to obey Allah S.W.T's rules in every situation.- <b>Muslim</b>  I make effort to obey rules/advice of my religion (God) in my daily life.- <b>Non Muslim</b>	(Krauss, Hamzah, & Idris, 2007)	Conscientiousness – efficient –to act dutifully, planned Q48
I always thank a person when they do something nice for me.	(Krauss, Hamzah, & Idris, 2007)	Openness – appreciation for emotion Q50
I assume that people talk about me because they are concerned about my well-being.	(Krauss, Hamzah, & Idris, 2007)	Extraversion – positive emotions
I try to smile as much as possible.	(Krauss, Hamzah, & Idris, 2007)	Extraversion – positive emotion Q54
I get zealous when my colleague/friend is more successful than me.	(Krauss, Hamzah, & Idris, 2007)	Extraversion – positive emotion. changes zealous to zealous = motivated
I do not get angry when I am being scolded.	(Krauss, Hamzah, & Idris, 2007)	Extraversion – positive emotion
I speak politely to my parents.	(Krauss, Hamzah, & Idris, 2007)	Conscientiousness – efficient –to act dutifully, planned
I forgive others who wrong me before they ask for my forgiveness.	(Krauss, Hamzah, & Idris, 2007)	Openness
I not expect others to finish my work for me.	(Krauss, Hamzah, & Idris, 2007)	Conscientiousness – efficient –to act dutifully, planned
I find ways to recycle anything that can still be of use.	(Krauss, Hamzah, & Idris, 2007)	Conscientiousness – efficient –to act dutifully, planned
I do feel worried when I send negative e-mails/SMS messages/information to people.	(Krauss, Hamzah, & Idris, 2007)	Neuroticism – secure
I will keep a person's identity hidden when I talk about them and they are not present.	(Krauss, Hamzah, & Idris, 2007)	Very important to whistle blowing Neuroticism – secure/sensitivity

Construct	Main reference	Explanation
I seek sympathy from others when I experience misfortune.	(Krauss, Hamzah, & Idris, 2007)	
I don't like to join in when I hear people gossiping.	(Krauss, Hamzah, & Idris, 2007)	Very important to whistle blowing
I tend to remain silent when someone degrades my religion in front of me.	(Krauss, Hamzah, & Idris, 2007)	Very important to whistle blowing Neuroticism – secure/sensitivity
I can tolerate people who disagree with me.	(Krauss, Hamzah, & Idris, 2007)	Changes sentences CANNOT to CAN to more positive – really important in whistle blowing to measure
I throw rubbish in the trash bin when I see it lying around.	(Krauss, Hamzah, & Idris, 2007)	Conscientiousness - efficient –to act dutifully, planned
I am careful to follow Islamic social norms during all activities I am involved in.- <b>Muslim</b>  I am careful to follow my religious social norms during all activities I am involved in.- <b>Non Muslim</b>	(Krauss, Hamzah, & Idris, 2007)	Neuroticism – secure
I participate in recreational activities without neglecting religious norms.	(Krauss, Hamzah, & Idris, 2007)	Conscientiousness - efficient –to act dutifully, planned
I perceive all non-Muslims that I see as potential Muslims.- <b>Muslim</b>  I perceive those who are not the same religion as mine as potential believers of my religion.- <b>Non Muslim</b>	(Krauss, Hamzah, & Idris, 2007)	Openness
I respect all opinions.	(Krauss, Hamzah, & Idris, 2007)	Openness
I feel happy when someone says something good about one of my friends.	(Krauss, Hamzah, & Idris, 2007)	
I openly display my anger if somebody meddles with my belongings.	(Krauss, Hamzah, & Idris, 2007)	Neuroticism – secure
I tend to let setbacks in life distract me from my responsibilities and religious practice.	(Krauss, Hamzah, & Idris, 2007)	Neuroticism – secure
I am very comfortable admitting my mistakes.	(Krauss, Hamzah, & Idris, 2007)	
I don't gossip about others.	(Krauss, Hamzah, & Idris, 2007)	Change to be positive –

Construct	Main reference	Explanation
	Idris, 2007)	very important to whistle blowing
I enjoy working in a team.	(Krauss, Hamzah, & Idris, 2007)	Agreeableness – cooperative. very important in whistle blowing
I use other people's belonging with their permission.	(Krauss, Hamzah, & Idris, 2007)	From without to with Neuroticism – secure
I offer my guests the best of what I have when I am hosting them in my home.	(Krauss, Hamzah, & Idris, 2007)	Agreeableness – cooperative and Openness
I do not enter a person's house until I am invited.	(Krauss, Hamzah, & Idris, 2007)	Neuroticism – secure
I make effort to make my guests feel as comfortable as possible.	(Krauss, Hamzah, & Idris, 2007)	Agreeableness – cooperative and Openness
I work hard to achieve my goals in the specified time.	(Krauss, Hamzah, & Idris, 2007)	Conscientiousness – efficient –to act dutifully, planned
I prefer to do any form of labour than to beg.	(Krauss, Hamzah, & Idris, 2007)	Conscientiousness – efficient –to act dutifully, planned
I am the first to greet when meeting another person.	(Krauss, Hamzah, & Idris, 2007)	Agreeableness –friendly
I make effort to always follow the Islamic code of dress.- <b>Muslim</b>	(Krauss, Hamzah, & Idris, 2007)	

Table 4: Attitudes Attributes of Religiosity Personality (25 items)

Construct	Other reference	Main Reference	Explanation
I make effort to deepen my understanding of Islamic law – <b>Muslim</b>	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	(Krauss, Hamzah, & Idris, 2007)	Behaviour – Knowledge
I make effort to deepen my understanding of law/rules/teaching/precepts of my religion – <b>Non Muslim</b>			
I love my brothers and	(Fichter, 1969)	(Krauss, Hamzah,	Affect –

Construct	Other reference	Main Reference	Explanation
sisters in Islam as I love myself.  I love my brothers and sisters in my religion as I love myself.	(Barnett, Bass, & Brown, 1996)	& Idris, 2007)	emotion
I feel at peace when I hear the Quran recited. – <b>Muslim</b>  I refer to Holy book/Scriptures to obtain tranquillity (peace). – <b>Non Muslim</b>	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	(Krauss, Hamzah, & Idris, 2007)	Affect – emotion. Behaviour – Belief
I try to understand the meaning of Qur’anic words/verses. – <b>Muslim</b>  I try to understand the teachings of my religion in the Holy book/Scriptures. – <b>Non Muslim</b>	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	(Krauss, Hamzah, & Idris, 2007)	Behaviour – Knowledge
I thank Allah S.W.T when beggars come to my house .- <b>Muslim</b>  I feel happy when beggars come to my house – <b>Non Muslim</b>	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	(Krauss, Hamzah, & Idris, 2007)	Affect – emotion
I will not ridicule someone in return when they ridicule me, even during Ramadhan.- <b>Muslim</b>  I continue to perform good deeds even if others might ridicule me for it - <b>Non Muslim</b>	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	(Krauss, Hamzah, & Idris, 2007)	Behaviour – predisposition to Action - Action depends on situation
I will not ridicule someone in return when they ridicule me.	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	(Krauss, Hamzah, & Idris, 2007)	Behaviour – predisposition to Action - Action depends on situation. Changes

Construct	Other reference	Main Reference	Explanation
			sentence to be positive
I make sure all my family members are following the teachings (Sunnah) of Rasulullah. .- <b>Muslim</b>	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	(Krauss, Hamzah, & Idris, 2007)	Behaviour – Belief
I make sure all my family members are following their belief- <b>Non Muslim</b>			
I make an ongoing effort to increase the frequency of my non-obligatory (nafil) prayers. - <b>Muslim</b>	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	(Krauss, Hamzah, & Idris, 2007)	Behaviour – intentions to kindness + belief
I make an ongoing effort to increase the frequency of my good deeds.- <b>Non Muslim</b>			
I would give true information in court against someone even if he/she is my relative.	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	(Krauss, Hamzah, & Idris, 2007)	Behaviour – predisposition to Action - Action depends on situation
I criticize my friends when they do wrong.	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	(Krauss, Hamzah, & Idris, 2007)	Behaviour – predisposition to Action
I assume that nobody is perfect.	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	(Krauss, Hamzah, & Idris, 2007)	Behaviour – Knowledge
I get upset when I hear about the suffering of Muslims in other parts of the world.- <b>Muslim</b>	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	(Krauss, Hamzah, & Idris, 2007)	Affect – emotion to object
I get upset when I hear about the suffering of people of all races in other parts of the world. – <b>Non Muslim</b>			
I like to help the poor without anyone knowing.	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	(Krauss, Hamzah, & Idris, 2007)	Behaviour – intentions
I make effort to internalize the Prophet's ethical conduct in my daily life- <b>Muslim</b>	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	(Krauss, Hamzah, & Idris, 2007)	Behaviour – Belief

Construct	Other reference	Main Reference	Explanation
I make effort to internalize the ethical conduct of my religion in my daily life - <b>Non Muslim</b>			
I would remove an obstacle that I see on the road, even if it is small.	(Fichter, 1969) (Barnett, Bass, & Brown, 1996).	(Krauss, Hamzah, & Idris, 2007)	Behaviour – intentions – Belief in Islam doing good deeds.
I feel worried when I hurt my parents.	(Fichter, 1969) (Barnett, Bass, & Brown, 1996). (Krauss, Hamzah, & Idris, 2007)	(Krauss, Hamzah, & Idris, 2007)	Affection – emotion to human. Behaviour - Belief In Islam, need to respect parent. In others religion also, deemed virtuous.
I refer to the people who know when I feel uncertain about the Islamic rulings.- <b>Muslim</b>  I refer to the people who know when I feel uncertain about the rulings/teachings of my religion.- <b>Non Muslim</b>	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	(Krauss, Hamzah, & Idris, 2007)	Behaviour – Knowledge And Belief
I make effort to remember death often. - <b>Muslim</b>  I make effort to remember death and afterlife often. – <b>Non Muslim</b>	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	(Krauss, Hamzah, & Idris, 2007)	Behaviour – Belief
I create tranquillity/calmness in public.	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	(Krauss, Hamzah, & Idris, 2007)	Behaviour – Knowledge. Affect – Emotion.
I do not neglect my friend's dignity.	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	(Krauss, Hamzah, & Idris, 2007)	Affect – emotion
I make sure that when I read the Qur'an, I understand its	(Fichter, 1969) (Barnett, Bass, &	(Krauss, Hamzah, & Idris, 2007)	Behaviour – Knowledge.

Construct	Other reference	Main Reference	Explanation
demands. – <b>Muslim</b>  I make sure that I understand the demands/obligations/teachings of my religion.- <b>Non Muslim</b>	Brown, 1996)		
I share my opinion when I think that it will improve a situation.	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	(Krauss, Hamzah, & Idris, 2007)	Behaviour – Belief
I perform my work duties enthusiastically because it is a form of worship (ibadat). - <b>Muslim</b>  I perform my work duties enthusiastically because of my religion/God.	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	(Krauss, Hamzah, & Idris, 2007)	Behaviour – Belief
I will seek for Allah’s help first then to others when faced with difficulty- <b>Muslim</b>  I will seek for God’s help first then to others when faced with difficulty- <b>Non Muslim</b>	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	(Krauss, Hamzah, & Idris, 2007)	Behaviour – Belief

Table 5: Religious Behavior Attributes of Religiosity Personality (12 items for Muslims – 9 items for Non-Muslims)

Construct	Other reference	Main reference
I use the lessons from the Qur’an and Hadith in my conversations. – <b>Muslim</b>  I use the lessons from the Holy book/Scriptures in my conversations. – <b>Non Muslim</b>	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	(Krauss, Hamzah, & Idris, 2007)
I invite others to perform obligatory prayer (solat) – <b>Muslim</b>  I invite others to perform prayer/religious service – <b>Non Muslim</b>	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	(Krauss, Hamzah, & Idris, 2007)
I do pay alms (zakat). – <b>Muslim</b>  I do give donations.- <b>Muslim &amp; Non Muslim</b>	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	(Krauss, Hamzah, & Idris, 2007)
I find time to recite the Qur’an even if I am	(Fichter, 1969)	(Krauss, Hamzah, &

Construct	Other reference	Main reference
busy.- <b>Muslim</b> I find time to recite the Holy book/Scriptures even if I am busy - <b>Non Muslim</b>	(Barnett, Bass, & Brown, 1996)	(Idris, 2007)
I am the first to give salam when meeting another Muslim.- <b>Muslim</b>	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	
I am involved in da'wah work.- <b>Muslim</b> I am involved in religious work.- <b>Non Muslim</b>	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	(Krauss, Hamzah, & Idris, 2007)
I make effort to have ablution (wudhu') at all the times.- <b>Muslim</b>	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	
I have started saving money for hajj since my early days. – <b>Muslim</b> I have started saving money for religious donations since my early days- <b>Non Muslim</b>	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	(Krauss, Hamzah, & Idris, 2007)
I look opportunities to give charities.	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	(Krauss, Hamzah, & Idris, 2007)
I set aside money every year for charity.	(Fichter, 1969)	(Krauss, Hamzah, & Idris, 2007)
I pray the 5 compulsory (fard) prayers (solat) everyday- <b>Muslim</b> I practice religious service/prayers as taught in my religion – <b>Non Muslim</b>	(Fichter, 1969) (Barnett, Bass, & Brown, 1996)	(Krauss, Hamzah, & Idris, 2007)

Appendix A: Religiosity Personality Inventory Items (Krauss, Hamzah & Idris, 2007, p.158-161)

- 1 I get enthusiastic about doing good deeds when people praise me.
- 2 I am willing to help old people when they need it.
- 3 I make effort to deepen my understanding of Islamic law  
I make effort to deepen my understanding of law/rules/teaching/precepts of my religion.
- 4 I feel at peace when I hear the Quran recited.  
I refer to my al-Qur'an/Holy book/Scriptures to obtain tranquillity (peace).
- 5 I love my brothers and sisters in Islam as I love myself.  
I love my brothers and sisters in my religion as I love myself.
- 6 I use the lessons from the Qur'an and Hadith in my conversations.  
I use the lessons from the Qur'an/Holy book/Scriptures in my conversations.
- 7 I incline toward taking a side when my friends quarrel.
- 8 I try to understand the meaning of Qur'anic words/verses.  
I try to understand the teachings of my religion in the Holy book.
- 9 I establish good relations with my neighbours.
- 10 I find ways to recycle anything that can still be of use.
- 11 I invite others to perform obligatory prayer (solat)  
I invite others to perform solat/prayer/religious service.
- 12 I avoid something if I am unsure about its legal status.  
I avoid something if I am unsure about its religious implication.
- 13 I make effort to remember death often.  
I make effort to remember death and afterlife often.
- 14 I do not pay alms (zakat).  
I try to avoid myself from giving donations.

- 15 I find time to recite the Qur'an even if I am busy.  
I find time to recite the Qur'an/Holy book/Scriptures even if I am busy
- 16 I immediately apologize if I wrong someone.
- 17 I thank Allah S.W.T when beggars come to my house.  
I feel happy when beggars come to my house.
- 18 I make effort to always follow the Islamic code of dress.  
I always follow the latest fashion code of dress.
- 19 If I borrow money from someone, I will make a contract with them.
- 20 I create commotion in public.
- 21 I do all jobs assigned to me to the best of my ability.
- 22 I am the first to give salam when meeting another Muslim.  
I am the first to greet when meeting another person.
- 23 I will ridicule someone in return when they ridicule me, even during Ramadhan.  
I will ridicule someone in return when they ridicule me.
- 24 I continue to perform good deeds even if others might ridicule me for it.
- 25 I am particular about doing good deeds consistently even though they may be small.
- 26 I easily forgive my siblings when they hurt me.
- 27 I always obtain the facts before passing judgements.
- 28 I tend to rely on others when faced with difficulty.  
I will seek for God's help first then to others when faced with difficulty.
- 29 I like to help the needy.
- 30 I do not expose the shortcomings of other.
- 31 I make effort not to display my personal good deeds.
- 32 I like to help my relatives.
- 33 I frequently discuss religious issues with my friends.  
I frequently share my religious values with my friends.
- 34 I make sure all my family members are following the teachings (Sunnah) of Rasulullah.  
I make sure all my family members are following the teachings of my religion.
- 35 I seek sympathy from others when I experience misfortune.
- 36 I avoid offending in any way when joking around with others.
- 37 I make an ongoing effort to increase the frequency of my non-obligatory (nafil) prayers.  
I make an ongoing effort to increase the frequency of my good deeds.
- 38 I would give true information in court against someone even if he/she is my relative.
- 39 I would remove an obstacle that I see on the road, even if it is small.
- 40 I worry if I cannot pay debt on time.
- 41 I am involved in da'wah work.  
I am involved in religious work.
- 42 I care about my good relations with my siblings.
- 43 I admonish my friends when they do wrong.  
I criticize my friends when they do wrong.
- 44 I perform my work duties enthusiastically because it is a form of worship (ibadat).  
I perform my work duties enthusiastically because of my religion/God.
- 45 I fulfil all my promises.
- 46 I make effort to obey Allah S.W.T's rules in every situation.  
I make effort to obey rules/advice of my religion (God) in my daily life.
- 47 I assume that people talk about me because they are concerned about my well-being.

- 48 I always thank a person when they do something nice for me.
- 49 I assume that nobody is perfect.
- 50 I get jealous when my colleague/friend is more successful than me.
- 51 I make effort to have ablution (wudhu') at all the times.  
I make effort to be clean at all times.
- 52 I try to smile as much as possible.
- 53 I do not get angry when I am being scolded.
- 54 I tend to remain silent when someone degrades Islam in front of me.  
I tend to remain silent when someone degrades my religion in front of me.
- 55 I speak politely to my parents.
- 56 I forgive others who wrong me before they ask for my forgiveness.
- 57 I expect others to finish my work for me.
- 58 I get upset when I hear about the suffering of Muslims in other parts of the world.  
I get upset when I hear about the suffering of people of all races in other parts of the world.
- 59 I will keep a person's identity hidden when I talk about them and they are not present.
- 60 I like to join in when I hear people gossiping.
- 61 I do not neglect my friend's dignity.
- 62 I refer to the people who know when I feel uncertain about the Islamic rulings.  
I refer to the people who know when I feel uncertain about the rulings/teachings of my religion.
- 63 I like to help the poor without anyone knowing.
- 64 I make effort to internalize the Prophet's ethical conduct in my daily life.  
I make effort to internalize the ethical conduct of my religion in my daily life.
- 65 I throw rubbish in the trash bin when I see it lying around.
- 66 I feel worried when I hurt my parents.
- 67 I do not feel worried when I send negative e-mails/SMS messages/information to people.
- 68 I use public buses, walkways, etc. with care/respect.
- 69 I cannot tolerate people who disagree with me.
- 70 I am careful to follow Islamic social norms during all activities I am involved in.  
I am careful to follow my religious social norms during all activities I am involved in.
- 71 I participate in recreational activities without neglecting religious norms.
- 72 I perceive all non-Muslims that I see as potential Muslims.  
I perceive those who are not the same religion as mine as potential believers of my religion.
- 73 I respect all opinions.
- 74 I feel happy when someone says something good about one of my friends.
- 75 I am very conscious about my health.
- 76 I openly display my anger if somebody meddles with my belongings.
- 77 I tend to let setbacks in life distract me from my responsibilities and religious practice.
- 78 I am very comfortable admitting my mistakes.
- 79 I make a serious effort to fulfil wedding invitations.
- 80 I have started saving money for hajj since my early days  
I have started saving money for religious donations since my early days.
- 81 I prefer to do any form of labour than to beg.

- 82 I gossip about others.  
 83 I make sure that when I read the Qur'an, I understand its demands.  
 I make sure that I understand the demands/obligations/teachings of my religion.  
 84 I use other people's belonging without their permission.  
 85 I speak rudely to my parents when I am angry at them.  
 86 My siblings and I compete in serving our parents.  
 87 I enjoy working in a team.  
 88 I pay more attention to my friends than my parents.  
 89 I offer my guests the best of what I have when I am hosting them in my home.  
 90 I like to take advantage of opportunities to understand Islam with my family.  
 I like to take advantages of opportunities to understand my religion with my family.  
 91 I look opportunities to give charities.  
 92 I share my opinion when I think that it will improve a situation.  
 93 I do not enter a person's house until I am invited.  
 94 I follow the advice of my parents even though it may not be what I want.  
 I follow the advice of my parents even though it may contradict my religious conviction.  
 95 I make effort to make my guests feel as comfortable as possible.  
 96 I set aside money every year for charity.  
 I set aside money every year for religious purposes.  
 97 I work hard to achieve my goals in the specified time.  
 98 I pray the 5 compulsory (fard) prayers (solat) everyday.  
 I practice solat/religious prayers as taught in my religion.  
 99 I follow the advice of my parents even though it may not be what I want.

Appendix B – Religiosity Personality Inventory Items for Muslims

Personality traits	
1	I get enthusiastic about doing good deeds when people praise me.
2	I am willing to help people when indeed.
3	I avoid something if I am unsure about its legal status.
4	I immediately apologize if I wrong someone.
5	I make effort to always follow the Islamic code of dress.
6	If I borrow money from someone, I will make a contract with them.
7	I do all jobs assigned to me to the best of my ability.
8	I am particular about doing good deeds consistently even though they may be small.
9	I easily forgive my siblings when they hurt me.
10	I always obtain the facts before passing judgements.
11	I tend to rely on others when faced with difficulty.
12	I make effort not to display my personal good deeds.
13	I frequently discuss religious issues with my friends.
14	I frequently share my religious values with my friends.
15	I do not expose the shortcomings of other.
16	I avoid offending in any way when joking around with others.

17	I worry if I cannot pay debt on time.
18	I fulfil all my promises.
19	I make effort to obey Allah S.W.T's rules in every situation.
20	I always thank a person when they do something nice for me.
21	I assume that people talk about me because they are concerned about my well-being.
22	I try to smile as much as possible.
23	I get jealous when my colleague/friend is more successful than me.
24	I do not get angry when I am being scolded.
25	I speak politely to my parents.
26	I forgive others who wrong me before they ask for my forgiveness.
27	I not expect others to finish my work for me.
28	I find ways to recycle anything that can still be of use.
29	I do feel worried when I send negative e-mails/SMS messages/information to people.
30	I will keep a person's identity hidden when I talk about them and they are not present.
31	I seek sympathy from others when I experience misfortune.
32	I don't like to join in when I hear people gossiping.
33	I tend to remain silent when someone degrades Islam in front of me.
34	I can tolerate people who disagree with me.
35	I throw rubbish in the trash bin when I see it lying around.
36	I am careful to follow Islamic social norms during all activities I am involved in.
37	I participate in recreational activities without neglecting religious norms.
38	I perceive all non-Muslims that I see as potential Muslims.
39	I respect all opinions.
40	I feel happy when someone says something good about one of my friends.
41	I openly display my anger if somebody meddles with my belongings.
42	I tend to let setbacks in life distract me from my responsibilities and religious practice.
43	I am very comfortable admitting my mistakes.
44	I don't gossip about others.
45	I enjoy working in a team.
46	I use other people's belonging with their permission.
47	I offer my guests the best of what I have when I am hosting them in my home.
48	I do not enter a person's house until I am invited.
49	I make effort to make my guests feel as comfortable as possible.
50	I work hard to achieve my goals in the specified time.
51	I prefer to do any form of labour than to beg.

<b>Attitudes</b>	
1	I make effort to deepen my understanding of Islamic law
2	I love my brothers and sisters in Islam as I love myself.
3	I feel at peace when I hear the Quran recited.
4	I try to understand the meaning of Qur'anic words/verses.
5	I thank Allah S.W.T when beggars come to my house.
6	I continue to perform good deeds even if others might ridicule me for it.

7	I will not ridicule someone in return when they ridicule me, even during Ramadhan.
8	I make sure all my family members are following the teachings (Sunnah) of Rasulullah.
9	I make an ongoing effort to increase the frequency of my non-obligatory (nafil) prayers.
10	I would give true information in court against someone even if he/she is my relative.
11	I criticize my friends when they do wrong.
12	I assume that nobody is perfect.
13	I get upset when I hear about the suffering of Muslims in other parts of the world.
14	I like to help the poor without anyone knowing.
15	I make effort to internalize the Prophet's ethical conduct in my daily life.
16	I would remove an obstacle that I see on the road, even if it is small.
17	I feel worried when I hurt my parents.
18	I refer to the people who know when I feel uncertain about the Islamic rulings.
19	I make effort to remember death often.
20	I create tranquillity/calmness in public.
21	I do not neglect my friend's dignity.
22	I make sure that when I read the Qur'an, I understand its demands.
23	I share my opinion when I think that it will improve a situation.
24	I perform my work duties enthusiastically because it is a form of worship (ibadat).
25	I will seek for Allah's help first then to others when faced with difficulty.

#### Religious Practices

1	I use the lessons from the Qur'an and Hadith in my conversations.
2	I invite others to perform obligatory prayer (solat)
3	I do pay alms (zakat).
4	I do give donations.
5	I find time to recite the Qur'an even if I am busy.
6	I am the first to give salam when meeting another Muslim.
7	I am involved in da'wah work.
8	I make effort to have ablution (wudhu') at all the times.
9	I have started saving money for hajj since my early days
10	I look opportunities to give charities.
11	I set aside money every year for charity.
12	I pray the 5 compulsory (fard) prayers (solat) everyday.

#### Relationship With Human

1	I establish good relations with my neighbours.
2	I like to help my relatives.
3	I care about my good relations with my siblings.
4	I speak politely to my parents when I am angry at them.
5	My siblings and I compete in serving our parents.
6	I like to take advantage of opportunities to understand Islam with my family.
7	I follow the advice of my parents even though it may not be what I want.
8	I follow the advice of my parents even though it may contradict my religious conviction.
9	I incline toward taking a side when my friends quarrel.

10	I pay more attention to my friends than my parents.
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Appendix C – Religiosity Personality Inventory Items for Non-Muslims

<b>Personality traits</b>	
1	I get enthusiastic about doing good deeds when people praise me.
2	I am willing to help people when indeed.
3	I avoid something if I am unsure about its legal status.
4	I immediately apologize if I wrong someone.
	If I borrow money from someone, I will make a contract with them.
5	I do all jobs assigned to me to the best of my ability.
6	I am particular about doing good deeds consistently even though they may be small.
7	I easily forgive my siblings when they hurt me.
8	I always obtain the facts before passing judgements.
9	I tend to rely on others when faced with difficulty.
10	I make effort not to display my personal good deeds.
11	I frequently discuss religious issues with my friends.
12	I frequently share my religious values with my friends.
13	I do not expose the shortcomings of other.
14	I avoid offending in any way when joking around with others.
15	I worry if I cannot pay debt on time.
16	I fulfil all my promises.
17	I make effort to obey rules/advice of my religion (God) in my daily life.
18	I always thank a person when they do something nice for me.
19	I assume that people talk about me because they are concerned about my well-being.
20	I try to smile as much as possible.
21	I get jealous when my colleague/friend is more successful than me.
22	I do not get angry when I am being scolded.
23	I speak politely to my parents.
24	I forgive others who wrong me before they ask for my forgiveness.
25	I not expect others to finish my work for me.
26	I find ways to recycle anything that can still be of use.
27	I do feel worried when I send negative e-mails/SMS messages/information to people.
28	I will keep a person's identity hidden when I talk about them and they are not present.
29	I seek sympathy from others when I experience misfortune.
30	I don't like to join in when I hear people gossiping.
31	I tend to remain silent when someone degrades my religion in front of me.
32	I can tolerate people who disagree with me.
33	I throw rubbish in the trash bin when I see it lying around.
34	I am careful to follow my religious social norms during all activities I am involved in.
35	I participate in recreational activities without neglecting religious norms.
36	I perceive those who are not the same religion as mine as potential believers of my religion.

37	I respect all opinions.
38	I feel happy when someone says something good about one of my friends.
39	I openly display my anger if somebody meddles with my belongings.
40	I tend to let setbacks in life distract me from my responsibilities and religious practice.
41	I am very comfortable admitting my mistakes.
42	I don't gossip about others.
43	I enjoy working in a team.
44	I use other people's belonging with their permission.
45	I offer my guests the best of what I have when I am hosting them in my home.
46	I do not enter a person's house until I am invited.
47	I make effort to make my guests feel as comfortable as possible.
48	I work hard to achieve my goals in the specified time.
49	I prefer to do any form of labour than to beg.
50	I am the first to greet when meeting another person.

<b>Attitudes</b>	
1	I make effort to deepen my understanding of law/rules/teaching/precepts of my religion.
2	I love my brothers and sisters in my religion as I love myself.
3	I refer to Holy book/Scriptures to obtain tranquillity (peace).
4	I try to understand the teachings of my religion in the Holy book/Scriptures.
5	I feel happy when beggars come to my house.
6	I continue to perform good deeds even if others might ridicule me for it.
7	I will not ridicule someone in return when they ridicule me.
8	I make sure all my family members are following their belief.
9	I make an ongoing effort to increase the frequency of my good deeds.
10	I would give true information in court against someone even if he/she is my relative.
11	I criticize my friends when they do wrong.
12	I assume that nobody is perfect.
13	I get upset when I hear about the suffering of people of all races in other parts of the world.
14	I like to help the poor without anyone knowing.
15	I make effort to internalize the ethical conduct of my religion in my daily life.
16	I would remove an obstacle that I see on the road, even if it is small.
17	I feel worried when I hurt my parents.
18	I refer to the people who know when I feel uncertain about the rulings/teachings of my religion.
19	I make effort to remember death and afterlife often.
20	I create tranquillity/calmness in public.
21	I do not neglect my friend's dignity.
22	I make sure that I understand the demands/obligations/teachings of my religion.

23	I share my opinion when I think that it will improve a situation.
24	I perform my work duties enthusiastically because of my religion/God.
25	I will seek for God's help first then to others when faced with difficulty.

Practices	
1	I use the lessons from the Holy book/Scriptures in my conversations.
2	I invite others to perform prayer/religious service.
3	I do give donations.
4	I find time to recite the Holy book/Scriptures even if I am busy
5	I am involved in religious work.
6	I have started saving money for religious donations since my early days.
7	I look opportunities to give charities.
8	I set aside money every year for charity.
9	I practice religious service/prayers as taught in my religion.

Relationship With Human	
1	I establish good relations with my neighbours.
2	I like to help my relatives.
3	I care about my good relations with my siblings.
4	I speak politely to my parents when I am angry at them.
5	My siblings and I compete in serving our parents.
6	I like to take advantages of opportunities to understand my religion with my family.
7	I follow the advice of my parents even though it may not be what I want.
8	I follow the advice of my parents even though it may contradict my religious conviction.
9	I incline toward taking a side when my friends quarrel.
10	I pay more attention to my friends than my parents.

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