Development and validation of indicators for the Islamic Affairs Management Index in Malaysia: A Fuzzy Delphi Method approach

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Abstract

Malaysia is a nation distinguished by its ethnic, religious, and cultural diversity. Despite this diversity, Islam is recognized as the official religion and significantly influences various dimensions of the lives of Muslims, spanning from personal matters to governmental structures. Institutions responsible for Islamic affairs were established to supervise religious matters and protect the rights and interests of Muslims. However, the current state of Islamic affairs management remains ambiguous, highlighting the need for a comprehensive assessment tool. Therefore, the objective of this study is to identify a set of indicators for the Islamic Affairs Management Index in Malaysia. The Fuzzy Delphi Method (FDM) was utilized to select and validate the most important indicators for inclusion in the index. The identification of these indicators was based on the input of twelve (12) experts, including policy makers, policy executers, academics, and representatives of non-governmental organizations (NGOs). The results indicated that, out of 40 proposed indicators, 37 met the FDM criteria and were accepted for incorporation into the index. This index serves as a tool for relevant stakeholders to assess the current performance of Islamic affairs management, thereby facilitating informed improvements in policymaking and strategic planning. Overall, this study employed the FDM to guide the decision-making process in the selection and validation of the most critical indicators for the Malaysian Islamic Affairs Index.

Keywords: Indicators, Islamic Affairs Management Index, expert consensus, Fuzzy Delphi Method, Malaysia

Introduction

Malaysia, as a Muslim-majority country, places significant emphasis on issues related to Islamic affairs and the welfare of its Muslim population. The effective management of these affairs is essential to the development and progress of Islamic affairs in the country. Despite its importance, the management of Islamic affairs poses significant challenges due to the broad scope of religious matters, including the management of mosques and surau, Islamic education, da'wah, Islamic family institution, the enforcement of Islamic laws, halal management, as well as the management of *baitulmal*, *zakat*, and *waqf*. The interconnection of these elements needs a structured and comprehensive approach to assess the effectiveness of Islamic affairs management.

Islamic affairs management refers to a management system that involves planning, implementing, directing, and monitoring agencies or organizations related to Islamic affairs to achieve the goal of *al-falah* (success, safety, and lasting happiness) (Ghani et al., 2023). In Malaysia, Islamic affairs are managed and supervised by various religious institutions, with the Department of Islamic Development Malaysia (JAKIM) playing a crucial role at the federal level. At the state level, Islamic affairs are managed by the State Islamic Religious Council (MAIN) and the State Islamic Religious Department (JAIN), each of which has distinct functions and policies in handling religious matters.

In order to support the development of Islamic affairs, the government allocates a substantial budget to Islamic institutions every year. For instance, the government has allocated RM 2 billion for the management and development of Islamic affairs in 2025 (BERNAMA, 2024, September 18). This allocation aims to safeguard the well-being of Muslim society, covering various aspects of education, economic development, and Islamic teachings (Ghani et al., 2023). In addition, JAKIM (2023) introduced "Transformation Plan of Religious Affairs Towards Malaysia Madani (Al Falah) 2023-2027". This plan is crucial to ensure a holistic and effective alignment of programs relating to Islamic affairs, as well as to maintain their continuity. To achieve this, five strategic axes were formulated: (i) a strong Islamic administration, (ii) human well-being, (iii) the dignity of Shariah, (iv) empowered leadership, and (iv) institutional honour. Through this plan, the implemented strategies and programs can be enhanced to ensure the long-term sustainability of Islamic affairs development.

Despite ongoing efforts, empirical evidence continues to indicate persistent challenges in Islamic affairs. If these issues are not effectively addressed, they may lead to further complications that could hamper the development of Islamic affairs and negatively impact the well-being of Muslim societies. Previous studies have identified various issues related to Islamic affairs. For example, a study conducted by Suleiman and Farid (2023) revealed that the rising divorce rate among Muslim couples are attributed to factors such as negligence of responsibility, infidelity, domestic violence, communication issues, financial problems, and third-party interventions. A qualitative study by Remly, Sabaruddin and Adenan (2024) identified two main challenges in revitalizing the mosque institution. The first challenge concerns the personal characteristics of mosque committee members, including lack of productivity, ideological and political differences, conflicts between religious scholars and professionals, lack of teamwork, and irresponsibility. The second challenge involves social factors, including the inaccessible nature of the mosque committee members, community resistance to changes initiated by the committee, and ideological and political differences within the mosque leadership. Additionally, a study by Awang, Mat and Ghani (2022) found that new converts face challenges in building their identity as Muslims. These challenges include a lack of understanding and appreciation of religious teachings, conversion due to marriage, limited moral support from a non-Muslim partner, continued living in a non-Muslim community, a significant gap from the Muslim community, and difficulty in abandoning old habits. Considering these issues, it is crucial to take important steps to monitor and improve the current situation of Islamic affairs.

Furthermore, the development of a comprehensive and reliable index for evaluating Islamic affairs management is undeniably essential. However, it is equally important to assess its individual elements, as they cannot be evaluated in isolation due to their interconnected nature. Several indices have been developed in the past to measure the performance of specific issues within the Islamic sphere. For instance, Sulong, Chowdhury, Abdullah and Hall (2024) constructed the Sustainable Halal Tourism Composite Performance Index (SHTCPI) to assess the progress of

the global halal tourism industry based on four key dimensions: environment, social, economic, and halal tourism, using 24 indicators. Similarly, Widiastuti et al. (2022) developed a sustainability index for the Islamic Social Finance program to evaluate its performance and long-term sustainability. As-Salafiyah, Rusydiana and Mustafa (2022) constructed the Maqashid Sharia-based Mosque Empowerment Index, which measures mosque empowerment based on six key indicators, including religion, soul, mind, lineage, property, and environment. Wiratama and Safitri (2023) created the Islamic Education Development Index (IEDI) to assess the progress of Islamic education development at the provincial level in Indonesia. Harahap, Sukiman and Harahap (2023) introduced the Falah Welfare Index to measure the community well-being in Langkat Regency, Indonesia. Finally, Osman et al. (2024) developed the Maqasid Al-Shari'ah - Society's Perception Index (MS-SPI) to evaluate social well-being based on societal perceptions within the context of Maqasid al-Shari'ah. Although these indices provide valuable insights into particular aspects, they do not offer a comprehensive assessment of Islamic affairs management. Consequently, further study is needed to construct an index capable of tracking the overall performance of Islamic affairs management, which can provide a more holistic understanding of their state and progress.

Hence, these efforts demonstrate the significant gap in the overall assessment of Islamic affairs management and selecting relevant indicators. The lack of a standardized framework for evaluating the management of Islamic affairs can prevent policymakers and other stakeholders from making informed decisions and implementing changes that can improve institutions. Furthermore, without a constructive and transparent evaluation tool, it becomes difficult to assess the impact of policies or track improvement in the management of Islamic affairs over time. As such, there is an urgent need to develop a set of valid and reliable indicators, specifically adapted to the Malaysian context. Indeed, the strength and weakness of any index largely depend on the quality of the underlying variables (indicators) (OECD, 2008). The selection of these indicators should adhere to the SMART criteria, meaning they must be specific, measurable, achievable, relevant, and time-bound (Santeramo, 2015). To address this issue, the development of such an index would provide a structured framework to assess the performance of Islamic affairs management in Malaysia. This can provide a better understanding of the strengths and weaknesses of implemented policies and programs, thereby guiding more effective decision-making processes within Islamic institutions. Therefore, this study aims to identify and select the most significant indicators for the Islamic affairs management index using the Fuzzy Delphi Method (FDM).

Method

This study employed the Fuzzy Delphi Method (FDM) as the primary approach to identify the most significant indicators for the Islamic Affairs Management Index. The FDM was selected because of its ability to address the ambiguity and subjectivity of expert views while facilitating consensus among experts (Jamaludin et al., 2025). As a modified version of the traditional Delphi method, FDM integrates fuzzy set theory to overcome the ambiguities that may arise during expert consensus (Lee et al., 2021). Unlike the traditional Delphi method, which often faces challenges such as low convergence of expert views, high costs, and the risk of eliminating various experts' views (Mabrouk, 2021). The FDM improves decision-making by utilizing triangulation statistics to measure the distance between levels of consensus within the expert panel (Ghazali, Lim & Jamak, 2019), thereby reducing ambiguity in interpreting expert feedback (Lin et al., 2020). In

addition, the robustness of the method allows for the integration of diverse perspectives, thereby improving the comprehensiveness of the index framework. The ability of the FDM in handling both qualitative (Delphi) and quantitative (fuzzy analysis) data ensures a more objective approach in managing uncertainty in data collection, expert judgments, and indicator selection, while accounting for data fuzziness (Padilla-Rivera et al., 2021).

Participant

The participants for this study were selected through purposive sampling from a group of twelve (12) expert panels. According to Adler and Ziglio (1996), a sample of 10 to 15 experts is considered appropriate for the Delphi technique. In the Delphi method, the selection of experts is crucial because it can influence the quality and reliability of the study's results (Jacobs, 1996). The experts consisted of policymakers, policy executors, academics, and representatives of non-governmental organisations (NGOs). The selection of the experts was based on the following criteria:

1) The expert must have knowledge of Islamic affairs management.
2) The expert must have at least five years of experience in their respective field.
3) The experts must have at least a bachelor's degree and a doctorate for academics.
4) The experts who agree to participate must fully commit to the duration of the study.
5) The expert must have excellent communication skills.

Table 1 displays the profile of the participants (experts) involved in the study.

Table 1. Profile of the experts

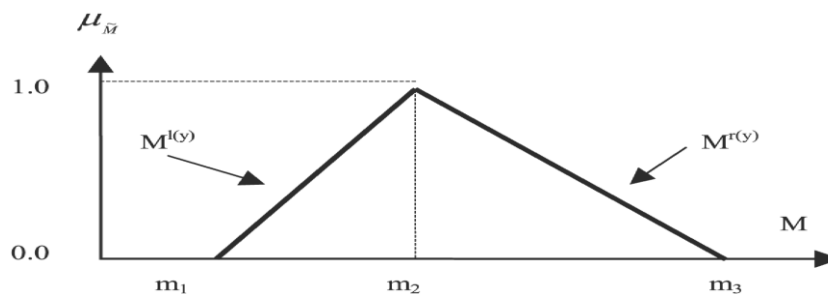| Demographic variable	Category	Frequency	Percentage (%)
Gender	Male	9	75.00
	Female	3	25.00
Category of expert	Policy maker	2	16.70
	Policy executor	5	41.70
	Academician	3	25.00
	Non-Governmental Organisation	2	16.70
Academic qualification	Bachelor's degree	4	33.30
	Master's degree	3	25.00
	PhD	5	41.70
Working experience	11 - 20 years	2	16.70
	21 years and above	10	83.30
Total		**12**	**100**

Instrument

In this study, a survey questionnaire was employed to gather expert views on the key indicators for the Islamic Affairs Management Index. The questionnaire was designed based on insights from previous research and refined through small group discussions using the Nominal Group

Technique (NGT) to ensure a well-rounded selection of indicators. It consists of two main sections: (1) Section A, which collects information about the experts' backgrounds, and (2) Section B, which focuses on their evaluations of the proposed indicators for managing Islamic affairs.

Procedure and data analysis

The procedure for the Fuzzy Delphi Method (FDM) is as follows:

1) Selection of Participants (Experts): The selection of experts is described in the previous section.
2) Determination of Linguistic Scale: The linguistic scales are similar to Likert scales with the addition of fuzzy numbers incorporated into response scales based on a triangular fuzzy number (Ghazali et al., 2019), as shown in Figure 1. Determining the linguistic scale is essential to resolve the problem of fuzziness between experts' opinions. Hence, in order to take into account the fuzziness of the experts' opinions, three levels of fuzzy values were assigned to each response: minimum value (m_1), most plausible value (m_2), and maximum value (m_3) (Abdullah et al., 2021). In this study, a seven-point linguistic scale (ranging from 1 = extremely not important to 7 = extremely important) was used to collect feedback from the participants (experts).

Figure 1. Triangular fuzzy number

3) Calculation of the Threshold Value (d): The threshold values (d) are critical in determining the level of consensus among experts. The expert consensus is considered reached if the threshold value is less than or equal to 0.20 (Ahmad Zamzuri et al., 2022; Cheng & Lin, 2002). The threshold value (d) is calculated according to the following formula:

$$d(\bar{m}, \bar{n}) = \sqrt{\frac{1}{3}[(m1 - n1)^2 + (m2 - n2)^2 + (m3 - n3)^2]}$$

4) Determination of the Agreement of Indicators: The determination of the expert consensus on the indicators is important to ensure their reliability for inclusion in the study. The overall expert consensus must exceed 75%. If the expert consensus percentage for each indicator exceeds 75%, it is considered that consensus has been reached for the indicator (Rahman et al., 2021). However, if the expert consensus is less than 75%, a second round of the fuzzy Delphi should be conducted to re-evaluate the indicators (Zulkefli, Abdullah & Endut, 2022).

5) Calculation of the Defuzzification Value: The defuzzification process is used to determine the ranking (A_{max} score) of each item, which reflects the level of expert consensus. A higher A_{max} score implies a higher ranking of the items compared to others. The calculation of the defuzzification value is based on the following formula:

$$A_{max} = 1/4 \times (a_1 + 2a_m + a_2)$$

In this study, a defuzzification value (A_{max} score) ≥ 0.5 (S. A. Abdullah et al., 2021) is applied to select the most important indicators for the index. Indicators with a score ≥ 0.5 are accepted, while those with a score below 0.5 are discarded. Indicators with the highest defuzzification values are prioritized and considered as the outcome indicators for the development of the Islamic affairs management index.

Results

As illustrated in Table 2, the results present the final list of indicators for the Islamic Affairs Management Index. A total of 40 indicators were proposed to the panel of experts for inclusion in the index, which covers ten clusters, including Mosque Management and Enlivenment, Islamic Family Management, Performance of Islamic Affairs Management, Baitulmal Management, Enforcement and Compliance of Laws, Understanding and Appreciation of Islam, Society Well-Being, Islamic Religious Education, Halal Management, and Da'wah and Tarbiyah.

Based on the findings, all 40 indicators were accepted for inclusion in the index because they met the first prerequisite of having a threshold value (d) ≤ 0.20. For the second prerequisite, 37 out of the 40 indicators received expert consensus of $> 75\%$. Additionally, for the third prerequisite, all 40 indicators satisfied the criterion of having an average defuzzification value (A_{max} score) ≥ 0.50. As a result, three indicators were omitted: 'Congregation Attendance', 'Cleanliness and Cheerfulness', and 'Accredited Preachers', while the remaining thirty-seven indicators were accepted after meeting all the prerequisites of the FDM.

Furthermore, Table 2 also demonstrates the ranking of indicators based on the consensus of the expert panels through the defuzzification value (A_{max} score). The findings revealed that five indicators registered the highest defuzzification value, including 'Professional Skills' ($A_{max} = 0.967$), 'Trustworthiness and Integrity' ($A_{max} = 0.967$), 'Collection and Acquisition of Baitulmal Revenue' ($A_{max} = 0.958$), 'Revenue Distribution' ($A_{max} = 0.958$), and 'Children Management' ($A_{max} = 0.950$). On the other hand, an indicator such as 'Tendency to Choose Religious Schools' ($A_{max} = 0.842$) received the lowest defuzzification value, thus being listed as the least significant indicator of the Islamic affairs management compared to other indicators.

Table 2. Expert consensus on Islamic Affairs Management Index indicators

Clusters	Indicators	Threshold value (d)	Expert agreement (%)	Df value (A_{max})	Result	Rank
Mosque Management and Enlivenment	Professional management	0.057	100%	0.942	Accepted	7
	Congregation attendance	0.142	70%	0.867	Rejected	37
	Mosque activities and services	0.071	100%	0.933	Accepted	13
	Infrastructure facilities	0.094	80%	0.872	Accepted	35
	Financial management	0.061	100%	0.942	Accepted	8
	Cleanliness and cheerfulness	0.151	70%	0.883	Rejected	33
	Support from qaryah (community) members	0.071	100%	0.933	Accepted	14
Islamic Family Management	Marriage rate according to regulations	0.102	90%	0.911	Accepted	25
	Increase in marriage rate	0.083	90%	0.864	Accepted	38
	Children management	0.046	100%	0.950	Accepted	5
	Management of special needs families	0.084	90%	0.886	Accepted	32
	Intervention for troubled families	0.093	90%	0.928	Accepted	18
Performance of Islamic Affairs Management	Professional skills	0.000	100%	0.967	Accepted	1
	Delivery system	0.071	100%	0.933	Accepted	15
	Programs effectiveness	0.095	90%	0.894	Accepted	30
	Current technology usage	0.093	90%	0.928	Accepted	19
Baitulmal Management	Collection and acquisition of baitulmal revenue	0.025	100%	0.958	Accepted	3
	Revenue distribution	0.025	100%	0.958	Accepted	4
	Development and utilisation of revenue	0.098	90%	0.903	Accepted	27
Enforcement and Compliance of Laws	Shariah criminal offense rate	0.106	80%	0.872	Accepted	36
	Regulatory compliance and monitoring	0.071	100%	0.933	Accepted	16
	Case management and resolution	0.095	90%	0.894	Accepted	31
	Law codification	0.100	90%	0.919	Accepted	21
Understanding and Appreciation of Islam	Lifelong learning	0.076	100%	0.917	Accepted	23
	Adherence to the Ahli Sunnah Wal Jama'ah	0.098	90%	0.919	Accepted	22
	Life according to Shariah	0.061	100%	0.942	Accepted	9
Society Well-Being	Trustworthiness and integrity	0.000	100%	0.967	Accepted	2
	Diversity management	0.101	90%	0.911	Accepted	26
	Individual well-being	0.061	100%	0.942	Accepted	10
Islamic Religious Education	Tendency to choose religious schools	0.107	100%	0.842	Accepted	40
	Performance of religious school students	0.126	80%	0.897	Accepted	29
	Quality of religious schools	0.071	100%	0.933	Accepted	17
Halal Management	Halal certification	0.101	90%	0.903	Accepted	28
	Community awareness of halal certification	0.065	100%	0.936	Accepted	12
	Enforcement and monitoring of halal certificates	0.076	100%	0.925	Accepted	20
	Number of new converts	0.131	90%	0.856	Accepted	39

Da'wah and Tarbiyah	Accredited preachers	0.152	70%	0.875	Rejected	34
	Methods of conveying da'wah	0.046	100%	0.950	Accepted	6
	Content of da'wah	0.061	100%	0.942	Accepted	11
	Assessment and monitoring of da'wah	0.076	100%	0.917	Accepted	24

Pre-requisites:
1) Threshold value (d) ≤ 0.20
2) Percentage of expert agreement > 75%
3) Defuzzification value (A_{max} score) ≥ 0.50

Discussion

As previously stated, the experts identified five critical indicators for the Islamic Affairs Management Index: 'Professional Skills,' 'Trustworthiness and Integrity,' 'Collection and Acquisition of Baitulmal Revenue,' 'Revenue Distribution,' and 'Children Management.' Among these, 'Professional Skills' were found to be the most critical indicator, which is consistent with Tan and Laswad (2018) assertion that employees must possess intellectual, interpersonal, personal, and organizational skills to perform their tasks effectively. Basir and Mohamed (2019), in their study conducted at the Department of Islamic Development Malaysia (JAKIM), highlighted the importance of human capital development programs, such as training, education and knowledge, human resource management, quality, and work experiences, to enhance professional skills. These initiatives ensure that employees remain competent and adaptable to organizational settings. Additionally, the experts agreed that 'Trustworthiness and Integrity' were vital indicators, reflecting moral values needed in the workplace and society. Trust is fundamental for establishing social exchange relationships in the workplace Chen and Sriphon, 2022), which can enhance the credibility of Islamic institutions.

Baitulmal management, particularly 'Collection and Acquisition of Baitulmal Revenue' and 'Revenue Distribution', emerged as another two critical indicators in evaluating Islamic affairs management. The collection of zakat and waqf is vital for supporting vulnerable groups in society, including the elderly, the poor, and orphans, through initiatives such as education, training, and business activities (Razak, 2020). However, issues in the distribution of these funds remain unresolved. Thaker et al. (2019) found that despite the success in zakat collection, the performance of Islamic institutions in zakat disbursement remains subpar, with an average of 26% of zakat revenue left undistributed each year. Further research highlighted gaps in zakat assistance, particularly in areas such as medical insurance, education, and religious savings (Zulkifli et al., 2021). Addressing these issues and ensuring the proper allocation of resources is essential to maintaining the trust of the Muslim community and preventing leakage of funds.

The management of children also emerged as a key indicator in measuring the performance of Islamic affairs management, highlighting the role of families in promoting the positive development of children. The family is generally considered an important social institution in all societies (Zulkefli, Endut & Abdullah, 2024). Previous studies emphasized that early experiences and family environment play a crucial role in children's development, highlighting the importance of parental involvement. Encouraging parents' active participation in children's learning, as well as in school and community activities such as parent-teacher conferences and workshops (Đurišić & Bunijevac, 2017), has a lasting impact on the child's emotional, physical, and mental well-being.

Unexpectedly, some remarkable indicators, such as 'Congregation attendance', 'Cleanliness and Cheerfulness', and 'Accredited Preachers', were considered essential for understanding the current state of Islamic affairs management. However, based on the experts' consensus, these three indicators were not included in the index framework. Concerning the congregation attendance, while the presence of Muslims at the mosque can serve as a benchmark for assessing the strength of their religious beliefs, it was excluded from the framework. This exclusion was due to its limited relevance for performance measurement and its redundancy with other indicators within Mosque Management and Enlivenment. The number of worshipers can be influenced by various factors, including the location of the mosque, the facilities provided, special and seasonal events, particularly during important dates such as Ramadan and festive periods such as Eid (Mohamed et al., 2023). However, focusing solely on attendance could overlook other, more vital indicators for assessing the enlivenment of the mosque and the overall performance of Islamic affairs management.

Conclusion

This study sought to identify the most significant indicators for the Islamic Affairs Management Index based on the expert opinions. The findings revealed that out of the 40 proposed indicators, three indicators, including 'Congregation Attendance', 'Cleanliness and Cheerfulness', and 'Accredited Preachers', were excluded from the index framework because they did not meet the 75% consensus among the experts. Conversely, indicators such as 'Professional Skills', 'Trustworthiness and Integrity', 'Collection and Acquisition of Baitulmal Revenue', 'Revenue Distribution', and 'Children Management' had emerged as the most important. These indicators are crucial for assessing the performance of Islamic affairs management, as their inclusion in the index allows for regular monitoring of the efficiency and transparency of management practices. The implications of this study are substantial, as relevant stakeholders could utilise the proposed index to make a more structured assessment of Islamic affairs management. This would ultimately contribute to greater transparency and accountability in governance, as well as more effective policy formulation and strategic planning. For future research, the index should be empirically tested through a public poll to evaluate its effectiveness and adaptability within the Malaysian context. In addition, further research should explore other methods, such as the Analytic Hierarchy Process (AHP), which has proven to be an effective approach for constructing indices and addressing complex problems.

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