

Systematic Literature Review of Islamic Oriented Scale in Malaysia

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DOI: 10.6007/IJARBSS/v6-i11/2403 URL: <http://dx.doi.org/10.6007/IJARBSS/v6-i11/2403>

ABSTRACT

This research is a systematic review on Islamic-oriented scales that have been developed in Malaysia. The first scale has been established in 2006 and is targeted for youths throughout Malaysia. Based on the review conducted by the researchers, it has been found that 11 scales have been designed to study the Muslim community in Malaysia. Most of the scales have been created in the context of Muslim students in secondary schools involving the appreciation of *aqidah* (belief), the appreciation of Islamic Moral (manners), or religiosity in general. This analysis could be a significant reference for other researchers or organisations which conduct quantitative research in terms of selecting a valid and reliable scale as well as fulfilling the requirements of the research context.

Keywords: Scales, measurement, Islam, Muslim, systematic literature review

INTRODUCTION

Religion and measurement are two inseparable elements in daily life. Each religious practice of an individual is evaluated by Allah to determine that person's position during the Judgement Day. Allah encourages Muslims to perform accurate measurement and calculation in all matters. Accurate calculation shows precision and leads to justice towards self and other people.

Allah (swt) mentions in the al-Quran:

"So fulfill the measure and weight and do not deprive people of their due and cause not corruption upon the earth after its reformation. That is better for you, if you should be believers." (Al-A'raf:85)

There are various religious beliefs held by the society throughout the world such as Islam, Christianity, Hinduism, Buddhism, Sikhism, and others. Islam is the second largest religion in the world which has 1.7 billion followers and this number is equal to 23% of the world

population (Burke & Danial, 2015). Malaysia is one of the countries where Islam is the official religion. The majority of Malaysians are Muslims consisting of 19.5 million citizens which make up 61.3% of the Malaysian population (Kementerian Penerangan Malaysia, 2015). The increase of Muslim population worldwide and in Malaysia specifically requires the utilisation of scales that are valid, reliable, and Islamic-oriented mainly for research regarding Islam.

The history of religious measurement has begun in the western countries since 1950. Allport and Ross (1950) have developed Religious Orientation Scale to measure the internal and external aspects of religion. Many researchers have adapted this scale which is based on Judeo-Christian for use in the Islamic context. In actuality, there are a lot of differences in the terms, practices, and laws of each religion. For example, one of the items in The Francis Scale of Attitude towards Christianity (Francis & Stubb, 1987) obviously contains the belief towards Bible and Jesus. Despite certain items being inappropriate for use with the Muslims' concept of *aqidah* and practices, a large number of researchers inevitably have to adapt these scales for their research due to the inadequate presence of Islamic-oriented scales. Therefore, several initiatives have been taken by the researchers in the present decade in order to establish a scale specific to the aspects of Islam. The early attempts to design Islamic-oriented scales in Malaysia have been initiated by Azimi et al. (2006), Azma (2006), and Azhar (2006). Although this effort appears to be behind the times as compared to the scale development in the western countries, it is an attempt beneficial to the Islamic research.

Fundamentally, every quantitative research demands a good measuring scale. Researchers may adapt the existing scales to their research or create new scales if necessary. Developing a scale itself requires meticulousness and involves a complicated process. In case there is a need to establish a measuring scale, researchers have to abide by each step that has been standardised comprising the process of validating and identifying the reliability of the scale (Nunnally, 1978). Any quantitative research which utilises an invalid scale could negatively affect the whole research findings (Aiken & Growth-Marnat, 2006). In spite of the limitations in the development of Islamic-oriented scales, researchers have to be wise in selecting a scale that demonstrates good psychometric properties before using the scale in research.

In Malaysia, numerous scales have been designed in the fields of social science, medicine, economy, and religion specifically in Islam. The abundance of scales necessitates a systematic literature analysis to recognise the level of validity and reliability of the scales. Although the scale establishment in Malaysia is progressing gradually, the progress is consistent from year to year. Each researcher has attempted to conduct multiple processes and analysis in order to produce a valid measuring scale that fulfils the research requirements and complies with the Islamic laws.

RESEARCH METHODOLOGY

RESEARCH DESIGN

This research employs the systematic literature review (SLR) approach. This approach applies a systematic search to identify Islamic-oriented scales in Malaysia. The search focused on religious aspects in Islam namely religiosity, Muslim personality, Islamic Education, *akhlaq*, *aqidah*, and repentance. Scales created in the context of Islamic economy, Islamic technology,

and Islamic medicine were excluded from this research.

SEARCH STRATEGY

The search was conducted using Malay terminologies particularly “instrumen”, “skala”, “pengukuran”, “Islam”, and “Muslim” and English terminologies specifically “instrument”, “scale”, “measurement”, “Islam”, and “Muslim”. The search was done by entering the combination of the terminologies above with no restriction on the publication year. The databases utilised were Scopus, Emerald, Google Scholar and the web databases of Public Universities throughout Malaysia. The title and abstract of each publication were scrutinised to make sure that only Islamic-oriented scales were adopted in social science research while excluding the fields of economy, technology, and medicine. For the purpose of gathering complete information about a scale, the researchers also used Google Search Engine database by typing the name of the scale and the acronym of each recognised scale.

RESEARCH FINDINGS

The researchers have identified 11 scales in the Muslim context that have been developed in Malaysia. The information regarding these scales are summarised in Table 1 below.

Table 1 : The Analysis of Islamic-Oriented Scales in Malaysia

Muslim Religiosity and Personality Inventory (MRPI) by Krauss (2006)	
Objective	To measure youths’ perception of religiosity
Construct	Islamic worldview scale and religious personality
Version	Original (185 items)
Analysis	EFA, CFA, content validity, Cronbach’s Alpha (CTT analysis)
Notes	UPM Doctorate Thesis
References	Al-Quran and Hadith
Skala Penghayatan Pendidikan Islam (SPPIP-M) by Azma (2006)	
Objective	To measure secondary school students’ appreciation of Islamic Education
Construct	Tasawwur (worldview), emotions, and behaviour
Version	Original (254 items)
Analysis	EFA, CFA, content validity, Cronbach’s Alpha (CTT analysis)
Notes	UKM Doctorate Thesis
References	Darraz’s Islamic Moral Classification and Gable and Wolf’s Model
Inventori Penghayatan Akhlak Pelajar by Azhar (2006)	
Objective	To measure secondary school students’ appreciation of <i>akhlaq</i>
Construct	Personal Islamic Moral, social Islamic Moral, and religious Islamic Moral
Version	Original (130 items)
Analysis	EFA, CFA, content validity and Cronbach’s Alpha
Notes	UKM Doctorate Thesis
References	Darraz’s Akhlaq Classification and Hassan Langgulung (1995)
Maternal Piety Scale by Siti Aishah et al. (2008)	
Objective	To measure respondents’ spiritual aspect

Construct	Faith, virtue, and forbid vices
Version	Original (10 items)
Analysis	Cronbach's Alpha value, EFA, CFA, concurrent validity
Notes	Published article
References	Al-Quran and Hadith
Moral Value Inventory For Muslim Adolescence (MVIMA) by Salhah et al. (2010)	
Objective	To measure the moral value of Muslim youths
Construct	Spiritual value, social value, and personal value
Version	Original (48 items)
Analysis	EFA, content validity
Notes	Published article
References	Naquib al-Attas' Value Model
Ummatic Personality Inventory (UPI) by Noraini (2011)	
Objective	To measure the personality of IPTA students
Construct	Ibadah, amanah, ilm
Version	Original (69 items)
Analysis	EFA and Cronbach's Alpha
Notes	Published article
References	Al-Faruqi's Ummatic Concept
Instrumen Pentaksiran Akhlak Berasaskan Rakan Sebaya (IPAM-RS) by Jimaain (2012)	
Objective	To measure secondary school students' Islamic Moral through peer assessment
Construct	Islamic Moral towards Allah, the prophet, self, family, society, environment, and the country
Version	Original (167 items)
Analysis	Content validity, construct validity, item & respondent reliability (IRT Analysis)
Notes	UKM Doctorate Thesis
References	Darraz's Theory, KBSR & KBSM syllabus
Instrumen Penilaian Akhlak Pelajar IPTA (IMPAK) by Adibah (2013)	
Objective	To measure the Islamic Moral of IPTA students based on self-evaluation and peer evaluation
Construct	Speech, behaviour, and personality
Version	Original (64 items)
Analysis	Content validity, construct validity, predictive validity, item & respondent reliability, test-retest reliability (combination of IRT (Item Response Theory) and CTT (Classical Test Theory))
Notes	UTM Doctorate Thesis
References	Al-Ghazali's Personality Theory & Kohlberg's Moral Reasoning Theory
Instrumen Penghayatan Akidah by Norsaleha et al. (2013)	
Objective	To measure secondary school students' appreciation of <i>aqidah</i>
Construct	Understanding, emotions & practices
Version	Original (90 items)
Analysis	Cronbach's Alpha value & content validity
Notes	Published article

References	Al-Ghazali, Sayid Sabiq, Kurikulum Bersepadu Sekolah Menengah (KBSM)
<i>Inventori Taubat Al-Ghazali by Salhah et al. (2014)</i>	
Objective	To develop repentance measuring scale for youths who have committed fornication
Construct	Guidance & repentance
Version	Original (13 items)
Analysis	EFA, CFA, & content validity
Notes	Universiti Sains Islam Malaysia Grant Project
References	Al-Ghazali's Repentance Model
<i>Inventori Spiritual Imam Ghazali (ISIG) by Mohammad Aziz et al. (2015)</i>	
Objective	To measure the respondents' awareness level, practices, and knowledge of spiritual value
Construct	Repentance, fear, asceticism, patience, gratitude, sincerity, reliance on Allah, love, acceptance, and remembrance of death
Version	Original (100 items)
Analysis	Content validity and Cronbach's Alpha value
Notes	Published work paper
References	Imam Ghazali's Classification of Praised Attitudes

Based on the analysis of the 11 scales above, 4/11 (36%) of the scales measure the aspect of religiosity and Muslim personality, 4/11 (36%) of the scales measure moral aspect and Islamic Moral, 1/11 (9%) of the scales measure the aspect of belief, 1/11 (9%) of the scales measure the aspect of repentance, whereas 1/11 (9%) of the scales measure the aspect of Islamic Education appreciation. The scales were established either through doctorate research, institutional grant, or published work paper. It has been identified that the doctorate research involved individual works. In contrast, the scales designed through grant project and work paper were group works.

The analysis showed that 5/11 (45.5%) of the scales are from doctorate research namely MRPI (Krauss, 2006), SPPIP-M (Azma, 2006), *Inventori Penghayatan Akhlak Pelajar* (Azhar, 2006), IPAM-RS (Jimaain, 2012), and IMPAK (Adibah, 2013). On the other hand, 5/11 (45.5%) of the scales are from published articles and work papers particularly Maternal Piety Scale (Siti Aishah et al., 2008), Moral Value Inventory for Muslim Adolescence (Mvima) (Salhah Et Al., 2010), Ummatic Personality Inventory (UPI) (Noraini, 2011), *Instrumen Penghayatan Akidah* (Norsaleha et al., 2013), and *Inventori Spiritual Imam Ghazali* (Abdul Aziz et al., 2015). Only one out of eleven scales (9%) has been created through grant project which is *Inventori Taubat al-Ghazali* (Salhah et al., 2014).

Base on the result, there are 9/11 (82%) of the scales were analysed using Classical Test Theory (CTT) to ensure their validity and reliability. Only 1/11 (9%) of the scales was analysed using Item Response Theory (IRT) through the application of Rasch Measurement Model whereas the analysis of another 1/11 (9%) of the scales was done by combining CTT and IRT to make sure that the scale demonstrates psychometric sounds properties.

All Islamic-oriented scales are based on the original Islamic teaching which refers to authentic revelations. However, there are 2/11 (18%) of the scales that have integrated Islamic

approach with the western theory specifically SPIPP-M (Azma, 2006) and IMPAK (Adibah, 2013). Azma (2006) has incorporated Darraz's Islamic Moral Classification with Gable and Wolf's Model whereas Adibah (2013) has utilised a combination of Al-Ghazali's Personality Theory, Constructivism Theory, and Kohlberg's Moral Reasoning Theory. 9/11 (82%) of the scales are based on models by respected scholars such as al-Ghazali (t.th) and contemporary scholars such as Darraz, Sayid Sabiq, al-Faruqi, Naquib al-Attas, and Hassan Langgulung. 2/11 (18%) of the scales have been designed based on general guidelines from al-Quran and Hadith. 2/11 (18%) of the scales have been developed for secondary school students by combining the models of contemporary scholars with KBSR and KBSM syllabus (Jimaain, 2012 & Norsaleha et al. 2014).

All these scales are not accessible online since they are not officially used by any organisation or research. The researchers who are in need of these scales are required to personally request for permission from individuals or groups involved in establishing the scales.

DISCUSSION

This research adopted the systematic literature review approach in reviewing Islamic-oriented scales in Malaysia. The researchers employed a systematic search to assure that all Islamic-oriented scales were discovered for analysis. The scale analysis summary (Table 1) could be a reference for any research that demands a measuring scale that is suitable with the research context of an organisation or individual.

During the present decade, it can be observed that there is a dramatic increase in the attempts to develop a measuring scale in the Islamic context. The rise in the establishment of scales for the Muslim community in Malaysia is not a surprising situation due to the blooming awareness to cease from using scales that are based on other religions such as the Judeo-Christian belief. This is due to the difference in religious practices and specific terms utilised in Islam. The expertise in the psychometric domain is not only dominated by the western scholars such as Allport & Ross (1967) but it has also started to receive serious attention from Muslim researchers worldwide such as Abu Raiya et al. (2008) and Asma and Priester (2007). In addition, local researchers in Malaysia such as Azma (2006), Jimaain (2012), and Adibah (2013) also demonstrate their interest in psychometric. Indeed, the development of new scales becomes essential when multiple factors such as economic transformations in Islam (for instance, al-rahn (mortgage) and al-wadiah (safekeeping of property)), socioeconomic changes, technology (internet usage), and social revolutions (for instance, the LGBT issue) are taking place rapidly among the Muslim community in Malaysia.

The concept of religiosity is a field in psychology which is currently expanding. Thus, the finding of the SLR conducted by the researchers is plausible which indicates that nearly half of the scales focus on the aspect of religiosity and Muslim personality. Basically, religiosity is a general religious aspect consisting of experience, ideology, religious practices, intellect, and ethics (Glock & Stark, 1966). The aspect of religiosity is often associated with positive personal development, exceptional work performance, and healthy mind and body. Religiosity measurement is also linked with spiritual aspect especially involving the assessment at workplace. Nevertheless, based on the analysis, current research mostly centre around the context of school students and youths who face various social problems. An example of this is

MRPI (Krauss, 2006) which has been established as a means to overcome the social problems among youths. *Inventori Taubat al-Ghazali* has also been designed for youths who have committed fornication (Salhah et al., 2014). This depicts the absence of a specific scale to measure the aspect of religiosity and spirituality in a broader context such as in Malaysian workplace.

Islamic Moral is inherently one of the elements in religiosity (Glock & Stark, 1966). Nonetheless, the wide concept of Islamic moral calls for a particular operational definition (Jimaain, 2012) containing its own distinguished dimension (Azhar, 2006; Adibah, 2013). For example, Azhar (2006), Jimaain (2012), and Adibah (2013) have designed a scale precisely for Islamic Moral without concerning other aspects of religiosity. The summary of the scales illustrates that 4/11 (36%) of the scales cover the measurement of secondary school students' Islamic Moral (SPIPP-M, IPAM-RS, and *Inventori Penghayatan Akhlak Pelajar*) whereas a scale has been created to measure the Islamic Moral of IPTA students (IMPAK). Based on the analysis, it has been discovered that a scale has yet to be developed in the context of workplace such as the measurement of Islamic Moral in economy, education, or medicine. In spite of each occupation having its own ethics, those ethics only act as subjective guidelines. The evaluation of Islamic Moral by employers is also restricted since most assessments in an organisation are more towards evaluating the occupational competency. Therefore, the measurement of Islamic Moral that incorporates the occupational value in an organisation deserves serious attention from future researchers.

Every scale development research should reflect good psychometric properties in order for the scale to be valid and objective in measuring a variable. Based on the analysis, all scales have been reported to have content validity, construct validity, and reliability. Nonetheless, almost all scales do not demonstrate criterion validity which is divided into concurrent validity and predictive validity. Only Maternal Piety Scale has reported concurrent validity and IMPAK has reported predictive validity. Actually criterion validity is one of the crucial aspects to be taken into account for the development of each new measuring scale (Nunnally, 1978). Most of the early scales have been established using CTT analysis comprising factor analysis such as EFA and CFA. This trend has been observed to change during recent years in which researchers have begun to apply IRT in designing measuring scales (e.g. IPAM-RS and IMPAK).

CONCLUSION

The limitation of Islamic-oriented scales has triggered a new phenomenon in the world of Islamic psychometric. It is vital for us to shift our attitudes by stopping to depend on the scales from other religions. All researchers in the Islamic field have to be proactive in creating scales based on authentic evidences and references from acknowledged Islamic books. The development of Islamic-oriented scales does not only involve the psychometric knowledge but also in-depth knowledge of Islam to ensure that the operational framework of the scales is not misleading from the original concept demanded by the religion.

The establishment of Islamic-oriented scales has undergone a drastic evolution in the current decade. Research related to Islam should utilise specific measuring scales guided by unambiguous Islamic revelations and laws. It is paramount to refer to legitimate and

authoritative experts for the exact terms in Islamic Education while using the Islamic revelations as the primary guidelines. This conducted SLR has gathered scales that can be employed to measure variables particularly in Islam. It is aspired that this work paper would assist other researchers in referring to valid and reliable scales while conducting their research.

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