

Modeling Islamic Finance Adoption for SMEs: Do behavioral intentions and innovativeness matter?**Humaira Asad, Memoona Shaheen***University of the Punjab***Muhammad Aftab***COMSATS University, Islamabad***Abstract**

This study aims to develop a model that explains the Islamic finance adoption by small and medium enterprises (SMEs). We extend the Theory of Planned Behavior by uniting it with the Theory of Diffusion of Innovation. The proposed model examines the effect of innovativeness along with the attitude formation and intention factors towards Islamic finance by focusing on the small and medium enterprises (SMEs). This model was tested by analyzing data from 505 SMEs owners using Structural Equation Modelling. The results show that it is not only the attitude towards Islamic finance and other behavioral factors that determine the intention to use Islamic finance, the innovativeness also matters.

Keywords: Momentum, Portfolio, Winner Stocks, Loser Stocks

While explaining the behavior of microfinance users, traditional theories revolve around quantitative factors such as interest rate, borrowing period, and size of the loan as the key determinants. Based on the rational-maximization principle, these theories explain how the users should choose microfinance, instead of describing how users of microfinance select the microfinance institutions and products. A behavioral anomaly is observed in the borrowing behavior of the small enterprisers in certain countries. Simply, we can state that religion influences the choice of a financial institution. It contributes to forming the attitude and behavior of borrowers towards micro-finance institutions (MFIs). Extensive research explains the impact of religion on the behavior of consumers (Afonso, Cox & Thorpe, 2020; Weill, 2019; Mobin, Masih & Alhabshi, 2017; Bonne, Vermeir & Verbeke, 2009; Khan, Asad & Mahboob, 2017) but a few studies explain the impact of religion on the borrowing and investment behavior. This paper argues that in certain situations economic theory cannot predict the borrower's behavior correctly. The systematic error occurs due to the religion of the borrowers. In this context, the factors that influence the intention to use microfinance will be different. In this paper, we extend the classical determinants of intention to use a product explained by the theory of planned behavior (TPB) to explain the factors that describe the intention to borrow within a population dominated by Muslims living in Pakistan. It is an attempt to explain the determinants of the adoption of microfinance in a society where the selection of the financing institution is driven by the religion of the users.

The concept of microfinance institutions was launched in the 1970s. The objective of setting up microfinance institutions (MFIs) was to provide affordable loans to the poor to help them fight against poverty. Along with the traditional MFIs, many religion-based MFIs also participated in the expansion process. The prominent religion-based MFIs include Christian, Hindu, and Islamic MFIs (Alkhan & Hassan, 2021; Harper, Rao & Sahu, 2008; Mersland, D'espallier & Supphellen, 2013; Mukherjee, 2015; Mansori, Safari & Chin, 2018). Islam forbids borrowing that is not Sharia-compliant. The process is Sharia-compliant when it is according to the rules and regulations defined by the Quran and Sunnah. Islamic MFIs offer Sharia-compliant financing. Sharia-compliant financing is interest-free. It is restricted to financing projects/business activities that are Sharia-compliant. For example, Islamic MFI will not finance a casino or a bar selling alcohol or a restaurant selling food made of pork, etc. In Muslim majority countries, many Muslim entrepreneurs have switched to Islamic MFIs (Mobin, Masih & Alhabshi, 2017; Alandejani, Kutan & Samargandi, 2017).

Small and medium enterprises (SMEs) accelerate the process of economic and social growth in a country. They contribute to generating employment opportunities, developing linkages with the industrial sector, and promoting innovations (Chaudhry, Khalid, & Farooq, 2018; Kiyani, 2017; Gveroski, Risteska, & Dimeski, 2011; Zairani & Zaimah, 2013). These firms make more than ninety-five percent of all business sectors in the world and contribute fifty percent in GDP (Elasrag, 2016). In Pakistan, SMEs play a pivotal role by constituting around 90 percent of the total business sector. They employ above 80 percent non-agriculture labor force (SMEDA, 2020). They contribute substantially to strengthen the business sector. SMEs are considered shock absorbers during periods of financial instability (Khalique, Bontis, Shaari, & Hassan, 2015). Despite having a pivotal role in the strengthening of an economy, SMEs are always short of funding opportunities (Marzban, Yeken, McMillen, & Ozkan, 2015).

Access to finance is still the biggest constraint to the growth of SMEs. This sector is considered unserved and underserved in terms of the provision of credit facilities (Makhlouf, 2017). Although the average growth rate of microfinance is above twenty percent, the usage of formal credit is relatively low (Pearlman, 2012). For SMEs in developing countries, a financing gap of \$ 2.4 trillion is estimated. In addition, around thirty-two percent of potential borrowers in Muslim countries do not borrow from MFIs for them not being Sharia-compliant (Makhlouf, 2017; International Finance Corporation [IFC], 2010). Based on the above information, we can say that there is a huge untapped demand for Islamic microfinance.

The assets of the Islamic finance sector grew by eleven percent (YoY) to US \$2.4 trillion in 2017. The assets increased with a compound annual growth rate (CAGR) of six percent since 2012. This figure is based on data from Islamic finance institutes in 56 countries with Muslims in the majority. These countries are located in the Middle East and South and Southeast Asia. Due to this enormous growth of Islamic finance in Muslim and non-Muslim countries, it has become one of the primary sources of financing for SMEs (Marzban et al., 2015; Amin et al., 2011). Advances in financial technology and crowdfunding have led Islamic financial institutions to show a CAGR of 4% since 2012 (Makhlouf, 2017; Thomson Reuters, 2018).

Previous studies have attempted to investigate the behavior of individual investors towards Islamic finance (Amin et al., 2011; Bangash, Khattak, & Khan, 2019; Tara, Irshad, Khan, & Yamin, 2014). Research studies focusing on Islamic finance report that halal attitude and subjective norms help in explaining the intention to use Islamic banking (Butt & Aftab, 2013; Sulaiman, Mohammad & Hassan, 2016). These studies are mainly based on the theory of reasoned action (TRA) and the theory of planned behavior (TPB). The present study identifies the determinants of the behavior of small and medium enterprises towards Islamic finance in the context of an emerging country with Muslims in the majority. The behavioral intentions are explained through the theoretical lens of the theory of planned behavior (TPB; Ajzen, 1991) and the theory of diffusion of innovation (discussed below).

The remaining sections of this paper are arranged as follows. After providing an introduction, the conceptual framework and hypotheses tested in this study are presented. The subsequent sections present the research methodology, results of the study, and discussion of the results. In the end, the conclusion, implications of the results, and future research areas are presented.

Conceptual Framework and Hypotheses Development

Islamic finance has extended its network to almost all parts of the world. Many studies have been conducted to explain the borrowing behavior of SMEs in the context of conventional banks. According to these studies, the key determinants include the size of the bank, service quality, the reputation of the bank, pricing, and entrepreneurial alertness (Fatima & Bilal, 2020; Gerrard & Cunningham, 2000; Lam & Burton, 2005). Recent studies on microfinance reveal that some firm owners do not borrow money from conventional financing institutions due to religious convictions. For example, in Pakistan, approximately 20 percent to 25 percent of SMEs do not borrow from conventional banks due to religious reasons. It means that the demand for funds remains untapped due to the available funding opportunities not being Sharia-compliant (Makhlouf, 2017).

Previously, the behavioral preferences towards financing based on profit and loss sharing were investigated by analyzing data from Australian small businesses and financial institutions (Jalaluddin & Metwally, 1999; Jalaluddin, 1999). These studies identified behavioral factors including business support, risk sharing, risk of default, and cost of borrowing as the main

determinants of selecting microfinance institutions. Later on, research studies demonstrated that knowledge and awareness, religious obligation, cost benefits, business support, and reputation of a bank were the main determinants of the intention to use Islamic microfinance (Jaffar & Musa, 2014; Tara et al., 2014). Subsequently, the religiosity of the borrower was recognized as a key determinant of the preferences towards Islamic micro-financing (Riaz, Khan & Khan, 2017).

The theoretical framework of this study is an extension of the theory of planned behavior (Ajzen, 1991). This theory contends that attitude towards a product, subjective norms, and perceived behavioral control help in determining the intention to adopt a product. This theory has been extensively used to predict an individual's behavioral intent, but in this study, we have used it to explain the intentions to adopt products and services offered by Islamic financing institutions (IFIs) by small and medium enterprises. Sulaiman, Mohammad, and Hassan (2016) investigated the factors that determine the intention to adopt Islamic banking. The study identified that attitude towards Islamic banking and subjective norms help in explaining the intention to use Islamic banking. This investigation is based on the theory of reasoned action. The theory of reasoned action purports that behavioral intention depends on two factors, namely attitude and subjective norms (Fishbein, 1979). The theory of planned behavior (TPB) is an advancement over the theory of reasoned action (TRA). The TPB considers perceived behavioral control as an additional determinant of the behavioral intention of an individual. The theoretical model of this paper is anchored in TPB. It is appropriate to use this theory for small and medium enterprises because many studies have applied TPB to explain firm-level behavioral intentions (Sarmah, Sharma, & Gupta, 2017; Jin, Littrell, & Niehm, 2012).

After a careful review of the studies carried out to explain the factors that explain the intention to use Islamic finance can be classified into two major categories. Multiple studies identify the factors that explain the factors considered by customers borrowing from Islamic financing institutions mostly banks for personal usage. Most of these studies use the Theory of Reasoned Action (TRA), Theory of Planned Behavior (TPB), or both. Data comes from a Muslim majority country. The estimation techniques of Confirmatory Factor Analysis (CFA), Structural Equation Modelling (SEM), or Smart Partial Least Squares (Smart-PLS) are employed to estimate the proposed models. All studies consider multiple sets of behavioral factors responsible for explaining the intention to borrow from an Islamic bank. These factors include attitude, religiosity, awareness, subjective norms, perceived behavioral control (Aziz & Zahra, 2018; Bananuka, Kasera, Najjemba, Musimenta, Ssekiziyivu, & Kimuli, 2019; Jamshidi & Hussin, 2016; Possumah, Appiah, & Hilmiyah, 2018; Raza, Shah, & Ali, 2018).

The second category of studies includes research investigations that focus only on the borrowing behavior of the managers/owners of small and medium enterprises (SMEs). These studies are based on TRA, TPB, or both. The techniques of CFA, SEM, and Smart PLS are used depending on the size of the datasets used. Various behavioral factors such as motivation and religious commitment, knowledge, and awareness, the reputation of the Islamic Financing Institution, its usefulness, and its organizational culture are presented as the main determinants of the borrowing intentions by SMEs.

It is observed that whether a financial institution is a conventional or Islamic Sharia-compliant, it competes to optimize in terms of its operations and performance. The adoption of advancements of technology has become an essential ingredient to survive in today's cut-throat competitive environment and banks are no exception (Aziz & Samad, 2016). To gain a competitive advantage, financial institutions have to participate in the process of the adoption of technology. We contend that the fact that Islamic financial institutions (IFIs) are offering Sharia-compliant borrowing facilities to SMEs is not sufficient to intensify the intention to borrow from the IFIs; the borrower also considers whether the operations are easy and technologically viable particularly when much-improved technology is being used by the conventional alternatives. It is therefore important to measure the effect of innovativeness in the financial products and services offered by the IFIs along with other behavioral factors to explain the intention to borrow for SMEs from IFIs (Al Balushi, 2019; Jaffar, & Musa, 2014; Jaffar, & Musa, 2016; Qoyum, & Fauziyyah, 2019; Rasheed, Siddiqui, & Rahman, 2018; Sattar, Hamza, & Moghar, 2020).

We extend the TPB to explain the determinants of the intentions of SMEs towards Islamic finance in the present highly competitive environment. With the rapid advancements in the technology used to provide financial services commonly known as FinTech, financial institutions are putting a lot of focus on innovating the products and services (Nicoletti & Nicoletti, 2017). 'FinTech' can be defined as a technology-based innovation that leads to the development of new business

models, applications, processes, products, or services. Innovation has a direct effect on financial institutions, their products, and the services they render (Kaur, Ali, Hassan, & Al-Emran, 2021; Schindler, 2017). We argue that while selecting a micro-financing institution, the borrowers consider the extent of innovativeness of the products and services it renders. This phenomenon is explained by the theory of diffusion of innovation. It states that individuals adopt innovations due to four factors. These include the innovation itself; the communication channel followed to inform about the innovation; the time, the innovation was made; and the social influence made by the innovation (Dearing & Cox, 2018). Applying this theory in our context, it is stated that entrepreneurs of small and medium enterprises may use the products and services offered by Islamic banks if they consider them innovative. This forms another important aspect of the proposed Islamic finance adoption model.

Hypotheses Development

According to the TPB, attitude towards a behavior means a global predisposition for or against the development of such behavior. According to Jalaluddin (1999), attitude depends on the level of awareness towards Islamic products and services, religious obligations, business support provided by the Islamic financing institutions, cost-benefit analysis, and reputation of the products and services. The attitude towards a product is determined mainly by the belief of a customer. Belief is defined as a person's or groups' conviction or stimulated views about something (Fishbein & Ajzen, 1975). In this study, five elements of belief are considered. These include awareness and knowledge, religious obligation, awareness of Islamic financing products, reputation, business support, and cost benefits. Awareness means having know-how or familiarity with an object or a condition. Knowledge, on the other hand, is defined as a deeper understanding of the theoretical or practical aspects of a concept (Rana, Slade, Kitching, & Dwivedi, 2019). Research studies show that when people are more familiar with the available options for financing and they have a better understanding of the available products, they show a greater intention to use them (Wahyuni, 2012). Considering this relationship, we hypothesize that:

H1: A greater level of awareness and knowledge of products offered by IFIs have a direct relationship with the positive attitude towards these products and services.

Religious obligation can be defined as the impact of religion on people's opinions and actions. In a Muslim society, the choices and selection of options are influenced by religion to a great extent (Amin, Rahim, Sondoh & Hwa, 2011; Sulaiman, Mohammad, and Hassan, 2016). Existing literature supports the notion that religious obligation molds the attitude towards a product (Han, Yeoh, & Ahmad, 2018). Extending this linkage, Gait and Worthington (2009) identified religious obligation as the key determinant of attitude towards Islamic financing products and services. Realizing this relationship, Islamic financial institutions develop such products that comply with the Shariah teachings. This helps them to cater to the needs of the borrowers driven by religious obligation. Based on the above discussion we hypothesize the following.

H2: There is a direct relationship between religious obligation perceived by a borrower and his attitude towards an IFI.

Islamic financial institutions like their conventional counterpart provide support to their corporate clients. The business support provided by the Islamic and conventional banks is classified as 'Money related bolster' and 'non-monetary bolster.' The money-related bolster is in the form of money such as the provision of working capital, property credit, etc. Non-monetary bolster includes provisions that are non-monetary for example, counseling, training programs, appropriation, and innovative work (Yusoff & Yaacob, 2010). It has been observed that Islamic financing institutions provide monetary and non-monetary support to facilitate the enterprises to run their businesses smoothly and to promote business innovation and development (Gait & Worthington, 2008, 2009). We theorize that if a bank offers more support to the enterprisers, more of them will prefer to become its clients. Hence, we hypothesize that:

H3: There is a positive association between business support offered by an IFI and the attitude towards that institution.

When a financial product is chosen, the borrowers evaluate the costs and benefits associated with that product. They consider the terms and conditions, the cost of borrowing, service charges, repayment structure, expected rate of return, etc (Al-Ajmi, Hussain, & Al-Saleh, 2009). IFIs strive to maintain a balance between the costs they charge and the costs charged by the conventional alternative. Some research studies have indicated that IFIs are less cost-effective as compared to conventional banks (Dusuki, 2008; Hassan, 2008). Some studies indicate that

borrowers of IFIs give more significance to the products being transparent and Shariah-compliant and give less importance to the costs associated with borrowing from IFIs (Amin, Rahim, Sondoh & Hwa, 2011; Amin, 2008). It is, therefore, important to know how the associated costs and benefits influence the attitude towards IFIs. Hence, we hypothesize:

H4: There is a direct relationship between the cost and benefits offered by an IFI and the attitude towards it.

The reputation of a bank is considered an important determinant of the intention of using its products and services. It is considered as a central insight into the credibility, social responsibility, trustworthiness, and reliability of a financing entity. Grittersová (2014) provided evidence to show that the reputation of a bank plays a pivotal role in bringing business. Dusuki and Abdullah (2007) and Dusuki (2008) have indicated that Islamic banks should spend more on social purposes to build upon their reputation. This will help to motivate people to do more business with Islamic banks. Hence,

H5: The reputation of a financial institution is positively associated with the attitude towards that financial institution.

Many studies that explain intention to use a product identify attitude as one of the major determinants (Hansen et al., 2018; Um, 2019; Echchabi & Olaniyi, 2012; Shah Alam, & Mohamed Sayuti, 2011; Joynathsing & Ramkissoon, 2010). Attitude towards something places a lot of influence on a borrower when he has to choose between the borrowing options. In this context, TPB states that intention to use something depends on the positive or negative attitude towards that object (Ajzen, 1991). Several attempts have extended TPB to explain how attitude influences the expectation to use a financial product (Echchabi & Olaniyi, 2012; Taib et al., 2008; Amin & Chong, 2011; Amin et al., 2011). Hence, we develop the hypothesis.

H6: Positive attitude will lead to a greater intention to borrow from IFIs

Subjective norms can be defined as the behavior formed due to social pressure. It is observed that social norms influence the behavior of an individual. This particular effect is described in TPB. Many studies support the presence of the impact of social conditions on the behavior of individuals (Fishbein & Ajzen, 1975; Pedersen, 2005; Taylor & Todd, 1995; Armitage & Conner, 2001). Some studies indicate that subjective norms play a vital role in making choices for personal finance (Amin et al., 2011). In a Muslim society, when it comes to borrowing, people are compelled to borrow finance that is in line with their religious teachings. According to Islamic law (Shariah), financial institutions cannot charge interest on loans. In addition to this restriction, there are several other compulsions that the IFIs have to comply with. The selection of Islamic financial instruments (Shariah-compliant) may be due to internal factors i.e. religious obligation or because of social pressure i.e. social norms. There is a provision that a person develops an intention to borrow from an IFI inspired by both internal and external factors. We have covered the impact of religious obligation in H2. To see the impact of subjective norms on the intention to borrow from an IFI, we formulate:

H7: Subjective norms are directly associated with a greater intention to borrow from IFIs.

Perceived behavioral control alludes to the view of solace or inconvenience to perform conduct (Ajzen, 1991). It means that if an entrepreneur needs money, he can choose a source of funding on his own. Hence, if a person perceives that he has greater control to decide on his own, there are greater chances that he will go for Islamic finance. Numerous studies in a milieu of financial services have shown a generous effect of perceived behavioral control on intention (Brown, Hays, & Stuebs Jr, 2016; Kashif, Zarkada, & Ramayah, 2018; Lu, Tzeng, Cheng, & Hsu, 2015; Rutherford & DeVaney, 2009). This study proposes that,

H8: A greater perceived behavioral control is associated with a greater intention to use goods and services from IFIs by SMEs.

Innovativeness represents the firm's inclination and receptiveness towards new ideas (Li, Xia, & Zajac, 2018). The term financial innovativeness means the development and application of new financial instruments and new financial technologies. Due to immense development in the field of information technology, significant changes have been observed in the financial sector. Several attempts have been made to investigate the role played by financial innovativeness. It has been observed that due to the advancements in information technology and the realization that a bank can survive in increasing competition through innovations, several financial instruments have been developed (Cherotich, Sang, Shisia, & Mutung'u, 2015; Ignazio, 2007). Financial innovation implies the development of new financial instruments, financial technologies, and markets (Tufano, 2003). It is defined as the development and implementation of financial processes and products

(Kaur, Ali, Hassan, & Al-Emran, 2021; Gomber, Kauffman, Parker, & Weber, 2018). The development of the financial sector can be classified as the development of new products, new services, new processes, and new organizational structures (e.g., e-banking, an electronic exchange for trading securities) (Ignazio, 2007). Examples of financial innovations include electronic banking, fund transfers, mobile banking, one-link ATMs, etc. It has been observed that innovations in the financial sector are now considered essential for the development and competitiveness of a financial institution. Realizing the significance of innovativeness, Islamic financial institutions have incorporated new technologies in their operations like their conventional counterparts. In addition to this, many new products have been developed and are being implemented successfully. If a bank develops new instruments and new techniques that can provide better solutions to the small and medium enterprises, they will show a greater intention to use products that are specifically developed to cater to their needs. Hence, we hypothesize that

H9: Innovativeness in financial instruments and services is positively associated with the use of goods and services from IFIs by SMEs.

Research Methodology

To estimate the proposed adoption model given in Fig. 1 and to test the hypotheses presented above, data was collected through a questionnaire specifically developed for this study. A qualitative study was carried out to collect information necessary for the construction of the questionnaire. Ten in-depth interviews were conducted to identify the behavioral factors considered by the small and medium entrepreneurs based in Lahore. We have followed the classification of small and medium enterprises defined by the Small and Medium Enterprises Development Authority (SMEDA, 2020). According to SMEDA, an enterprise will be classified as a small and medium enterprise if the number of employees is less than or equal to 250, paid-up capital is up to PKR 25 million or annual sales are up to PKR 250 million (SMEDA, 2020). The questions were asked within the scope of the study and were focused on the factors that explain the adoption behavior towards Islamic finance. Next, a review of relevant studies was carried out to construct the proposed model.

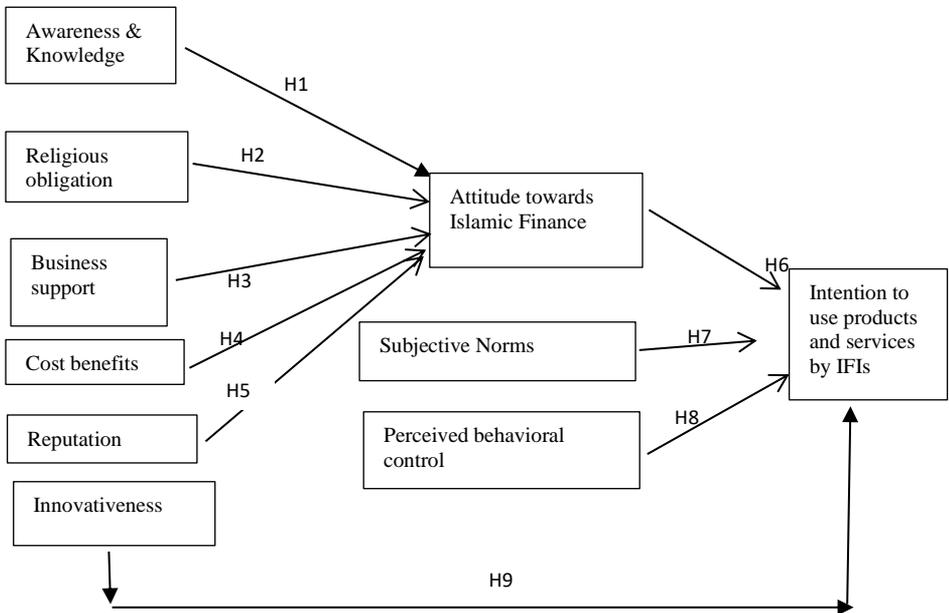


Figure 1. Islamic finance adoption model

A questionnaire was developed using established scales and in the light of the themes identified by the entrepreneurs interviewed for this purpose. The list of small and medium enterprises was obtained from Jamal's Yellow Pages (2020). Six hundred small and medium enterprises (SMEs) were selected randomly. The selected enterprises were based in all the major cities of Pakistan, namely Lahore, Islamabad, Gujranwala, Karachi, Gujrat, and Sialkot.

A pilot study was carried out to test the questionnaire. Twenty enterprisers were requested to fill the initial draft and their feedback was used to refine the questionnaire. The final version of the questionnaire comprised of two sections. Section I comprised nine questions based on the demographic information of the respondents such as age, income, education, religion, gender, etc. Section II comprised questions based on the eight variables shown in Fig 1. To measure awareness and knowledge of Islamic financial products, five items were used. These items were taken from Pikkarainen, Pikkarainen, Karjaluoto, and Pahnla (2004) and Amin et al. (2011). For the measurement of reputation, four items were taken from Kennington, Hill, and Rakowska (1996). Business support and cost benefits were measured using five and four items respectively from the scale developed in Jaffar and Musa (2014; 2016). For the measurement of religious belief, scales developed by Metwally (1996) and Amin et al. (2011) have been used. Religious belief is measured by using five items. To quantify innovativeness, four items are taken from the scale developed by Hurley, Hult, and Knight (2005). Five items from the scale developed by Ajzen and Fishbein (2000), Lada, Tanakinjal, and Amin (2009) were used to measure attitude towards Islamic finance. For the measurement of perceived behavioral control, four items from Ajzen and Fishbein (2000) were employed. Subjective norms were measured by taking four items from the scales developed by Taib, Ramayah, and Razak (2008) and Ajzen and Fishbein (2000). The three-item scale used to measure intention to use Islamic finance is an adaption of the questions used in the scale developed in Ajzen and Fishbein (2000). All variables are measured using a seven-point Likert scale, where point 1 stands for "strongly disagree" and point 7 indicates "strongly agree." The final version of the questionnaire was distributed by visiting each of the six hundred SME owners. Each respondent was briefed about the objective of the research. The questionnaires were personally administered. The collection of data through questionnaires was started in March 2018. It took four months to complete the data collection. After initial screening, data from 95 questionnaires were dropped because of having insufficient data. The data from the remaining 505 questionnaires were used for analysis.

Research results

Quantitative research techniques were applied to test the nine hypotheses stated above. The demographic profile of the sample is presented in Table 1. Out of 505 respondents, 496 (98 percent) entrepreneurs are males and only nine are females. This indicates that in Muslim countries like Pakistan, a relatively less number of females manage to set up their enterprises. Looking at the age distribution, it has been observed that 202 (40 percent) respondents are in the age group of 20 to 30 years. One hundred and seventy-five entrepreneurs are in the age group of 31 to 40 years. There are 62 and 63 respondents in the age categories of 41 to 50 years and 51 to 60 years' categories. Only three respondents were above 60 years of age category.

Table 1. *Demographic Profile of the Sample*

Variable	Frequency	Percentage
Gender		
Male	496	98
Female	9	2
Age		
20-30 years	202	40
31-40 years	175	34.6
41-50 years	62	12.3
51- 60 years	63	12.5
> 60 years	3	0.6

Annual sales

< PKR 250,000	42	8.3
PKR 250,000 - PKR 500,000	38	7.5
PKR 500,000 - PKR 1 Million	55	10.9
PKR 1 Million - PKR 25 Million	102	20.2
PKR 25 Million - PKR 250 Million	269	53.3

Educational Qualification

Intermediate Level	9	1.8
Graduation	93	18.4
Post Graduation	398	78.8

Next is the profiling of entrepreneurs in terms of annual sales. It has been seen that only 42 respondents had an annual turnover below PKR 250,000. Thirty-eight respondents are having an annual turnover between PKR 250,000 and 500,000. Fifty-five SME owners are having their annual turnover between PKR 500,000 and one million. There are 102 SME owners with a sales turnover between PKR 1 and 25 million. The remaining 269, which makes 53.3 percent of the data fall in the annual sales turnover between PKR 25 and 250 million. The educational details show that most of the respondents 398 (78.8 percent) were having postgraduate-level education, few have intermediate-level education (1.8 percent). Ninety-three SME owners are graduates. It can be seen that the sample is quite diverse in terms of age, educational qualifications, and size of the enterprise in terms of annual sales.

To estimate the Islamic finance adoption model, Structural Equation Modeling (SEM) was applied. This will help in determining the impact of behavioral factors and innovativeness in explaining the adoption of Islamic financing by small and medium enterprises. Initially, Confirmatory Factor Analysis (CFA) was conducted using the data from the SME owners to validate the psychometric properties of the scales applied in this study. It also helps in assessing the composite reliability, convergent and discriminatory validity of the constructs. Then, the structural model was estimated. For demographic analysis, reliability analysis, CFA, and estimation of structural model shown in Fig. 1, SPSS v-22 and AMOS were used.

Confirmatory factor analysis

The Confirmatory Factor Analysis (CFA) using maximum likelihood estimation techniques was performed to verify the factor structure of the ten unobserved variables given in Fig. 1. Table 2 details the results of CFA. The factors, their items, the corresponding standardized regression, along their p-values are given in columns 1 to 4. Column 3 presents the standardized regression weights. A scale has convergent validity if the standardized regression weights of all its items are greater than 0.5 (Steenkamp & Van Trijp, 1991). The items with standardized regression weights greater than or equal to 0.5 were retained. The items with standardized regression weights less than 0.5 were dropped. Following this principle, item 4 of reputation, item 5 of business support, items 3 and 4 of religious obligation, items 4 and 5 measuring innovativeness, and items 4 and 5 measuring intention to use Islamic finance were dropped. The remaining items measuring the given latent variables confirm that the scales used to measure these variables show convergent validity. The reliability indicators (Cronbach's alpha values) for all factors are given in Column 5. The values of Cronbach's alpha of all constructs are greater than 0.7. A construct is considered reliable if the value of Cronbach alpha exceeds the minimum threshold value of 0.7 (Nunnally, 1978). It means that all constructs employed in this study show internal consistency or composite reliability. Columns 6 and 7 show the Average Variance Extracted (AVE) and the square root of AVE of the constructs explaining the Islamic finance adoption model. A construct has convergent validity if the square root of the average variance extracted (AVE) is equal to or greater than 0.7 (Fornell & Larcker, 1981). By considering the square root values of average variance extracted (given in column 6), it is concluded that the constructs show convergent validity.

In the last column of Table 2, the goodness of fit indices are presented. The chi-square value divided by degrees of freedom is less than 3 ($\chi^2 = 1992$, $df = 933$, $\chi^2/df = 2.521$; p -value =

0.000). This shows that the measurement model is a good fit. Comparative Fit Index (CFI) of the measurement model is equal to 0.921, NNFI is 0.908, and RMSEA=0.04 < 0.08 which are in line with the threshold values given by Cheung and Rensvold (2012) and MacCallum, Browne, and Sugawara (1996). The indicators of goodness of fit indicate that the psychometric properties of the scales are validated.

Table 2. *Confirmatory Factor Analysis*

Factor	Indicator	Standardized Regression weights	p-value	Composite Reliability	Average Variance Extracted (AVE)	Square root AVE	Goodness of Fit Indices
				CR > 0.7	≥ 0.5	≥ 0.7	
Awareness & Knowledge	KA_1	0.886		0.799	0.528	0.727	χ^2 (933)=1992
	KA_2	0.934	***				(p=0.000)
	KA_3	0.576	***				$\chi^2/df = 2.521$
	KA_4	0.868	***				CFI =0.921
Religious Obligation	RO_1	0.991		0.894	0.686	0.828	NNFI =0.908
	RO_2	0.992	***				RMSEA = 0.04
	RO_5	0.566	***				
Cost Benefit	CB_1	0.741		0.8	0.501	0.701	
	CB_2	0.86	***				
	CB_3	0.915	***				
	CB_4	0.888	***				
Business Support				0.914			
	BS_1	0.839			0.729	0.854	

	BS_2	0.88	***			
	BS_3	0.676	***			
	BS_4	0.567	***			
Reputation	R_1	0.758		0.815	0.521	0.721
	R_2	0.89	***			
	R_3	0.818	***			
Innovativeness	Inn_1	0.833		0.824	0.578	0.76
	Inn_2	0.913	***			
	Inn_3	0.863	***			
Attitude	Att_1	0.627		0.863	0.56	0.748
	Att_2	0.786	***			
	Att_3	0.772	***			
	Att_4	0.797	***			
	Att_5	0.746	***			
Perceived Behavioural Control	PBC_1	0.685		0.84	0.572	0.756
	PBC_2	0.83	***			
	PBC_3	0.865	***			
	PBC_4	0.618	***			
Subjective Norms	SN_1	0.808		0.867	0.624	0.79

	SN_2	0.889	***			
	SN_3	0.835	***			
	SN_4	0.596	***			
Intention to Use Islamic Finance	IntN_1	0.775	***	0.923	0.801	0.895
	IntN_2	0.975	***			
	IntN_3	0.923	***			

Table 3 presents the correlation coefficients between the latent variables. The correlation coefficients between the antecedents show the presence of weak association among themselves. This shows that the scales have discriminant validity. Attitude, perceived behavioral control and subjective norms show a relatively stronger relationship with intention to use Islamic finance. In the last two rows, the values of mean and a standard deviation for each latent variable are given. Mean values of awareness and knowledge and religious obligation are 5.52 and 5.01 respectively. For cost benefits, business support and reputation mean values are 3.83, 4.43, and 4.21. The mean values for innovativeness, attitude, perceived behavioral control and subjective norms are 4.47, 4.61, 4.71, and 4.78. The mean value of intention to use Islamic finance (not given in Table 3) is 4.5 with a standard deviation of 1.6. All items are measured on a seven-point Likert scale. The mean values of all variables vary from 3.83 to 5.52 with a standard deviation varying between 1.0 and 1.67. This means that the overall responses show a slight tilt towards the positive side on average.

Structural model

After validating the scales, the proposed Islamic finance adoption model was estimated using the structural model. Table 4 presents the results of the structural model.

Table 3. Correlation between the Constructs

	Awareness & Knowledge	Religious Obligation	Cost Benefit	Business Support	Reputation	Innovation	Attitude	Perceived Behavioral Control	Subjective Norms
Religious Obligation	0.380**								
Cost Benefit	0.072**	0.282**							
Business Support	0.227**	0.443**	0.427*						
Reputation	0.200**	0.366**	0.442*	0.517*					
Innovation	0.217**	0.289**	0.301*	0.438*	0.447*				
Attitude	0.251	0.469**	0.441*	0.491*	0.507*	0.394*			
Perceived Behavioral Control	0.221	0.451**	0.276*	0.395*	0.388*	0.296*	0.582*		
Subjective Norms	0.103	0.097*	0.142*	0.161*	0.150*	0.092*	0.194*	0.228**	
Intention to Use Islamic Finance	0.121	0.422**	0.229*	0.261*	0.316*	0.228*	0.486*	0.613**	0.55*
Mean	5.52	5.01	3.83	4.43	4.21	4.47	4.61	4.71	4.78
S.D.	1.423	1.374	1.556	1.21	1.265	1.072	1.217	1.67	1.335

**Correlation is significant at the 0.01 level (2-tailed).

Discussion

The estimated results show that awareness and knowledge of Islamic financing goods and services, religious obligation, the support provided by Islamic financing institutions, cost, and benefits analysis, and reputation of an institute all play a positive and significant role in building a positive attitude towards Islamic financing products and services. Hence, the hypotheses H1, H2,

H3, H4, and H5 are supported by empirical evidence. The result for H1 is in line with the results obtained by Amin et al. (2011), and Metwally (1996). H3 postulates that greater business support has a positive influence on attitude towards Islamic finance. This hypothesis is accepted. This result is in accordance with the findings of Tara et al. (2014) and Marimuthu, Jing, Gie, Mun, and Ping (2010). H4 theorizes that a better cost and benefits analysis for a financial product has a positive effect on building a positive attitude towards that product. This finding is in line with the results of Amin et al. (2011) and Amin (2008). H5 postulates that having a good reputation helps a financial institution to build a positive attitude towards its products and services. This postulate is supported by $\beta=0.43$ ($t=4.933$, $p<0.05$).

H6 theorizes that a positive attitude towards Islamic finance has a positive influence on the intention towards Islamic finance. It is accepted with $\beta=0.62$ ($t=4.039$, $p<0.05$). It is consistent with previous studies (Abduh, Omar, & Duasa, 2011; Lada et al., 2009; Ramayah, Jantan, Mohd Noor, Razak, & Koay, 2003; Amin, et al., 2011). H7 hypothesized that subjective norms have a positive influence on intention to use Islamic financing products and services. The results show that H7 is supported by the results with $\beta = 0.53$ ($t=11.331$, $p<0.05$). This result is consistent with the findings of Amin et al. (2011), Abduh et al. (2011), Lada et al. (2009), and Jaffar and Musa (2014). H8 postulates that greater behavioral control has a positive influence on the intention to use Islamic financial products and services. The results show that the hypothesis is supported with $\beta = 0.50$ ($t=2.613$, $p<0.05$). H9 postulates that the innovativeness of a financial institution in terms of its products and services has a positive influence on the intention to use Islamic finance and it is accepted. The results show that $\beta = 0.39$ ($t=2.081$, $p<0.05$).

The study confirms the role of the theory of planned behavior and the theory of innovation diffusion in identifying the factors that explain the behavior of small and medium enterprises towards Islamic finance. The entrepreneurs not only consider the factors considered by the borrower of a conventional financial institution but also takes into account his religious obligation and reputation of a financial institution while deciding to do business with an Islamic financial institution. For an entrepreneur, it is very important whether an Islamic financial institution is truly Islamic (Sharia-compliant) or not. Due to the rapid development of information technology, an entrepreneur also considers the extent to which the products being offered are technically new and sound. Moreover, cost benefits, reputation, and business support are observed to be the most vital determinants as indicated by respondents' observation. Serving the clients as per their needs and requests will enable them to expand their market share. This study can be extended in the future by examining the factors significant for Muslim and non-Muslim entrepreneurs for the selection of Islamic finance.

Conclusion, Implications of Results and Recommendations for Future Research

The objective of this study was to delineate the determinants of the process of attitude formation and the intention to use Islamic finance products and services by the small and medium entrepreneurs. The study is based on the theoretical underpinnings of the theory of planned behavior (Ajzen, 1991; Ajzen, & Fishbein, 2000) and the diffusion of innovation theory by Rogers (1995, 2004). The Islamic finance adoption model was developed by combining the two theories discussed above. The proposed model was then empirically tested by taking data from 505 small and medium entrepreneurs. The results show that the determinants of attitude towards Islamic finance products and services can be classified into two categories. The first category comprises factors relevant to the entrepreneur. It includes the level of awareness and knowledge of the products offered by Islamic financial institutions and the religious obligation of the entrepreneurs. The second category comprises factors relevant to Islamic financial institutions. It comprises of the support provided by the financial institutions, the cost, and benefit advantage provided by them, and their reputation. In addition, the adoption model also purports that new products and services offered by Islamic financing institutions have a positive and significant impact on the usage of products and services offered by them.

Table 4. Structural Model Results

Hypotheses	Hypothesized Paths	Standardized Regression Weights (β)	t-value	P-value	Results
H1	ATTIT <--- AAK	.28	2.856	.004	Accepted
H2	ATTIT <--- ROB	.24	2.616	.009	Accepted
H3	ATTIT <--- BSU	.42	3.706	***	Accepted
H4	ATTIT <--- CBE	.35	4.158	***	Accepted
H5	ATTIT <--- REP	.43	4.933	***	Accepted
H6	IN_N <--- ATTIT	.62	4.039	***	Accepted
H7	IN_N <--- SUB_NO	.53	11.331	***	Accepted
H8	IN_N <--- PER_B	.50	2.613	.008	Accepted
H9	IN_N <--- INNO	.39	2.081	.037	Accepted

*** Significance at $p < 0.01$ ** significance at $p < 0.05$

Goodness of fit indices: $\chi^2 = 2080.973$, $df = 781$, $\chi^2/df = 2.593$, RMSEA= 0.05, CFI=0.916, NNFI=0.93

Implications of the results

This study has implications for Islamic financial institutions (IFIs) and the government regulatory authorities. It can help them in developing strategies in light of the factors identified in this study. Surprisingly, many small and medium entrepreneurs are not sure whether the Islamic FIs offer products and services that are truly Sharia-compliant. There is a lack of proper awareness and insufficient knowledge about IFIs and their operations. The consequences of this information raise several substantial ramifications for Islamic banks. The study provides sufficient evidence to the policymakers of IFIs that attitude, perceived behavioral control, subjective norms and financial innovativeness are the key determinants of usage of Islamic financial products and services by the small and medium entrepreneurs in an emerging country with Muslims in the majority. The IFIs need to realize that of all factors, attitude towards Islamic financial instruments and services play the most significant role. When it comes to attitude formation, the reputation of a financial institution that whether it is truly Islamic or not matters the most. Islamic financing ensures an increase in the welfare of society by minimizing the gap between the haves and have nots. IFIs can offer collateral-free loans for setting up or expansion of the SMEs. This can help in expediting the pace of economic development in economies with slow or stagnant growth. The IFIs can develop tailored products for SMEs in light of the findings of this study. This can help in not only enhancing the GDP but more employment opportunities can be generated as well.

This study has academic implications also. This paper adds to the existing literature on Islamic finance as this research study promulgates the Islamic financing adoption model. The model suggests that the intention to use products and services offered by IFIs depends upon certain important behavioral factors (mentioned above). The model also highlights the significance of being innovative. It shows that an IFI cannot survive in today's competitive environment without giving due attention to being innovative in terms of its products and services. The involvement of

technology is increasing in every area and the financial sector is not an exception. FinTech has become a buzzword now and financial institutions are switching extensively to being online or internet-based to be more competitive and cost-effective. Islamic financial products developed specifically for SMEs can contribute significantly to lowering the financing gap. Financial institutions must focus on developing products that maintain a balance between asset and equity-based financial instruments.

Future Research Areas

Future research studies can contribute by developing Shariah-compliant products for SMEs in line with the findings of this study. Future studies can also focus on developing innovative financial products to be offered by IFIs. Studies can also focus on which specific technological advancements are significant for SMEs in an emerging economy where religion plays an important role in forming the attitude and behavior towards borrowing. Another area for further research can be how specifically, IFIs can use FinTech to enhance the welfare of society.

References

- Abduh, M., Omar, M. A., & Duasa, J. (2011). Factor Influence Depositor's Withdrawal Behavior in Islamic Banking: A Theory of Reasoned Action. *World Academy of Science, Engineering and Technology*, 60, 2074-2079
- Afonso, J. S., Cox, J., & Thorpe, A. (2020). Business Performance and Heterogeneity among Islamic Microfinance Clients: Evidence from Pakistan (No. 2020-03). University of Portsmouth, Portsmouth Business School, Economics and Finance Subject Group.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision Processes*, 50(2), 179-211.
- Ajzen, I., & Fishbein, M. (2000). Attitudes and the attitude-behavior relation: Reasoned and automatic processes. *European Review of Social Psychology*, 11(1), 1-33.
- Al Balushi, Y. (2019). An investigation of the adoption of Islamic financing instruments by small and medium enterprises in the Sultanate of Oman (Thesis, Doctor of Philosophy (Ph.D.)). The University of Waikato, Hamilton, New Zealand. Retrieved from <https://hdl.handle.net/10289/12391>
- Al-Ajmi, J., Abo Hussain, H., & Al-Saleh, N. (2009). Clients of conventional and Islamic banks in Bahrain: How they choose which bank to patronize. *International Journal of Social Economics*, 36(11), 1086-1112.
- Alandejani, M., Kutan, A. M., & Samargandi, N. (2017). Do Islamic banks fail more than conventional banks?. *Journal of International Financial Markets, Institutions and Money*, 50, 135-155.
- Alkhan, A. M., & Hassan, M. K. (2021). Does Islamic microfinance serve maqāsid al-shari'a?. *Borsa Istanbul Review*, 21(1), 57-68.
- Amin, H. (2008). Choice criteria for Islamic home financing: empirical investigation among Malaysian bank customers, *International Journal of Housing Markets and Analysis*, 1(3), 256-74.
- Amin, H., & Chong, R. K. (2011). Is the theory of reasoned action valid for Ar-Rahnu? An empirical investigation. *Australian Journal of Basic and Applied Sciences*, 5(10), 716-726.
- Amin, H., Rahim, A., Sondoh Jr. L. & Hwa, M. C. A. (2011). Determinants of customers' intention to use Islamic personal financing: The case of Malaysian Islamic banks. *Journal of Islamic Accounting and Business Research*, 2(1), 22-42.
- Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behavior: A meta-analytic review. *British journal of social psychology*, 40(4), 471-499.
- Aziz, S. & Zahra, A. (2018) Adoption of Islamic banking in Pakistan an empirical investigation, *Cogent Business & Management*, 5(1), DOI: 10.1080/23311975.2018.1548050
- Bananuka, J., Kaseera, M., Najjemba, G., Musimenta, D., Ssekiziyivu, B. and Kimuli, S. (2019), Attitude: mediator of subjective norm, religiosity and intention to adopt Islamic banking, *Journal of Islamic Marketing*, 11(1), 81-96. <https://doi.org/10.1108/JIMA-02-2018-0025>
- Bangash, R., Khattak, Z. Z., & Khan, H. (2019). The Development of Islamic Finance and Fostering the Influence of Moral Values and Personal Factors in Investment Decision. *Global Social Sciences Review*, 4(1), 49-60.

- Bonne, K., Vermeir, I. and Verbeke, W. (2009). Impact of religion on halal meat consumption decision making in Belgium, *Journal of International Food & Agribusiness Marketing*, 21(1), 5-26.
- Brown, J. O., Hays, J., & Stuebs Jr, M. T. (2016). Modeling accountant whistleblowing intentions: Applying the theory of planned behavior and the fraud triangle. *Accounting and the Public Interest*, 16(1), 28-56.
- Butt, M. M., & Aftab, M. (2013). Incorporating attitude towards Halal banking in an integrated service quality, satisfaction, trust and loyalty model in online Islamic banking context. *International Journal of Bank Marketing*, 31(1), 6-23.
- Charag, A., Fazili, A. and Bashir, I. (2019). Determinants of consumer's readiness to adopt Islamic banking in Kashmir, *Journal of Islamic Marketing*, 11(5), 1125-1154. <https://doi.org/10.1108/JIMA-10-2018-0182>
- Chaudhry, N. I., Khalid, Z. B., & Farooq, H. (2018). Analyzing the Interaction among Factors Hindering the Growth of SMEs: Evidence from the Cutlery Sector of Pakistan. *Abasyn University Journal of Social Sciences (AUSS)*, 11(1), 21-36.
- Cherotich, K. M., Sang, W., Shisia, A., & Mutung'u, C. (2015). Financial innovations and performance of commercial banks in Kenya. *International Journal of Economics, Commerce and Management*, 3(5), 1242-1265.
- Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural equation modeling*, 9(2), 233-255.
- Dearing, J. W., & Cox, J. G. (2018). Diffusion of innovations theory, principles, and practice. *Health Affairs*, 37(2), 183-190.
- Dusuki, A. W., & Abdullah, N. I. (2007). Maqasid al-Shariah, Maslahah, and corporate social responsibility. *American Journal of Islamic Social Sciences*, 24(1), 25.
- Dusuki, A. W., (2008). Banking for the poor: the role of Islamic banking in microfinance initiatives. *Humanomics*, 24(1), 49-66.
- Echchabi, A., & Olaniyi, O. N. (2012). Malaysian consumers' preferences for Islamic banking attributes. *International journal of social economics*, 39(11), 859-874.
- Elasrag, H. (2016). Islamic finance for SMEs. CreateSpace Independent Publishing Platform.
- Fatima, T., & Bilal, A. R. (2020). Individual Entrepreneurial Orientation, Access to Finance, and SME Performance: Fortifying Role of Entrepreneurial Alertness. *Abasyn University Journal of Social Sciences*, 13(1), 233-248.
- Fishbein, M. (1979). A theory of reasoned action: some applications and implications. A theory of reasoned action: Some applications and implications. *Nebraska Symposium on Motivation*, 27, 65-116.
- Fishbein, M., & Ajzen, I. (1975). *Intention and Behavior: An introduction to theory and research*. Addison-Wesley, Reading, MA
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Gait, A. H., & Worthington, A. C. (2008). An empirical survey of individual consumer, business firm and financial institution attitudes towards Islamic methods of finance. *International Journal of Social Economics*, 35(11), 783-808.
- Gait, A. H., & Worthington, A. C. (2009). A primer on Islamic finance: Definitions, sources, principles, and methods. Griffith University, Department of Accounting, Finance and Economics.
- Gerrard, P., & Cunningham, J. B. (2000). The bank switching behaviour of Singapore's graduates. *Journal of Financial Services Marketing*, 5(2), 118-128.
- Gomber, P., Kauffman, R. J., Parker, C., & Weber, B. W. (2018). On the fintech revolution: interpreting the forces of innovation, disruption, and transformation in financial services. *Journal of Management Information Systems*, 35(1), 220-265.
- Grittersová, J. (2014). Transfer of reputation: Multinational banks and perceived creditworthiness of transition countries. *Review of international political economy*, 21(4), 878-912.
- Gveroski, M., Risteska, A., & Dimeski, S. (2011). Small and Medium Enterprises--Economic Development Drivers. *Management (1820-0222)*, 16(59).
- Han, Z., Yeoh, E. K. K., & Ahmad, W. M. B. W. (2018). Does religious obligation of Muslims in western China influence their intention to adopt Islamic banking?. *Contemporary Chinese Political Economy and Strategic Relations*, 4(3), 1207-XVII.

- Hansen, J.M., Saridakis, G. and Benson, V. (2018). Risk, trust, and the interaction of perceived ease of use and behavioral control in predicting consumers' use of social media for transactions, *Computers in Human Behavior*, 80(1), 197-206.
- Harper, M., Rao, D. S. K., & Sahu, A. K. (2008). *Development, divinity and dharma – The role of religion in development and microfinance institutions*. Warwickshire, UK: Practical Action Publishing.
- Hassan, M. U. (2008). Microfinance in small and medium-sized enterprises (SMEs) in Pakistan: practices and problems in the prevailing system and prospects for Islamic finance. *Kyoto Bulletin of Islamic Area Studies*, 2(1), 231-237.
- Hurley, R. F., Hult, G. T. M., & Knight, G. A. (2005). Innovativeness and capacity to innovate in a complexity of firm-level relationships: A response to Woodside (2004). *Industrial Marketing Management*, 34(3), 281-283.
- IFC (International Finance Corporation). (2010). *Scaling Up SME Access to Financial Services in the Developing World*. International Finance Corporation, Washington, DC.
- Ignazio, V. (2007). Financial Deepening and Monetary Policy Transmission Mechanism. *BIS Review*, 124, 1-10.
- Jaffar, M. A., & Musa, R. (2014). Determinants of attitude towards Islamic financing among halal-certified micro and SMEs: A preliminary investigation. *Procedia-Social and Behavioral Sciences*, 130, 135-144.
- Jaffar, M. A., & Musa, R. (2016). Determinants of attitude and intention towards Islamic financing adoption among non-users. *Procedia Economics and Finance*, 37(16), 227-233.
- Jalaluddin, A. (1999). Attitudes of Australian small business firms and financial institutions towards the profit/loss sharing method of finance, Doctor of Philosophy thesis, Department of Economics, University of Wollongong. <http://ro.uow.edu.au/theses/1313>
- Jalaluddin, A., & Metwally, M. M. (1999). Profit/loss sharing: an alternative method of financing small businesses in Australia. *Middle East Business and Economic Review*, 11, 8-14.
- Jamal's Yellow Pages (2020). Retrieved on 12 August 2017. <http://www.jamals.com/>
- Jamshidi, D., & Hussin, N. (2016). Islamic credit card adoption understanding: when innovation diffusion theory meets satisfaction and social influence. *Journal of Promotion Management*, 22(6), 897-917.
- Jin, M. Y., Littrell, M. A., & Niehm, L. (2012). Young female consumers' intentions toward fair trade consumption. *International Journal of Retail & Distribution Management*, 40(1), 41-63.
- Joynathsing, C., & Ramkissoon, H. (2010). Understanding the behavioral intention of European tourists. In *International Research Symposium in Service Management*, 1694-0938.
- Kashif, M., Zarkada, A., & Ramayah, T. (2018). The impact of attitude, subjective norms, and perceived behavioural control on managers' intentions to behave ethically. *Total Quality Management & Business Excellence*, 29(5-6), 481-501.
- Kaur, S. J., Ali, L., Hassan, M. K., & Al-Emran, M. (2021). Adoption of digital banking channels in an emerging economy: exploring the role of in-branch efforts. *Journal of Financial Services Marketing*, 1-15. Advance online publication. <https://doi.org/10.1057/s41264-020-00082-w>
- Kennington, C., Hill, J., & Rakowska, A. (1996). Consumer selection criteria for banks in Poland. *International Journal of Bank Marketing*, 14(4), 12-21.
- Khalique, M., Bontis, N., Abdul Nassir bin Shaari, J., & Hassan Md. Isa, A. (2015). Intellectual capital in small and medium enterprises in Pakistan. *Journal of Intellectual Capital*, 16(1), 224-238.
- Khan, M. M., Asad, H., & Mehboob, I. (2017). Investigating the consumer behavior for halal endorsed products: Case of an emerging Muslim market. *Journal of Islamic Marketing*, 8(4), 625-641.
- Kiyani, S. A. (2017). Role of entrepreneurship education on student attitudes. *Abasyn Journal of Social Sciences*, 10(2), 270-293.
- Lada, S., Tanakinjal, G.H., & Amin, H. (2009). Predicting intention to choose halal products using theory of reasoned action. *International Journal of Islamic and Middle Eastern Finance and Management*, 2(1), 66-76.
- Lam, R., & Burton, S. (2005). Bank selection and share of wallet among SMEs: Apparent differences between Hong Kong and Australia. *Journal of Financial Services Marketing*, 9(3), 204-213.

- Li, J., Xia, J., & Zajac, E. J. (2018). On the duality of political and economic stakeholder influence on firm innovation performance: Theory and evidence from Chinese firms. *Strategic Management Journal*, 39(1), 193-216.
- Lu, M. T., Tzeng, G. H., Cheng, H., & Hsu, C. C. (2015). Exploring mobile banking services for user behavior in intention adoption: using new hybrid MADM model. *Service Business*, 9(3), 541-565.
- MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods*, 1(2), 130.
- Makhlouf, M. (2017). *Islamic banking opportunities across small and medium enterprises: Pakistan* (English). Washington, D.C.: World Bank Group. <http://documents.worldbank.org/curated/en/506171487156711093/Islamic-banking-opportunities-across-small-and-medium-enterprises-Pakistan>
- Mansori, S., Safari, M., & Chin, J. H. (2018). How Muslims Make a Decision Regarding Islamic Microfinance Options? A Survey of Determinant Factors. *Journal of Insurance and Financial Management*, 4(1), 1-10.
- Marimuthu, M., Jing, C., Gie, L. P., Mun, L. P., & Ping, T. Y. (2010). Islamic banking selection criteria and implications. *Global J Hum. Soc. Sci.*, 10(4). <http://eprints.utp.edu.my/12050/>
- Marzban, S., Yeken, M., McMillen, M., & Ozkan, C. (2015). *Leveraging Islamic Finance for Small and Medium Enterprises (SMEs)*. Washington DC 20433: The World Bank Group.
- Mersland, R., D'espallier, B., & Supphellen, M. (2013). The effects of religion on development efforts: Evidence from the microfinance industry and a research agenda. *World Development*, 41, 145-156.
- Metwally, M. (1996). Attitudes of Muslims towards Islamic banks in a dual-banking system, *American Journal of Islamic Finance*, 6(1), 11-17.
- Mobin, M. A., Masih, M. & Alhabshi, S. O. (2017). Religion of Islam and Microfinance: Does It Make Any Difference?, *Emerging Markets Finance and Trade*, DOI: 10.1080/1540496X.2016.1268526
- Mukherjee, A. K. (2015). Empowerment through government subsidized microfinance program: Do caste and religion matter?. *International Journal of Social Economics*, 42(1), 2-18.
- Nicoletti, B., & Nicoletti, W. (2017). *Future of FinTech*. Basingstoke, UK: Palgrave Macmillan.
- Nunnally, J. (1978). *Psychometric theory*, New York: McGraw-Hill.
- Pearlman, S. (2012) Too Vulnerable for Microfinance? Risk and Vulnerability as Determinants of Microfinance Selection in Lima, *The Journal of Development Studies*, 48(9), 1342-1359, DOI: 10.1080/00220388.2012.693170
- Pedersen, P. E. (2005). Adoption of mobile Internet services: An exploratory study of mobile commerce early adopters, *Journal of Organizational Computing and Electronic Commerce*, 15(3), 203-222.
- Pikkarainen, T., Pikkarainen, K., Karjaluoto, H., & Pahnla, S. (2004). Consumer acceptance of online banking: an extension of the technology acceptance model, *Internet Research*, 14(3), 224-235, <https://doi.org/10.1108/10662240410542652>
- Possumah, B. T., Appiah, M. K., & Hilmiyah, N. (2018). Determinants of Islamic banking adoption across different religious groups in Ghana: A panoptic perspective. *Journal of International Studies*, 11(4), 138-154.
- Qoyum, A., & Fauziyyah, N. (2019). The Halal aspect and Islamic Financing among Micro, Small and Medium Enterprises (MSMEs) in Yogyakarta: Does Berkah Matter? *Journal of Islamic Monetary Economics and Finance*, 5(1), 215-236. <https://doi.org/10.21098/jimf.v5i1.1055>
- Ramayah, T., Jantan, M., Mohd Noor, M. N., Razak, R. C., & Koay, P. L. (2003). Receptiveness of internet banking by Malaysian consumers: The case of Penang. *Asian Academy of Management Journal*, 8(2), 1-29.
- Rana, N. P., Slade, E., Kitching, S., & Dwivedi, Y. K. (2019). The IT way of loafing in class: Extending the theory of planned behavior (TPB) to understand students' cyberslacking intentions. *Computers in Human Behavior*, 101, 114-123.
- Rasheed, R., Siddiqui, S. H., & Rahman, M. A. (2018). Influence of Awareness on SME's Intention towards adoption of Islamic Finance in Pakistan. *Review of Economics and Development Studies*, 4(1), 51-59.

- Raza, S. A., Shah, N., & Ali, M. (2018). Acceptance of mobile banking in Islamic banks: evidence from modified UTAUT model. *Journal of Islamic Marketing*, 10(1), 357-376. <https://doi.org/10.1108/JIMA-04-2017-0038>
- Riaz, U., Khan, M., & Khan, N. (2017). An Islamic banking perspective on consumers' perception in Pakistan, *Qualitative Research in Financial Markets*, 9(4), 337-358
- Rogers, E. M. (1995). *Diffusion of innovations*. 4th Ed. New York: Free Press.
- Rogers, E. M. (2004). A prospective and retrospective look at the diffusion model. *Journal of health communication*, 9(S1), 13-19.
- Rutherford, L., & DeVaney, S. A. (2009). Utilizing the theory of planned behavior to understand convenience use of credit cards. *Journal of Financial Counseling and Planning*, 20(2), 48.
- Sarmah, B., Sharma, S., & Gupta, S. (2017). Antecedents of e-business adoption intention: an empirical study. *International Journal of Innovation Science*, 9(4), 417-434.
- Sattar, M., Hamza, F., & Moghar, A. (2020). Adoption of Islamic finance for SMEs and very small enterprises in Morocco. *Turkish Economic Review*, 6(4), 335-352.
- Schindler, J. W. (2017). FinTech and financial innovation: Drivers and depth. (2017-08-10). FEDS Working Paper No. 2017-081. Available at SSRN: <https://ssrn.com/abstract=3029731> or <http://dx.doi.org/10.17016/FEDS.2017.081>
- Shah Alam, S., & Mohamed Sayuti, N. (2011). Applying the Theory of Planned Behavior (TPB) in halal food purchasing. *International journal of Commerce and Management*, 21(1), 8-20.
- SMEDA (2020). Small and Medium Enterprise Development Authority. Retrieved from <https://smeda.org/>
- Steenkamp, J. B. E., & Van Trijp, H. C. (1991). The use of LISREL in validating marketing constructs. *International Journal of Research in marketing*, 8(4), 283-299.
- Sulaiman, L., Muhammad, Mustafa Omar, & Hassan, Mohammad, R. (2016). Modelling public behavioral intention to adopt Islamic banking in Uganda: The theory of reasoned action, *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 9 Issue: 4, pp.583-600, <https://doi.org/10.1108/IMEFM-08-2015-0092>
- Taib, F.M., Ramayah, T., & Razak, D.A. (2008). Factor influencing intention to use diminishing partnership home financing, *International Journal of Islamic and Middle Eastern Finance and Management*, 1(3), 235-48.
- Tara, N., Irshad, M., Khan, M. R., & Yamin, M. (2014). Factors Influencing Adoption of Islamic Banking, *Journal of Public Administration and Governance*, 4(3), 352-367.
- Taylor, S., & Todd, P. A. (1995). Understanding information technology usage: A test of competing models, *Information Systems Research*, 6(2), 144-176.
- Thomson Reuters (2018). *Islamic Finance Development Report 2018- Building Momentum*. Retrieved from https://www.salaamgateway.com/en/story/report_islamic_finance_development_report_2018-SALAAM0609201806281/
- Tufano, P. (2003). Financial innovation. In *Handbook of the Economics of Finance*, Vol. 1, 307-335. Elsevier.
- Um, N. H. (2019). Antecedents and consequences of consumers' attitude toward social commerce sites, *Journal of Promotion Management*, 25(4), 500-519.
- Weill, L. (2019). *Islamic microfinance*. In *A Research Agenda for Financial Inclusion and Microfinance*. Edward Elgar Publishing.
- Wirtz, J., & Mattila, A. S. (2003). The effects of consumer expertise on evoked set size and service loyalty, *Journal of Services Marketing*, 17(7), 649-665.
- Yusoff, M. N. H. B., & Yaacob, M. R. B. (2010). The government business support services in Malaysia: The evolution and challenges in the new economic model, *International Journal of Business and Management*, 5(9), 60.
- Zairani, Z., & Zaimah, Z. A. (2013). Difficulties in Securing Funding from Banks, *Journal of Advanced Management Science*, 1(4), 354-357.

ⁱ The Theory of Reasoned Action purports that the behavioral intention is determined by two factors, namely attitude and subjective norms (Fishbein, 1979). The Theory of Planned Behavior (TPB) is derived from the Theory of Reasoned Action (TRA). The TPB considers perceived behavioral control as an additional determinant of behavioral intention of an individual.