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Islamic Fintech as a Catalyst for Sustainable Financial Behavior: Evidence from Consumers of Saudi Islamic Banks

Osama M. Al-Hares[1], Ihab K. Magableh[2], Maher H. Mahrouq[3], Ashraf K. Magableh[4], Mahabba I. Magableh[5]

[1]School of Business, University of Wollongong in Dubai, UAE
Email ID: OsamaAlhares@uowdubai.ac.ae
[2] Arab Planning Institute, Kwait
Email ID: ihab@api.org.kw
[3]Association of Banks in Jordan, Amman, Jordan
Email ID: maher@abj.org.jo
[4]Ezymart Pty Ltd, Jordan
Email ID: Ash@ezymart.net.au
[5]Princess Sumaya University for Technology, Jordan
Email ID: mah20248093@psut.edu.jo

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KEYWORDS

Islamic Fintech, Financial Literacy, Religiosity, Islamic Financial Transactions Banks, and Banking Industry

ABSTRACT

This research investigates the relationship between Islamic fintech, Islamic financial literacy, and religiosity and their impact on sustainable Islamic financial transactions within the Islamic banking context in Saudi Arabia. Employing a quantitative research approach, the study focuses on customers of Saudi Islamic Banks in Riyadh. The findings reveal nuanced insights. Firstly, Sharia financial literacy is determined to have no direct influence on Sharia financial transactions in Islamic banks in Saudi Arabia. Secondly, religiosity is found to have no direct effect on Sharia financial transactions. Thirdly, Islamic financial literacy significantly influences Islamic financial transactions, while religiosity does not exhibit a direct impact on Islamic fintech. Moreover, Islamic fintech is identified as a significant driver of Sharia financial transactions. Intriguingly, it is established that Islamic fintech mediates the relationship between Sharia financial literacy and financial transactions. However, no such mediating effect is observed in the case of religiosity influencing Sharia financial transactions. These results contribute to the growing body of literature on sustainable Islamic banking, clarifying the complex dynamics between Islamic Fintech, financial literacy, and religiosity as they influence the conduct of financial transactions within the context of Saudi Islamic banks in Saudi Arabia.

1. INTRODUCTION

The global expansion of Islamic commercial banks over the past five years has been driven by increasing demand for Sharia-compliant financial services and the development of supportive regulatory frameworks. In Saudi Arabia, one of the key drivers of this growth has been the government's Vision 2030 initiative, which includes financial sector development and greater integration of Islamic finance. The Saudi Central Bank (SAMA) has played a crucial role in laying a structured regulatory foundation that supports the performance and long-term sustainability of Islamic banking. However, Islamic banking constitutes a major component of the financial system in Saudi Arabia. As of recent data, Islamic banks account for a significant share—approximately 60%—of the total banking assets in the Kingdom, with major institutions such as Al Rajhi Bank, Alinma Bank, and Bank Albilad operating fully under Sharia principles. Nevertheless, there is still untapped potential compared to other Islamic finance hubs such as Malaysia. Although Malaysia has a smaller Muslim population proportion (around 61.3%) compared to Saudi Arabia’s Muslim-majority demographic, it boasts a more mature and diversified Islamic finance ecosystem. Malaysia's success can be attributed to its robust legal infrastructure, early adoption of Islamic finance, and strong government backing. Despite Saudi Arabia's strong Islamic banking footprint, challenges remain. One of the main concerns is the relatively low level of Islamic financial literacy. According to a seminar hosted by SAMA in 2023, Islamic financial literacy in the Kingdom stands at only 8.93%, while the broader National Sharia Economic Literacy Index is 16.2%. This literacy gap may affect consumer decisions regarding Islamic financial products, as supported by research that links financial literacy with individual consumption and financial behavior (Khan et al., 2020; Thilakam, 2012).

A promising strategy to enhance financial inclusion and awareness is through digitalization—particularly Islamic financial technology (Islamic Fintech). Defined by SAMA as the application of technology in delivering financial services aligned with Sharia principles, Islamic Fintech is emerging in response to the growth of conventional fintech platforms that often rely on interest-based models. Research shows that Islamic Fintech holds considerable potential in Saudi Arabia, especially given its young, tech-savvy population and high smartphone penetration. However, several challenges persist, including the lack of tailored policy instruments, limited Sharia-compliant digital financial products, cybersecurity risks, and the need to better reach underserved and lower-income populations (Rusydiana, 2018; Kulu et al., 2022). Moreover, one of the fundamental ideas guiding consumer behavior and impacting their preferences is religion (Khan et al., 2020). In this case, Saudi Arabia is the country having the most Muslims among all the countries. Being the nation with most Muslims, Saudi Arabia has opportunities for Sharia-based economic activities, one of which is Islamic finance (Ardiansyah, 2020). Religion is an important aspect of Muslim culture (Kotler, 2012), and consequently, it influences how Muslims behave (Lindridge, 2005). With a majority Muslim population, many people should be more interested in using Islamic bank institutions, but many still do not use Islamic bank institutions as a means of daily transactions and still use the services of conventional institutions whose transactions contain usury, illegal in the Al-Quran (Fauzi & Murniawaty, 2020).

For those reasons, the dominant factors affecting a person's decisions in Islamic financial transactions need to be tested. Before, the studies' findings by Eliza (2019) and Saragi and Rahmi (2022) revealed that Islamic financial literacy factors influence the use of Islamic bank services and products. Furthermore, in a study conducted by Puji and Hakim (2021), The relationship is good between the accessibility of Islamic bank services and increasing people's use of Islamic bank services and products. Therefore, the main research question of this investigation is: Does the mediating relationship of Islamic Fintech, financial literacy, and religiosity affect Islamic financial transaction banks?

2. THE HYPOTHESIS DEVELOPMENT AND RESEARCH MODEL

The Effect of Islamic Financial Literacy on Sustainable Islamic Financial Transactions

Financial literacy is an individual's capacity to utilize the financial management information acquired (Zakaria, 2020). According to Wardani and Santi (2019), a lack of financial awareness in an individual will lead to financial difficulties. Islamic financial literacy is essential, as it enables people and society to understand the concepts and methods of Islamic finance and to identify the various Islamic financial products. This will assist individuals in making prudent financial decisions consistent with Islamic beliefs. Moreover, Islamic financial literacy is essential for enhancing public access to high-quality Islamic financial products and fostering the growth of Islamic financial markets (Ernayani, 2023).

The significance of financial literacy in the establishment of Islamic finance necessitates the enhancement of accurate comprehension of Islamic finance among scholars, ulama, and the general populace, which will profoundly impact efforts in Islamic financial transactions (Musclihah & Sanusi, 2019). A deficient level of Islamic financial literacy will result in restricted public access to Islamic financial institutions. Similarly, elevated Islamic financial literacy enhances public awareness, hence affecting individuals' decisions to engage with Islamic banks. This is based on publicly available information concerning the use of Islamic financial services (Thohari, 2021). Thohari (2021) elucidates that elevated financial literacy will affect an individual's behavior while selecting a financial institution. They will delegate financial management to entities according to Islamic norms.

Research studies consistently demonstrate similar findings about the influence of Islamic financial literacy on Islamic financial transactions. Khan et al. (2020) and Ruwaidah (2020) asserted that an individual's Islamic financial literacy correlates positively with their comprehension of becoming a client at an Islamic bank. Research by Wijanarko and Rachmawati (2020) and Mukti et al. (2022) confirms that Islamic financial literacy has a favorable and significant impact on the use of Islamic Bank financial services and products. This is consistent with research by Luthfiani and Sari (2018), Thohari and Hakim (2021), Muslichah and Sanusi (2019), and Albaity and Rahman (2019), which indicates that Islamic financial literacy influences financial transactions in Islamic banks. From the theory and previous research references, the following is the proposed hypothesis:

H1: Islamic financial literacy has a considerable and favorable impact on sustainable Islamic financial transactions.

The Effect of Religiosity on Sustainable Islamic Financial Transactions

The a religious aspect—the degree to which a person fulfills religious ritual duties. The intellectual component of an individual refers to their level of knowledge and understanding of their religion's teachings, particularly those derived from sacred writings, hadith, Fiqh, and other sources. The consequential component refers to the extent to which religious teachings influence an individual's social conduct, such as visiting the ill, cultivating relationships, and contributing financially to religious and social initiatives, among other activities. Religiosity significantly influences purchasing behavior, since Muslims tend to avoid haram items and exhibit neither stinginess nor greed, according to the routes delineated by Allah. Consequently, customer behavior should embody their connection with Allah. The effect of religion may significantly shape an individual's viewpoint and conduct, as the application of Islamic ideals profoundly impacts decisions about the consumption of halal items. In this instance, the disposition of religion serves as a standard for customers. Religious consumers will favor a bank that complies with Sharia principles (Musclihah & Sanusi, 2019).

The outcomes of research studies on the influence of religiosity on Islamic financial transaction decisions exhibit symmetry and alignment. Zuhirsyan and Nurlinda (2021) asserted that an individual's religious disposition correlates positively with their viewpoint and adherence to Islamic ideals, hence impacting decision-making over the use of services and goods offered by Islamic banks. A study by Zuhirsyan and Nurlinda (2021) indicated that religion positively and significantly influences the decision to use Islamic banking services and products. This aligns with the findings of Santoso and Adwiyah (2019), Wijanarko and Rachmawati (2020), and Muslichah and Sanusi (2019), which indicate that religion influences an individual's propensity to engage in transactions using Islamic banking products. Alam et al. (2012) assert that religiosity greatly affected the objectives of Islamic home financing in the Min Klang Valley. Based on the previous research references, the following is the hypothesis:

***H2**: Religiosity significantly and positively affects sustainable Islamic financial transactions.*

The Effect of Islamic Financial Literacy on Islamic Fintech

According to Hseuh (2017) classifies Islamic fintech into three types. The first type includes third-party payment systems, which are payment systems that are made through intermediary institutions. These include various channels of cross-border electronic commerce, online-to-offline payment, mobile payment solutions, and payment platforms offering services such as bank transfers and transactional payments. The second type refers to peer-to-peer (P2P) lending, which is defined as a platform that bridges online lenders and borrowers. The platform provides a channel for the extension of credit and risk management, allowing both sides to efficiently distribute resources based on their respective needs. The third type is linked to crowdfunding, which is defined as a type of fintech where an idea or product—ranging from design, software, content, or artistic projects—is promoted to the public, thus allowing interested parties to give financial support for the venture.

Further, the financial skills, knowledge, and beliefs held by a person significantly impact their financial behaviors and attitudes. Enhancing an individual's knowledge can significantly influence their engagement in activities related to finance and foster more favorable financial behaviors. Massive technological developments in the banking world must be accompanied by comprehensive financial literacy (Suci & Rikumahu, 2018). The goal of financial literacy is to be accessed as a whole by the public. Islamic financial literacy is vital in providing awareness and policies for using Islamic Fintech.

There is symmetry and alignment with the findings of research studies on the impact of Islamic financial literacy on Islamic Fintech. According to Syahrani and Pradesa (2023), the understanding of Islamic finance plays a crucial and impactful role in the adoption of Islamic Fintech within Islamic banking institutions. Informed by the theoretical framework and existing research literature, the following hypothesis is put forward:

***H3:** Islamic financial literacy positively and significantly affects Islamic Fintech.*

The Effect of Religiosity on Islamic Fintech

Advances in technology and information affect society—the rising dependence of society on the use of information and communication technology, thereby creating convenience and practicality, which makes society increasingly fulfill its digital needs. Society currently relies heavily on the internet to carry out daily activities, both to meet life's needs and to communicate with other people, so the internet has become one of the basic needs of most people throughout the world. Along with increasing internet use, the use of smartphone technology is also increasing. Smartphones facilitate the execution of daily activities for individuals, such as paying for purchases using a mobile device (Suprihati et al., 2021).

The research findings of Iskamto and Yulihardi (2023) stated that religiosity significantly and positively influences interest in using Sharia LinkAja among generation Z in the Bondowoso District. However, Falevy's (2022) research results show different results, where the religiosity level significantly and negatively affects financial technology services. This denotes that the greater a person's religiosity level will actually reduce the person's interest in utilizing financial technology. On the basis of the theory and previous research references, the hypothesis below is derived:

***H4:** Religiosity significantly and positively affects Islamic Fintech.*

The Effect of Islamic Fintech on Sustainable Islamic Financial Transactions

According to Falevy (2022), Islamic Fintech has introduced substantial transformations across multiple sectors of the financial industry. Digital payments represent a fundamental component of digital finance, increasingly influencing the landscape of financial technology (Fintech) and e-commerce (Risman et al., 2021). Fintech has created new avenues for enhancing economic activities with greater efficiency and effectiveness. The emergence of Fintech and digital banks has reinforced the importance of providing easy, hassle-free, and convenient digital banking services, especially by traditional banks (Belbergui, 2021). The growth of digital technology has shifted people's habitual patterns in using banking services, including Islamic banks. This can be observed from the rise in the number of Islamic banking products using digital services in order to give the best service to meet people's expectations (Aripin et al., 2022). The rapid growth of Islamic Fintech in Saudi Arabia cannot be separated from the interest of people who want to make transactions, according to Islam Falevy (2022). Sharia fintech encompasses technology-driven financing services rooted in Islamic principles, characterized by the provision of financial services that align with Sharia guidelines. This approach facilitates the connection between financing providers and recipients, aiming to execute financing transactions through electronic systems (Saudi Shariah Supervisory Board, 2018).

There is symmetry and alignment with the findings of research studies on the impact of Islamic Fintech on Islamic financial transactions. According to Sari (2018), Islamic Fintech positively and significantly affects Islamic financial transactions at Islamic banks. Adewoye (2013) also states that in Nigerian commercial banks, mobile banking affects service delivery. Informed by the theoretical framework and existing research literature, the subsequent hypothesis is put forth:

H5: *Islamic Fintech significantly and positively affects sustainable Islamic financial transactions.*

The Effect of Islamic Financial Literacy on Sustainable Islamic Financial Transactions Through Islamic Fintech

The presence of Fintech is an innovation that really helps society because it makes transactions easier. From year to year, Fintech is growing rapidly; advances in technology and fintech services support this to be very fast and efficient, so many people are starting to switch to Fintech. Islamic Fintech is one Islamic Bank service that lets consumers access information, interact and make online transactions. Internet-based banking services can be called internet banking. M-banking services will provide freedom and ease of financial transactions such as paying bills, checking balances, transferring money, and other financial services. One of the advantages of M-banking is the efficiency of bank operational costs. By using Islamic-based technology, people are greatly helped in getting services. Likewise, in the field of finance or financial literacy, there has also been quite significant development. Technology and financial literacy are related to each other, especially awareness of usury.

There are symmetrical and consistent results of research studies on the impact of Islamic Fintech interventions on Islamic financial literacy on Islamic financial transactions. According to Djuwita et al. (2022), Islamic financial literacy positively and significantly affects Islamic financial transactions through Islamic Fintech. The following hypothesis is put up based on theory and past study references:

H6: *Islamic Fintech mediates the effect of Islamic financial literacy on sustainable Islamic financial transactions.*

The Effect of Religiosity on Sustainable Islamic Financial Transactions Through Islamic Fintech

Islamic financial transactions are a system that complies with Islamic law where its operations follow Islamic procedures for muamalat, avoid practices that contain elements of usury, and carry out investment activities on the basis of financing profit sharing (Siamat, 2005). The primary difference between conventional and Islamic banks is that the interest system does not apply at Islamic banks, both regarding rewards to customers who place their funds in Islamic banks and regarding customers as borrowers for financing at Islamic banks. As the Saudi Central Bank (SAMA) (2023) stated, Islamic financial transactions are categorized into two, namely Islamic banks and Islamic non-bank financial industries, i.e., Islamic insurance, Islamic financing companies, Islamic pension funds, Islamic bonds (sukuk), Islamic capital market activities, and Islamic mutual funds. This means Islamic fintech companies in Saudi Arabia do not operate independently; they have a strong relationship with Islamic banks through fund management, transaction processing, regulatory oversight, and strategic partnerships. This connection ensures that Islamic Fintech remains fully compliant with Sharia law while offering innovative financial services.

Transactions in Islam must be based on the rules of Islamic law because transactions are a manifestation of human charity that is worth worship before Allah, which can be categorized into halal and haram transactions. The sources of transaction law in Islam are the Al-Quran, Al-Sunnah, and ijtihad. According to the fatwas that the National Sharia Council (DSN)-MUI issued in 2008, Islamic financial transactions are a matter of *muamalah* (relationships between human beings), where the original law is that everything is permissible unless it is prohibited. This is very different from matters of worship (human relations with Allah SWT), where the original law is that everything is prohibited unless there are provisions.

Religiosity is also a hierarchy that connects dogma, religion, and an individual's faith in carrying out religious orders, which are implemented in many facets of life, such as the economy. A person's attitude of diversity expressed in several facets of life is known as religiosity. Religious activities can take place during other activities as well as during ritual conduct, such as worship, including economic activities. Religious attitude or a condition known as religiosity motivates a person to act in a way that is consistent with his degree of religious observance (Djuwita et al., 2022). Therefore, the greater a person's level of religiosity, the more they will understand the boundaries of halal and haram regarding usury and will always be submissive and obedient towards religious rules that drove their choice of an Islamic bank. Apart from religiosity, trust is also something that is highly considered in the banking world. Basically, banks are only intermediary institutions between customers who save funds and customers who need funds. When someone is making a decision, he will favor options that he can trust more than those that he can trust less. Trust is a mental state that depends on a person's circumstances and social environment (Ernayani, 2022).

Additionally, technology is a product of advancements in life. Technology consistently evolves, delivering the latest innovations that enhance human life. The swift advancement of technology created by humans is propelling humanity into what is referred to as the modern era. Informed by the theoretical framework and existing research literature, the following hypothesis is put forward:

H7: *Islamic Fintech mediates the effect of religiosity on sustainable Islamic financial transactions.*

3. METHOD

A quantitative research design was employed in this investigation, utilizing the associative causality method, along with data collection and analysis techniques such as surveys and SEM (Structural Equation Modeling). The authors conducted the data collection for this research in front of King Saud University Research Center. The researchers chose the location as it has problems in accordance with those to be studied related to Islamic financial inclusion and Islamic financial literacy in affecting Islamic financial transactions with Islamic financial technology as an intervening variable. In addition, there has never been any research on these problems at the research location, and most Islamic commercial bank clients engage in their financial activities. Furthermore, in this investigation, purposive sampling was used as the sampling method. This is a technique for determining samples by picking a subset of a population based on the researcher's desires, or the research problem, in order to ensure that the sample captures the known population characteristics (Nursalam, 2017). The respondents' characteristics in picking this research sample were the general public, both men and women, who have already been customers or have experienced or tried to use Sharia commercial banks and whose domicile was within the DKI Riyadh Province area.

Table 1. Operational Variables

Research Variables	Dimensions	Scale
Sharia financial literacy	1. Freedom of transactions 2. Free from *maysir, gharar* and usury 3. No price games 4. Clear and open 5. Benefits	Ordinal Scale (5 Likert scale)
Sharia Financial Inclusion	1. Accessibility dimension 2. Availability dimension 3. Usage dimensions	Ordinal Scale (5 Likert scale)
Islamic Financial Technology	1. Dimension of convenience 2. Speed dimension 3. Range dimensions	Ordinal Scale (5 Likert scale)
Sustainable Sharia Financial Transactions	1. The principle of brotherhood 2. The principle of justice 3. The principle of benefit 4. The principle of balance	Ordinal Scale (5 Likert scale)

Source: Data processed by researchers, 2023

4. RESULTS

4.1. Descriptive Statistics

Descriptive analysis summarizes study data including minimum, maximum, mean, standard deviation, and data count. Table 2 shows the descriptive statistics' outcomes for this study as follows:

Table 2. Descriptive Analysis of Islamic Financial Literacy (X1)

Indicator Variables	Min	Max	Mean	Std. Deviation
X1.1	3	5	4.721	0371
X1.2	2	5	4.684	0.413
X1.3	3	5	4.726	0.356
X1.4	2	5	4.721	0.378
Total Average			**4.713**	**0.379**

Source: Data processed 2024

From Table 2, it can be described that the average value of respondents' answers was 4.713, meaning they strongly agreed. The lowest average score was found in the capability indicator (X1.2), namely 4,684, with a standard deviation of 0.413 in the questionnaire item "Having good personal capabilities, one of which is determining policies for the future in financial activities at Islamic Bank." In comparison, the highest average score was revealed in the attitude indicator (X1.3), namely 4.726, with the smallest standard deviation, namely 0.356, in the questionnaire item "The financial behavior of a Muslim in managing finances at an Islamic Bank is for the long-term period."

Table 3. Descriptive Analysis of Religiosity (X2)

Indicator Variables	Min	Max	Mean	Std. Deviation
X2.1	2	5	4.731	0.413
X2.2	3	5	4.753	0.368
X2.3	2	5	4.800	0.358
X2.4	3	5	4.768	0.363
Total Average			**4.763**	**0.375**

Source: Data processed 2024

From Table 3, it can be elucidated that the average score for respondents' answers was 4.763, which means they strongly agreed. The lowest average score was found in the religious practice indicator (X2.1), namely 4.731 with a standard deviation of 0.413 in the questionnaire item "With complete financial service access infrastructure, it makes it easier for me to make financial transactions at Saudi Islamic Banks." Meanwhile, the largest average score was uncovered in the experience indicator (X2.3), which is 4.800 with the smallest standard deviation, namely 0.358, in the questionnaire item "My essence in using Islamic bank services and products is the satisfaction it provides so that it has an impact on continued reuse."

Table 4. Descriptive Analysis of Islamic Fintech (Z)

Indicator Variables	Min	Max	Mean	Std. Deviation
Z.1	3	5	4.779	0.356
Z.2	3	5	4.789	0.333
Z.3	3	5	4.826	0.299
Z.4	2	5	4.795	0.338
Z.5	3	5	4.753	0.375

Z.6	2	5	4.774	0.367
Total Average			**4.786**	**0.344**

Source: Data processed 2024

From Table 4, it can be clarified that the average score for respondents' answers was 4.786, indicating that they strongly agreed. The lowest average score was in the privacy indicator (Z.5), namely 4.753, with a standard deviation of 0.375 in the questionnaire item "Islamic Bank financial services digital technology needs to provide privacy service features for the benefit of its customers." Conversely, the average score was the largest found in the website design indicator (Z.3), namely 4.829, with the smallest standard deviation, namely 0.299, in the questionnaire item "A simple form of website design for financial services and products at Islamic bank provides a convenience factor for every user (customer)."

Table 5. Descriptive Analysis of Islamic Financial Transactions (Y)

Indicator Variables	Min	Max	Mean	Std. Deviation
Y.1	3	5	4.805	0.318
Y.2	3	5	4.800	0.328
Y.3	3	5	4.837	0.285
Y.4	3	5	4.816	0.313
Y.5	3	5	4.821	0.310
Total Average			**4.816**	**0.311**

Source: Data processed 2024

From Table 5, it can be explained that the average score for respondents' answers of 4.816 means they strongly agreed. The lowest average score was in the indicator financing, which was carried out on real assets (Y.2), namely 4.800 with a standard deviation of 0.328 on the questionnaire item "The essence of one of the Islamic financial activities such as financing in Islamic Banks prioritizes real assets which are seen as clear objects and its value." On the other hand, the largest average score was in the no interest indicator (Y.3), namely 4.837, with the smallest standard deviation, namely 0.285, in the questionnaire item "The principle of *muamalah* for profit sharing on financial transactions in Islamic banks is a principle benefit for both parties who avoid the interest/*riba*."

4.2. Outer Model

The outer model test seeks to define the latent variable–indicator link. Table 6 below shows the validity and reliability test results.

Table 6. Validity and Reliability Test

Variables	Indicator	Loading Factor	Cronbach Alpha	Composite Reliability	Average Variance Extracted (AVE)
Literacy Islamic Financial	X1.1	0.859	0.861	0.905	0.705
	X1.2	0.807			
	X1.3	0.848			
	X1.4	0.844			
Religiosity	X2.1	0.792		0.947	0.781
	X2.2	0.953	0.937		

	X2.3	0.895			
	X2.4	0.814			
	X2.5	0.953			
	Y.1	0.845			
	Y.2	0.869			
Islamic Fintech	Y.3	0.885		0.946	0.746
	Y.4	0.94			
	Y.5	0.885	0.932		
	Z.1	0.851			
	Z.2	0.927			
Islamic Financial Transactions	Z.3	0.86		0.948	0.784
	Z.4	0.859			
	Z.5	0.854			
	Z.6	0.828	0.931		

Source: Data processed 2024

In this study, all variables' Cronbach's Alpha values were above 0.70, indicating dependability. Islamic financial literacy, religiousness, Fintech, and transactions similarly had composite reliability coefficients above 0.70. Thus, this study's composite dependability metric is dependable.

Next, convergent validity verifies the relationships between indicators and their constructs or variables. Testing outer loadings, sometimes called loading factors, and Average Variance Extracted helps determine convergent validity. Convergent validity and substantial validity are achieved when the outer loading is greater than 0.70 and the Average Variance Extracted (AVE) is greater than 0.50 (Chin, 1999). Table 7 shows that Islamic financial knowledge, religiousness, Islamic Fintech, and Islamic financial transactions all have loading factors above 70, proving convergent validity. All Average Variance Extracted (AVE) values were more than 0.50, confirming convergent validity.

Table 7. Discriminant Validity Test (Fornell-Larcker Criterion)

	X1	X2	Y	Z
X1	0.840			
X2	-0.177	0.884		
Y	0.428	-0.105	0.885	
Z	0.459	-0.104	0.840	0.864

Source: Data processed 2024

The path coefficient analysis shows the magnitude of the effect or influence the independent variable exerts on the dependent variable. The highest path coefficient value indicates the effect of Islamic Fintech on Islamic financial transactions, which is 0.815. In contrast, the least influence is demonstrated by the effect of religiosity on Islamic Fintech, which stands at -0.023. This definition implies that the variables in this model had positive and negative path coefficients. A positive coefficient means that as the path coefficient of an independent variable increases in comparison to the dependent variable, the effect between the independent variables and the dependent variable increases; the opposite effect is experienced when a similar adjustment occurs.

4.4. R-Square Test

The coefficient of determination, also known as R-Square, is a measure of assessing the extent to which different factors affect an endogenous variable. Chin and Wynne (1999) noted that structural model endogenous latent variables with R-square measures of 0.67 and above suggest that the effect of exogenous variables on these endogenous variables is within a desirable range. A finding between 0.33 and 0.67 is considered moderate, while a measure between 0.19 and 0.33 is classified as weak.

The analysis of the data processing yielded the following R-Square values:

Table 8. R-Square

	R Square	R Square Adjusted
Islamic Fintech (Z)	0.212	0.205
Islamic Financial Transactions (Y)	0.707	0.704

Source: Data processed 2024

Table 8 shows that Islamic financial transaction variable Y's R-Square was 0.704. Islamic financial literacy X1, religiosity X2, and Islamic Fintech Z affect 70.4% of Islamic financial transactions. The remaining 29.6% is explained by factors not examined in this study. The R-squared for the Islamic Fintech variable Z was 0.205, indicating that Islamic financial literacy and religiosity (X1 and X2) affect 20.5% of Islamic Fintech, whereas other factors explain 79.5%.

4.5 Hypothesis Test

Through the test against the path coefficient by a parameter estimate of 95% or $\alpha = 0.05$, the test of the hypothesis was carried out. Again, the t-statistic > 1.960 or p-value < 0.05 will indicate the significance of the direct and indirect effects. The findings from the hypothesis testing are displayed in Table 9.

Table 9. Direct Effect

	Standard Deviation (STDEV)	Coefficient	T Statistics (1O/STDEVI)	P Values
X1→Y	0.051	0.052	1.014	0.311
X2 → Y	0.033	-0.012	0.351	0.726
X1 → Z	0.070	0.455	6.549	0.000
X2 → Z	0.089	-0.023	0.264	0.792
Z → Y	0.044	0.815	18.553	0.000

Source: Data processed 2024

The findings of the direct influence test can be explained in Table 9 as follows:

1. The influence of financial literacy on Islamic financial transactions yielded a p-value of 0.311, which is greater than 0.05, and a t-statistic value of 1.014, which is less than the t-table value of 1.960. Therefore, it can be concluded that financial literacy did not have an effect on Islamic financial transactions.

2. The analysis of the impact of religiosity on Islamic financial transactions resulted in a p-value of 0.726, which is greater than 0.05, and a t-statistic value of 0.351, falling below the t-table threshold of 1.960. Therefore, it can be concluded that religiosity did not have an effect on Islamic financial transactions.

3. The influence of financial literacy on Islamic fintech transactions demonstrated a p-value of 0.000, which is less than 0.05, and a t-statistic value of 6.549, exceeding the t-table value of 1.960. Therefore, it can be concluded that financial literacy had a significant positive impact on Islamic Fintech.

4. The analysis of the influence of religiosity on Islamic Fintech yielded a p-value of 0.792, which is greater than 0.05, and a t-statistic value of 0.264, falling below the t-table value of 1.960. Therefore, it can be concluded that religiosity did not have an impact on Islamic Fintech.

5. The influence of Islamic Fintech on Islamic financial transactions demonstrated a p-value of 0.000, which is less than 0.05, and a t-statistic value of 18.553, exceeding the t-table value of 1.960. Therefore, it can be concluded that Islamic Fintech has a significant positive effect on Islamic financial transactions.

Table 10. Indirect Effect

	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Description
X1 → Z → Y	0.062	5.943	0.000	Mediate
X2 → Z → Y	0.073	0.263	0.793	No mediate

Source: Data processed 2024

The findings of the indirect influence test are detailed in Table 10 as follows:

1. The findings indicate that financial literacy significantly impacts Islamic financial transactions via Islamic Fintech, as evidenced by a p-value of 0.000, which is less than 0.05. This suggests that Islamic Fintech serves as a mediator in the relationship between financial literacy and Islamic financial transactions.

2. The impact of religiosity on Islamic financial transactions via Islamic Fintech yielded a p-value of 0.793, which is greater than 0.05; therefore, it can be concluded that Islamic Fintech did not serve as a mediator in the relationship between religiosity and Islamic financial transactions.

5. DISCUSSION

The research results state that Islamic financial literacy has no impact on sustainable Islamic financial transactions in Islamic banks in Saudi Arabia. Thus, H1 (first hypothesis), which states that Islamic financial literacy significantly and positively affects Islamic financial transactions, is declared unsupported, indicating that Islamic financial literacy is incapable to affect Islamic financial transactions.

Financial literacy one factor that may determine the extent of awareness of the existence of financial products and service providers. It is a situation whereby many varied and new financial products come into existence, and individuals must be informed of them more deeply if they wish to use them. Based on the findings of this study, it can be mentioned that financial literacy in society is still low and, therefore, is one of the biggest issues Islamic banks face in increasing the amount of Islamic financial transactions (Khan et al., 2020). In addition, Islamic banks in Saudi Arabia are currently facing several obstacles to rising the financial literacy and inclusion index. Indeed, a number of challenges have been faced, including disparity in the level of education, a lack of curiosity regarding financial products, uncertainty over the legitimacy of the financial products, and uneven dissemination of supporting infrastructure, among others. This aligns with the results of the seminar from the Saudi Central Bank (SAMA) (2023), stating that the Islamic financial literacy level stood at 8.93%, while the National Sharia Economic Literacy Index reached 16.2%. The above figure shows that Sharia economic literacy is still low, although Saudi Arabia holds the record as the nation with the biggest Muslim population. This also reflects the fact that making Sharia economics the mainstream of the economy and Saudi Arabia the center of Sharia economics and financial transactions in Asia remains far off.

The findings of this research corroborate with research by Hakim (2020), Wijanaroko and Rachmawati (2020), and Yeni et al. (2023), who stated that Islamic financial literacy did not impact Islamic financial transactions. However, they contradict the research results of Wijanarko and Rachmawati (2020) and Puji and Hakim (2021), who state that Islamic financial literacy positively and significantly affects Islamic financial transactions.

The research results revealed that religiosity has no effect on sustainable Islamic financial transactions in Islamic banks in Saudi Arabia. Thus, the second hypothesis—religiosity has a significant positive effect on Islamic financial transactions—was unsupported, denoting that religiosity is unable to influence Islamic financial transactions. The influence of religiosity is a fundamental aspect in understanding consumer behavior and shaping their preferences (Khan et al., 2020). Saudi Arabia holds the distinction of having the largest Muslim population globally. Saudi Arabia, a nation with the largest Muslim population globally, has opportunities for Sharia-based economic activities, one of which is sharia finance (Ardiansyah, 2020). However, the reality is that an individual's level of religiosity does not impact him to do Islamic financial transactions. This shows that someone with a high religiosity level and believes that Islam is the source of all legal sources does not necessarily understand the services and products offered by Islamic banks.

The results of this research align with research by Amini et al. (2020) that religiosity does not influence the decision to use Sharia finance.

The research findings state that Islamic financial literacy significantly and positively affects Islamic Fintech. Thus, the hypothesis which states that Islamic financial literacy significantly and positively affects Islamic Fintech, is declared supported. This suggests that Islamic financial literacy is able to affect Islamic Fintech, and Islamic financial literacy is one main element in influencing Islamic financial transactions on Islamic banks in Saudi Arabia.

The availability of access and financial services at institutions, along with various products, aims to enhance the welfare of individuals. The findings align with the theory of reasoned action and the theory of acceptance model, as indicated by the Saudi Central Bank (SAMA) (2023). An individual may hold a viewpoint or understanding shaped by their experiences or skills in making specific choices, leading them to strongly advocate for opinions or decisions that are perceived to offer value and advantages. This is particularly relevant when considering the acceptance of various forms of digitalization or technology within Islamic banking, especially regarding perceived usefulness, practicality, and ease in accordance with Sharia principles.

The research results state that religiosity does not affect Islamic Fintech. Religiosity is a system of beliefs, values, and practices related to the spiritual and transcendental aspects of human life. On the other hand, technology involves the application of knowledge, skills, and tools to design, create, and use goods and services that benefit humans. From the research results, it is concluded that a person's religiosity level does not affect the financial technology development level. This is because the level of technological development is often not welcomed by bank customers, especially elderly customers, so it is difficult for them to adapt to new technology. Apart from that, there is an assumption that what is considered true by religion is not considered true by technology, and vice versa. Technological development cannot be linked to the appreciation and practice of religion because these two things are in different spheres. From the research results, Islamic Fintech significantly and positively affects sustainable Islamic financial transactions with Islamic Banks in Saudi Arabia. In other words, the hypothesis—Sharia fintech significantly and positively affects Islamic financial transactions—is declared accepted; this means that Sharia fintech is able to influence Islamic financial transactions.

Financial technology has brought extensive change to various sectors of the financial industry. Islamic Fintech represents a technology-driven financing service grounded in sharia principles. It is characterized by the delivery of financial services that adhere to Shariah guidelines, facilitating connections between financing providers and recipients to execute financing transactions via an electronic platform. The emergence of Islamic Fintech presents a significant opportunity to enhance economic activities with greater efficiency and effectiveness. Research by Saudi Shariah Supervisory Board (2018) has also been done regarding the utilization of technology in financial services, or what is called Fintech. The result of the study also supports the theory of the acceptance model. With the presence of developments in the digitalization of financial services, it will be easier for a person or society to choose Sharia-compliant activities or services with more variants and options. By examining the value factors and advantages gained, the availability of digitization of Fintech indeed assists a person to decide in financial transactions in Islamic Banks, where they believe that their digital services are according to the Islamic financial system where all of their operations are under the guidance of Islamic principles.

The research results stated that Islamic Fintech mediates the impact of Islamic financial literacy on sustainable Islamic financial transactions at Islamic banks in Saudi Arabia. Thus, the hypothesis stating that Islamic Fintech mediates the impact of Islamic financial literacy on Islamic financial transactions was accepted. This means that testing the impact of Islamic financial literacy on Islamic financial transactions will be better through Islamic Fintech, and Islamic Fintech is an important element in influencing Sharia financial literacy on Islamic financial transaction decisions in Islam in Saudi Arabia.

Fintech has brought considerable change to the various areas within the financial industry. Islamic Fintech is also technology-based financing in general, in which the provision of financial services is characterized by adherence to Sharia principles, facilitating the connection between financing providers and those seeking financing, with the objective of executing transactions through an electronic system. Sharia fintech has opened up new chances to develop economic activities more effectively and efficiently (Saudi Shariah Supervisory Board, 2018). Technological developments and Fintech within Saudi Arabia must be balanced with digital literacy, defined as the capacity to comprehend and apply information obtained from diverse digital platforms. These situations require Islamic financial inclusion, whose purpose is to eliminate all types of barriers, both non-price and price forms, toward the public's access to or utilizing formal financial services in conformity with Sharia. These findings also confirm that three theories, such as the theory of reasoned action, the theory of behavior planned, and the theory of acceptance model, along with the presence of developments in Islamic financial services digitalization, increase the level of a person's abilities in managing their finances well and enhance the abilities to take appropriate actions with good knowledge. The best option to choose is to conduct digital-based Islamic financial transactions through available financial products and/or services. In addition, open accessibility supports the provision of an easy factor for the public and other parties to perceive, make preferences, and make the best decisions in order to consider information to be very suitable, one of which is transaction activities in Islamic banks' financial services and/or products, which are presumed to be particular according to the Islamic law principles.

The growth of banking technology is presently very swift, and almost all banks are competing to always improve their technology. This is, of course, related to current developments and customer demands. Regarding the existence of Islamic Fintech, which is anticipated to mediate the impact of customer religiosity on Islamic financial transactions at Islamic banks in Saudi Arabia, it turns out that it is not as expected. This shows that even though services for Islamic Fintech have been improved, this is still not able to increase customers with a high religiosity level to carry out transactions at Islamic banks in Saudi Arabia. In its development, Islamic Fintech also faces challenges and problems, including a lack of policy instruments that regulate work processes, the availability of human resources, high-security risks, and not yet reaching lower-class consumers (Rusydiana, 2018).

The Saudi Central Bank (SAMA) (2023) recognizes Fintech as an innovation within the financial services sector that leverages technology. Islamic Fintech refers to financial services and products that apply technological innovation in accordance with Shariah principles (Rusydiana, 2018). In Saudi Arabia, the rise of Islamic Fintech reflects growing demand for Shariah-compliant alternatives within a rapidly expanding Fintech ecosystem. Regulatory oversight of Fintech, including Islamic Fintech, is primarily managed by the Saudi Central Bank (SAMA) and the Capital Market Authority (CMA), with Shariah compliance typically ensured through institution-level Shariah supervisory boards. Although Saudi Arabia does not have the largest Muslim population globally, it holds a central role in Islamic finance due to its religious significance and policy support. The increasing awareness among young Saudis regarding ethical and Shariah-compliant financial practices presents a significant opportunity for Islamic Fintech growth in the Kingdom.

6. CONCLUSION

The role of Islamic Fintech, Islamic financial literacy, and religiosity in Islamic banking has received significant attention, but their combined impact on Islamic financial transactions, particularly within Sharia commercial banks in Saudi Arabia, remains poorly understood, and there is a knowledge gap in the research. Previous studies have largely focused on individual aspects such as financial literacy or religiosity in isolation, without considering their interrelationships and potential mediating effects through modern financial technologies. Additionally, the impact of religiosity on technology adoption in the context of sustainable Islamic banking remains underexplored, especially across different cultural contexts. This study intends to address these voids by investigating the complex dynamics between these variables and providing nuanced insights into their interactions and effects on sustainable Sharia financial transactions.

However, the research results state that Sharia financial literacy yields no effect on Sharia financial transactions in Islamic banks in Saudi Arabia; religiosity has no effect on Sharia financial transactions; Islamic financial literacy influences Islamic Fintech; religiosity has no effect on Islamic Fintech; Islamic Fintech influences on sustainable Sharia financial transactions; Islamic Fintech mediates the impact of Sharia financial literacy on sustainable financial transactions and Islamic Fintech does not mediate the influence of religiosity on sustainable Sharia financial transactions at Islamic banks in Saudi Arabia. This indicates that it turns out that customers need to be educated regarding Islamic financial literacy in more depth, including understanding and socialization regarding technology so that they feel that technology makes things easier because it has been proven that a person's religious level towards a religion is not able to influence the level of financial technology of an Islamic bank in Saudi Arabia.

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