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# Role Of Islamic Financial Technology on Sustainable Income with The Mediating Effect of Financial Literacy: Case Study of Pakistan

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**ABSTRACT**

**Background of the Study:** This quantitative study aims to understand the Role of Islamic Financial Technology on Sustainable Income with the Mediating Effect of Financial Literacy. This research focused on how entrepreneurs engaged in FinTech and sustainable their income, as well as financial literacy, work as mediators or not. Various challenges occur during this research, especially in data collection, but this study seeks to explore these challenges.

**Methods:** Data were collected from 200 respondents from different age groups who were entrepreneurs and investors. The questionnaire survey has been used to construct crucial variables such as mobile money, crowdfunding, peer-to-peer lending, financial literacy, and sustainable income. Research philosophy is positivism, and the deductive approach has been used. The time horizon has a cross-sectional pattern.

**Results:** The results of this study support an ironic and exact picture of the variables influencing or not sustainable income in the present financial literacy as a mediator. The results revealed that the obtained PLS model has adequate reliability and validity. All the independent variables have recognized significant relationships towards the dependent variable, but some do not support the dependent variable.

**Conclusion:** Financial literacy was crucial in this study as a mediator, which is considered an essential determinant among observed variables (crowdfunding, peer-to-peer lending, and mobile money) of Islamic FinTech and sustainable income. Besides that, the research has clarified with the existing data that the population of Pakistan needs to be made aware of the characteristics of Islamic FinTech. Financial sectors may use this research's results to improve their financial literacy strategies. Because of a lack of financial education, there is a widespread need to understand financial technologies, applications, and services.

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Fintech, mobile money, crypto currency, peer-to-peer lending, financial literacy, sustainable income.

## Introduction

Financial technology has a very long history. Finance and technology are both interlinked. Today, the subject of FinTech is looking new, but its history started in 1844. The Global Financial Crisis (GFC) in 2008 gave a new dimension to FinTech, which is the reason FinTech is now evolving into a new paradigm (Arner et al., 2016). The origin of FinTech began in 1844; the telegraph was introduced and enabled exchange traders to share market information at unprecedented speed.

In 1865, the early fax machine named the pantelegraph was invented by Giovanni Caselli; at that time, banks used the pantelegraph for verified signatures during banking transactions. In 1866, the First Trans-Atlantic Cable was made to reduce communication time, and in

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1918, FedWire was made to transfer funds between all connected Banks. In the 1950s, credit cards were launched, and in 1960, electronic pricing data was formed for the stock market brokers. ATMs were invented and introduced in 1960; in 1971, the Nasdaq was established and operated as an electronic bulletin board.

From 1972 till 2015 there were many tools were introduced (SWIFT, MIDAS, First online shopper, Electronic Trading Platforms, Cash Machine Networks, LINK, and Matrix cash machine networks merge, Cashback, Internet and e-commerce business models emerge, DotCom Bubble, Direct Trading, Chip and PIN, debit card, Contactless Payments, Version 0.1 of the cryptocurrency Bitcoin and Crowdfunding for startups). Financial services have completed their journey from bookkeeping to the development of central national banks, the system of payments, the introduction of the complex method of asset market, and as well as other financial products (Arthur, 2017). Many industries like retail, telecom, and the internet offered financial services and made easy payment systems to introduce digital wallets. The financial service industry utilises a wide variety of information with more effective and improved methods due to the increasing digitalisation, specialisation, and decentralisation (Cuesta et al., 2015). They found that the FinTech ecosystem has FinTech startups, technology developers, customers in financial sectors, traditional financial institutions, and regulatory bodies. The Shariah board and its scholars have played a vital role in Islamic FinTech, and business partners with the FinTech ecosystem are another essential and necessary segment (Lee & Shin, 2018). In Bangladesh, underdeveloped financial systems have been stable through the divine usage of smartphones, and the impact of the growth of technology on the economy is appreciated. The links between the banks and financial companies through FinTech will create transparency and strong accountability and give potential to Bangladesh's economy and financial sector (M. R. Islam, 2019).

While Pakistan is still working towards overcoming the post-COVID-19 impacts on its health and living sector, technology has enabled millions to endure the long-lasting effects of the pandemic. The country’s local banks have been able to provide judicious aid to the disadvantaged masses of the country through the “Ehsaas” program while using digital platforms and means” (IBS, 2021). FinTech has given financial sectors revolutionary changes and mobile payment technology, promoted online banking systems and introduced cryptocurrencies. and it also provided security and built trust in the financial sector and services through mobile banking because it saves time expenses and connects lenders to customers directly (Ahmad & Mamun, 2020).

Islamic finance's core objectives are fair distribution and mobilisation of resources, inclusion, justice, and financial inclusion in society (Rabbani, Khan, & Thalassinos, 2020). During the pandemic, 70% of the usage of FinTech apps has increased. This crisis has seen unmatched losses, affecting large businesses and SMEs' cash flows and abysmal daily wages (Khan et al., 2021). Transparency has been differentiating Islamic FinTech from Conventional FinTech; Islamic Fintech has given fair benefits to both parties and is Sharia-compliant (Kelana, 2018). Indonesia is the largest Muslim country in the world and the hub of Islamic Fintech; studies have shown that Sharia regulation for Islamic Fintech is insufficient, especially in P2P lending; further regulation improvement will benefit the involved parties (Ulya, 2018). Islamic FinTech faced the most significant challenge by the regulations, which can be resolved by the policy maker and the academic explorative practices and theory (Firmansyah & Anwar, 2018). Islamic finance is based on the principle of Shari’ah, which helped the application


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and alignment of Islamic FinTech. They worked on computability issues of Fintech, which are based on FinTech solutions for the Islamic financial industry (Abu-Bakar, 2017) (Abubakar, Ogunbado, & Saidi, 2018) (Biancone & Radwan, 2019) and (Todorof, 2018).

Pakistan's financial sector faces problems where technology has not been introduced properly to the user. The role of Islamic financial technology on sustainable income has not been completely discovered, and financial literacy has also not been given much importance. There is a vast gap that exists in Pakistani literature reading financial technology as well as Islamic financial technology. Because the investor of Pakistan has a low literacy rate, most business personnel are continuing their forefather's business, and they are not willing to link their business with literacy. So, in absolute terms, no and low literacy means they do not want to discover or adopt new technology, and this is the drawback of Pakistan's business culture. They are more comfortable with their traditional business practices. The study contributes the effect of three Islamic FinTech services and platforms (mobile money, peer-to-peer lending, and crowdfunding) on sustainable income, which has already been analysed by (Azman et al., 2020) and explores the other variables with this existing model of financial literacy as a mediating variable because the micro-entrepreneurs have limited knowledge and education related to technology. This quantitative study aims to understand the Role of Islamic Financial Technology on Sustainable Income with the Mediating Effect of Financial Literacy. This research focused on how entrepreneurs engaged in FinTech and sustainable their income, as well as financial literacy, work as mediators or not. Various challenges occur during this research, especially in data collection, but this study seeks to explore these challenges.

Identifying and exploring problems and analysing the direct and indirect relationship between Islamic FinTech and sustainable growth are required to gain better knowledge, understand action plans, and develop policies for making proper decisions. Identifying actual problems faced by Financial Sectors and implementing reforms could save the business losses and retain the income. The micro financer will get insight into how they improve their financing capabilities and improve or increase their income. The primary data is taken from FinTech users. The analysis and results of the study contributed to overcoming the problems and further findings.

## Literature Review

There are several theories related to technology and businesses. Discuss some of the theories, such as the Technology Acceptance Theory (TAM), the theory of reasoned action (TRA), and the Theory of Planned Behavior (TPB), which were discussed in detail by (Rouibah et al., 2009). Theory of reasoned action (TRA) (Ajzen & Fishbein, 1980) (Fishbein & Ajzen, 1975) (Sheppard, Hartwick, & Warshaw, 1988) and technology acceptance model (TAM) (Davis, 1986) (Davis, Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology, 1989) (Davis, Bagozzi, & Warshaw, User Acceptance of Computer Technology: A Comparison of Two Theoretical Models, 1989) has an influential driven factor which has a solid theoretical background, and literature based on trust and risk. The future is where humans will cultivate knowledge because the 21st century will have lots of challenges with opportunities like global sustainable development, which will not be possible without rapid changes in countries' institutional culture (Lungu, 2019).

### Technology Acceptance Theory (TAM)

The technology transfer model (TAM) is derived from the technology reasoned action (TRA) theory. Three factors- perceived usefulness, perceived ease of use, and attitude toward the use- are the factors


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of TAM that explain users' motivation (F, S, & D, 2011). TAM also defines the perceived usefulness and ease of use on the positive impact on user attitude, and sometimes control and other external variables add-in (the technological acceptance model) TAM model (Jung, 2019). In the business world, technology provides marvellous development, and competition encourages the rapid adoption of technology. Previously, the internet and technology were only used as an exchange of pieces of information, but now, it has been used for increasing the number of business users, competition, profitability, and extent of business (Nugroho, Bakar, & Ali, 2017). The urbanisation rate showed an insignificant relationship with mobile phone connectivity (Lashitew & Tulder, 2019). Studies based in Ghana show that mobile money users have more income than non-users of mobile money because they are more likely to transfer and receive their payments and remittances.

**Crowd Funding**

The positive Relationship between crowdfunding and sustainable projects has been seen in the results, especially in the high rates of loan-based crowdfunding success (Maehle, Otte, & Drozdova, 2020). Another study revealed that crowdfunding is not only the success factor, but other variables ranging from fandom, quality information, project initiators, co-finance and previous success, also included and performed their roles crucial to guarantee their success (Kuzma, 2018). Crowdfunding impacts the sustainability of income or economy, social and environmental sustainability, and established systems following climate change (Climent, Climent, & Oghazi, 2019). The finding identified that financial institutions must build relationships with backers through continuous communication before engaging with crowdfunding and establish a community of potential backers for long-term relationships (Maehle, 2020).

**Peer-to-Peer Lending**

Peer-to-peer lending is not a financial activity but a general lending activity for a specific purpose noted with sustainability-oriented initiatives (Petruzzelli et al., 2019). The nature of P2P is a low credit rating, and the bank has a high credit rating. It creates healthy competition in the segmented market case and opens a window for investors (Yeo & Jun 2020). The expansion of P2P lending has given the economy the right direction, promoted financial inclusion, promoted more businesses and new startups, and established better infrastructure (Oh & Rosenkranz, 2020). The benefit of the banks is that they can make their platform or collaborate with P2P lending firms. This strategy will stop the flooding of investors towards P2P lending, and banks will retain their customers effectively (Thakor, 2019).

**Financial Literacy**

Most of the users of those particular apps fell in the age group of 16-65 years, and they could manage their income and expenditures effectively with the help of technologies (McKillop et al., 2020). Digital financial products (Internet Financial Products, Internet Consumer Products, Internet loans, and crowdfunding) positively correlate with financial literacy (Shen et al., 2018). In developing countries like Tanzania, where males' financial literacy ratio is more significant than females, females cannot make financial decisions. The rich people of Tanzania easily take education, especially financial education, and enhance their financial ability to serve their family, organisation, and country (Lotto, 2020). Financial literacy helps investors make sound financial decisions and helps them invest their savings(Tauni et al., 2017). Lack of financial literacy was the primary reason behind the market crisis of 2008 (Akerlof & Shiller, 2009).


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**Sustainable Income**

Islamic FinTech in covering the multibillion-dollar Islamic social finance pool from Zakat, Sadaqah, and Waqf has been used as an opportunity (Leveraging Islamic Fintech to Improve Financial Inclusion, 2020). In Latin America, financial knowledge is highly correlated with financial well-being, and future policies related to financial education will also help individuals sustain their income, society, and the economy as a whole (OECD, 2018). Financial literacy gives an individual a better lifestyle and a balanced or sustainable financial position (Praveena & Rachel, 2018). Reasonable rates, availability of voluntary saving facilities, frequency of loan collections, and managerial ability best correlate with financial sufficiency, pushing the organisation towards self-sufficiency (Azman et al., 2016).

**Relationship between mobile money and sustainable income**

Mobile money has more potential to reach new heights and will give new solutions to its users for SDGs to be achieved by 2030 (Lopez, Manager, & (GSMA), 2019). Literacy plays a vital role in mobile money transactions; it also helps provide financial services to poor people with low-cost services and eliminates gender bias. This study concludes that the mobile money adoption policy must be revised to promote technological innovation in the financial system and target the low-income population, which is ultimately the youth of Ghana, which is included in developing countries (Amoah & Korle, 2020). Mobile money or payment plays a positive role in sustainable development, and development leads to sustainable income (Pal et al., 2020).

*H1. Mobile money has a significant impact on sustainable income.*

**Relationship between crowdfunding and sustainable income**

Many fraudulent activities have been fueled by empirical evidence, breaking backers' trust in crowdfunding (Dupont & Karpoff, 2019). Because of a lack of information and experts, the victims process or file the case very rarely (Cumming et al., 2020). The positive Relationship between crowdfunding and sustainable projects has been seen in the results, especially in the high rates of loan-based crowdfunding success (Maehle, Otte, & Drozdova, 2020). Suppose firms or creators engaged with Shariah crowdfunding also strictly applied the Islamic Shariah screening process and also fulfilled the Islamic legal formalities. The result shows a strong correlation between crowdfunding and sustainable income (Azman et al., 2020).

*H2. Crowdfunding has a significant impact on sustainable income.*

**Relationship between peer-to-peer lending and sustainable income**

Peer-to-peer lending is not a financial activity but a general lending activity for a specific purpose noted with sustainability-oriented initiatives (Petruzzelli et al., 2019). The nature of P2P is a low credit rating, and the bank has a high credit rating. It creates healthy competition in the segmented market case and opens a window for investors (Yeo & Jun 2020). Islamic FinTech, in P2P lending, has three elements that are strictly prohibited: one is riba' (usury), the second is my sir (gambling), and the third one is gharar (uncertainty). Fixed interest and late payments on the loan are prohibited at all costs (Azman et al., 2020).

*H3. Peer-to-peer lending has an impact on sustainable income.*

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**Relationship between mobile money, crowdfunding, and peer-to-peer lending with sustainable income in the presence of financial literacy**

The researcher worked on finding the relation between technology and financial knowledge/ literacy, and the result found that there is a significant positive relationship between technology and financial literacy (Mabula & Ping, 2018). The author worked on different dimensions, but the most crucial dimension was that future income (salary) depended on the students' financial clients needed to be made aware of their capabilities and market scenario, which is why they agreed to work at low wages and salaries (Artavanis & S, 2020). Data illustrates that the majority of Indians are not aware of financial literacy, so financial inclusion contributes to financial literacy and stability and contributes to economic growth (Tony & Desai, 2020). Financial literacy mediates between Parental Socialization and Financial Planning for Retirement, which shows a positive relationship (Palace et al., 2017).

*H4. Mobile money impacts sustainable income with the mediating effect of financial literacy.*

*H5. There is an impact of crowdfunding on sustainable income with the mediating effect of Financial Literacy.*

*H6. Peer-to-peer lending impacts sustainable income with the mediating effect of financial literacy.*

**Relationship between financial literacy and sustainable income**

Without debt, no organisation run with equity, so Islamic FinTech gives the platform to micro-entrepreneurs running businesses or startups to avail this technology and boost their business and go for sustainable income (Kaplinsky, 2019). Financial well-being or sustainability showed a positive correlation with financial literacy. In Latin America, financial knowledge is highly correlated with financial well-being, and future policies related to financial education will also help individuals sustain their income, society, and the economy as a whole (OECD, 2018). It has a wide-reaching implication for social unit savings and investment behaviour (Gallery, Newton, & Palm, 2011). Financial literacy gives an individual a better lifestyle and a balanced or sustainable financial position (Praveena & Rachel, 2018).

*H7. Financial literacy has an impact on sustainable income.*

The research model mentioned the framework consisting of variables, such as dependent and mediator.

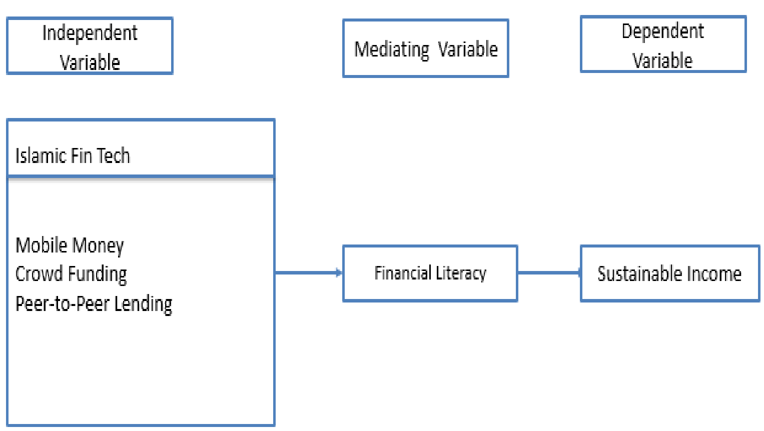


*Figure 01: Conceptual Framework*

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| S. No | Variable Name | Types of Variables | Literature Reference |
|---|---|---|---|
| **1** | Mobile Money | Independent (OV) | (Nik Azman, Md. Zabri, Masron, & Kader Malim, 2020) |
| **2** | Crowd Funding | Independent (OV) | (Nik Azman, Md. Zabri, Masron, & Kader Malim, 2020) |
| **3** | Peer-to-Peer Lending | Independent (OV) | (Nik Azman, Md. Zabri, Masron, & Kader Malim, 2020) |
| **4** | Financial Literacy | Mediating | (Sharif, Naghavi, Nia, & Waheed, 2020) |
| **5** | Sustainable Income | Dependent | (Nik Azman, Md. Zabri, Masron, & Kader Malim, 2020) |

*Table 01: Conceptual Framework with References*

## Research Methodology

The methodology is an essential ingredient of the research; it must be efficiently handled, and to conclude, a methodology has a crucial element (Saunders et al., 2009). The research gives others knowledge so they can make informed and rational decisions (Ryan, 2018). In positivism, the researcher is neutral and independent in the research, and an objective stance has been maintained; the large and highly structured sample size and quantitative methods used but analysed the range of data (Saunders et al., 2009). A deductive approach was used in this research. This study used the mono method and was conducted on a quantitative technique. In this study, the time horizon has a cross-sectional pattern. A survey questionnaire has been the best tool for the collection of data. The questionnaire consists of six different parts. Each part consists of questions related to variables and their effect on sustainable income. In this study, the purposive sampling technique has been used. During this study, 200 questionnaires were distributed because some redundant and incomplete questionnaires were rejected. Different software is available for analysing data in social sciences research; at least two software programs must be used for complete statistical analysis. SPSS and PLS-SEM have been used.

SPSS is not for checking the mediator and moderator variables, and it is challenging to apply SPSS. However, Smart PLS is given the best platform for that model, with one or more mediators and moderators. The demographic of the respondents' profiles was collected from entrepreneurs, lenders, or investors. The mean, mode, and median have been checked through descriptive techniques. All analyses were performed in Smart PLS version 3.2.6, i.e. Structural Equation Modelling (SEM) methods, to examine the research hypotheses (Ringle, Wende, & Becker, 2015). This study applied PLS-SEM to determine the Relationship between exogenous and Indigenous populations, and the study's construvariablesiables were mismeasured (Garson, 2016). In diagnostic tests, reliability, validity, collinearity, and direct and indirect relation between the variables have been tested through Smart PLS.

## Result

The respondent’s personal information is provided in the descriptive analysis as it is used to explain a person’s characteristics (Burns & Bush, 2003).

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| Profile | | Frequency | Percentage% |
|---|---|---|---|
| ***Gender*** | Male | 125 | 62.5% |
| | Female | 75 | 37.5% |
| | | Total= 200 | Total= 100% |
| | < 30 | 137 | 68.5% |
| ***Age*** | 30 – 50 | 58 | 29% |
| | 50+ | 5 | 2.5% |
| | | Total= 200 | Total= 100% |
| | Single | 69 | 34.5% |
| | Married | 82 | 41% |
| ***Marital Status*** | Divorced | 28 | 14% |
| | Widowed | 21 | 10.5% |
| | | Total= 200 | Total= 100% |
| | Student | 89 | 44.5% |
| | Retired | 1 | 0.5% |
| | Self-employed | 27 | 13.5% |
| ***Occupation*** | Un-employed | 12 | 6.0% |
| | Salaried Individual | 71 | 35.5% |
| | | Total= 200 | Total= 100% |
| | Primary – Middle | 2 | 1% |
| | Matriculation – | 28 | 14% |
| ***Education*** | Intermediate | 170 | 85% |
| | Bachelor – Masters | Total= 200 | Total= 100% |
| ***Income*** | < 0.5 M | 112 | 56% |
| | 0.5M – 1M | 54 | 27% |
| | 1M – 3M | 25 | 12.5% |
| | > 3M | 9 | 4.5% |
| | | Total= 200 | Total= 100% |

*Table 02: Respondents' Demographic Profiles*

***Internal Consistency:*** The outer loading results indicated that most values scored above the threshold of 0.7, which showed enough reliability. However, the reliability scores for financial literacy with the values of (0.697) could be better, with value indicators loaded weakly and must be further investigated.

***Convergent validity:*** The item's reliability is commonly measured using Cronbach's alpha coefficients and composite reliabilities. Both values were calculated and offered, indicating an internal consistency in the data (Carlson & O'Cass, 2010). The composite reliability values should be greater than its threshold value, i.e. 0.7, which has been used to assess the reliability of the study (McLure Wasko et al., 2005). The provided acceptable value suggested by the past studies, i.e. 0.7 (Meng-Hsiang, Li-Wen, & Cheng-Se, 2014). The results of composite reliabilities as the rate are above 0.7. These results ensure the reliability of the research (Naylor, Lamberton, & West, 2012) for obtaining convergent validity, which is related to the values of average variance explained (AVE). Convergent validity is achieved if the average variance is more significant than (AVE= 0.50).

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| | Cronbach's Alpha | rho_A | Composite Reliability | Average Variance Extracted (AVE) |
|---|---|---|---|---|
| **Crowdfunding** | 0.828 | 0.829 | 0.879 | 0.593 |
| **Fin Literacy** | 0.713 | 0.722 | 0.822 | 0.536 |
| **Islamic FinTech** | 0.926 | 0.935 | 0.937 | 0.502 |
| **Mobile money** | 0.849 | 0.851 | 0.892 | 0.624 |
| **Peer-to-Peer** | 0.973 | 0.973 | 0.979 | 0.903 |
| **Sustainable income** | 0.799 | 0.852 | 0.880 | 0.711 |

*Table 03: Results of AVE, Cronbach's Alpha, and Composite Reliability Test*

Table 03 offered the determined results of (AVE) for each item. The results mentioned above are all greater than 0.50. According to Hair et al. (2016), if the values of AVE are more than 0.50, it proves there is enough variance in those items, whereas if the values are less than 0.50, it shows some errors in those factors.

***Discriminant Validity (Outer Model Analysis):*** Through empirical criteria, discriminant validity differentiates the level of each construct and describes that each construct is different and unique (Hair et al., 2016). The discriminant validity required for this study, named Fornell-Larcker criterion validity. The below-determined results show that each construct's variance (AVE) is more than the squared values. Thus, the table below shows that it has adequate discriminant validity.

| | Crowdfunding | Fin Literacy | Islamic FinTech | Mobile money | Peer-to-Peer | Sustainable income |
|---|---|---|---|---|---|---|
| **Crowdfunding** | 0.770 | | | | | |
| **Fin Literacy** | 0.560 | 0.732 | | | | |
| **Islamic FinTech** | 0.813 | 0.507 | 0.708 | | | |
| **Mobile money** | 0.581 | 0.363 | 0.798 | 0.790 | | |
| **Peer-to-Peer** | 0.563 | 0.393 | 0.890 | 0.528 | 0.950 | |
| **Sustainable income** | 0.574 | 0.643 | 0.550 | 0.399 | 0.441 | 0.843 |

*Table 04: Fornell-Larcker Criterion*

Discriminant validity by using the Heterotrait-Monotrait (HTMT) ratio of correlations (Henseler, Ringle, & Sarstedt, 2014); it provides an accurate performance comparative to the Fornell-Larcker criterion. The abovementioned results above (Henseler et al., 2014) strongly endorse applying the HTMT criteria for discriminant validity assessment. If the HTMT values are below 0.9, discriminant validity is recognized between the two variables. The HTMT ratio confirmed the existence of discriminant validity among most of the variables except 0.956, 0.929, and 0.900, which are above 0.9. These items correlated too highly because crowdfunding is the observed variable of Islamic FinTech.

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| | Crowdfunding | Fin Literacy | Islamic FinTech | Mobile money | Peer-to-Peer | Sustainable income |
|---|---|---|---|---|---|---|
| **Crowdfunding** | | | | | | |
| **Fin Literacy** | 0.715 | | | | | |
| **Islamic FinTech** | 0.956 | 0.631 | | | | |
| **Mobile money** | 0.690 | 0.460 | 0.929 | | | |
| **Peer-to-Peer** | 0.629 | 0.474 | 0.900 | 0.579 | | |
| **Sustainable income** | 0.704 | 0.811 | 0.646 | 0.472 | 0.505 | |

*Table 05: Heterotrait-Monotrait Ratio (HTMT)*

***Inner Model Analysis:*** Inner model investigation ensures that basic models are built solid and exact. Inner model assessment by determination coefficient (R2). An overview of the quality criteria is shown in table 06.

| | R Square | R Square Adjusted |
|---|---|---|
| **Fin Literacy** | 0.323 | 0.313 |
| **Sustainable income** | 0.414 | 0.411 |

*Table 06: R square and R square adjusted*

The results show that the model formed has R square values, i.e. 0.323 (32.3%) and 0.414 (41.4%). This means that the ability of independent variables to explain the dependent variables (consumer's financial literacy) and (Sustainable income) is about 32.3% and 41.4%.

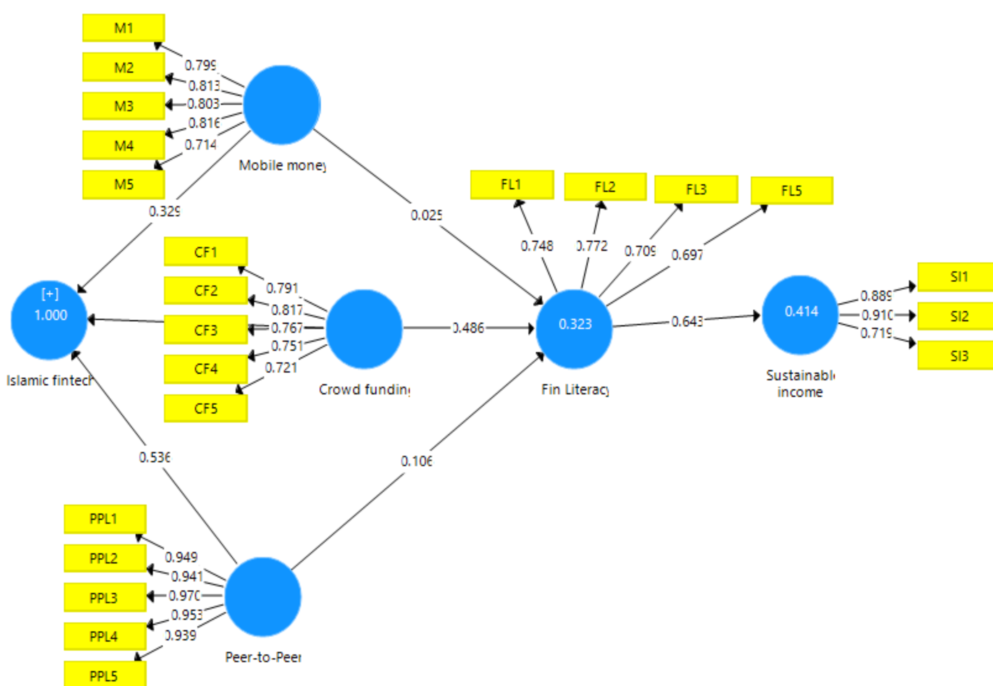


*Figure 02: Inner Model Analysis*

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The bootstrapping procedures were adopted to examine the path coefficients and measure the projected parameters' statistical significance (Hair et al., 2016). According to Hair et al. (2016), the significance level depends on the study's objectives and the field of study. Primarily, researchers use a level of significance of 10% or 5% for their exploratory studies (Hair et al., 2016). Hereafter, this study accepted 10% and 5% levels of significance.

**Testing of Hypotheses:** Hypothesis testing is inspected by looking at the probability value with P-values <0.05 and <0.10. SEM-PLS uses two analyses to test the hypothesis, i.e. direct effect and indirect effect. Table 4.3.1 obtained results for the structural model's path coefficients and hypothesis study.

| | (STDEV) | T Statistics | P Values | Decision |
|---|---|---|---|---|
| Crowdfunding -> Fin Literacy | 0.078 | 6.262 | 0.000 | Supported |
| Crowdfunding -> Sustainable income | 0.061 | 5.129 | 0.000 | Supported |
| Fin Literacy -> Sustainable income | 0.047 | 13.778 | 0.000 | Supported |
| Mobile money -> Fin Literacy | 0.080 | 0.313 | 0.754 | Not Supported |
| Mobile money -> Sustainable income | 0.052 | 0.309 | 0.758 | Not Supported |
| Peer-to-Peer -> Fin Literacy | 0.080 | 1.318 | 0.188 | Not Supported |
| Peer-to-Peer -> Sustainable income | 0.052 | 1.297 | 0.195 | Not Supported |

*Table 07: Path Analysis (Total Effect)*

| | (STDEV) | T Statistics | P Values | Decision |
|---|---|---|---|---|
| Peer-to-Peer -> Fin Literacy -> Sustainable income | 0.052 | 1.297 | 0.195 | Not Supported |
| Mobile money -> Fin Literacy -> Sustainable income | 0.052 | 0.309 | 0.758 | Not Supported |
| Crowdfunding -> Fin Literacy -> Sustainable income | 0.061 | 5.129 | 0.000 | Supported |

*Table 08: Path Analysis (Specific Indirect Effect)*

Path analysis or hypothesis testing elaborate that crowdfunding has a significant impact on financial literacy at (t=6.26 and p=0.000), as well as crowdfunding a significant impact on financial literacy at (t=5.129 and p=0.000). At the same time, financial literacy is positively associated with sustainable income (t=13.778 and p=0.000). Furthermore, mobile money has an insignificant impact on financial literacy at (t=0.313 and p=0.754) as it also shows an insignificant impact on sustainable income (t=0.309 and p=0.758). The mobile money users have more income than the non-users because they are more likely to transfer and receive their payments and remittances. It has been cost-effective, minimised fraud from others, increased financial transactions and participation in the economy, and reduced poverty (Apiors & Suzuki, 2018). Same as above, Peer-to-Peer lending has an insignificant relationship with financial literacy, which is above the 0.05 level of significance (t=1.318 and p=0.188), and Peer-to-Peer lending has an insignificant relationship with sustainable income, which is above the 0.05 level of significant (t=1.297 and p=0.195).

## Conclusion

The mentioned hypotheses were statistically noteworthy and accepted. The results of this study support an ironic and exact picture of the variables influencing or not sustainable income in the presence of financial literacy as a mediator. The provided results revealed that the obtained PLS model has adequate reliability and validity. The role of financial literacy was crucial in this study as a mediator, which is considered an important determinant among observed variables (crowdfunding, peer-to-peer lending and mobile money) of Islamic FinTech and sustainable income. Adding behavioural factors to the TAM model will also give better results and help discover new dimensions. Many researchers have worked previously in this way. The technology acceptance model (TAM) has also discussed different factors. Trust has been one of them, and emotional behaviour has been diagnosed as an issue affecting technology acceptance (Samaradiwakara & Gunawardena, 2014). In the business world, technology provides marvellous development, and competition encourages the rapid adoption of technology. Previously, the internet and technology were only used as an exchange of pieces of information, but now, it has been used for increasing the number of business users, competition, profitability, and extension of business (Nugroho, Bakar, & Ali, 2017).

Besides that, the research has clarified with the existing data that Pakistan's population is not to be made the characteristics of Islamic FinTech. Although the population of Pakistan has been very engaged with the usage of mobile phones, it is very disappointing that the lack of financial literacy makes this engagement unuseful. It is generally seen that the young generation is involved in unhealthy practices of mobile phones and needs to remember their Islamic principles and rules and regulations of life. Family, friends, colleagues, institutions, and Islamic scholars are responsible for promoting the positive usage of mobile phones and technology in younger generations. As with the absenteeism of financial literacy, very few people have knowledge of peer-to-peer lending, which has created financial resources that are unemployed in the economy. With the collaboration of financial institutions/banks, the government of Pakistan and the Higher Education Commission, with the collaboration of financial institutions/ banks, must impose the financial literacy-based subject and course content to respective educational institutions and universities and arrange different seminars, conferences, and workshops based on financial literacy. (Atakora, 2013) Moreover, financial literacy education boosts client behaviour regarding relevant monetary merchandise and services.

The study is laden with specific difficulties with problem assessments in the financial sectors and the association of technology and financial literacy with a sustainable income. First, Pakistan is a developing country that has faced many issues, as well as the literacy rate, which is a significant problem and it continuously affects the growth of the financial sector of Pakistan. Secondly, there are factors other than financial literacy that small entrepreneurs need to know about technology, including investors or customers. They need to be more bothered to accomplish the lack of and overcome this particular weakness. Thirdly, the severe concern in the country is the limited literature need for more interest from investors, limited resources, and the uncooperative behaviour of respondents. In the conservative mindset, people are problem creators, so they have not cooperated and participated in the research. The main problem was time constrain because limited time was given to completing the research work. Meanwhile, further research needs to include more new observed variables of Islamic FinTech better to understand individual sustainable income with different mediators and moderators. Further, the future studies review has highlighted the following issues: enhancing the size of the

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sample for plausible accuracy, the effect of COVID-19, Islamic principles should be considered as the mediator and the inclusion of the longitudinal research for a deeper understanding of the strategy. Moreover, introducing green technology in behavioural finance will add more dimensions to the existing knowledge, thus increasing the reliability of future research conducted in the sphere of Islamic FinTech.

### Author's Contribution:

**Conception or Design:** Ali Tariq
**Analysis or Interpretation of Data:** Ali Tariq
**Manuscript Writing & Approval:** Ali Tariq

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