

Determinants of Islamic Financial Literacy in OIC Countries: A Comprehensive Systematic Review and Analysis

H F Harun*¹, M A Sarman², and S H Kamaruddin³

ABSTRACT

The rapid growth and demand for Islamic banking and finance have brought about the imperative necessity to explore Islamic financial literacy (IFL). This paper reports a review of existing studies to understand the determinants of Islamic financial literacy and their connections in OIC countries. The database was methodically examined and selected using the PRISMA Protocol. The initial keywords-based search found a total of 132 articles and it was reduced to 45 articles following several screening phases. The results found that students' knowledge and understanding of Islamic finance are influenced by various factors: 1) socio-demographic background, 2) educational level, 3) religious beliefs, and 4) economic support. It was further revealed that knowledge, attitudes, and education were the imperative determinants of IFL, while the role of religion was the least studied. Our findings provide valuable insights on ways to improve the current state of Islamic financial literacy in OIC countries by targeting specific groups or areas for intervention. It also calls for further investigation on the topic of IFL to establish a sufficient degree of Islamic financial education, attitudes, and knowledge.

ملخص

ساهم النمو السريع والطلب المتزايد على الخدمات المصرفية والمالية الإسلامية في نشأة ضرورة حتمية لاستكشاف الثقافة المالية الإسلامية (IFL). تقدم هذه الورقة مراجعة للدراسات القائمة لفهم محددات الثقافة المالية الإسلامية وارتباطاتها في بلدان منظمة التعاون الإسلامي. فقد خضعت قاعدة البيانات للدراسة والاختيار بشكل منهجي باستخدام بروتوكول بنود التقارير المفضلة للمراجعات المنهجية و التحليل التلوي (PRISMA). وتوصل البحث الأولي القائم على الكلمات

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الرئيسية إلى ما مجموعه 132 مقالة وتم تلخيص عددها إلى 45 مقالة بعد عدة مراحل للتدقيق. وأشارت النتائج إلى أن معرفة الطلاب وفهمهم للمالية الإسلامية يتأثر بعوامل مختلفة: (1) الخلفية الاجتماعية والديموغرافية، و (2) المستوى التعليمي، و(3) المعتقدات الدينية، و (4) الدعم الاقتصادي. وتبين أيضا أن عناصر المعرفة والمواقف والتعليم كانت المحددات الأبرز لمستوى الثقافة المالية الإسلامية، في حين أن دور الدين كان أقل العناصر خضوعا للدراسة. والنتائج التي توصلنا إليها تعطي رؤية قيمة حول سبل تحسين الوضع الراهن للثقافة المالية الإسلامية في بلدان منظمة التعاون الإسلامي من خلال استهداف فئات معينة أو مجالات تدخل محددة. كما تدعو أيضا إلى مزيد من الدراسة في موضوع الثقافة المالية الإسلامية لبناء مستوى كاف من الثقافة والمواقف والمعرفة بقضايا المالية الإسلامية.

RÉSUMÉ

La croissance rapide et la demande en matière de banque et de finance islamiques ont fait naître la nécessité impérieuse d'explorer la culture financière islamique (CFI). Ce document rapporte une revue des études existantes pour comprendre les déterminants de l'alphabétisation financière islamique et leurs connexions dans les pays de l'OCI. La base de données a été méthodiquement examinée et sélectionnée en utilisant le protocole PRISMA. La recherche initiale basée sur des mots-clés a permis de trouver un total de 132 articles et a été réduite à 45 articles après plusieurs phases de sélection. Les résultats ont montré que la connaissance et la compréhension de la finance islamique par les étudiants sont influencées par divers facteurs : 1) le contexte sociodémographique, 2) le niveau d'éducation, 3) les croyances religieuses et 4) le soutien économique. Il a également été révélé que les connaissances, les attitudes et l'éducation étaient les principaux déterminants de la finance islamique, tandis que le rôle de la religion était le moins étudié. Nos résultats fournissent des indications précieuses sur les moyens d'améliorer l'état actuel de l'éducation financière islamique dans les pays de l'OCI en ciblant des groupes ou des domaines d'intervention spécifiques. Ils appellent également à des recherches plus approfondies sur le sujet de l'IFL pour établir un niveau suffisant d'éducation, d'attitudes et de connaissances en matière de finance islamique.

Keywords: Islamic finance, literacy level, determinant, PRISMA, systematic literature review

JEL Classification: G02, I22

1. Introduction

Islamic banking and finance have experienced rapid growth, particularly across Muslim-populated countries in Asia and the Middle East. While it is still a small segment of the global financial market, the implementation of Islamic finance is increasing exponentially due to the strong economic growth in Muslim nations. Islamic finance refers to financial services that comply with Islamic law (also known as *shari'ah* law), principles, and rules. To understand the significance of Islamic finance in the context of OIC (Organization of Islamic Cooperation) countries, it is essential to consider the level of Islamic financial literacy among the population.

Financial literacy plays a vital role in enabling individuals to access appropriate financial information and make informed decisions. Improving financial literacy has been shown to enhance financial security and enable better decision-making, particularly in the rapidly changing and volatile financial markets. Financial literacy is a crucial component of overall financial development (Mikek, 2023). Therefore, a thorough understanding of Islamic literacy determinants is crucial to empower individuals with the necessary knowledge and skills to navigate the complex financial landscape.

While numerous studies have been published on financial literacy in recent years, few have specifically focused on financial literacy in the Islamic context. For example, Minhaj-ud-Din *et al.* (2022) investigated the growth of Islamic finance in 12 OIC countries while Abd. Wahab *et al.* (2022) reviewed the research areas of Islamic finance at Malaysian public universities. Meanwhile, other studies (e.g., Sulaeman & Sukmana, 2023; Bila & Biyase, 2023) have focused on poverty alleviation. In fact, previous studies that explored similar aspects of financial literacy have been limited in terms of their design and scope. A study by Majid and Nugraha (2022) limited its investigation to the impact of Islamic financial literacy (IFL) on the intention of prospective Muslim investors to invest in Islamic securities crowdfunding via the FinTech platform.

A study by Widityani *et al.* (2020) investigated the factors enhancing Islamic financial literacy among college students in Indonesia. It also examined the level of Islamic financial literacy and explored its relationship with socio-demographic characteristics using multilinear regression analysis. The findings identified three significant factors that contribute to the development of Islamic financial literacy among college

students: perception, attitude, behaviour, and knowledge. Similarly, Abdullah *et al.* (2023) conducted a study focusing on the significance of financial literacy in managing personal resources within local communities in Malaysia. The research specifically examined the factors influencing Islamic financial literacy and highlighted the crucial roles of knowledge, religion, and financial attitude in promoting Islamic financial literacy within these communities. However, it is important to note that these two studies had a narrow scope that was limited to examining the Malaysian or Indonesian contexts exclusively.

Islamic financial literacy as a whole remains largely undefined and under-explored. Most studies have concentrated on other domains, such as accounting and economics, rather than Islamic finance itself. For instance, Kibiya *et al.* (2022) examined the level of Islamic accounting literacy among accounting students in Nigerian colleges while Umar *et al.* (2021) explored how academic and professional organisations influence financial literacy markers in Islamic banking and finance in Nigeria. Previous research has revealed scattered determinants of financial literacy within the traditional financial literacy framework (Biancone *et al.*, 2020), making it challenging to develop a comprehensive understanding of Islamic financial literacy.

While these studies offer valuable insights, it is crucial to recognise the need for broader research encompassing a more diverse range of countries and populations. By expanding the scope and design of future studies, a comprehensive understanding of Islamic financial literacy can be achieved, subsequently facilitating more effective initiatives and policies to promote financial literacy within Islamic finance.

Therefore, this review aims to comprehensively examine the level of Islamic financial literacy (IFL) among OIC countries and identify the key influencing determinants. By analysing the existing literature on IFL, this study seeks to shed light on the current state of financial literacy in OIC countries and provide insights into the factors that contribute to or hinder its development. The determinants of Islamic financial literacy among OIC countries are also identified and analysed by considering the consistency and heterogeneity of findings across different studies. The PRISMA protocol was used to ensure a systematic and rigorous review of the literature. The findings of this review will contribute to a better understanding of IFL and its significance within the OIC context, as well

as inform policymakers and practitioners on strategies to enhance financial literacy initiatives in these countries.

Motivated by Widityani *et al.* (2020) and Abdullah *et al.* (2023), this paper seeks to contribute to the IFL literature by focusing on the four key determinants driving Islamic financial literacy: 1) knowledge, attitude, and education, 2) socio-demographic factors, 3) economic incentives, and 4) the role of religion.

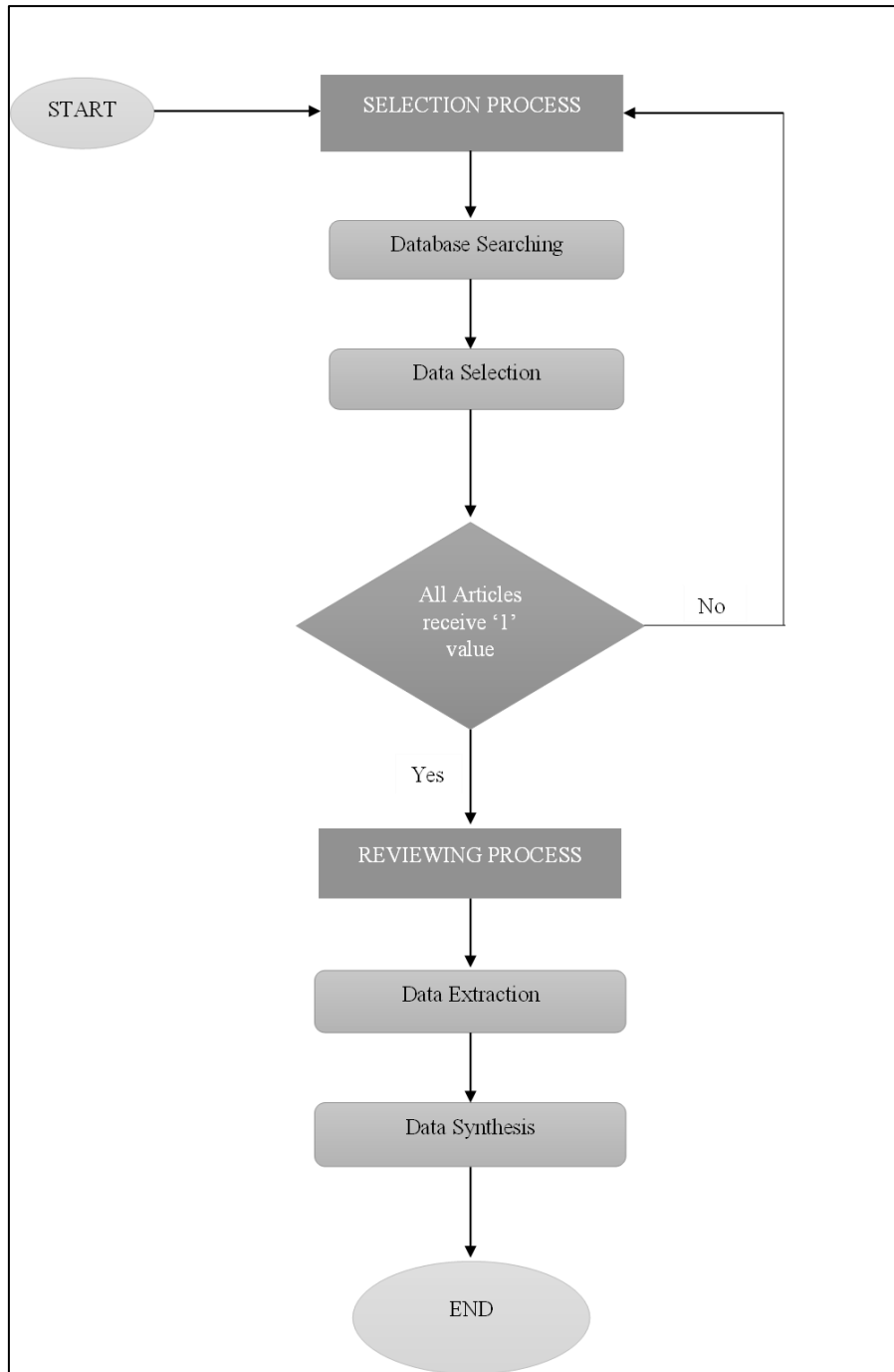
2. Research Methodology and Protocols

This systematic review was conducted by adopting the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) protocol (Liberati *et al.*, 2009). The study focused on two processes - Selection and Reviewing. Existing studies on Islamic financial literacy, especially those conducted among undergraduates, were first identified and gathered in a database. The database was systematically screened and selected by following the Liberati *et al.* (2009) and Pahlevan-Sharif *et al.* (2019) PRISMA protocol. Figure 2.1 shows a flowchart that summarises the protocols.

2.1. Selection Process

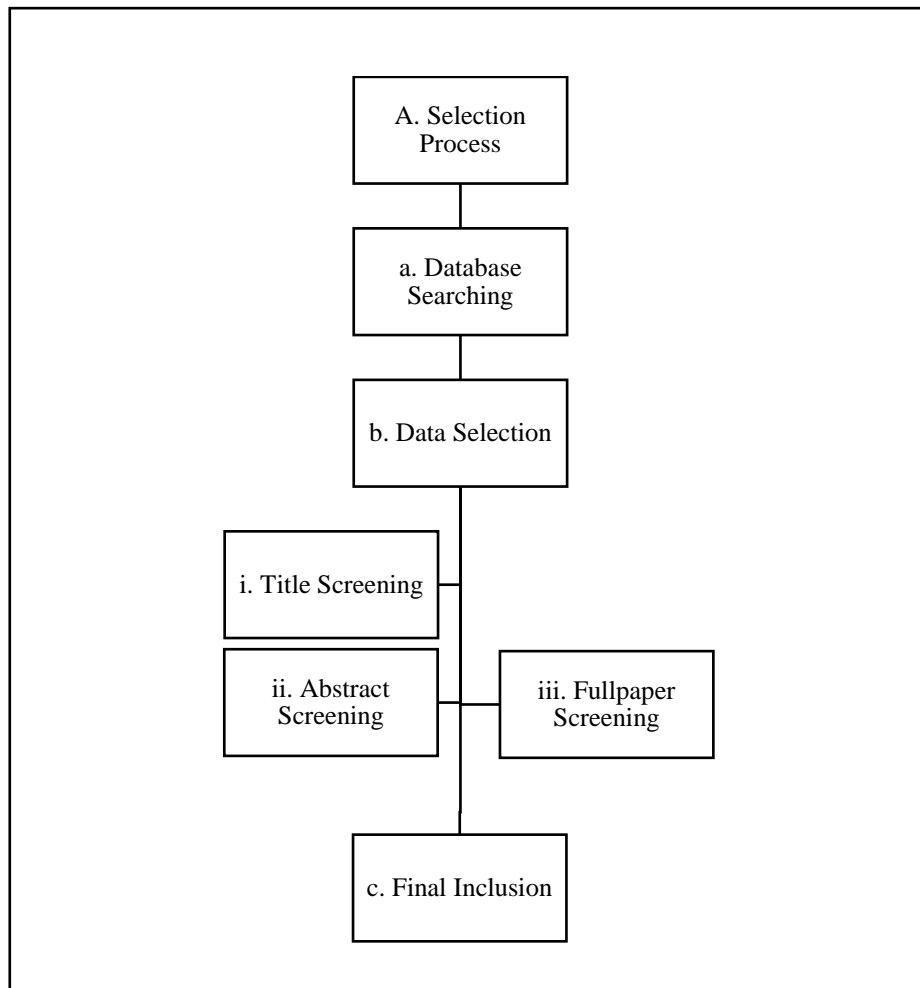
2.1.1. Database Searching

A comprehensive search strategy was developed to identify relevant studies to construct the main dataset. This included searching and conducting forward and backward citation searches. Both Scopus and the journals' websites were mainly used to find articles published in 132 journals containing "Islamic financial literacy" in their titles, abstracts, or keywords. The search was conducted on 8 September 2021 with the date constraint of "1990 to 2022" and language restriction of "English" were applied. Any grey literature (such as working papers and conference proceedings) was also excluded.

Figure 2.1: Research Flowchart

The identified records' titles, abstracts, keywords, authors' names and affiliations, journal names, and publication years were exported to an MS Excel spreadsheet. Two independent reviewers independently read the titles and abstracts. The full texts of the remaining papers were then evaluated using the eligibility conditions developed in the study selection phase as summarised in Figure 2.2.

Figure 2.2: Selection Process



2.1.2. Data Selection

All relevant studies identified were reviewed to determine whether they met the inclusion criteria or eligibility conditions for the systematic review. Among the main inclusion criteria was the article must be about Islamic financial literacy and not just financial literacy.

- i. Title screening
All articles in the database exported in the spreadsheet were initially screened based on the title. An article would be removed if the title did not reflect the keywords. A column off-site screening was created to identify articles that were not to be removed. A value of '0' was given to any article that should be excluded, '1' to any article that should be included, and '2' to any article that fell into the grey area.
- ii. Abstract screening
Articles that received the values of '1' and '2' were secondly screened based on the abstract. A similar valuing method was used to indicate whether these articles should be excluded, included, or fell into the grey area.
- iii. Full paper screening
All included articles were screened based on the context of the full paper. Such method was effective, especially for articles that received a '2' value in the abstract screening phase.

2.1.3. Final Inclusion

The remaining articles after the three screening phases were included in the final database.

2.2. Reviewing Process

2.2.1. Data Extraction

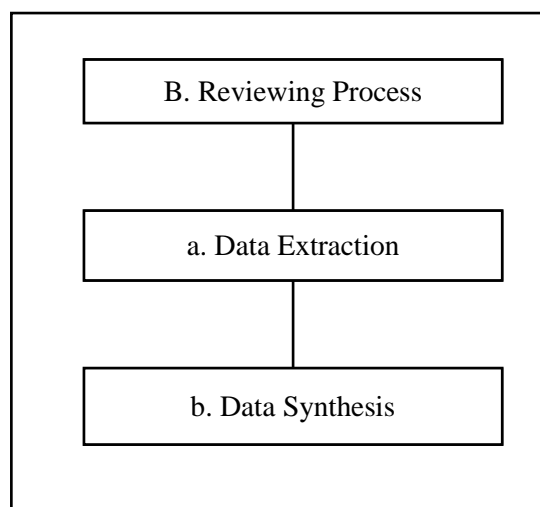
Relevant data were extracted from the selected studies, involving information such as the authors, publication year, and main findings. A literature matrix was developed containing relevant information from the articles.

2.2.2. Data Synthesis

The extracted data were synthesised to produce an overall summary of knowledge regarding Islamic financial literacy, especially among OIC countries. This study focused on identifying the view of current studies on the determinants driving IFL. It was achieved by analysing the percentage of studies that looked on different IFL key determinants.

The literary works were classified by considering three different durations: 1993 to 2002, 2003 to 2012, and 2013 to 2022. This allows for better understanding of the literacy curve in light of the different key determinants. Figure 2.3 contains a summary of the Reviewing process.

Figure 2.3: Reviewing Process



3. Results

3.1. Selection Process Based on PRISMA Protocol

During the initial database searching phase, a total of 132 articles were found using the IFL keywords. The database was first screened based on the relevancy of its titles, which resulted in the exclusion of 50 articles. The remaining 82 articles underwent a second screening based on the abstracts, resulting in the removal of 27 articles. A more thorough selection was conducted by evaluating the full texts of the articles and 10

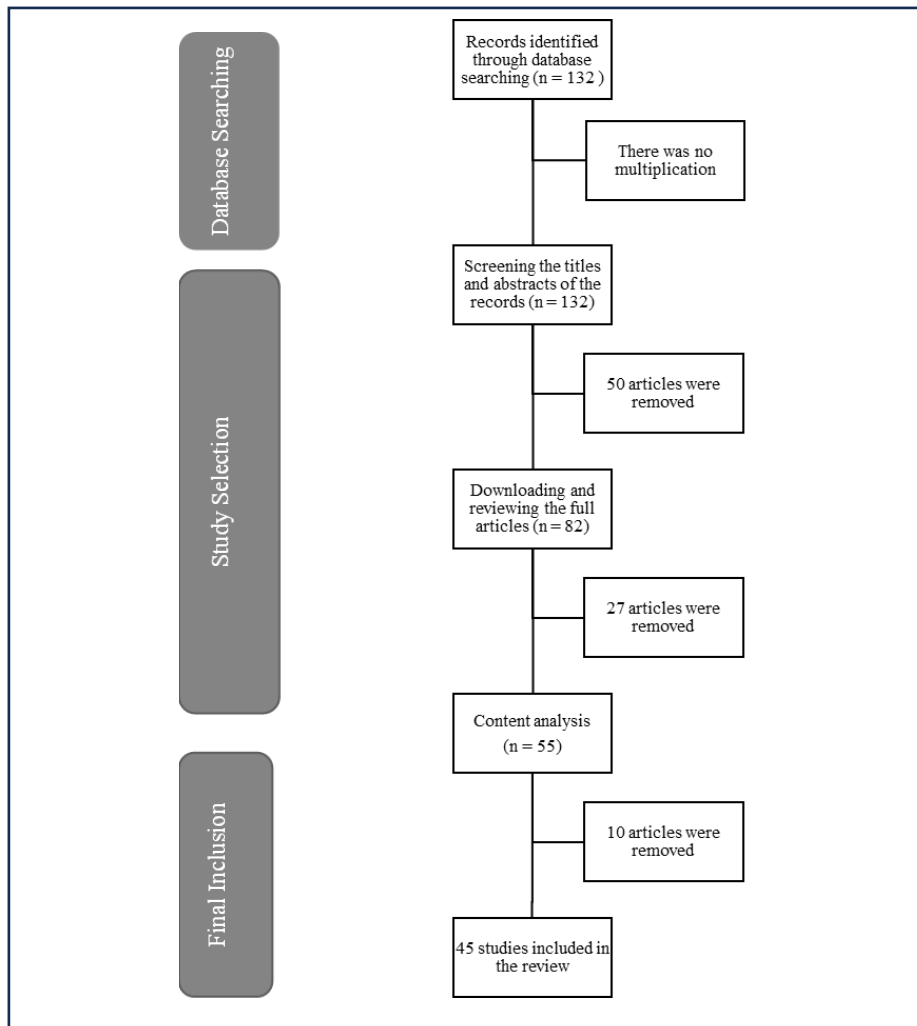
articles were excluded for failing to match the requirements. Finally, 45 articles were deemed suitable to be used for the systematic review. Fig. 3.1 illustrates the selection process for the study.

3.2. Key Determinants Analysis Based on Review of Existing Studies

This review paper delved into the existing research on Islamic financial literacy to explore the level of awareness and understanding of Islamic finance among the masses. This will highlight the gaps in the existing knowledge and inform future research in the field of Islamic financial literacy.

The discussion focuses on the four driving determinants of Islamic financial literacy – knowledge, attitudes, and education; socio-demographic factors; economic incentives; and the role of religion. The existing studies were first extracted based on the IFL key determinants and later mapped to the different determinants.

Our review found that numerous academic works have emphasised the importance of knowledge, attitudes, and education as the driving determinants of IFL. Several studies reported other determinants; however, they were somehow linked to the knowledge, attitude, and education opportunities. For instance, Md. Sapir @ Md. Shafik and Wan Ahmad (2020) investigated the significance of exposure to undergraduate *muamalat* courses to improve undergraduates' understanding of Islamic finance. According to the authors, providing students with financial education and exposure to financial practices can affect their literacy test results.

Figure 3.1: PRISMA Protocol in Selection Process

Nevertheless, the study's measurements did not fully and accurately capture all aspects of Islamic financial literacy. Similar claims were propounded by Sabri *et al.* (2012), Calamato (2020), Clark (2009), and Shim *et al.* (2009) who reported that students' exposure to finance - which was attributed to both their familial and academic backgrounds - served as an important marker of their level of financial literacy. Such relationship is also supported by various other studies (Chen & Volpe, 1998; Lantara & Kartini, 2015; Ming-Yen Teoh *et al.*, 2013; Chandra, 2012; Ismail, 2007; Sabri *et al.*, 2012).

Meanwhile, Chaulagain (2015) proposed a connection between one's financial awareness, knowledge, and abilities to their financial and behavioural attitudes and actions. While the likelihood of its presence was unknown (Chartrand, 2005), it was established that social environment, culture, values, and interactions have an impact on pupils' financial behaviour. Huston (2010) and Atkinson and Messy (2012) refuted an assertion that financial competence and behaviour are related. According to them, financial literacy encompasses not only financial information and skills but also the capacity to put them to use, cultivate the proper mindset, and act in a way that is consistent with them.

Past studies also suggest that having a vast knowledge of English languages and computers can affect students' financial literacy (Agarwalla *et al.*, 2015; Lazaro & Medalla, 2004). Remund (2010) reported a link between having the knowledge and awareness of financial concepts (income, financial planning, budgeting, saving, and investing) with proficient financial abilities. Later, Atkinson and Messy (2012), Ibrahim *et al.*, (2010), and Ali *et al.* (2015) propounded similar assertions that financial awareness and knowledge relate heavily to individuals' financial skills on top of their attitudes and behaviours.

Although there is a hazy consensus regarding the relationship between knowledge, attitude, and behaviour, the number of claims that rejected this association is modest. Therefore, it is essential to examine all three characteristics inside a single radius. For instance, Setiawati *et al.* (2018) argued that the study of IFL should include knowledge, Islamic financial attitudes, and Islamic financial behaviour into one character rather than being constrained by only one of the traits.

Financial literacy scores have also been linked to location, gender, and age. According to Agarwalla *et al.* (2015), men were found to be more literate when given the chance to manage the ongoing household finances. This is in contrast to Sabri *et al.* (2012) and Lee (2015) who reported that women were more literate when given the chance to pursue their education and establish their financial duties and expectations. However, the studies described above have linked gender to educational opportunities. It might be possible that educated individuals can be more financially knowledgeable, regardless of their gender.

Another assertion was offered by Mainelli (2009) who claimed that residents of areas near the financial centres benefited from greater financial literacy, exposure, and chances to participate in financial markets. The author equated having financial literacy with a specific region rather than gender. Although the location was justified, it was done in a manner comparable to the aforementioned studies by citing the possibility of obtaining financial education and expertise.

A number of research have linked individual economic motivations with financial literacy scores in a different aspect. Studies by Newman (2016), Hidajat and Hamdani (2017), and Shinkafi *et al.* (2020) stated that having financial infrastructure and resources will allow people to become financially included and provide them with the information and tools necessary to achieve proper financial education. Additionally, Utomo *et al.* (2021) established a link between the ability to access economic incentives and the utilitarian's assessment of financial products. This includes the cost of financial instruments, technology, inadequate service, and the degree to which the goods are halal.

The studies discussed above thus support our hypothesis that financial knowledge, attitude, and education are the key drivers to achieving IFL. Based on the various study durations, a growth curve analysis of the previous studies and the IFL key determinants was conducted to further analyse the findings. The results are summarised in Table 3.1. The analysis of the several classes reflects the key literacy level for a different set of years and categories.

The results show that knowledge, attitudes, and education are the key determinants of Islamic financial literacy among OIC countries, with 55.10% of studies focusing on these factors. The largest number of studies took place between 2013 and 2022 ($n = 12$, 24.49%) while 14 studies (28.57%) were conducted between 2003 and 2012.

In comparison, socio-demographic factors were found to be less frequently investigated and only comprised 14.29% from the total number of studies. The largest number of studies ($n = 5$) took place between 2013 and 2022, with a percentage of 10.21%. Between 2003 and 2012, there were 2 studies (4.08%) that focused on sociodemographic factors as the determinants of IFL.

Table 3.1: Summary of Categorical Key Analysis of Islamic Financial Literacy Performance

IFL Key Determinants	Duration	Number of Studies (<i>n</i>)	Percentage of Studies (%)	
			Independent Percentage	Total
Knowledge, Attitudes, and Education	2013-2022	12	24.49	55.10
	2003-2012	14	28.57	
	1993-2002	1	2.04	
Socio-Demographic Factors	2013-2022	5	10.21	14.29
	2003-2012	2	4.08	
	1993-2002	0	0.00	
Economic Incentives	2013-2022	8	16.33	26.53
	2003-2012	4	8.16	
	1993-2002	1	2.04	
Role of Religion	2013-2022	2	4.08	4.08
	2003-2012	0	0.00	
	1993-2002	0	0.00	

Economic incentives were also investigated as the determinants of IFL ($n = 13$, 26.53%). The majority of these studies took place between 2013 and 2022 ($n = 8$, 16.33%) followed by those that were conducted between 2003 and 2012 ($n = 4$, 8.16%).

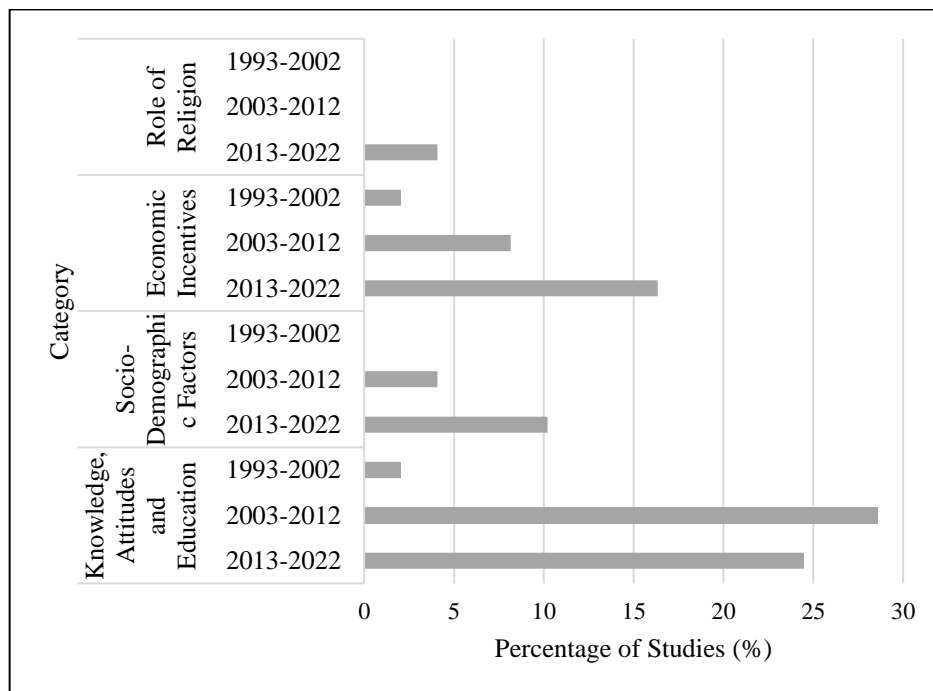
Meanwhile, the role of religion as a determinant of IFL was the least studied, with only 4.08% of studies ($n = 2$) focusing on this factor. These studies took place between 2013 and 2022 while no studies on the role of religion as a determinant of IFL were found between 2003 and 2012 or 1993 and 2002.

It is worth noting that the number of studies focusing on different determinants of IFL has increased over time, particularly between 2013 and 2022. This suggests a growing interest in understanding the factors that influence IFL among OIC countries. However, given the limited number of studies focusing on the role of religion as a determinant of IFL, further research in this area may be beneficial to better understand the influence of religious beliefs on IFL.

Our results suggest that knowledge, attitudes, and education are the most important determinants of IFL, followed by economic incentives and socio-demographic factors. The majority of recent studies (from 2013 to

2022) indicated that knowledge, attitudes, and education were the primary factors contributing to IFL. Unlike other factors, the determinants remain important and prominent after 20 years. The major claim made by previous studies is supported by Figure 3.2; however, it does not offer a clear explanation on how other IFL factors relate to the knowledge, attitudes, and education determinants. The role of religion as a determinant of IFL remains under-studied and requires further investigation.

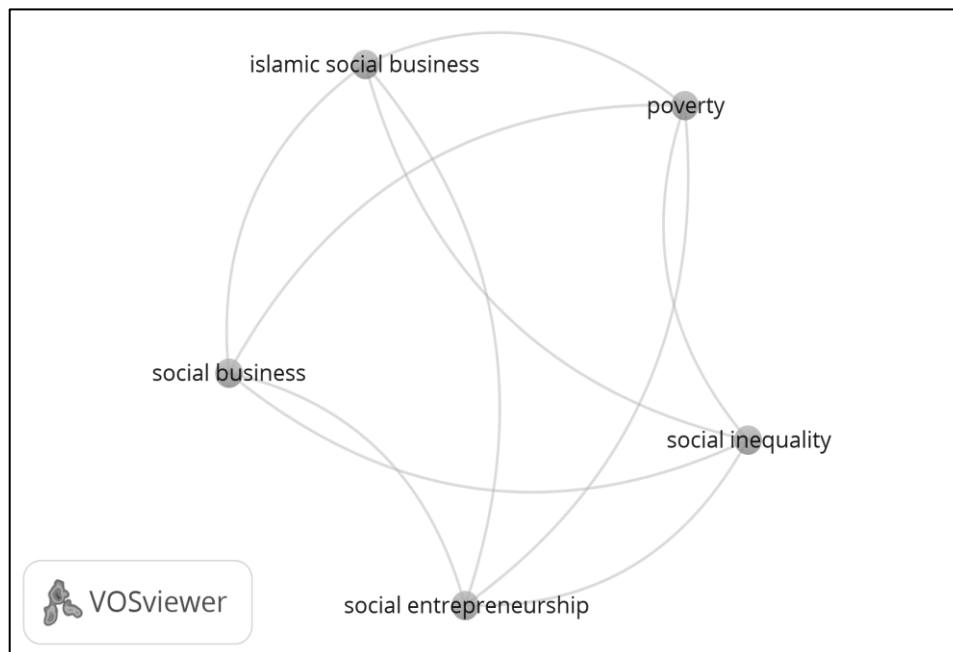
Figure 3.2: Categorical IFL Analysis



Additionally, we used VOSviewer to explore the connections between the keywords available across all articles. It involved analysing the co-occurrence of keywords in the literature related to Islamic finance, identifying the most frequently used keywords, and the relationships between them. Specifically, we looked at the interconnection between Islamic social business, poverty, social inequality, social entrepreneurship, and social business. The software automatically detected the keywords based on the input data in order to establish a relationship between these keywords and our research.

The analysis results in Figure 3.3 showed that there was a high level of interconnectedness between the keywords of Islamic social business, poverty, social inequality, social entrepreneurship, and social business, suggesting that these concepts are closely related in the literature. Such findings are particularly relevant for policymakers, educators, and financial institutions who are interested in promoting financial literacy among OIC countries. By highlighting the interconnection between Islamic social business, poverty, social inequality, social entrepreneurship, and social business, this paper posits the need for these areas to be addressed holistically for effective and better promotion of financial literacy, particularly across OIC countries. Rather than treating these issues in isolation, policymakers should consider how they are interconnected and develop interventions that target them collectively.

Figure 3.3: Keywords Co-occurrence Analysis of Literature



4. Conclusion

This study employed the PRISMA protocol by Liberati *et al.* (2009) to analyse the consistency and heterogeneity of findings across existing studies regarding the determinants that drive Islamic financial literacy,

particularly among OIC countries. The results highlight several factors influencing the level of IFL knowledge and understanding, which include socio-demographic background, knowledge, attitudes and education, economic support, and religious commitment.

The findings suggest that knowledge, attitudes, and education are the most important factors influencing students' understanding of Islamic finance, with a total of 55.10% of studies focusing on these factors. Socio-demographic factors and economic incentives were also found to be important determinants of IFL, with 26.53% and 14.29% of studies focusing on these factors, respectively. The role of religion as a determinant of IFL was the least studied, with only 4.08% of studies focusing on this factor.

It is clear from this analysis that more needs to be done to ensure that OIC countries have an adequate level of Islamic financial knowledge, attitudes, and education to make informed decisions about their finances. Additionally, further research should also focus on exploring other potential predictors that may affect levels of Islamic financial literacy amongst OIC countries. The results of this study provide valuable insights on ways to improve the current state of IFL in OIC countries. By targeting specific groups or areas for intervention, policymakers and educators can work to increase the level of IFL among OIC countries, which can ultimately lead to a more informed and financially responsible population.

However, this study is limited by the number of studies that focused on examining IFL among OIC countries. This indicates the critical need for experimental studies in the future that could add to our understanding of the factors influencing IFL among OIC countries and guide the designing of efficient interventions to raise IFL levels in this context. Given the limited number of studies focusing on the role of religion as a determinant of IFL, further research in this area is necessary to better understand the influence of religious beliefs on IFL. In conclusion, the results of this study highlight the importance of improving IFL among OIC countries and the need for further research in this area, particularly regarding the role of religion as a determinant of IFL.

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References

- Abdullah, A., Salleh, M.Z.M., Zakaria, M.N., Din, N.M., Aziz, M.I., Muhammad, M.Z. (2023). Achieving Islamic Financial Literacy in Malaysia: Issues and Challenges. In: Alareeni, B., Hamdan, A. (eds) Sustainable Finance, Digitalization and the Role of Technology. ICBT 2021. *Lecture Notes in Networks and Systems*, vol 487. Springer, Cham. https://doi.org/10.1007/978-3-031-08084-5_64
- Abd. Wahab, N., Yusof, R. M., Zainuddin, Z., Shamsuddin, J. N. and Mohamad, S. F. N. (2022), "Charting Future Growth for Islamic Finance Talents in Malaysia: A Bibliometric Analysis on the Islamic Finance Domains and Future Research Gaps." *Journal of Islamic Accounting and Business Research*. Advance online publication. <https://doi.org/10.1108/jiabr-02-2022-0045>
- Agarwalla, S. K., Barua, S. K., Jacob, J. and Varma, J. R. (2015), "Financial literacy among working young in urban India." *World Development*, 67, 101-109. <https://doi.org/10.1016/j.worlddev.2014.10.004>
- Alharbi, R. K., Yahya, S. and Ramadan, V. (2022), "Financial literacy, access to finance, SMEs performance and Islamic religiosity: evidence from Saudi Arabia." *International Journal of Entrepreneurship and Small Business*, 46(2), 259-285. <https://doi.org/10.1504/IJESB.2022.124456>
- Ali, A., Rahman, M. S. A. and Bakar, A. (2015), "Financial satisfaction and the influence of financial literacy in Malaysia." *Social Indicators Research*, 120, 137-156.
- Ali, M. M., Devi, A., Furqani, H. and Hamzah, H. (2020), "Islamic financial inclusion determinants in Indonesia: an ANP approach." *International Journal of Islamic and Middle Eastern Finance and Management*, 13(4), 727-747. <https://doi.org/10.1108/IMEFM-01-2019-0007>
- Alshater, M. M., Saba, I., Supriani, I. and Rabbani, M. R. (2022), "Fintech in Islamic finance literature: A review." *Heliyon*, e10385. <https://doi.org/10.1016/j.heliyon.2022.e10385>
- Atkinson, A. and Messy, F. A. (2012), "Measuring financial literacy: Results of the OECD/International Network on Financial Education (INFE) pilot study."
- Biancone, P., Saiti, B., Petricean, D. and Chmet, F. (2020), "The bibliometric analysis of Islamic banking and finance." *Journal of Islamic Accounting and Business Research*, 11(9), 2069-2086.
- Bila, S. and Biyase, M. (2023), "Determinants of subjective poverty in rural and urban areas of South Africa," *Journal of Economic Cooperation & Development* 44(1)

- Calamato, M. P. (2020), "Learning financial literacy in the family." San Jose State University, Publication No. 1488108. *ProQuest Dissertations and Theses Global*.
- Chandra, E. (2012), "Reaching out to debtors." *The Borneo Post Online*. Retrieved from <https://www.theborneopost.com/2012/09/09/reaching-out-to-debtors/> (Accessed December 21, 2022).
- Chen, H. and Volpe, R. P. (1998), "An analysis of personal financial literacy among college students." *Financial Services Review*, 7(2), 107-128.
- Chaulagain, R. P. (2015), "Contribution of financial literacy to behavior." *Journal of Economics and Behavioral Studies*, 7(6), 61-71.
- Chartrand, T. L. (2005). "The role of conscious awareness in consumer behavior." *Journal of Consumer Psychology*, 15(3), 203-210.
- Clark, C. (2009), "Why fathers matter to their children's literacy." *National Literacy Trust*. Retrieved from https://www.literacytrust.org.uk/assets/0000/0770/Father_review_2009.pdf (Accessed December 20, 2022).
- Dewi, M. K. and Ferdian, I. R. (2021), "Enhancing Islamic financial literacy through community-based workshops: a transtheoretical model." *Journal of Islamic Accounting and Business Research*, 12(5), 729-747.
- Din, S. M. U., Mehmood, S. K., Shahzad, A., Ahmad, I., Davidyants, A. and Abu-Rumman, A. (2021), "The impact of behavioral biases on herding behavior of investors in Islamic financial products." *Frontiers in Psychology*, 11, 1-10. <https://doi.org/10.3389/fpsyg.2020.600570>
- Hidajat, T. and Hamdani, M. (2017), "Measuring Islamic financial literacy." *Advanced Science Letters*, 23(8), 7173-7176. <https://doi.org/10.1166/asl.2017.9321>
- Huston, S. J. (2010), "Measuring financial literacy." *Journal of Consumer Affairs*, 44(2), 296-316.
- Ibrahim, D., Harun, R. and Isa, Z. M. (2010), "A study on financial literacy of Malaysian degree students." *Cross-cultural Communication*, 5(4), 51-59.
- Ismail, M. N. (2007), "The globalisation debate: A case of carking up the wrong tree." Kuala Lumpur: University of Malaya Press.
- Kevser, M. and Doğan, M. (2021), "Islamic financial literacy and its determinants: A field study on Turkey." *Journal Transition Studies Review*, 28(1), 91-120. <https://doi.org/10.14665/1614-4007-28-1-008>
- Kibiya, I. U., Usman, M. and Hamid, K. T. (2022), "Awareness and knowledge of Islamic accounting system among accounting students in the Nigerian

universities.” *Journal of Islamic Accounting and Business Research*. Advance online publication.

Kiyosaki, R. and Lechter, S. (2000), “Rich dad poor dad.” *Warner Books*.

Kunovskaya, I. (2010), “The impact of FL on use of financial services in Russia” [Doctoral dissertation, University of Georgia]. Retrieved from https://getd.libs.uga.edu/pdfs/kunovskaya_irina_201005_phd.pdf

Lantara, I. W. N. and Kartini, N. K. R. (2015), “Financial literacy among university students: Empirical evidence from Indonesia.” *Journal of Indonesian Economy and Business*, 30(3), 247.

Lazaro, D. and Medalla, E. (2004), “English as the language of trade, finance and technology in APEC: An East Asia perspective.” *Philippines Journal of Development*, 31(2), 1395-1413.

Lee, J. (2015), “Learning money management skills increases financial security for women.” *Deseret News*. Retrieved from <https://www.deseret.com/2015/8/25/20570858/learning-money-management-skills-increases-financial-security-for-women>

Letkiewicz, J. C., & Fox, J. J. (2014). Conscientiousness, financial literacy, and asset accumulation of young adults. *Journal of Consumer Affairs*, 48(2), 274-300.

Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P. A., Clarke, M., Devereaux, P. J., Kleijnen, J. and Moher, D. (2009), “The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: Explanation and elaboration.” *Annals of Internal Medicine*, 151(4), W-65.

Lusardi, A. and Mitchell, O. (2014), “The economic importance of financial literacy: Theory and evidence.” *American Economic Journal: Journal of Economic Literature*, 52(1), 5-44.

Mahdzan, N. S., Zainudin, R., Che Hashim, R. and Sulaiman, N. A. (2017), “Islamic religiosity and portfolio allocation: the Malaysian context.” *International Journal of Islamic and Middle Eastern Finance and Management*, 10(3), 434-452. <https://doi.org/10.1108/IMEFM-11-2016-0162>

Majeed, M. T. and Zainab, A. (2021), “A comparative analysis of financial performance of Islamic banks vis-à-vis conventional banks: evidence from Pakistan.” *ISRA International Journal of Islamic Finance*, 13(3), 331-346. <https://doi.org/10.1108/IJIF-08-2018-0093>

Majid, R. and Nugraha, R. A. (2022). Crowdfunding and islamic securities: the role of financial literacy. *Journal of Islamic Monetary Economics and Finance*, 8(1), 89-112. <https://doi.org/10.21098/jimf.v8i1.1420>

- Mainelli, M. (2009), "What makes a successful financial centre.". Z/Yen & Gresham Professor of Commerce.
- Md. Sapir@ Md. Shafik, A. S., Shakirah, A. and Ahmad, W. M. W. (2020), "Financial literacy among Malaysian Muslim undergraduates." *Journal of Islamic Accounting and Business Research*, 11(8), 1515-1529. <https://doi.org/10.1108/JIABR-10-2017-0149>
- Mikek, P. (2023). Financial deepening and income inequality: is there a financial Kuznetz curve in Latin America?. *Eurasian Economic Review* 13, 103–125. <https://doi.org/10.1007/s40822-023-00227-x>
- Minhaj-ud-Din, Khan, M. A., and Ibrahim, Y. (2022), "Islamic Finance, Financial Deepening and Economic Growth: Evidence from Twelve OIC Member Countries," *Journal of Economic Cooperation & Development* 43(4), 163-191.
- Newman, S. (2016), "31 Money saving tricks for students." Retrieved from <https://www.fastweb.com/financial-aid/articles/the-31-money-saving-tricks-for-students>
- Pahlevan-Sharif, S., Mura, P. and Wijesinghe, S. N. R. (2019), "A systematic review of systematic reviews in tourism." *Journal of Hospitality and Tourism Management*, 39, 158-165. <https://doi.org/10.1016/j.jhtm.2019.04.001>
- Pellinen, A., Törmäkangas, K., Uusitalo, O. and Rajjas, A. (2011), "Measuring the financial capability of investors: A case of the customers of mutual funds in Finland." *International Journal of Bank Marketing*, 29(2), 107-133.
- Rahim, S. H. A., Rashid, R. A. and Hamed, A. B. (2016), "Islamic financial literacy and its determinants among university students: An exploratory factor analysis." *International Journal of Economics and Financial Issues*, 6(7), 32-35.
- Rasheed, R. and Siddiqui, S. H. (2022), "Impact of demand side factors on adoption of Islamic finance by SMEs: a way forward for sustainable financial markets." *International Journal of Business and Globalisation*, 31(1), 113-130. <https://doi.org/10.1504/IJBG.2022.124526>
- Remund, D. L. (2010), "Financial literacy explicated: The case for a clearer definition in an increasingly complex economy." *Journal of Consumer Affairs*, 44(2), 276-295.
- Sabri, M. F., Cook, C. C. and Gudmunson, C. G. (2012), "Financial well-being of Malaysian college students." *Asian Education and Development Studies*, 1(2), 153-170.
- Sekita, S. (2011), "Financial literacy and retirement planning in Japan." *Journal of Pension Economics & Finance*, 10(4), 637-656.

- Setiawati, R., Nidar, S. R., Anwar, M. and Masyita, D. (2018), "Islamic financial literacy: Construct process and validity." *Academy of Strategic Management Journal*, 17(4), 1-12.
- Shinkafi, A. A., Yahaya, S. and Sani, T. A. (2020), "Realising financial inclusion in Islamic finance." *Journal of Islamic Marketing*, 11(1), 143-160. <https://doi.org/10.1108/JIMA-02-2017-0020>
- Shim, S., Xiao, J. J., Barber, B. L. and Lyons, A. C. (2009), "Pathways to life success: A conceptual model of financial well-being for young adults." *Journal of Applied Developmental Psychology*, 30(6), 708-723.
- Sulaeman and Sukmana, R. (2023), "Determining the Main Factors Involved in Alleviating Poverty in the Organization of Islamic Cooperation (OIC) Countries," *Journal of Economic Cooperation & Development* 44(1)
- Teoh, W. M. Y., Chong, S. C. and Yong, S. M. (2013), "Exploring the factors influencing credit card spending behavior among Malaysians." *International Journal of Bank Marketing*, 31(6), 481-500.
- Umar, U. H., AbuBakar, M., Baita, A. J., Kademi, T. T. and Haron, M. H. (2021), "Do academic and professional institutions promote the awareness and knowledge of Islamic banking and finance in Nigeria?" *Journal of Islamic Accounting and Business Research*, 12(3), 401-417.
- Utomo, S. B., Sekaryuni, R., Widarjono, A., Tohirin, A. and Sudarsono, H. (2021), "Promoting Islamic financial ecosystem to improve halal industry performance in Indonesia: a demand and supply analysis." *Journal of Islamic Marketing*, 12(5), 992-1011. <https://doi.org/10.1108/JIMA-12-2019-0259>
- Widityani, S. F., Faturohman, T., Rahadi, R. A., & Yulianti. (2020). Do socio-demographic characteristics and financial literacy matter for selecting islamic financial, products? *Journal of Islamic Monetary Economics and Finance*, 6(1), 51-76. <https://doi.org/10.21098/jimf.v6i1.1057>
- Widyastuti, U., Febrian, E., Sutisna, S. and Fitrijanti, T. (2021), "Market discipline in the behavioral finance perspective: a case of Sharia mutual funds in Indonesia." *Journal of Islamic Accounting and Business Research*, 13(1), 114-140. <https://doi.org/10.1108/JIABR-06>