



Driving Sustainable Innovation: Islamic Financial Literacy and Inclusion in the Five Southernmost Provinces of Thailand

Asas Worasutr^{1*}, Stephen E. Little², Mohammed Abdel Haq³

¹ Lecturer, Islamic Business Innovation Program, Faculty of Islamic Science, Prince of Songkla University, Thailand – Contact Author
asaswora@hotmail.com

² Professor, Centre for Islamic Finance, University of Bolton, United Kingdom
s.little@bolton.ac.uk

³ Professor, Centre for Islamic Finance, University of Bolton, United Kingdom
mohammed.abdel-haq@bolton.ac.uk

Received: 11/12/2023

Accepted for publication: 11/09/2024

Published: 23/12/2024

Abstract

Financial literacy is increasingly recognised as enhancing access to financial services. The role of financial literacy in enabling individuals to make well-informed financial decisions is crucial. Financial inclusion ensures that individuals can participate in the formal economy and access financial tools to improve their living standards. Accordingly, financial literacy and inclusion are essential because they provide people with the knowledge and access to services that promote a more sustainable financial system, which benefits the larger community and the economy. However, exploring Islamic financial literacy, particularly in Muslim minority countries, remains a nascent concept. Furthermore, research on financial literacy and inclusion from an Islamic perspective is limited. Therefore, this research aims to examine the level of Islamic financial literacy, inclusion, and their relationship in the five southernmost provinces of Thailand. A mixed-methods research design was employed, using questionnaires and semi-structured interviews to gather quantitative and qualitative data. Based on empirical evidence, proactive policy recommendations are proposed to encourage Islamic financial institutions to increase Islamic financial literacy and inclusion by educating their targeted customers and developing products tailored to their needs. This should also emphasise the significant contribution of higher education in implementing policies to educate and innovate Islamic financial products that are compatible with the community's requirements. To support these initiatives, more resources should be allocated to Islamic finance scholars to enable them to organise seminars to increase Islamic financial knowledge among the public. Additionally, an information centre could be established to gather statistical data related to the Islamic financial sector in a specific region to facilitate the creation of Islamic financial products that meet customers' demands.

Keywords: Islamic Financial Literacy; Inclusion; Sustainable; Innovation; Thailand; Islamic Finance



1. Introduction

Financial literacy and financial inclusion are widely recognised as crucial goals in Thailand's development agenda. According to the International Survey of Adult Financial Literacy Competencies conducted by the Organisation for Economic Cooperation and Development (OECD) / International Network on Financial Education (INFE) in 2016, Thailand's financial literacy scores are lower than the global average. Nevertheless, the Bank of Thailand's financial inclusion survey revealed that the financial access of Thai households increased from 98.7% in 2018 to 99.7% in 2020 (Bank of Thailand, 2020). These data indicate that many financial customers in Thailand may not be financially literate. However, there is an absence of information relating to Islamic financial literacy (IFL) and Islamic financial inclusion (IFI) among Thai Muslims. Moreover, the existing surveys are based on the conventional model that excludes the beliefs of Muslim respondents. Therefore, this study is conducted to identify how well Thai Muslims understand the concept of Islamic finance and how many have access to Islamic financial services. In Thailand, Islam is the largest minority faith; there are approximately 3.2 million Muslims or 4.9% of the total population. About two-thirds live in the five southernmost provinces, namely Pattani, Yala, Narathiwat, Satun, and Songkhla (National Statistical Office, 2010 cited in Pattani Economy, 2019). Muslims in Thailand enjoy the same protection and support granted to every civilian. They can practice their faith and participate in religious and social activities.

Additionally, without any discrimination, they are entitled to the same political rights as other citizens in the democratic system, with the King as the Head of State. Islamic finance was first introduced in the country in 1987 when a group of dedicated Muslims founded the Pattani Islamic Saving Cooperative to manage funds in the area. Since then, the Thai government has noticed the importance of Islamic finance after the signing ceremony of the Indonesia-Malaysia Thailand-Growth Triangle (IMT-GT) in 1994. The two primary reasons for the government to initiate Islamic financial institutions in Thailand were to provide Shari'ah-compliant financial services to Thai Muslims and to establish financial institutions that link to IMT-GT members and the Muslim world. After the 1998 Asian Financial Crisis, the government looked at Islamic finance from different perspectives and recognised its potential as an alternative financial system (Sitthivanich and Hassan, 2018). This study was conducted in 2020 and 2022 based on data collected from Muslim and Islamic financial-related organisations in Thailand's five southernmost provinces. Given the potential of Islamic finance in a Muslim minority country like Thailand, it could be utilised as a sustainable tool to promote business opportunities for all groups of people while also stimulating economic growth in the wider community.

The rest of the paper is organised as follows. The next section provides a background of the literature review. Section three provides the methodological design and approach of this study. Section four shares the main results achieved. Then, section five discusses the main results, considering the theoretical background. Finally, section six concludes the paper.

2. Literature review

An in-depth review of the existing literature indicates that the research on IFL can be treated as a new topic brought into Islamic finance. This is evident when Kayed (2008) asked "if there are any attempts by the research community to assess levels of IFL in various Muslim communities." Two years later, Ahmad (2010), in his paper, drew attention to the essentials of IFL among the Muslim population and called for further research. Furthermore, the exploratory study on financial literacy undertaken by Abdullah and Chong (2014) demonstrated the absence of findings on financial literacy from the Islamic



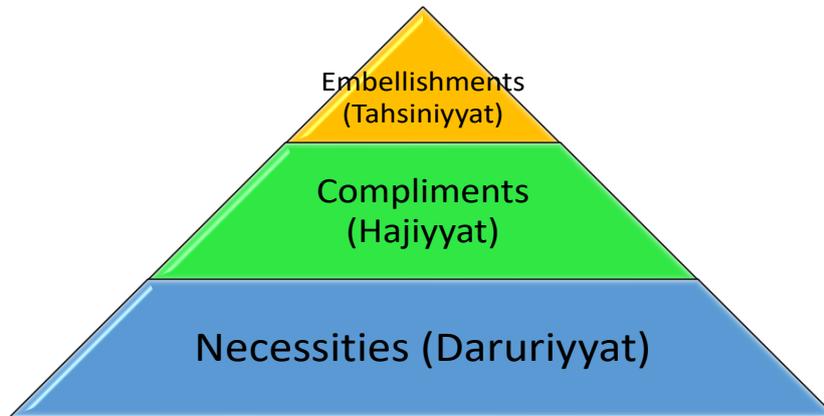
perspective. These doubts showed that, during those times, there was a demand for research on IFL. Eventually, the studies of IFL appeared in and after 2015.

The first definition of IFL can be found in the work of Abdullah and Anderson (2015, p. 4), which states that 'IFL is the stock of knowledge that one acquires through education and/or experience related explicitly to essential Islamic finance concepts and products. Notwithstanding, a review of the literature reveals that many IFL studies (e.g., Alfarisi et al., 2020; Biplob and Abdullah, 2019; Er and Mutlu, 2017; Khasanah et al., 2022) have adopted and applied the definition of financial literacy proposed by Atkinson and Messy (2012) in the OECD Working Papers. They view IFL as a combination of Islamic financial knowledge, attitudes, and behaviours in making financial decisions and managing financial resources by Islamic teachings. According to this perspective, Alfarisi et al. (2020) elaborated on each component as follows: Islamic financial knowledge entails an understanding of Shari'ah principles within the Islamic financial system; Islamic financial attitude refers to attitudes toward Islamic financial services; and Islamic financial behaviour refers to the behaviour demonstrated when using Islamic financial instruments. In addition, Biplob and Abdullah (2019) broaden the concept of IFL by including the idea of charity in Islam. This concept encompasses wealth purification and distribution, two of Islam's most important tenets. Based on these perspectives, it can be inferred that IFL is a comprehensive concept that covers various aspects of financial matters.

From the Islamic perspective, the importance of IFL is highly associated with wealth (Mal), which is one of the categories of the Maqasid of Shari'ah, set to achieve the well-being of humankind (Biplob and Abdullah, 2019; Khotiawan and Luthfiansyah, 2017; Lahsasna, 2016). According to Ayub (2007), the preservation of wealth connotes the sanctity of wealth among society members, focusing on earning Halal income and encouraging spending to receive the pleasure of God. Existing literature indicates that a Muslim with a high level of IFL tends to understand the concepts of Islamic wealth (Biplob and Abdullah, 2019), make financial decisions by Shari'ah principles (Antara et al., 2016), cultivate good financial habits as prescribed by the teachings of Islam (Nawi et al., 2018), strengthen the foundation of ethics and morality (Dinc et al., 2021), avoid taking significant risks (Yunus et al., 2021), and control spending behaviour to minimise bankruptcy (Abdullah et al., 2022). Thus, by being well-equipped with IFL, individuals can avoid engaging in transactions that are deemed unethical or harmful in Islam. This can result in increased financial security and a more balanced and mindful approach to money management.

As for IFI means having access to Islamic financial products and services available in the market (Abdullah et al., 2021). However, the conventional banking system is not suitable for Muslims due to the presence of interest, ambiguity, gambling, and sinful transactions, all of which are strictly forbidden in Islam. To address this need, Shari'ah-based financial institutions have been established in various parts of the world (Zulkhibri, 2016). The advent of Islamic financial institutions has played a pivotal role in facilitating Muslim clients to save, raise funds, and invest in a way consistent with their faith. Moreover, Islamic finance has been recognised for its potential to contribute to sustainable development, particularly in alignment with the Sustainable Development Goals (SDGs). By fostering inclusive growth and supporting socially responsible outcomes, Islamic finance can play a significant role in enhancing financial inclusion and improving the financial sector's resilience (Aboul-Dahab, 2023). Since the foundational principles of Islamic finance are based on Shari'ah, the importance of IFI can be seen in the hierarchy of the Maqasid of Shari'ah, as illustrated in Figure 1 below.

Figure 1. The Hierarchy of the Maqasid of Shari'ah in Islamic Finance



Source: Aris et al. (2013)

According to Figure 1, "necessities" (Daruriyyat) are regarded as the most essential component of humanity. The necessities can be subdivided into five elements of preservation: faith, self, intellect, posterity, and wealth (Tarique et al., 2017; Vejzagic and Smolo, 2011). Accordingly, the protection of wealth is categorised as one of the necessities vital to human life. In this regard, financial inclusion contributes to the necessities by ensuring that the wealth of society members is kept securely through Shari'ah-compliant products such as Wadi'ah safekeeping accounts (Ahmed, 2011). Another contribution to the necessities is eliminating unfair exploitation caused by usury and uncertainty.

Additionally, as Islamic financial institutions are strictly prohibited from involving unethical businesses like alcohol or weapons, society will be safe from the harmful nature of these businesses (Dusuki and Bouheraoua, 2011). The next level is "compliments" (Hajiyyat). This component is required to eliminate hardship and facilitate the well-being of humanity (Dusuki and Bouheraoua, 2011). Under "compliments," financial inclusion can fulfil the everyday needs of individuals by financing houses and motor vehicles through Murabahah and Ijarah (Ahmed, 2011). The last component at the top is "embellishments" (Tahsiniyyat). Mukminin (2019) highlights that profits generated from financial activities serve a dual purpose: to preserve and enhance wealth and promote the welfare of individuals, particularly those who have overcome adversity and transformed their resources into financial gains. This approach underscores the broader objectives of Islamic financial practices, which aim to support wealth preservation and individual well-being. Moreover, this component refers to desirable elements that grant additional value to humankind (Tarique et al., 2017). These elements include voluntary acts (Vejzagic and Smolo, 2011). In this regard, Islamic financial institutions can promote financial inclusion by utilising income redistribution instruments like Sadaqah to connect many poor people to the formal financial system (Zulkhibri, 2016). Hence, Islamic IFI could be crucial in providing a comprehensive framework for supporting all societal groups.



2.1 *The Relationship between Islamic Financial Literacy and Islamic Financial Inclusion*

The advocates of financial literacy and inclusion (e.g., Atkinson and Messy, 2013; Morgan and Long, 2020) have asserted that financial literacy can positively affect access to and use of financial services. Moreover, with the growth of innovation and sophisticated financial products, customers require an understanding, skills, and confidence to use them more than ever (Demirguc-Kunt and Klapper, 2012). The review of the literature also reveals that financial literacy enables one to evaluate and compare financial products to make a well-informed decision that satisfies their financial needs and achieves welfare (Atkinson and Messy, 2013). Thus, financial literacy could facilitate the process of decision-making and help avoid financial mistakes. The study by Koomson et al. (2020) shows that individuals with a high level of financial literacy are more likely to know where to seek financial assistance and can receive financial advice from financial institutions. Er and Mutlu (2017) also pointed out that financial literacy can eliminate information asymmetry between banking agents and clients. In this respect, financial literacy makes people aware of what they can consider their rights from the financial services providers.

Furthermore, Senghore (2023) emphasises that IFL and a supportive regulatory environment are crucial for the growth of the Islamic finance sector. Increased public awareness and adoption of these products, combined with favourable regulations, will attract investors and promote competition. This, in turn, improves product quality and offers consumers a wider range of options, promoting greater financial inclusion.

Nevertheless, some studies have concluded that financial literacy has a moderate or little impact on financial inclusion (Bruhn et al., 2014; Lyons et al., 2017). Based on these studies, though positive impacts are discovered, the effects of financial literacy are only on specific groups of people. Additionally, Ozili (2021), who conducted a global review of financial inclusion, found that financial literacy can enhance financial inclusion when a lack of knowledge is the leading and only barrier to using financial services.

Despite several studies not fully supporting the relationship between financial literacy and financial inclusion, the recent global financial crisis has created a growing consensus among policymakers to acknowledge financial literacy as an essential element for financial inclusion. International agencies and governments worldwide have shown initiatives to promote financial literacy as a complementary policy to achieve financial inclusion. This can be seen in the World Bank's target of achieving Universal Financial Access (UFA), which recognised financial literacy as one of the main drivers to attaining UFA (World Bank, 2018). Moreover, many countries, including Thailand, have established a framework for improving financial inclusion and literacy (NESDB, 2016). As such, policymakers view that financial literacy and financial inclusion are highly correlated and complement each other. The primary reason is that financial literacy enables people to make informed decisions about financial products and services, which leads to sustainable finance and economic development (Atkinson and Messy, 2013).

From the Islamic perspective, the requirement of IFL and IFI is mainly driven by the obligation to comply with Shari'ah jurisprudence (Shakeel, 2017). Additionally, IFL is crucial for Muslims to navigate the intricacies of Islamic financial products and services (Nawi et al., 2018). According to Zaman et al. (2017), all Muslims need to grasp the fundamental principles of Islamic finance, such as the profit and loss sharing system, the Islamic modes of financing, and the distinctions between interest and profit, before participating in the Islamic financial system. Based on empirical study, a potential link between IFL, IFI, and actual economic activity has been observed. The study conducted by Rozikin and Sholekhah (2020) demonstrated a significant impact of IFL on intentions to save money with Islamic financial institutions. Since savings provide



the capital required for investment, when individuals save money, these funds can be channelled to support business expansion, resulting in job creation and increased productivity (Mankiw, 2014).

Furthermore, empirical research by Basrowi et al. (2020) highlighted a significant link between IFL and financial technology. The work of Demirguc-Kunt et al. (2018) in *The Global Findex Database 2017* emphasises the importance of financial technology in promoting economic activities, particularly by increasing access to financial services via mobile banking and other digital platforms, especially for unbanked or underserved populations. Financial technology has also been recognised as a driving force behind the creation of innovative financial products. Technologies such as artificial intelligence, big data analytics, and blockchain have all played instrumental roles in improving existing financial products or developing new ones (Demirguc-Kunt et al., 2018). Some studies in the field have also indicated that IFL can ensure sustainable finance by preventing excessive risks (Yunus et al., 2021) and minimising bankruptcy (Abdullah et al., 2022) in the market. These empirical data highlight the potential consequences of IFL and IFI in the economy. Thus, if Muslims are well-equipped with IFL, it could provide prosperity for the Islamic banking industry and the economy.

2.2 The Measurement of Islamic Financial Literacy and Islamic Financial Inclusion

Measures used to evaluate conventional financial literacy have not been adequately tailored for Muslims. For example, the inclusion of interest in traditional financial literacy frameworks contradicts the principles of Islamic finance. The literature review on the measurement of IFL reveals that most empirical studies assess it by examining the understanding of the principles of Islamic finance, such as Islamic financial-related terms (Rozikin and Sholekhah, 2020; Zaman et al., 2017), charity in Islam (Aisyah and Seapuloh, 2019), and computation questions (Er and Mutlu, 2017; Yunus et al., 2021). Researchers have also measured it by assessing awareness and perception of Islamic financial products and services in the market (Albaity and Rahman, 2019; Alfarisi et al., 2020). Moreover, Er and Mutlu (2017) and Yunus et al. (2021) have constructed a set of questions relating to personal financial planning and management based on Shari'ah principles.

It was found that researchers in the field also used qualitative measurements to assess IFL. Abdullah and Razak (2015) adopted an interview technique to investigate the significance and necessity of IFL and explore Islamic financial education and planning. In 2021, Dewi and Ferdian conducted workshops on Islamic financial literacy to present a comprehensive educational model to improve IFL. Abdullah et al. (2022) utilised a semi-structured interview to gather expert opinions on whether IFL can minimise bankruptcy among Muslims. In another study, Khasanah et al. (2022) employed ethnographic studies using direct observation and interviews to determine factors that impact the level of IFL in various communities. Furthermore, Yuslem et al. (2023) used a qualitative approach with a case study technique to investigate the problem of IFL among Islamic scholars. As such, qualitative measurements can be used to delve deeply into the perspectives of IFL and discover information that cannot be obtained through quantitative surveys.

In this study, the level of IFL is measured quantitatively from the aspects of Islamic financial knowledge, attitude, and behaviour. This research has also incorporated qualitative interviews to gain insightful information regarding IFL in the research context. The use of the qualitative technique is expected to complement the findings of quantitative measurements.

For financial inclusion, most studies from Islamic perspectives have utilised the same indicators to measure financial inclusion as conventional ones. The measurement was found to be conducted on both the demand side and the supply side. Typically, individual or household surveys are used to gather data from the demand side. There are three significant indicators



of financial inclusion from the demand side. The first indicator is financial access, associated with measuring accessibility to formal financial services (Bank for International Settlements, 2015). Many previous studies (e.g., Abdullah et al., 2021; Demirguc-Kunt et al., 2013) have measured access to financial services by the degree of account ownership. The second indicator is financial usage, which refers to how individuals use the financial services available (Bank for International Settlements, 2015). Numerous studies have examined usage by looking at using an account to save and using bank credit. The data from financial usage can help identify types, patterns, and behaviours related to using financial services (Demirguc-Kunt and Klapper, 2013). The third indicator is barriers, which measure obstacles that prevent individuals from accessing financial services (Camara and Tuesta, 2017). Most recent studies have adopted self-reported barriers to using formal accounts, as suggested by Global Findex, which outlines seven possible reasons for not having a bank account. These reasons include the cost of financial services, distance to financial services, lack of trust in financial institutions, joint use of financial services, religious reasons, lack of money, and documentary requirements (Demirguc-Kunt and Klapper, 2012). Individuals can choose more than one reason to answer this. The measurement of barriers to financial inclusion is quite helpful in facilitating the analysis of segments facing financial exclusion (Atkinson and Messy, 2013; Demirguc-Kunt and Klapper, 2012).

Regarding the supply side, the study by Camara and Tuesta (2017) collected data from financial institutions by measuring the availability of bank branches, banking agents, and ATMs. Klapper and Singer (2017) reviewed supply-side data by examining the number of loan and deposit accounts per capita. Tissot and Gadanecz (2017) assessed supply-side data by considering the variety of access channels, the proximity of access points, and the cost of financial services. Ben Naceur et al. (2015) measured supply-side data by comparing the total size of assets of Islamic financial institutions with the total size of assets of the entire banking industry. Given the above, data from the supply side are essential because they help us understand the constraints that result in involuntary exclusion from formal financial services.

For the present study, data on IFI were collected from both the supply and demand sides. On the demand side, the focus was on examining access, usage, and barriers to IFI. On the supply side, the objective was to capture information about activities undertaken to promote IFI, access channels, availability of Islamic financial products, limitations, and strategies to enhance IFI. Therefore, the data gathered from both sides are expected to yield comprehensive results, allowing for an accurate assessment of the current state of IFI in the five southernmost provinces of Thailand.

3. Methodology

This study is classified as mixed-method research, wherein quantitative and qualitative methods were employed to capture the necessary information from primary sources. The data for quantitative research were gathered via questionnaire distribution. The research area chosen was the five southernmost provinces of Thailand, including Pattani, Yala, Narathiwat, Songkhla, and Satun, and questionnaires were distributed to Muslim respondents. A sample size of 500 was selected and derived using a convenience sampling technique. The total sample was divided equally among the five provinces, resulting in 100 respondents from each province. Although a total of 500 questionnaires were initially distributed, out of which 437 were deemed usable and valid, resulting in a response rate of 87.4 percent. The questionnaire is divided into three sections. The first section captures the demographic and economic information of the respondents; the second section measures the level of IFL across three dimensions: financial knowledge, attitudes, and behaviours; and the last section assesses the status of IFI from



three indicators, namely, access, usage, and barriers. The data collected were analysed using IBM SPSS Statistical software version 25 and displayed using tables and figures.

In terms of qualitative data, a semi-structured interview was used to delve deeply into perspectives and explore new topics of interest. The interview sample was selected using a purposive sampling technique involving thirteen representatives from Islamic financial-related organisations in the five southernmost provinces of Thailand. They included four informants from Islamic banks. These informants were chosen from the provincial and regional branches, the Socio-Economic Development Department for the Five Southern Provinces of the Islamic Bank of Thailand (iBank), and the Bank for Agriculture and Agricultural Cooperatives (BAAC) Islamic Banking Fund. Three informants were from Islamic cooperatives, namely the Ibnu Affan Islamic Cooperative, which is the most popular in Pattani, Yala, and Narathiwat provinces; the As-Siddeek Islamic Cooperative, the most popular in Songkhla province; and the Ibnu Auf Islamic Cooperative, the most popular in Satun province. Three informants were from non-bank Islamic financial institutions, specifically a Takaful operator, an Islamic leasing company, and an Islamic investment company. One informant was from the Islamic Provincial Council, and two informants were from universities offering Islamic finance studies, namely the College of Islamic Studies at Prince of Songkhla University (PSU) and Fatoni University (FTU). Accordingly, the sample was chosen to be heterogeneous to obtain a comprehensive range of opinions. Five key interview questions were formulated to gather information about the role of related parties in enhancing the level of IFL and IFI, limitations of IFL and IFI, and strategies for increasing the levels of IFL and IFI in the region. For data analysis, thematic analysis was employed to categorise emergent and essential themes, which were then used to address the study's objectives.

4. Results

4.1 Examining Islamic Financial Literacy and Islamic Financial Inclusion of the Thai Muslims in the Five Southernmost Provinces of Thailand

This section critically analyses the results of questionnaire responses using statistical techniques to examine the status of IFL and IFI among Thai Muslims residing in the five southernmost provinces of Thailand. The quantitative data received from 437 respondents has been analysed in this section. Table 1 presents a descriptive analysis of the demographic variables of the respondents. The study focuses on the dimensions of gender, age, level of education, and monthly income. According to the table, most respondents were female, representing 62.5%, while 37.5% were male. Most respondents (77.3%) were between 20 and 49 years old, and the rest (22.7%) belonged to the 18-19 and 60-79 age brackets. Then, the data indicates that 43.2% of the respondents had obtained a degree from a university, 40.3% had attained a secondary school and vocational certificate, and 16.5% were primary school graduates with no formal education. Regarding monthly income, more than half of the respondents (51.7%) earned equal to or less than THB 10,000 per month, while only 3.0% earned more than THB 30,000, with the remaining respondents earning between THB 10,000 and THB 30,000.



Table 1. Demographic Profile of Respondents

| Variable | Frequency | Percentage |
|---------------------------|-----------|------------|
| Gender | | |
| Male | 164 | 37.5 |
| Female | 273 | 62.5 |
| Age | | |
| 18-19 years | 20 | 4.6 |
| 20-29 years | 107 | 24.5 |
| 30-39 years | 116 | 26.5 |
| 40-49 years | 115 | 26.3 |
| 50-59 years | 52 | 11.9 |
| 60-69 years | 20 | 4.6 |
| 70-79 years | 7 | 1.6 |
| Level of Education | | |
| University's Degree | 189 | 43.2 |
| Secondary School | 111 | 25.4 |
| Vocational Certificate | 65 | 14.9 |
| Primary School | 60 | 13.7 |
| No Formal Education | 12 | 2.8 |
| Monthly Income | | |
| THB 10,000 and below | 226 | 51.7 |
| THB 10,001-THB 15,000 | 90 | 20.6 |
| THB 15,001-THB 20,000 | 26 | 5.9 |
| THB 20,001-THB 25,000 | 55 | 12.6 |
| THB 25,001-THB 30,000 | 27 | 6.2 |
| More than THB 30,000 | 13 | 3.0 |

Source: Authors' elaboration

Based on Table 2, it was found that the mean score of Islamic financial knowledge of the sample is 41.6%. Thus, the results point out that respondents lack Islamic financial knowledge. When looking at it in detail, the data shows that a large proportion of respondents reported that they did not know the answers to Islamic financial terms or how Islamic financial products and services work. The findings obtained from this study are per previous empirical studies done by Abdullah and Razak (2015), Alfariis et al. (2020), and Zaman et al. (2017), which found that respondents were having difficulty in identifying commonly used Islamic financial terms and products. Regarding the Islamic financial attitude score, the mean score equals 52.4%. Although the score was above average, and the respondents were aware of the availability of Islamic financial services in the market, they still perceived no difference between conventional and Islamic financial products. The results of this study



are like many of the studies in the field, including those of Abdullah and Anderson (2015), Er and Mutlu (2017) and Zaman et al. (2017), who found that respondents believe both Islamic and conventional banking products are the same, except for their names. In testing the behaviour relating to Islamic finance, the findings reveal that respondents possess a good understanding and were able to plan their spending and savings and invest in transactions permissible by Shari'ah law. Regarding the level of IFL, which is calculated by adding the scores of Islamic financial knowledge, attitude, and behaviour, it was observed that the mean score of the sample is equal to 50.48 percent, indicating that the level of IFL is just above the average.

The analysis of the association between IFL scores and selected demographic variables illustrates that males have higher IFL scores than females, although the variation in figures is not substantial. Furthermore, the overall scores were lowest among the 18-19 and 70-79 age groups. Thus, the results point to widespread Islamic financial illiteracy among the younger and older populations in the five southernmost provinces of Thailand. According to the level of education, respondents with higher education seem to have the highest mean scores, while respondents with secondary, primary, and no formal education were the least financially literate groups. Therefore, the findings indicate a positive link between the level of education and IFL. Then, the data suggest that the lowest income group appeared to be the least financially literate compared to other groups.

Table 2. Overall Islamic Financial Literacy Test Score

| Islamic Financial Literacy Item | Total Score | Mean Score | Percentage | Standard Deviation |
|--|--------------------|-------------------|-------------------|---------------------------|
| Islamic Financial Knowledge | 15 | 6.24 | 41.6 | 3.67 |
| Islamic Financial Attitude | 5 | 2.62 | 52.4 | 1.23 |
| Islamic Financial Behaviour | 5 | 3.76 | 75.2 | 1.63 |
| Level of Islamic Financial Literacy | 25 | 12.62 | 50.48 | 4.90 |

Source: Authors' elaboration

The data in Table 3 indicates that this group's mean score for Islamic financial access is 17.2 percent. The most widely held Islamic financial product in the five southernmost provinces of Thailand is a deposit account. When examining other Islamic financial products, such as Islamic credit, Islamic vehicle leasing, Shari'ah-compliant equity funds, and Islamic insurance, the number of respondents with access to them was relatively low. Regarding the Islamic financial usage score, the average score for the entire sample is 20.5 percent. The data above shows that only one-fifth of respondents used Islamic financial services for their transactions in the last 12 months. Based on the level of IFI, which was derived from the total score of Islamic financial access and usage, it was discovered that the respondents have a mean score of 18.14 percent. Consequently, most respondents stated they had no Islamic financial products and had not used the services. Thus, the level of IFI across the sample in the five southernmost provinces of Thailand remains low.

The cross-tabulation analyses between IFI scores and demographic information indicate that females are less likely than males to own and use Islamic financial products and services. Moreover, it was found that age is negatively associated with the level of IFI, suggesting that older people are more likely to experience Islamic financial exclusion than younger individuals. Regarding the level of education, the findings reveal that respondents with tertiary education are more likely to



access and use Shari'ah-compliant financial services than those with secondary education or less. Regarding monthly income, the results indicate that respondents who earned THB 15,001-THB 20,000 have the highest scores in Islamic financial access and usage. The results show only minor differences in total scores between the highest and lowest income quintiles. Therefore, this study found no significant correlation between income level and IFI.

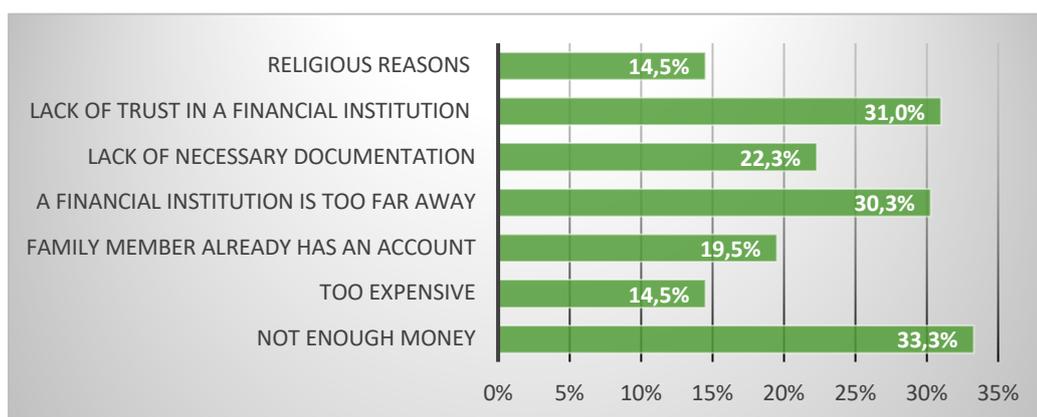
Table 3. Overall Islamic Financial Inclusion Test Score

| Islamic Financial Inclusion Item | Total Score | Mean | Percentage | Standard Deviation |
|---|-------------|-------------|-------------|--------------------|
| Islamic Financial Access | 5 | 0.86 | 17.2 | 1.26 |
| Islamic Financial Usage | 2 | 0.41 | 20.5 | 0.69 |
| Level of Islamic Financial Inclusion | 7 | 1.27 | 18.1 | 1.83 |

Source: Authors' elaboration

The figure below illustrates that the most reported barrier that could prevent the sample in the area from using Islamic financial products and services is not enough money. This barrier was cited by one-third of respondents, and 18 percent cited it as the only reason. The second most perceived barrier is a lack of trust in a financial institution, which was given by 31.0 percent of respondents. The third most common reason cited by 30.3 percent of respondents is that a financial institution is too far away. The most widely cited barriers are a lack of necessary documentation and family members already have an account. Each of these was mentioned by 22.3 percent and 19.5 percent of respondents. Lastly, 14.5 percent of respondents equally cited religious reasons and too expensive as reasons why they could not use Islamic financial products and services.

Figure 2. Self-Reported Barriers to Islamic Financial Inclusion



Source: Authors' elaboration



4.2 Exploring Islamic Financial Literacy and Islamic Financial Inclusion in the Islamic Financial-Related Organisations in the Five Southernmost Provinces of Thailand

This section presents the analysis of qualitative data obtained from semi-structured interviews with informants who work at Islamic financial-related organisations in Thailand's deep south provinces. The first theme discusses the region's activities relating to IFL and IFI. The interviewees stated that their institutions have sent staff to mosques and Islamic schools to spread knowledge about Islamic financial products. Furthermore, the data collected reveals that iBank, through its Socio-Economic Development in Five Southern Provinces Department, runs programs to disseminate information about Islamic finance products to grassroots populations and community enterprise groups. As for Islamic cooperatives, it was found that after individuals apply to become members, they will be provided with an intensive Islamic cooperative program. According to one interviewee, the program was designed to instruct the members about regulations, the benefits of membership, and Islamic financial services. The data from the Islamic council of the province reveals that they have been providing services to settle disputes arising from property issues among Muslims. On the university side, the data shows that Prince of Songkhla University and Fateni University have faculties that offer bachelor's programs in Islamic finance studies. Moreover, based on the information obtained, Islamic financial-related organisations also post content and conduct live streams about Islamic finance on their websites and social media platforms. In addition, these organisations have collaborated in activities relating to IFL. For example, staff from Islamic financial institutions were invited to deliver Islamic financial talks at local universities. In another example, students from the Islamic finance studies program were sent for internships at iBank, Takaful companies, and Islamic cooperatives.

Regarding IFI, the data obtained shows that local advertising, such as radio and billboards, were the primary methods that Islamic financial-related organisations used to promote their financial products in the region. They also participated in booth exhibitions at shopping malls, mosques, Islamic schools, and Islamic events. It was also discovered that employees had assisted their organisations by posting details about the services and contact information on their personal Facebook, Instagram, and Line accounts. When examining each type of organisation, it was revealed that Islamic banks engaged in activities targeting specific population groups. These activities are presented below:

- (i) To raise deposits, iBank and BAAC Islamic Banking Fund launched savings products for Hajj.
- (ii) iBank has signed a “memorandum of understanding” with government agencies, state enterprises, and corporations to offer special profit rates for mortgages and personal financing products.
- (iii) BAAC Islamic Banking Fund promoted its credit products by targeting agriculturists and fishermen.

Islamic cooperatives have representatives in every village assigned to recruit new members and promote financial products to existing members. Non-bank Islamic financial institutions like Takaful and Islamic leasing companies utilise network marketing by appointing representatives to promote their financial services. Information from the provincial Islamic council shows that most IFI activities are associated with the two main categories of Islamic philanthropy: Zakat and Sadaqah. The data further indicates that both universities that offer Islamic finance studies have established Islamic funds to promote IFI. Interviewees stated that FTU has a fund that helps villagers access Halal credit, while PSU has a welfare fund that provides scholarships to students every year.



Furthermore, the gathered data indicates that Islamic financial-related organisations have also collaborated on IFI activities. It was found that Takaful operators use iBank as a channel to promote their financial products by designating iBank employees as brokers and distributing flyers at the branches. As part of another activity, FTU has made the IU Bank platform—a banking platform that connects to the BAAC Islamic Banking Fund—available to its students.

The next theme explores the factors that could limit IFL and IFI in Thailand's five southern border provinces. These insights are based on the knowledge and experiences shared by the interviewees. The data gathered from the interviews revealed that one of the primary limitations of IFL in the region is the lack of basic Islamic finance knowledge among the local Muslim population. Most informants attributed this to the inadequacy of the Islamic finance curriculum in Islamic schools. The second limitation pertains to the deficiency of Islamic finance expertise among the management and employees of organisations involved in Islamic finance within the region. The third constraint is the limited understanding of the Islamic financial system among religious leaders, particularly local Imams. The findings of this study are like what Yuslem et al. (2023) discovered among Indonesian Islamic scholars, as many of them are still unable to differentiate between conventional and Islamic financial systems. The final challenge is the shortage of professionals in Islamic finance within the educational system. Consequently, the market requires more educators with a background in Islamic finance to develop human resources who are well-equipped with IFL.

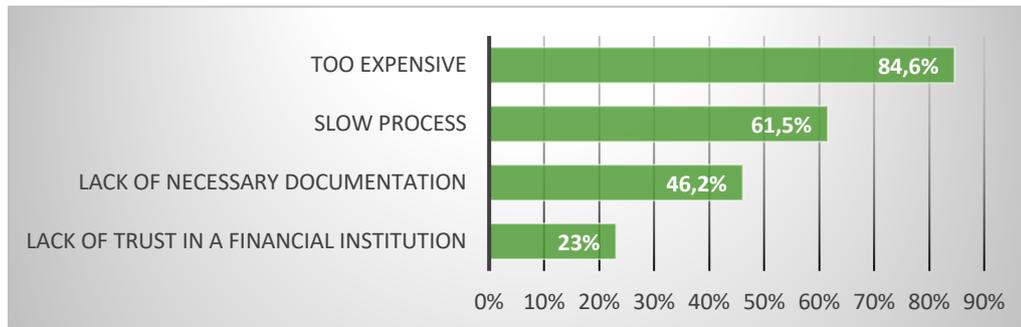
According to Figure 3, the most frequently cited limitation mentioned by interviewees was that many Islamic financial products and services are more expensive than their conventional counterparts. Despite the higher price, some informants believed religious people would pay a premium for access to Shari'ah-compliant financial services. However, based on the experiences of most informants from Islamic financial institutions, many people in the area prefer to use lower-cost credit services because they perceive the high cost as oppressive and burdensome. The following quotes provide more details:

“We Muslims often say that we need to stay away from the interest system, but when people come to ask for loans in Islamic financial institutions, they find that they are oppressed as the price is higher than the interest.”

“Many customers contact us for credit services, but once they know the cost, they decide not to use them because they find it difficult to repay.”

The second most highlighted limitation is the slow credit approval process of Islamic financial institutions, which cannot meet the needs of those who want to use the service. Additionally, the data shows that nearly half of the interviewees cited the lack of necessary documents as another limitation of IFI in the region. According to the opinions of these interviewees, documentation poses challenges for certain groups of people. For example, individuals in the grassroots often lack collateral-related documents, while vendors typically do not have financial records when they visit financial institutions to apply for credit. Finally, almost a quarter of interviewees viewed a lack of trust in Islamic financial institutions as a barrier to IFI in the area. According to the findings of the interviews, this lack of confidence is primarily associated with iBank and Islamic cooperatives. In the case of iBank, issues with bad debts have led people to question the institution's lenient credit approval principles, political intervention, and corruption within the organisation. As for Islamic cooperatives, the obtained data indicates that people still have doubts about the governance of these cooperatives, especially in the credit approval process, as they are not subject to the same level of strict regulation as formal financial institutions.

Figure 3. The main limitations of Islamic financial inclusion, as experienced by interviewees



Source: Authors' elaboration

The final theme explores interviewees' opinions on what should be done to increase the level of IFL and IFI among Muslims in Thailand's five southernmost provinces. According to the interview responses, three main strategies can be undertaken to facilitate the growth of IFL in the area. Firstly, all the interviewees suggested that the Islamic finance syllabus must be developed in Islamic educational systems. This recommendation is in line with previous literature, including that of Abdullah and Razak (2015) in Brunei, Lahsasna (2016) in Malaysia, and Khotiawan and Luthfiansyah (2017) and Sufyati (2021) in Indonesia, all of which support the inclusion of Islamic finance courses in their respective countries. The second strategy that could raise the level of IFL is to train and develop personnel who work in Islamic financial-related organisations to be knowledgeable and competent to disseminate IFL to the larger population. Some interviewees believed this strategy is urgent and important because, if it fails, the other strategies might be hard to implement. Lastly, interviewees primarily from Islamic banks, Islamic cooperatives, and non-bank Islamic financial institutions stated that enhancing public understanding of Islamic finance is necessary to increase the level of IFL in the region. According to these interviewees, seminars, conferences, and public talks are ways to raise consciousness among the target population.

The interviewees found a variety of strategies for increasing IFI among Thai Muslims in the five southern border provinces. To begin with, eleven of the thirteen interviewees believed that government support is required to expand the role of Islamic finance in enhancing financial inclusion. They agreed that more infrastructure and facilities should be needed to support the growth of Shari'ah financial services in Thailand. In addition, some interviewees noted that policies relating to the development of the Islamic financial system in Thailand must also be consistent and clear. The data further indicated that more than half of the interviewees recommended that Islamic financial institutions formulate marketing strategies to promote their existing products. These interviewees claimed that many people in the area are still unaware of the services each Islamic financial institution offers and how these services can meet their financial needs. The above recommendation is in line with the empirical studies of Basrowi et al. (2020), which concluded that to increase IFI, Islamic financial institutions should engage in more intensive marketing communication, particularly regarding religious understanding. Besides, interviewees felt product innovation could also play a critical role in expanding the use of Islamic financial services in Thailand's deep southern provinces. Accordingly, certain products that are equivalent to and distinct from conventional ones must be developed to meet the demands of residents. Finally, a few interviewees suggested that the country establish a central Shari'ah board to boost



public trust in Islamic financial institutions. According to these interviewees, having the central board issue rulings on Islamic financial products would be more credible than allowing each Islamic financial institution to do so.

5. Discussion

In this study, the quantitative approach was chosen as the primary method, with the qualitative approach serving as a complement. This section will further elaborate critical reflections on the key findings of quantitative data using detailed qualitative data. Regarding the current state of IFL in Thailand's deep south provinces, the findings from questionnaires show that most respondents are only familiar with fundamental Islamic financial knowledge. They still struggle to answer more complex questions about Islamic financial terms and products. These findings were consistent with the responses of many interviewees, who stated that most local Muslims correctly understand Islamic beliefs. Still, when it comes to Islamic finance, they are relatively ignorant. Moreover, although respondents were aware of the availability of Islamic financial services, data from the questionnaire show that they had a negative attitude toward the operations of Islamic banks, as they perceived no significant difference between Islamic and conventional banks. This result is consistent with information obtained from informants working in Islamic banks, where they frequently encounter customers who come to use the service and inquire about the percentage of the interest rate charged by Islamic banks.

Regarding Islamic financial behaviour, the questionnaire findings showed that most respondents could manage their finances in line with Shari'ah principles. However, the interview information disclosed that many Muslim customers who received microloans from iBank had issues with debt defaults. These results imply that some respondents may have exaggerated their financial behaviours. In summary, the level of IFL of the sample of Muslims in Thailand's five southernmost provinces can be classified as neutral to positive since the total score was just above the average. However, based on the scores of each dimension, advocates for financial literacy need to take measures and steps to improve Islamic financial knowledge and change the Islamic financial attitude of the Muslims in the area. They can apply their knowledge and understanding to support their Islamic financial behaviour by doing so.

Regarding the current trends of IFI in the area, the survey results showed that over half of the respondents were excluded from Islamic financial services. For those included, the most used products are deposits, while the number of respondents using Islamic credit, Takaful, and Shari'ah-compliant investment products is relatively low. This finding is consistent with information obtained from interview participants, who observed that Muslim customers of Islamic banks and cooperatives primarily use deposit services and show little interest in applying for loans. As for Takaful, despite having branches in every province, the proportion of policyholders remains small. Meanwhile, the informant from the Islamic investment firm reports that the company has almost no local customers. This may be attributed to the company not having offices and brokers operating in the area. In terms of Islamic financial usage, the statistical analysis demonstrated that only one-fifth of respondents used services with Islamic financial institutions over the past 12 months. The semi-structured interviews also showed that most Islamic financial institution clients have few transaction records. Therefore, Islamic financial institutions must encourage their clients to increase the frequency of use to create a transaction history that lenders can use as a basis for credit approval. In short, many Muslims in the five southernmost provinces are still unable to access and use the services of Islamic financial institutions. As a result, the low levels of people utilising Islamic financial products could pose a financial risk to Islamic financial institutions operating in the area.



This section discusses the obstacles to the growth of IFL and IFI in Thailand's five southernmost provinces. According to the quantitative data, most respondents were unfamiliar with Islamic financial terminology and the distinction between Islamic and conventional financial products. Many interviewees believed this happened because the Islamic educational system does not teach basic Islamic finance knowledge. Moreover, the results of the interviews revealed that not only the general population has insufficient Islamic finance knowledge but also many employees in Islamic financial institutions, religious leaders, and teachers in Islamic educational institutions. The study discovered that the lack of IFL among employees in Islamic financial institutions has limited their ability to explain and clarify the differences between Islamic and conventional finance and the products and services available to the clients. In addition, if staff members lack Islamic finance expertise, it will be difficult to implement policies that will assist the organisation in fulfilling its vision and mission. Since religious leaders are regarded as highly trustworthy by the local population, the lack of IFL would hamper the dissemination of Islamic financial knowledge in the area. Moreover, they may also provide false or misleading information to the public. Then, the scarcity of Islamic finance professionals in the educational system has also resulted in the lack of production and development of Islamic financial education materials, which is a serious hindrance to the growth of IFL in the area.

Regarding IFI, the data from the questionnaire and interviews revealed similarities and differences. The table below shows respondents in the five southernmost provinces reported a lack of funds, while interviewees cited high costs as the most significant barrier. From the information, economic conditions and prices play an important role in influencing the decisions to use Islamic financial services in areas where there is unrest and poverty. Meanwhile, both mentioned a lack of trust and documentation as significant reasons that could prevent the use of Islamic finance. The lack of confidence is challenging to address because it is associated with quality concerns about the supply side.

Regarding a lack of documentation, the questionnaire data revealed that Muslims who identified themselves as having this problem were mainly those with lower education levels and lower income groups. This is consistent with information provided by some interviewees, who perceived that these documents are related to collateral and financial records, which are crucial to demonstrating the ability to pay debts. On the other hand, only survey data indicated that access to Islamic financial services was hampered by being too far away. In contrast, most interviewees did not see physical distance as a potential barrier. Though Islamic financial institutions can offer their services in all areas, the absence of convenient channels like online services may be a significant reason why many respondents saw "too far away" as a barrier.

Furthermore, only interview findings revealed that the slow credit approval process was the main barrier, while this factor was not specified for respondents to select in the questionnaire. According to interview responses, the slow process was mainly caused by iBank's bad debt problems, which necessitated stricter credit approval measures. Additionally, Islamic cooperatives also experienced the issue of lagging credit approval, mainly due to limitations in the number of experts.



Table 4. Main Barriers to Islamic Financial Inclusion Based on Questionnaire and Interview Findings

| Questionnaire Survey | Semi-structured Interviews |
|-----------------------|----------------------------|
| Not enough money | Too expensive |
| Lack of trust | Slow process |
| Too far away | Lack of documentation |
| Lack of documentation | Lack of trust |

Source: Author Elaboration

Next, this section provides policy recommendations to relevant parties to boost IFL and IFI among Muslims in the five southernmost provinces of Thailand. Based on evidence gathered from quantitative and qualitative findings, the following are key policies that could increase the level of IFL in the area. Firstly, universities that offer Islamic finance courses in the area should take the lead in creating an Islamic finance curriculum and learning materials for the Islamic educational system. In addition, the curriculum should be structured by the target students at each level of Islamic educational institutions. Secondly, training courses and modules should be developed for personnel working in Islamic financial-related organisations in the area to convert theoretical knowledge into practical skills. Finally, all Islamic financial institutions should take the initiative as part of their corporate social responsibility to organise seminars to raise public awareness of the importance of Islamic finance throughout the region. It is anticipated that by the end of the workshops, participants will be able to comprehend the basic concepts of Islamic finance, recognise the advantages of using Islamic financial products, have greater trust in Islamic financial institutions, and possess the confidence to interact with them.

Based on the data gathered, policies that would increase the level of IFI in a Muslim minority country like Thailand require strong support from the government, particularly in terms of laws and regulations. The Islamic Bank of Thailand Act, enacted in 2002, is the only piece of legislation directing Islamic finance in Thailand. Therefore, the government should advocate passing new legislation to facilitate transactions for all Islamic financial institutions. Islamic financial institutions should innovate new products that cater to the needs of Muslim customers in the area. They can expand their customer base by offering the following products:

(i) **Islamic microfinance:** Islamic financial institutions should develop affordable microfinance products. They could, for instance, use Qard Hasan to facilitate their microfinance services with a small service charge. Another action that could be taken is introducing Ar-Rahnu, which requires a lower pledge, to channel credit to low-income people.

(ii) **Islamic venture capital:** funds could be established using Shari'ah-compliant contracts such as Musharakah or Mudarabah to invest in businesses. If Islamic venture capital is successfully established in the area, it could play an essential role in alleviating the financial constraints of local SMEs.

(iii) **Islamic Derivative:** An Islamic derivative called Bai-al Salam could be introduced to provide working capital to agricultural workers. As of now, the findings of the interviews indicate that many of them require a loan from the informal system to support their production. Thus, if Bai-al Salam can be implemented, they can receive Shari'ah-compliant financial assistance.



Regarding the development of Islamic financial products, universities that offer Islamic finance courses in the area could make a significant contribution by researching to identify which products are compatible with the community's needs. Furthermore, the universities could establish an information centre to collect statistical information about the Islamic financial sector in the five southern border provinces. The collection of such information could be essential in enabling those involved to create Islamic financial products that meet the demands of the target customers.

Concerning religious organisations, the Islamic Provincial Councils should use the function of Islamic almsgiving like Zakat to facilitate the transfer of wealth from the rich to the poor. Now, it has been discovered that the collection of Zakat on wealth at the provincial level is not well organised, and information about the number of people eligible to receive Zakat is also ambiguous. If they can successfully manage the Islamic redistributive mechanism and make it available to all recipients, they can create a broader impact on financial inclusion, particularly among the grassroots population.

According to the recommendations, the sustainability of initiatives toward IFL and IFI in Thailand's deep southern provinces requires collaboration and coordination among stakeholders, including the government, academics, Islamic financial institutions, religious organisations, and Islamic educational institutions. Therefore, it is recommended that an MOU should be signed among these parties to enable the effective implementation of such initiatives. The MOU should explicitly state that all parties will work together to organise IFL programs in a well-defined manner, including details on budgets, objectives, timelines, indicators, and the roles of each organisation. Hence, if these recommendations are implemented appropriately, the Islamic financial sector would be in a better position to meet the demands of their prospects and help the country achieve financial deepening.

6. Conclusion

Based on the empirical findings, quantitative and qualitative data were analysed and discussed to illustrate the current trends of IFL and IFI in Thailand's deep southern provinces. Subsequently, the research findings displayed the obstacles to the growth of IFL and IFI, followed by the recommendation of policies that could be pivotal in ensuring the sustainability of Islamic finance in the region.

It can be stated that this study has successfully addressed research gaps in the literature from contextual, theoretical, and methodological perspectives. On the contextual side, this study contributes to existing knowledge by collecting considerable information related to IFL and IFI within Thailand's Islamic financial industry. Given that Thailand is a Muslim minority country, this information could be utilised as a tool to promote financial opportunities for all groups of people while also stimulating economic growth in the wider community. Regarding the theoretical point of view, this study contributes significantly to the current literature on IFL assessment by formulating a framework that covers the dimensions of Islamic financial knowledge, attitude, and behaviour. The clear framework then aided the study in developing the measurement indicators. From a methodological perspective, this study has enhanced the understanding of IFL and IFI by using a mixed-method approach to collect and analyse data. Including different perspectives in single research has also assisted this study in drawing thorough conclusions about the subjects.



The current study, however, has limitations primarily stemming from the COVID-19 pandemic and the restrictions imposed. These restrictions prevented the researcher from conducting face-to-face interviews with informants. Due to the lack of face-to-face interviews, the researcher may have missed the depth of insights that could have been gleaned from these encounters. It was also difficult to contact any Islamic financial-related organisations during the lockdown because none of them were open. The researcher had to use the snowball technique to collect information from the participants. Still, as a result, the time it took to schedule each interview session was longer than usual.

This research has recommendations that could provide possibilities for future studies. First, this study examined the level of IFL and IFI among Thai Muslims in the five southernmost provinces; the findings are limited to only one region and may not apply to other areas. Therefore, future research that includes a sample of Muslims nationwide should be conducted to generalise the findings and enable a more focused policy design. Second, further research could investigate the level of IFL and IFI among vulnerable groups. A study aimed at gathering this data may help policymakers advance their understanding and develop effective strategies for them. Third, the study used a cross-sectional design that only collected data at one point. For future research, it is highly recommended that relevant agencies should adopt a longitudinal study to measure IFL and IFI over an extended period. Collecting data in this manner would make it possible to determine whether there is a notable change in the trends. Finally, despite the use of mixed methods in this study, only primary data were utilised; thus, future research could employ a mixed methods design with a combination of primary and secondary data to increase the credibility and depth of the research findings.

Acknowledgements

The author wishes to thank the Turin Islamic Economic Forum Online Workshop for providing me with this opportunity. I would like to extend my profound appreciation and sincere thanks to the Royal Thai Government and the Ministry of Higher Education, Science, Research, and Innovation for their generous financial support.

References

- Abdullah, A. M. and Anderson, A. (2015) Islamic Financial Literacy among Bankers in Kuala Lumpur. *Journal of Emerging Economies and Islamic Research*, 3(2), 1-16.
- Abdullah, A. M. and Chong, R. (2014) Financial Literacy: An Exploratory Review of the Literature and Future Research. *Journal of Emerging Economies and Islamic Research*, 2 (3).
- Abdullah, H. R. and Razak, A. L. H. A. (2015) Exploratory Research into Islamic Financial Literacy in Brunei Darussalam. Faculty of Business and Management Sciences, Universiti Islam Sultan Sharif Ali, Brunei Darussalam.
- Abdullah, Md. F., Hoque, M. N., Rahman, Md. H. and Said, J. (2022) Can Islamic Financial Literacy Minimize Bankruptcy Among the Muslims? An Exploratory Study in Malaysia. *SAGE Open*, 12(4). [Online] Available from: <https://journals-sagepub-com.ezproxy.bolton.ac.uk/doi/epub/10.1177/21582440221134898>. [Accessed: 5 January 2023].
- Abdullah, Md. F., Hoque, M. N., Rahman, Md. H. and Said, J. (2022) Can Islamic Financial Literacy Minimize Bankruptcy Among the Muslims? An Exploratory Study in Malaysia. *SAGE Open*, 12(4). [Online] Available from: <https://journals-sagepub-com.ezproxy.bolton.ac.uk/doi/epub/10.1177/21582440221134898>. [Accessed: 5 January 2023].



- Abdullah, Z., Saleh, S. and Mujiyati (2021) Determinant of Islamic Financial Inclusion in Digital Era: Cross-Province Analysis. *An-Nisbah: Jurnal Ekonomi Syariah*, 8(1), 59-80.
- Aboul-Dahab, K. M. A. (2023) The contribution of the Islamic and social banks to the concept of sustainable development, 10(2), pp. 13-25. [Online] Available from: <https://ojs.unito.it/index.php/EJIF/article/view/7178/6723>. [Accessed: 8 September 2024].
- Ahmed, H. (2011) Maqasid Al Shariah and Islamic Financial Products: A Framework for Assessment. *ISRA International Journal of Islamic Finance*, 149-160.
- Ahmad, M. (2010) Why Islamic Financial Literacy is Important. *Personal Money*, 46.
- Aisyah, I. and Saepuloh, D. (2019) The Implementation of Islamic Financial Literacy Through “Kencleng” Program in School. In: 2nd International Conference on Islamic Economics, Business, and Philanthropy (ICIEBP) Theme: “Sustainability and Socio Economic Growth”. (2019) Surabaya, Indonesia, 22 November 2018, *KnE Social Sciences*, 148–157.
- Albaity, M. and Rahman, M. (2019) The intention to use Islamic banking: an exploratory study to measure Islamic financial literacy. *International Journal of Emerging Markets*, 14(5), 988-1012.
- Alfarisi, M. F., Agestayani and Delfiani, S. (2020) The Impact of Islamic Economics and Finance Courses on Islamic Financial Literacy. *Iqtishadia*, 13(2), 197-215.
- Antara, P. M., Musa, R. and Hassan, F. (2016) Bridging Islamic Financial Literacy and Halal Literacy: The Way Forward in Halal Ecosystem. *Procedia Economics and Finance*, 37, 196-202.
- Aris, N. A., Othman, R., and Azli, R. B. (2013) Pyramid of Maslahah for Social and Economic Welfare: The Case of Bank Islam Malaysia Berhad. *Journal of Energy Technologies and Policy*, 3, 457-470.
- Atkinson, A. and Messy, F. (2013) Promoting Financial Inclusion through Financial Education: OECD/INFE Evidence, Policies and Practice. *OECD Working Papers on Finance, Insurance and Private Pensions No. 34*. Paris: OECD Publishing.
- Ayub, M. (2007) *Understanding Islamic Finance*. West Sussex: John Wiley and Sons.
- Bank for International Settlements. (2015) Financial inclusion indicators. In: *IFC Bulletin No 38*. (2015) Proceedings of the Kuala Lumpur Workshop. Kuala Lumpur, 5-6 November 2012. [Online] Available from: <https://www.bis.org/ifc/publ/ifcb38.pdf>. [Accessed 3 May 2020].
- Bank of Thailand. (2020) Financial Access Survey of Thai Household 2020. [Online] Available from: https://www.bot.or.th/English/FinancialInstitutions/Highlights/DocLib_FinancialAccessSurveyOfThaiHouseholds_2020/2020FinancialAccessSurveyOfThaiHouseholds.pdf. [Accessed 7 May 2021].
- Basrowi, Suryanto, T., Anggraeni, E. and Nasor, M. (2020) The Effect of Islamic Financial Literation and Financial Technology on Islamic Financial Inclusion. *Al-Falah: Journal of Islamic Economics*, 5(2), 231-263.
- Ben Naceur, S., Barajas, A. and Massara, A. (2015) Can Islamic Banking Increase Financial Inclusion?. *International Monetary Fund Working Papers* 15/31.
- Biplob, H. and Abdullah, Md. F. (2019) The Importance of Islamic Financial Literacy for Muslims: A General Review. *Islam and Civilisational Renewal*, 106-117.
- Bruhn, M., Ibarra, G. L. and McKenzie, D. (2014) The Minimal Impact of a Large-Scale Financial Education Program in Mexico City. *Journal of Development Economics*, 108, 184–189.



- Camara, N. and Tuesta, D. (2017) Measuring financial inclusion: a multidimensional index. In: Bank for International Settlements. (2017) Bank of Morocco – CEMLA – IFC Satellite Seminar at the ISI World Statistics Congress on “Financial Inclusion”. Marrakech, 14 July 2017. [Online] Available from: <https://www.bis.org/ifc/publ/ifcb47p.pdf>. [Accessed 14 April 2020].
- Demirguc-Kunt, A. and Klapper, L. (2012) Measuring Financial Inclusion: The Global Findex Database. Policy Research Working Paper 6025. Washington DC: World Bank Group.
- Demirguc-Kunt, A. and Klapper, L. (2013) Measuring financial inclusion: Explaining variation in use of financial services across and within countries. *Brookings Papers on Economic Activity*, 279–340.
- Demirguc-Kunt, A., Klapper, L. and Randall, D. (2013) Islamic Finance and Financial Inclusion - Measuring Use of and Demand for Formal Financial Services among Muslim Adults. Policy Research Working Paper 6642. Washington DC: World Bank Group.
- Demirguc-Kunt, A. Klapper, L., Singer, D., Ansar, S. and Hess, J. (2018) *The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution* (English). Washington DC: World Bank Group.
- 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.
- Dinc, Y., Cetin, M., Bulut, M. and Jahangir, R. (2021) Islamic financial literacy scale: an amendment in the sphere of contemporary financial literacy. *ISRA International Journal of Islamic Finance*, 13(2), pp. 251-263. [Online] Available from: <https://www.emerald.com/insight/content/doi/10.1108/IJIF-07-2020-0156/full/html>. [Accessed: 4 January 2023].
- Dusuki, A. W. and Bouheraoua, S. (2011) The Framework of Maqasid al-Shariah (Objectives of the Shari'ah) and Its Implications for Islamic Finance. ISRA Research Paper 22/2011.
- Er, B. and Mutlu, M. (2017) Financial Inclusion and Islamic Finance: A Survey of Islamic Financial Literacy Index. *International Journal of Islamic Economics and Finance Studies*, 3(2), 33-54.
- Kayed, N. R. (2008) Appraisal of the Status on Research on Labor Economics in the Islamic Framework. Paper presented at: 7th International Conference on Islamic Economics. Jeddah, Saudi Arabia, 1-3 April 2008.
- Khasana, M., Aminullah, R. and Setianingsih, D. (2022) Determinants of Islamic Financial Literacy Index: Comparison Based on Ethnographic Studies in Yogyakarta, Indonesia. *Jurnal AFKARUNA*, 18(1), 185-206.
- Khotiawan, M. and Luthfiansyah, M. (2017) Strategy to Enhance Sharia Financial Literacy and Inclusion in Indonesia (Case Study at Financial Services Authority Office in City of Malang). *Management and Economics Journal*, 1(1), 47-54.
- Koomson, I., Villano R. A. and Hadley, D. (2020) Intensifying Financial Inclusion through the Provision of Financial Literacy Training: A Gendered Perspective. *Applied Economics*, 52(4), 375-387.
- Lahsasna, A. (2016) Framework of Islamic Financial Education and Literacy. *Journal of Wealth Management and Financial Planning*, 3, 3-14.
- Lyons, A. C., Grable J. E. and Zeng T. (2017) Impacts of Financial Literacy on the Loan Decisions of Financially Excluded Households in the People’s Republic of China. Asian Development Bank Institute Working Paper Series No. 923.
- Mankiw, N. G. (2016) *Principles of microeconomics*. 8th ed. Boston: CENGAGE Learning Custom Publishing.
- Morgan, P. J. and Long, T. Q. (2020) Financial Literacy, Financial Inclusion, and Savings Behavior in Laos. *Journal of Asian Economics*, 68, 1-20.



- Mukminin, K. (2019) Profit Maximization in Islamic Banking: An Assemblage of Maqasid Shariah Conception. *European Journal of Islamic Finance*, 12, pp. 1-11. [Online] Available from: <https://ojs.unito.it/index.php/EJIF/article/view/2856/pdf>. [Accessed: 7 September 2024].
- Nawi, F. A. M., Daud, W. M. N. W., Ghazali, P. L., Yazid, A. S. and Shamsuddin, Z. (2018) Islamic Financial Literacy: A Conceptualization and Proposed Measurement. *International Journal of Academic Research in Business and Social Sciences*, 8(12), 629-641.
- NESDB. (2016) *The Twelfth National Economic and Social Development Plan (2017-2021)*. Bangkok: Office of the Prime Minister.
- OECD. (2016) *OECD/INFE International Survey of Adult Financial Literacy Competencies*. Paris: OECD Publishing.
- Ozili, P. K. (2021) Financial inclusion research around the world: A review. *Forum for Social Economics*, 50(4), 457-479.
- Pattani Economy. (2019) จำนวนมุสลิมในประเทศไทย. [Number of Muslims in Thailand]. Available from: <https://pattanieconomy.wordpress.com/2019/01/22/%E0%B8%88%E0%B8%B3%E0%B8%99%E0%B8%A7%E0%B8%99%E0%B8%A1%E0%B8%B8%E0%B8%AA%E0%B8%A5%E0%B8%B4%E0%B8%A1%E0%B9%83%E0%B8%99%E0%B8%9B%E0%B8%A3%E0%B8%B0%E0%B9%80%E0%B8%97%E0%B8%A8%E0%B9%84%E0%B8%97%E0%B8%A2/>. [Accessed 5 December 2020].
- Rozikin, A. Z. and Sholekhah, I. (2020) Islamic Financial Literacy, Promotion, and Brand Image Towards Saving Intention in Sharia Bank. *IQTISHADIA*, 13(1), 95-106.
- Senghore, A. F. (2023) Assessing the Role of Islamic Microfinance: A Women Empowerment Case Study. *European Journal of Islamic Finance*, 10(3), pp. 45-70. [Online] Available from: <https://ojs.unito.it/index.php/EJIF/article/view/7939/7705>. [Accessed: 4 September 2024].
- Shakeel, H. (2017) The Development of Islamic Finance: The Need for Islamic Financial Literacy. *Abha'th*, 2(6), 22-36.
- Klapper, L. and Singer, D. (2017) The Role of Demand-Side Data – Measuring Financial Inclusion from the Perspective of Users of Financial Services. In: Bank for International Settlements. (2017) Bank of Morocco – CEMLA – IFC Satellite Seminar at the ISI World Statistics Congress on “Financial Inclusion”. Marrakech, 14 July 2017. [Online] Available from: <https://www.bis.org/ifc/publ/ifcb47o.pdf>. [Accessed 14 April 2020].
- Sitthivanich, A. and Hassan, R. (2017) An Analysis of the Islamic and Conventional Banking Regulatory Bodies and Legislation in Thailand. *Journal of Islamic Banking and Finance*, 5 (2), 61-68.
- Tarique, K. Md., Ahmed, M. U. and Hossain, D. M. (2017) Maqasid al-Shariah in CSR Practices of the Islamic Banks: A Case Study of IBBL. *Journal of Islamic Economics, Banking and Finance*, 13(3), 47-63.
- Tissot, B. and Gadancz, B. (2017) Measures of Financial Inclusion - A Central Bank Perspective. In: Bank for International Settlements. (2017) Bank of Morocco – CEMLA – IFC Satellite Seminar at the ISI World Statistics Congress on “Financial Inclusion”. Marrakech, 14 July 2017. [Online] Available from: https://www.bis.org/ifc/publ/ifcb47q_rh.pdf. [Accessed 10 April 2020].
- Vejjagic, M. and Smolo, E. (2011) Maqasid Al-Shari'ah in Islamic Finance: An Overview. [Online] Available from: https://www.researchgate.net/publication/317063404_Maqasid_Al-Shari'ah_in_Islamic_Finance_An_Overview. [Accessed 19 Oct. 2019].



- World Bank. (2018) Financial Inclusion: Overview. [Online] Available from: <https://www.worldbank.org/en/topic/financialinclusion/overview>. [Accessed 21 November 2019].
- Yunus, D., Rodoni, A., Amilin and Prasetyowati, R. A. (2021) The Influence of Demographics and Religiosity Factors on Islamic Financial Literacy. *Inferensi Jurnal Penelitian Sosial Keagamaan*, 15(1), 91-116. [Online] Available from: <https://inferensi.iainsalatiga.ac.id/index.php/inferensi/article/view/5291/pdf>. [Accessed 15 December 2022].
- Yuslem, N., Nurhayati and Hasibuan, A. F. H. (2023) Analysis of the problems of Islamic financial literacy for Muslim scholars. *Jurnal Ekonomi dan Keuangan Islam*, 9(1), 45-61. [Online] Available from: <https://journal.uui.ac.id/JEKI/article/view/26012>. [Accessed 10 February 2023].
- Zaman, Z., Mehmood, B., Aftab, R., Siddique S. M. and Ameen, Y. (2017) Role of Islamic Financial Literacy in the Adoption of Islamic Banking Services: An Empirical Evidence from Lahore, Pakistan. *Journal of Islamic Business and Management*, 7(2), 230-247.
- Zulkhibri, M. (2016) Financial inclusion, financial inclusion policy and Islamic finance. *Macroeconomics and Finance in Emerging Market Economies*, 9(3), 303-320.