An Analysis Of Systematic Literature Review On The Development Of Islamic Oriented Instruments

Azlisham Abdul Aziz¹, Mohd Nor Mamat², Daud Mohamed Salleh³, Syarifah Fadylawaty Syed Abdullah⁴, Mohd Norazmi Nordin⁵

¹,²,³,⁴,⁵Academy of Contemporary Islamic Studies, Universiti Teknologi MARA, 40450 Shah Alam, Malaysia
sham72aziz@gmail.com

Abstract: This study analyzes the systematic approach of the literature review on Islamic-oriented instruments developed. Based on a survey conducted by the researcher, it was found that 15 instruments had been developed in Malaysia based on Islamic theories, models and muslim scholars. Most of the instruments that have been developed involve students at school, university, youth, adolescents, school administrators, and the appreciation of religion and the religiosity of the Muslim community in general. The analysis of the instruments formulated in this study is appropriate as a reference for Islamic researchers or organizations engaged in quantitative research in the selection of legitimate and reliable instruments and meeting research needs.

Keywords: Instrument, Measurement, Islam, Muslim, Systematic Literature Review

1. INTRODUCTION

There are two aspects are always closely linked and inseparable in this life, namely Islam and measurement. Every act in Islam shall be evaluated by Allah in order to determine the position in the hereafter. Allah encourages Muslims to make accurate measurements and calculations in all respects. Accurate calculations show accuracy and bring justice to oneself and others as well. Allah mentions in the Qur'an: "Therefore, complete the measurements and scales and do not deprive people of things and things that are their right." (al-A'raf, 7:85) Likewise, the judgment of Allah on the Day of Judgment is based on deeds, and everything will be judged. The words of Allah SWT: will be judged? (al-Zalzalah, 99: 7-8).

Basically, various beliefs related to religions practised by communities worldwide, such as Islam, Christianity, Hinduism, Buddhism, Sikhs and others. Islam is the second-largest religion globally, with 1.7 billion followers and is equal to 23% of the world's population (Burke & Danial, 2015). Malaysia is one of the countries where Islam is the official religion where most Malaysians are Muslims, comprising 19.5 million people, who make up 61.3 per cent of the population of Malaysia (Salbiah, 2018). The increase in the Muslim population...
worldwide and Malaysia requires a legitimate, reliable and Islamic-oriented instrument, particularly for research on Islam.

The history of religious measurements has begun in western countries since 1950. Allport and Ross (1950) have developed religious orientation instruments to measure the internal and external aspects of religion. Many researchers have adapted this Judeo-Christian-based instrument for use in an Islamic context. There are many differences in the terms, practices and laws of each religion. For example, one of The Francis Scale of Attitude to Christianity (Francis & Stubb, 1987) contains a belief in the Bible and Jesus. Although some aspects are not suitable for use with the concept of Muslim beliefs and practices, a large number of researchers inevitably adapt this instrument to their research due to the lack of Islamic-oriented instruments.

Therefore, several initiatives have been taken by these recent researchers to develop specific instruments for Islamic aspects. Early efforts to develop Islamic-oriented instruments in Malaysia were initiated by Azimi et al. (2006), Azma (2006) and Azhar (2006). Although this effort is somewhat backward compared to the development of instruments in western countries, it is a pioneering academic effort beneficial to Islamic research. All quantitative research requires a suitable measuring instrument. Researchers can customize existing tools for their research or, if necessary, create new instruments.

The development of the instrument itself requires perfection and involves complex processes. If a measuring instrument is needed, the researcher should adhere to each standardized step, including the validation process, and determine the scale's reliability (Nunnaly, 1978). Any quantitative research using invalid instruments may impact the overall findings of the research (Aiken & Growth-Marnat, 2006). Although there are limitations in developing Islamic-oriented instruments, researchers should wisely choose instruments that demonstrate good psychometric properties before using the research instrument. In Malaysia, various instruments have been designed specifically in social sciences, medicine, economics and religion in Islam. The abundance of instruments requires a systematic analysis of literature to determine the level of validity and reliability. Although the development of instruments in Malaysia is progressing slowly, progress is consistent from year to year. Each researcher seeks to carry out various processes and analyses to produce valid measuring instruments and evaluators that comply with the research requirements and comply with Islamic law.

2. RESEARCH METHODOLOGY

This study uses a systematic literature review approach (SLR). This approach uses systematic searches to identify Islamic-oriented instruments in Malaysia. This search focuses on Islam's religious aspects, namely religious life, Muslim personality, Islamic education, spirituality, morality, faith, and repentance. Instruments relating to Islamic economics, Islamic technology and Islamic medicine are not included in this study. The search is carried out using Bahasa Malaysia's terminology, which is "instrument" "scale" "measurement" "assessment" "Islam" and "Muslim" While in English the terminology is "instrument" "scale" "measurement" "evaluation" "Islam" and "Muslim" The search was carried out by entering a
combination of the terminology mentioned above without limitation in the year of publication. Scopus, Emerald, Google Scholar and public university web resources across Malaysia are the online database used. The titles and abstracts of each publication shall be taken into account to ensure that only Islamic instruments are observed in the study of the social sciences, excluding economics, technology and medicine. To gather complete information about the instrument, researchers also use the google search engine database by entering the scale name and acronym of each certified instrument.

3. FINDING OF THE STUDY

The researcher identified 15 instruments developed in Malaysia in the Muslim context. Summary of information on discovery based on Table 1 below.

**Table 1. Islamic Oriented Instruments**

<table>
<thead>
<tr>
<th>Instrument Title</th>
<th>Objective</th>
<th>Construct</th>
<th>Analysis</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muslim Religiosity and Personality Inventory (MRPI) by Krauss (2006)</td>
<td>Measure youth perceptions of religious appreciation</td>
<td>Building a scale of Islamic views and religious personalities</td>
<td>EFA, CFA, Validity of content and Cronbach Alpha (CTT analysis)</td>
<td>Al-Quran dan Hadis</td>
</tr>
<tr>
<td>Skala Penghayatan Pendidikan Islam (SPPIP-M) by Azma (2006)</td>
<td>Measure high school students' appreciation of Islamic Education Tasawwur</td>
<td></td>
<td>EFA, CFA, content validity, Cronbach Alpha (CTT analysis)</td>
<td>Darraz Moral Classification References and Inventory Model Gable and Wolf</td>
</tr>
<tr>
<td>Maternal Piety Scale by Siti Aishah et. al (2008)</td>
<td>Measuring the spiritual aspects of respondents</td>
<td>Faith, goodness, and abstinence from sin</td>
<td>Cronbach’s Alpha value, EFA, CFA, concomitant validity</td>
<td>Al-Quran dan Hadis</td>
</tr>
<tr>
<td>Moral Value Inventory for Muslim Adolescence (MVIMA) by Salhah et. al (2010)</td>
<td>Measuring the moral values of Muslim adolescents EFA</td>
<td>Spiritual values, social values, and personal values</td>
<td>EFA and content validity</td>
<td>Naquib al-Attas value model</td>
</tr>
</tbody>
</table>
### Ummatik Personality Inventory (UPI) by Noraini (2011)

**Objective**: Measuring the personality of students of the public university

**Construct**: Worship, trust, knowledge

**Analysis**: EFA analysis dan Cronbach Alpha

**References**: Al-Faruqi Ummatic Concept

### Penghayatan Islam Dalam Kalangan Anggota ATM by Burhanudin Jalal (2011)

**Objective**: Assessing the Islamic appreciation of Muslim Malaysian Armed Forces

**Construct**: Belief, Worship and Moral

**Analysis**: Statistical Package for Social Science (SPSS)

**References**: Documents and library studies and observations

### Instrumen Pentaksiran Akhlak Berasaskan Rakan Sebaya (IPAM-RS) by Jimaain (2012)

**Objective**: Measuring the morals of high school students through peer evaluation

**Construct**: Morals towards God, the prophet, self, family, society, environment and country

**Analysis**: Content validity, construct validity, reliability of items & respondents (IRT Analysis)

**References**: Darraz Theory, KBSR & KBSM Syllabus

### Instrumen Penilaian Akhlak Pelajar IPTA (IMPAK) by Adibah (2013)

**Objective**: Measuring the morals of IPTA students based on self-assessment and peer evaluation

**Construct**: Speech, behaviour, and personality

**Analysis**: Content validity, construct validity, expected validity, item & respondent reliability, reliability of repeat test (the combination of IRT (Item Response Theory) and CTT (Classical Test Theory))

**References**: Al-Ghazali Personal Theory and Kohlberg Moral Reasoning Theory

### Instrumen Penghayatan Akidah by Norsaleha et. al, (2013)

**Objective**: Measuring the appreciation of high school students on the beliefs of

**Construct**: Understanding, emotions & practices

**Analysis**: Cronbach Alpha Values & content validity

**References**: Al-Ghazali, Sayid Sabiq, Secondary School Integrated Curriculum (KBSM)

### Inventori Taubat Al-Ghazali by Salhah et. al, (2014)

**Objective**: Developing a tool to measure the repentance of teenagers who have committed adultery

**Construct**: Guidance and Repentance

**Analysis**: EFA, CFA, & validity of the content

**References**: Al-Ghazali Repentance Model

### Moral Conceptual Muslim Personality (MCMP) by Fawziah et al. (2014)

**Objective**: Conceptualizing the Muslim moral character of university students

**Construct**: Cooperation, striving for wealth and self, peace, voluntary charity, trust, fulfilling promises, forgiveness and perseverance

**Analysis**: Confirmation Factors (CFA), AMOS and validity of MCMP model
<table>
<thead>
<tr>
<th>References</th>
<th>Model of pious quranic framework model (al-Muttaqin)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective</strong></td>
<td>Measuring the level of awareness, practice, and knowledge of respondents’ spiritual values</td>
</tr>
<tr>
<td><strong>Construct</strong></td>
<td>Repentance, fear, asceticism, patience, gratitude, sincerity, trust, love, contentment, and remembering the death</td>
</tr>
<tr>
<td><strong>Analysis</strong></td>
<td>The validity of the content and the value of Cronbach Alpha</td>
</tr>
<tr>
<td><strong>References</strong></td>
<td>Classification of the simple nature of Imam Ghazali</td>
</tr>
</tbody>
</table>

**Pembinaan Dan Pengesahan Instrumen Penilaian Kendiri Akhlak Guru Pendidikan Islam (INSPI) oleh Salbiah Mohamed Salleh @ Salleh (2018)**

| **Objective** | Self-assess the morals of Islamic Education Teachers (INSPI) for every act done |
| **Construct** | Morality towards God, morality towards man and morality towards nature |
| **Analysis** | Instrument validity, validity and reliability by combining Classical Measurement Theory (TUK) and Item Response Theory (TRI) namely Rasch |
| **References** | Model Al-Ghazali’s Personal Theory, Nasih Ulwan Teacher Moral Model and al-Abrasyi Teacher Moral Model |

**Pembangunan dan Pengesahan Instrumen Kecerdasan Spiritual Untuk Pemimpin Sekolah di Malaysia (ISISLI) oleh Tajulashikin Jumahat (2018)**

| **Objective** | Measuring Islamic spiritual intelligence for school leaders in Malaysia |
| **Construct** | Spiritual Awareness (Allah Awareness, Belief in Allah, and Repentance) Morals (Patience, True, and Forgiveness) Responsibility (Justice and Integrity) Continuous Learning Learning (Religious Wisdom and Knowledge Sharing) |
| **Analysis** | Exploration factor analysis (EFA). validation using Content Validity Ratio (CVR) procedure validation factor analysis procedure (CFA) using AMOS |
| **References** | The worldview of Islamic spiritual intelligence, comprehensive literature review and expert opinion |

Based on the analysis of the above 15 instruments, 6/15 (40%) of the instruments measure aspects of Muslim religious appreciation and personality, 6/15 (40%) of the instruments measure the moral and ethical aspects of Islam, 1/15 (7%) of the instruments measure aspects of belief, 1/15 (7%) of the instruments measure aspects of repentance. In contrast, 1/15 (7%) of the instruments measure aspects of repentance. This instrument is developed either through doctoral-level research, institutional research grant projects or through published papers. It has also been identified that research at the doctoral level involves individual work. Instead, the instruments planned through research grant projects and working papers are group efforts.

The analysis shows that 8/15 (53%) of these instruments come from the research of philosophers, namely MRPI (Krauss, 2006), SPPIP-M (Azma, 2006), Student Moral Appreciation Inventory (Azhar, 2006), Islamic Appreciation in ATM (Burhanudin, 2011), IPAM-RS (Jimaain, 2012), IMPAK (Adibah, 2013), INSPI (Salbiah, 2018) and ISISLI
(Tajukashikin, 2018). On the other hand, 6/15 (40%) of the instruments are from published articles and papers, in particular Maternal Piety Scale (Siti Aishah et al., 2008), Inventory of Moral Values for Muslim Adolescents (Mvima) (Salhah et al., 2010), Ummatic Personality Inventory (UPI) (Noraini, 2011), Faith Appreciation Instruments (Norsaleha et al., 2013), MCMP (Fawziah et al., 2014) and Imam Ghazali Spiritual (Abdul Aziz et al., 2015). Only one in fifteen scales (7%) is generated by a grant project, namely the Taubat al-Ghazali Inventory (Salhah et al., 2014).

Based on the results, 12/15 (80%) instruments are analyzed using the Classical Test Theory (CTT) to ensure their validity and reliability. Only 1/15 (7%) of the instruments were analyzed using the Item Feedback Theory (IRT) by applying the Rasch Measurement Model, while the analysis of 2/15 (13%) of the other instruments was performed by combining CTT and IRT to ensure that the instrument showed psychometric sound properties.

All Islamic instruments are based on the original teachings of Islam, which refer to authentic revelation. However, there are 2/15 (13%) instruments that combine the Islamic approach with the specific Western theories of SPIPP-M (Azma, 2006) and IMPACT (Adibah, 2013). Azma (2006) combined Darraz Islamic Moral Classification with Gable and Wolf Models, while Adibah (2013) combined Personality Theory, Al-Ghazali Constructivism Theory, and Kohlberg's Moral Reasoning Theory. 10/15 (67%) scale based on respected scholars such as al-Ghazali (T.T.) and contemporary scholars such as Darraz, Sayid Sabiq, al-Faruqi, Naquib al-Attas, Nasih Ulwan, Al-Abrasyi, Sayyed Hossein An-Nasr and Hassan Langgulung. The 3/15 (20 per cent) scale was drawn up based on the general guidelines of al-Quran and Hadis. 2/15 (13%) scale was developed for high school students by combining modern master models with KBSR and KBSM syllabi (Jimaain, 2012 & Norsaleha et al., 2013). 2/15 (13%) tools have been developed based on a review of the Islamic world's literature highlights and views (Burhanudin, 2011 & Tajulashikin, 2018).

This instrument's stage of development can be seen in Figure 1 below, which began in 2006 until 2018. 2006 is a pilot year, starting with the development of a total of three instruments. Nevertheless, only one instrument was developed in 2008 and 2010. Two instruments followed in 2011, only one in 2012, and a slight improvement in 2013 and 2014, i.e. two instruments were developed. While only one instrument was developed in 2015 and finally two instruments were developed in 2018. From 2006 to 2018, it has been several years since the instrument was not developed, namely 2007, 2009, 2016 and 2017.

![Figure 1. History of Instrument Development](https://cibg.org.au/3227)
The instruments were developed for different respondents, namely 33% for school students, 26% for youth, 20% for university students, 7% for principals, 7% for teachers and 7% for ATMs. It can be explained based on Figure 2.

Figure 2. Instrument Respondents

4. DISCUSSION

This study was conducted using a systematic literature review approach in studying Islamic-oriented instruments in Malaysia. Researchers use a systematic search approach to ensure that all Islamic-oriented measurement is available for analysis. For each study, a summary of the scale analysis of Tables 1 and Figures 1 and 2 may serve as a reference for demanding measuring instruments appropriate to the organization's research context or individual. There has recently been a dramatic increase in attempts to develop measurement instruments in the Islamic context. The increasing development of instruments for the Muslim community in Malaysia is not an unusual situation due to a growing awareness of instruments based on other religions, such as Judeo Christian beliefs. This scenario is due to differences in religious practice and specific terms used in Islam. Psychometric expertise is not only being mastered by Western scholars such as Allport & Ross (1967) but is also beginning to receive serious attention from Islamic researchers around the world, such as

The concept of religiosity is a growing field of psychology. The findings of the SLR made by the researchers are therefore reasonable to show that almost half of the instruments focus on aspects of Muslim religiosity and personality. Fundamentally, religion is an aspect of general religion consisting of experience, ideology, religious practice, intellect and ethics (Glock & Stark, 1966). Aspects of appreciation of religious life are often linked to positive personal development, exceptional work performance and a healthy mind and body. Measurement of trust is also linked to spiritual aspects, which mainly involve the assessment of the workplace. However, based on the analysis, current research focuses mainly on school and youth students facing various social problems. This fact is evident from the development of MRPI (Krauss, 2006) to address social problems among young people. The Al-Ghazali Taubat Inventory was also designed for young adults who commit adultery (Salhah et al., 2014). Similarly, from the point of view of the religiosity assessment found in the Krauss study (2006), norsaleha et. Al (2013) and Burhanudin: (2013).

Islamic morality is one of the elements of religion (Glock & Stark, 1966). However, the broad concept of the Islamic moral call for a specific operational definition (Jimaain, 2012) has its dimensions (Azhar, 2006; Adibah, 2013; Salbiah, 2018). For example, Azhar (2006), Jimaain (2012), Adibah (2013) and Salbiah (2018) planned the exact scale of Islamic morality without taking into account other aspects of religiosity. The scale's summary reflects that the 4/11 (36%) scale includes the measurement of Islamic morality of secondary school students (SPIPP-M, IPAM-RS, and the Student Moral Appreciation Inventory). In contrast, the scale was designed to measure Islamic morality of IPTA (IMPAK) students and Islamic education teachers' morals in Malaysia (INSPI). Based on the analysis, the scale has not been developed in the workplace context, such as the measurement of Islamic morality in economics, education or medicine. Although each work has its ethics, they only act as subjective guidelines. Islamic Moral Evaluation by Employers is also limited, as most assessments in an organization are more likely to assess work efficiency. Therefore, the measurement of Islamic morality, which incorporates the value of employment in the organization, deserves serious attention from future researchers.

Similarly, the spiritual aspect, which is both an internal (intangible) and an abstract aspect, is critical to evaluate and measure utilizing instruments reliably and systematically. Instruments for each researcher's study were conducted through Table 1 analysis, such as the Maternal Piety Scale, the Imam Ghazali Model Inventory (ISIG) and the Development and Validation of Spiritual Intelligence Instruments for School Leaders in Malaysia (ISISLI).

Each instrument development research should reflect good psychometric properties to be a valid and objective instrument for measuring variables. Based on the analysis, all instruments have been reported to have content validity, face validity and reliability. However, almost all instruments do not show the validity of the criteria divided into concurrent validity and predictive validity. Only the Maternal Piety Scale reported concurrent validity and the IMPACT reported predictive validity. The validity of the criteria is one of the crucial aspects
to be taken into account in developing each new measuring instrument (Nunnally, 1978). Most of the initial tools were developed using a CTT analysis consisting of factor analysis such as EFA and CFA. This trend has been observed to change in recent years, with researchers starting to use IRT to design measurement scales, as in the IPAM-RS, IMPACT and INSPI studies.

5. CONCLUSION

The limitations of Islamic instruments have sparked new phenomena in the Islamic psychometric world. It is becoming necessary for us to change our attitude by stopping, depending on the instruments of other religions that are certainly not based on Islam (Norazmi et al., 2019). Researchers in the field of Islam need to be proactive in developing instruments based on the main pillars of Islamic epistemology and references from Muslim scholars and authoritative Islamic books (Zaid et al, 2020). The development of Islamic instruments involves psychometric knowledge and in-depth knowledge of the concept of monotheism in Islam to ensure that the operating framework of the instrument does not deviate from the original concept demanded by religion (Norazmi et al., 2020). Decades now show that the development of Islamic-oriented instruments has undergone a dramatic evolution (Zaid et al., 2020). Islamic research should use specific measuring instruments based on transparent sources of disclosure and Islamic law. It is imperative to refer to legitimate and competent experts for precise terms in Islamic studies and education, while at the same time using Islamic revelation as the primary guide. Thus, SLR has collected instruments that can be used to measure variables, especially in Islam. It is hoped that this paper will assist other researchers to refer to legitimate and reliable instruments while conducting their research.

6. APPRECIATION

The appreciation of writing this article is dedicated to Main Supervisor at the Academy of Contemporary Islamic Studies (ACIS) Universiti Teknologi MARA (UiTM), Associate Prof Ts Dr Mohd Nor Mamat and Co-Supervisor at Universiti Pertahanan Nasional Malaysia (UPNM), Lt Col (R) Dr Daud Mohamed Salleh on the minds of the people in the successful writing of this article. Similarly, dedication for the Department of Religious Corps of the Armed Forces (KAGAT) and the Malaysian Army (TDM) and the Ministry of Defense for supporting my postgraduate studies at ACIS UiTM.

7. REFERENCES


