



## *Impact of Islamic Financial Literacy, Awareness, Attitude, & Religiosity on Perception of Islamic Banks Customer*

*Furhana Gul<sup>1</sup> & Tahir Sikander Rahim<sup>2</sup>*

### ABSTRACT

The paper studies the estimation regarding degree of Islamic financial literacy among individuals of Pakistan & assess their Islamic financial literacy, behavior relating Islamic products, knowledge of products & features of Islamic banking, and religiosity with perception and intention in Islamic banks at Quetta, Pakistan. The questionnaire was surveyed using non-probability sampling technique and total of 312 respondents participated in survey. A preliminary survey was adopted to assess the validity of questionnaire. Structural equation modeling (SEM) analysis has been applied on the data and SmartPLS software was employed. The results showed that the positive relationship b/w factors & provide valuable insights into the ranks of Islamic financial education in Pakistani Islamic banks. This study disclosed that rank of Islamic financial education among individuals in Pakistan is relatively high. A high percentage of participants demonstrated a comprehensive understanding of Islamic financial products & services offered by Islamic banks. Furthermore, there was limited awareness, attitude and religiosity of the specific characteristics and advantages of Islamic banking. The results indicate a need for significant improvement in Islamic financial literacy among individuals in Pakistan. The medium level of familiarity and attitude towards of Islamic products & services highlight the importance of enhancing financial literacy and promoting awareness, attitude, and religiosity in Islamic banking principles. Efforts should be made to provide accessible and comprehensive financial literacy programs that specifically focus on Islamic finance. This will enable individuals to take informed decisions & engage more effectively with Islamic banking services.

**Keywords:** Islamic Financial Literacy, Awareness, Attitude, Religiosity, Perception and Intention in Islamic Banking

### CHAPTER 1: INTRODUCTION

#### 1.1 Introduction

The chapter comprises introduction of research topic & comprehensive depiction of variables to be studied. This chapter also discusses what has been found in earlier research and remains unexamined in previous research. Based on the background, the logical gap has been discussed. This chapter introduces research problem, questions, & objectives. It also discusses importance of study, including theoretical importance, practical importance, furthermore its role in the academic knowledge.

#### 1.2 Background

Islamic banking has arisen as moral, financial system that may help institutions improve their efficiency and competitiveness (Adelekan, 2021; Zaher & Kabir Hassan, 2001). Several empirical studies have shown successful adoption of Islamic financing principles can help banks attain higher levels of profitability (Bukhari et al., 2014; Hakim & Rashidian, 2004; Johnson, 2013).

The study of Islamic banking has yielded inconsistent results due to changes in the market, tax rate, Shariah supervisory board, and methodology of research. According to reports, Islamic banking looks to be overgrowing in Iran. In contrast, performance of Islamic financial system in Pakistan is deteriorating (Khan & Mirakhor, 1991). In addition, as was said before, the effective financing of a project was accomplished through the utilization of a variety of financial structures and documentations, all of which complied with Shariah standards (Gabbani, 2011).

A number of Muslim and non-Muslim academicians have worked on the principle and concept of Islamic banking (Ainley et al., 2007; El-Gamal, 2000; Iqbal & Mirakhor, 1999; Lewis & Algaoud, 2001; Warde, 2000).

This type of banking system followed the Islamic economic system, which was developed to liberate Muslims from colonizers' control over their religion's financial aspects. Muslims are guided by Islamic Shariah law regarding

<sup>1</sup> Affiliation: Bank Alfalah , [salish.ali23@gmail.com](mailto:salish.ali23@gmail.com)

<sup>2</sup> Affiliation: Alhamd Islamic University, [economist.tahir@gmail.com](mailto:economist.tahir@gmail.com)



faith, moral and norms, restrictions, and rational rulings or regulations (Akbar et al., 2012; Belouafi & Chachi, 2014). The Holy Quran & Hadith/Sunnah are two primary sources of Islamic Shariah law, while Ijtihad and Qiyas are secondary sources that define Shariah law (Gait & Worthington, 2008a). Sardar et al. (2003) point out that “Shariah,” which most Muslims consider Islamic law and divine, is not. In Islam, the Quran is the only thing that is precisely divine.

The Islamic sharia regulations are known to govern all aspects of Muslim lives. Muslims follow Sharia regulations to ensure an equitable society (Karbhari et al., 2004). Due to the global economic and financial systems changes, Muslims have been driven to create an environment of Islamic banking system. The common banking system relies profoundly on usury. This aspect of financial management is against Sharia laws. In order to find a way around it and remain connected with the world economy, Muslims established the Islamic banking system (Nizami, 2011; Obaidullah, 2005; Sadeghi, 2008; Wilson, 2006).

Islamic banks system runs on an interest-free basis (Mawdudi, 1961). The idea gained popularity in recent years. The Islamic banking system provides its customers with products that are interest-free and are following Sharia regulations. However, its customers are just a handful compared to the conventional banking system (Ismail, 2002; Zaher & Kabir Hassan, 2001). The idea is still being studied and this thesis are undergoing rigorous investigation to provide the customers with better and more compliant services and products. The Islamic banking system customers are also being reviewed to help create a profile of perceptions and other attributes such as financial literacy (Bley & Kuehn, 2004; Maurer, 2002; Siddiqui & Banker, 2005).

The banking environment has seen the significant and dynamic change during last few decades. Over time competitiveness has increased among the banking industry (Iqbal et al., 2006; Obaidullah, 2005). The inclusion of technology has led the banks to create an environment where customers flourish and transparent information. Today’s banking system is so vigorous that it has captured the interest of many (Atkinson & Messy, 2012). The core features of this system have been attracted economists of various schools (Amin et al., 2009).

Islamic economists and contemporary economists have indulged in the banking system studying how the latest trends have changed the scape of the financial industry (Dusuki & Abdullah, 2006). Though most Islamic banks are concentrated within the Middle East, various researchers, conventional bankers, and economists show a strong desire towards Islamic banking system (Bley & Kuehn, 2004). Islamic banking has become well-known, and the demands for the products of this system are increasing day by day. The principle on which Islamic banks work is a simple profit and loss feature to fund their venture (Dusuki & Dar, 2007; Kamla, 2009; Zainol et al., 2009).

### 1.3 Problem Statement

Families and authorities are concerned about financial literacy because of financial complexity systems, goods, & services (Ganesan et al., 2020). Similar expertise and information regarding Islamic banking are lacking in Pakistan, which has resulted to low public awareness and understanding (Khattak, 2010; Lee & Ullah, 2011). Previous research has demonstrated that a lack of financial literacy can cause serious issues and obstruct economic progress (Housby, 2011; Khan, 2010).

Individuals' acquaintance with Islamic financial products plays an essential role in whether or not they choose to use the Islamic banking system (Belouafi & Chachi, 2014). However, compared to traditional financial institutions, Islamic financial institutions are less well-known and more recent (Riaz et al., 2017). Therefore, it is vital to look into how much people understand about Islamic finance and how that relates to their use of Islamic banking. The general populace, however, lacks a comprehensive understanding of Islamic finance (Karbhari et al., 2004; Lajuni et al., 2017). This thesis investigates the effect of Islamic financial literacy affects Pakistani consumers of Islamic banks.

### 1.4 Research Questions

Research questions are discussed below,

- What is relationship b/w Islamic financial literacy & customer's perception of the use of Islamic banks products?
- Whether the awareness of Islamic products, religiosity, & attitude toward Islamic banking affect use of Islamic banks products?

### 1.5 Research Objectives

Study aims to know impact of Islamic financial literacy, awareness of Islamic products, religiosity, and attitude toward Islamic banking with customers perception using Islamic banks products, so this stud's objectives are.

- To determine the impact of Islamic financial literacy & customer's perception using Islamic banks services.



- To determine impact of awareness of Islamic products using Islamic banks services.
- To investigate impact of attitude toward Islamic banking using Islamic banks services.
- To investigate effect of religiosity using Islamic banks services

### 1.6 Aim of the Study

Ultimate objective of this study is to ascertain enhancement to which members of general public are familiar with Islamic banking and other facets of Islamic finances. Concerns with use of interest-based practices in conventional banking have contributed to the rise in popularity of Islamic banking around the world (Kontot et al., 2016). Islamic banks provide new goods and services, putting them in direct competition with traditional banks for both customers, Muslims & non-Muslims. Although a number of studies conducted in academic settings on the efficiency and risk management of Islamic banks, lack of knowledge exists on Islamic financial literacy (Lusardi, 2012).

Because governments, investors, bankers, and academics are beginning to recognize the value of financial literacy, its significance is growing in importance, particularly in emerging nations. The advancement of information technologies has brought to light the necessity of having a strong understanding of personal finance to successfully navigate the dynamic economic and financial landscape (Lajuni et al., 2017).

### 1.7 Significance of study

Importance of Islamic banking business is quite significant, particularly in Pakistan, where it has become a powerful participant in the financial sector. According to State Bank of Pakistan, as of June 2022, Islamic banking assets & deposits accounted up 19.5 % and 20.5 %, respectively, of the total banking industry and will be 35% in 2025 and 100% in 20230. The significant market presence highlights the increasing inclination towards Sharia-compliant financial practices. Studying the dynamics of Islamic banking is essential for comprehending its revolutionary influence on the financial industry and identifying the variables that contribute to its success. Given the ongoing evolution of the industry, it is crucial for regulators, financial institutions, and researchers to delve into complexities of Islamic banking practices.

Current literature points out that lack of financial literacy among consumers presents a lack of trust in the services and products of the financial industry services (Gerardi et al., 2010; Jäntti et al., 2014; Shen et al., 2016). In turn, if a symptom of unrest arises, this loss of confidence may lead to adverse reaction. According to various sources, one of the critical reasons of global financial crisis in 2007–2008 was a lack of financial literacy among financial market participants (Cueva & Rustichini, 2015; Kiss et al., 2016; Klapper et al., 2013).

Furthermore, lack of financial education has also been linked to debt issues, and these issues further give rise to loan defaults and costs (Di Mauro et al., 2013; French & McKillop, 2016; Ibrahim et al., 2010). Therefore, this study investigates that aspect to quantify the issue. Since Financial literacy has raised various financial problems, this study tends to measure that deficiency among the people of Pakistan. And since Islamic banking is relatively new, the study tends to add to its literature.

### 1.8 Rationale and Implications of the study

The need for an Islamic financial system arouses a long time ago when economies started to intertwine based on financial systems. Financial interaction between several economies took place through these financial systems, all of which were based on interest. Therefore, Muslims have been looking for interest-free financial plans.

However, the present-day Islamic banking system isn't popular among Muslims as expected. One reason assumed could be lack of Islamic financial education. Lack of Islamic financial education could be determinant responsible for the lack of prominence of Islamic Banking system. That's why, it is mandatory to conduct research & investigations. A study on the various financial systems of a country help determine aspects of the economy of country.

Furthermore, this also helps to determine the economy of country's individuals. This paper will help in adding to the literature review regarding Islamic financial literacy. It will further add value to profile of Islamic Banking Customer. Studying Islamic financial system will also help to review discrepancies in a developing system.



## CHAPTER 2 LITERATURE REVIEW

### 2.1 Introduction

This part deals to comprehend information available in literature to support development of framework from constructs of current study to build conceptual framework & hypothesis. Arguments will be created for Islamic financial education, attitude toward Islamic banks, awareness of Islamic products, religiosity, & customer's behavior toward Islamic services. First, customer's behavior dealing with Islamic services is reviewed considering past literature. Second Islamic financial literacy is reviewed with past literature. Third, the attitude towards Islamic banks is reviewed & explained with previous studies and theory. Forth, awareness of Islamic products is to be reviewed and presented with past literature. Fifth, religiosity is reviewed to establish its role in the current study.

### 2.2 Customers Perception of Islamic Banking

Advent of full-fledged Islamic banks & Islamic windows and view of Islamic banking as discipline are relatively new developments in the financial business. Customers had conflicting emotions regarding Islamic banks, according to several studies. Others were confused as to whether or not the banks conformed to Islamic standards, although many people had not yet opened accounts with an Islamic bank system and in Islamic banks (El Qorchi, 2005; Gabbani, 2011). The study identified a number of deficiencies in their business operations, marketing practices, product knowledge, customer-dealing practices, and customers' understanding of Islamic banks, values, and processes (Grohmann et al., 2018; Haron et al., 2009).

Moreover, Islam has shariah law, which benefits everyone and protects them from harm. Shariah-compliant products and practices are required in Islamic banks. CRM is a tool or process for collecting consumer data, building relationships, and ensuring customer retention and happiness. Islam enables anybody to acquire data or any other information for business purposes. The data must be accurate and authentic, and it should be used for benefit rather than speculation. Muslims must refrain from deception and theft (Husin & Ab Rahman, 2016).

In Islam, known as *ukhuwah Islamiyah*, it is appreciated to build up and maintain relationships, which is similar with (customers relationship management) CRM goals. purchasers and marketers, furthermore, cooperate and support one another through this mutually beneficial relationship. CRM allows Islamic banks to globally build their network through alliances, entering the world of advertisement, upgrading products accurately successfully, and communicating their services (Hasan & Dridi, 2010; Jalil & Rahman, 2014). As a CRM centered on customer happiness, Islam strives to provide the best services available. In Islamic terms, satisfaction is referred to as *Quannah*, which signifies "achievement" for all Muslims. As a result, CRM and Islam share aims that have *maslahah* for the *ummah*.

Many factors are responsible for gaining, retaining, and maintaining customers in Islamic banks (Ahmed Zebal & M. Saber, 2014). Organizations are continuously improving and upgrading by determining customer preferences. Similarly, to make sure customers purchase products, specific actions are required. Organizations that directly deal with their customers work on strengthening their relationship with them by meeting customer expectations. The Banking industry is one such organization that deals directly with its customers. Furthermore, Islamic banking system was introduced as need had arisen. Muslim thinkers felt the need to provide a financial plan that is interest-free.

A typical customer for an Islamic bank would prefer financial products & services which are not interest-based (Ali & Raza, 2017). Furthermore, Islamic banking system customer chooses financial system that complies with the Sharia regulations (Metawa & Almosawi, 1998; Tabrani et al., 2018). Various customers' grievances about banking operations have led banks to chalk out innovative strategies to help retain customers actively. Many other researchers have shown bank customers being unsatisfied due to different grievances against banking operations. Hence banking operations can be considered as one aspect of customer interest. Customer satisfaction is one of the significant concerns of Banks, even Islamic banks. Customer satisfaction is enabling Islamic banks to keep their old customers & gain new customers (Bhuiyan et al., 2022; Riaz et al., 2017).

### 2.3 Islamic Financial Literacy

Financial education is meant to understand financial concepts and critical approaches to managing one's finances (Akhtar, 2007). It measures how much the public can comprehend the basic financial notions and wealth management in long and short-term, keeping in mind the rigorous changes occurring in the economic environment.

The Islamic Financial Literacy curriculum teaches Muslims fundamentals of Islamic finance, which they require to know for keeping their faith pure (Antara et al., 2016). Rahim et al. (2016) IFL is defined as an individual's aptitude,



talent, and attitude in understanding and analyzing financial details from Islamic financial organizations. Islamic financial education, on the other hand, has not been defined yet. Since no conclusive definition of the concept exists general view of financial literacy can help define the views of Islamic financial attitude.

IFL must work on expansion for setting benchmark Islamic financial products so that they can be used by a wider variety of investors and businesspeople (Bin Abdullah et al., 2015). In terms of financial education, Islamic financial literacy can be explained as “strength of one to utilize financial education, expertise, and behavior in dealing financial sources as per Islamic preaching” (Rahim et al., 2016).

Many Muslims show concern over banking system & products even in Islamic banking system. Two essential obstacles faced by people seeking the products & services of Islamic Financial banking include understanding financial terms & comprehending the factors that impact solvency (Şiddīqī, 1983). Some of the factors that consumers must be aware of include the time of payments, the interest rates, economic conditions, length of payments and financing period, growth periods, etc. It is not easy to comprehend these factors. Another one of the significant issues Muslims face while investing in Islamic banking system in compliance with Shariah. In simple words, Islamic banks' financing methods comply with Shariah (Sun et al., 2012; Thambiah et al., 2011).

One way to analyze Islamic Financial education is to evaluate interest-free principle. Other assertion in Islamic financial literacy involves buying shares that show low levels of fluctuations in price, which is also in compliance with Islamic Sharia (Hasan & Asutay, 2011). In addition, Islamic banking focuses on profit and loss sharing mechanisms for investing money. Another element of Islamic banking is that these organizations are focused on offering multiple products including higher lease finance, trade financing, and industrial financing. *Modaraba* and *qarz-al-hasan* are two more prime characteristics of Islamic banking.

People do not use many of these Islamic financial products because they do not understand their mechanism, making them less exciting or too complicated. This is why Islamic banks cannot garner enough users, which leads to a low yield in profitable business (Haron et al., 2009). Inconsistent findings on determining motives and evaluating Islamic banking growth have emerged from discrepancies in research design and respondent profiles and differences in the market context. El Qorchi (2005), concerns about progressive liquidity management have arisen as a result of differences in financial markets as well as difficulties in regulating and supervising Islamic banking. It has been asserted that study that is specific to a country helps us gain a better knowledge of factors which affect performance of financial systems (Noor & Ahmad, 2012).

Nizami (2011), Islamic banking is building strong roots among Muslims in Pakistan, but not with its full potential, given that 97 percent of Pakistan's population is Muslim. It might have been owing to a strong drive for profit, a lack of literacy in financial knowledge of the regulations that govern Islamic products and services, or it could be due to something totally else. The fundamental hypothesis is that the impacts of the Islamic banking systems are mitigated by banking knowledge &, to extent that demographic factors are causal, the extent to which demographic factors are responsible.

This study aims to achieve two specific goals. Firstly, it deals with proving the effect of demographic outline connected with a market on Islamic banking's operations & business success. Second, to look at Islamic banks' customers' impressions of Islamic banking system by determining essential success variables which influence perception and reason for financial services preference.

To properly understand financial literacy, it is necessary to dissect the idea into its constituent elements. Financial capability is an associated broadest term linked to the financial prosperity of a household. It can apply financial knowledge that guides appropriate financial behaviors to accomplish financial objectives and increase financial wellbeing (Xiao, 2016). Therefore, the sub-dimension for measuring financial literacy in the literature are financial education, skills, attitudes, and behavior.

As a result, having a solid understanding of Islamic finance is an essential notion that Muslims absolutely need to have for preserving purity of their belief system (Antara et al., 2016). Therefore, to make Islamic financial products more available to the public, the people, and investors, it is vital that the information regarding these products be standardized and enriched. This will make Islamic financial products more accessible and more understood (Bin Abdullah et al., 2015). This standardization will help widen the spectrum of users and consumers of these products.

Islamic Financial education is individual skill to compare and analyze the financial information of Islamic financial system (Rahim et al., 2016). Furthermore, IFL can be categorized as the measure of education and significance of Islamic financial services impacting their intentions to use Islamic financing (Ramayah & Razak, 2008). Research shows people's financial decisions are affected by religion and their level. This religiosity also impacts people's level of risk-taking (Arora & Marwaha, 2014; Yusuff & Mansor, 2016; Schneider et al., 2015; Mahdzan et al., 2017; Benjamin et al., 2016).

Risk aversion is another aspect of financial decision that is closely related to religiosity (; Noussair et al., 2013; Jiang et al., 2015; Chen et al., 2016; Breuer et al., 2014). However, one can expect that the increased literacy level in Islamic Literacy may increase the chances of financial risk-taking (Rajan & Santhakumar, 2018).

*H<sub>1</sub>: Islamic financial literacy significantly affects the customer's perception of Islamic banking services.*

#### **2.4 Awareness of Islamic Services**

Knowing about your preferable brand means you have brand awareness (Valkenburg & Buijzen, 2005). Those with a higher knowledge of their brand have increased brand awareness. Therefore, brand knowledge indicates brand awareness (Keller, 1993). Furthermore, it can also be defined as familiarity with the product, features, and characteristics (Barreda et al., 2015; Lu et al., 2014). Most Islamic banking research shows that a small proportion of Muslims uses Islamic banking because of shortage of understanding or information about the services and products (Islam & Rahman, 2017).

Many studies dealing with Islamic Financial system have shown direct link b/w brand awareness & the rise in Islamic bank users (Aziz et al., 2017; Chaouch, 2017; Husin & Ab Rahman, 2016). As mentioned, most of Islamic banking system has flourished in UAE, & most of studies conducted have been done in the Middle East, Malaysia, and Indonesia (Dusuki & Abdullah, 2007; Rammal & Zurbruegg, 2016). However, limited study is present on the Islamic banking system at Pakistan, especially their link with awareness (Bassir et al., 2014; Kaabachi & Obeid, 2016; Warsame & Ileri, 2018).

Research conducted in the UAE recommended that Islamic bank managers spend time on potential customers and increase their awareness (Thambiah et al., 2011; Amin, Rahman, et al., 2011). The shortage of awareness among potential users is one of the primary reasons why one should opt for Islamic banking system isn't rising to extent of conventional banking (Sun et al., 2012). One way of changing people's attitude towards Islamic bank services and products is by created awareness about what is being offered to pique their interest (Muhamad et al., 2013). A few of researches conducted on Islamic banking have indicated that awareness within the banking industry demonstrated an enhanced customer inclination to utilize Islamic banking goods (Ibrahim et al., 2017).

This is owed to reality that awareness has key role in identifying customer intention. Bankers administrating Islamic banks and finances should administer market research to measure customer understanding and attitudes (Ibrahim et al., 2010). The services offered by Islamic banks include characteristics that might entice customers from a variety of religious and cultural backgrounds (Jalil & Rahman, 2014). Muslim's interest in the Islamic banking system is Shariah-compliant products, while non-Muslims are usually concerned with ethical banking (Jalil & Rahman, 2010; Khan & Mirakhor, 1991).

Ethical banking is a crucial variable among potential purchasers while looking for a bank (Ghosh, 2016). This also implies that banks are competing with one another by offering various services to leu in clients. These contending services are becoming a factor in bank selection. Hence, clients have the knowing and information of services & products being provided.

*H<sub>2</sub>. Awareness significantly affects the customer's behavior of Islamic banking services.*

#### **2.5 Attitude Towards Islamic Services**

Attitude refers to how a customer evaluates or appraises the behavior in issue favorably or negatively. Knowing and adjusting to individual encouragement and behavior is thus no longer option; it is a need for competitive survival (Engel & Linrud, 1993; Kotler, 2017). Performance of a person regarding a particular behavioral objective is in large part determined by their attitude towards the task at hand (Amin et al., 2013; Lajuni et al., 2017).

This would imply that person's positive opinion towards Islamic banks has considerable effect on likelihood that they would utilize Islamic banking services in the future (Amin et al., 2009).



Albaity and Rahman (2019) even though they found that the more literate a customer is, the less likely they are to use Islamic banking, they discovered that Islamic financial education has a negative relation with intention to use Islamic banking, positive attitude towards Islamic banking. There are, however, few studies that use geographical factors as the research environment. While there has been a lot of focus on Islamic banking users (Ahmad & Haron, 2002b; Bidabad, 2010). Ali et al. (2011) found a good correlation between growth and customer happiness in Islamic banking. Islamic banking's growth and development stages and its possibilities have been examined in the literature (Akram et al., 2011; Ali, 2015).

Newaz et al. (2016) despite the fact that religion has established stringent guidelines for the acquisition of financial services & products, the degree to which religious adherents follow Islamic law is likely to vary. This diversity is determined by attitude People's perceptions are influenced by their attitude, which affects their conduct (Fazio, 1986).

Previous study showed that one's mindset substantially impacts one's desire to utilize Islamic financial goods & services (Amin et al., 2009; Lada et al., 2009; Lajuni et al., 2017). Furthermore, other study has indicated positive relationship b/w behavior and will to use Islamic financial products/services, emphasizing need for tries to change or affect attitudes (Lajuni et al., 2017).

*H<sub>3</sub>: Attitude significantly affects the customer attitude of Islamic banking services.*

## **2.6 Religiosity**

Religious obligation, also known as religiosity, is at the foundation of religion and is described as "degree to which person employs or keeps own religious ideals, beliefs, & workings in daily life" (Worthington Jr et al., 2003). Religiosity is set of principles and actions that are compared to holy or transcendent entities. According to Jamaludin (2013), a strongly religious person is likely to judge the globe through its belief system rules and emphasize their faith in their life. It also impacts one's knowing one's relationship & responsibility to others when living in community (Mukhtar & Butt, 2012).

Souden and Rani (2015a) investigated effect of religiosity on intention to utilize Islamic Banks' goods. They found that the more people are fearful of a belief that incorporates God's punishment, they build perception towards of Islamic banks. Thus, religious beliefs heavily influence consumer attitudes regarding different dubious consumer practices.

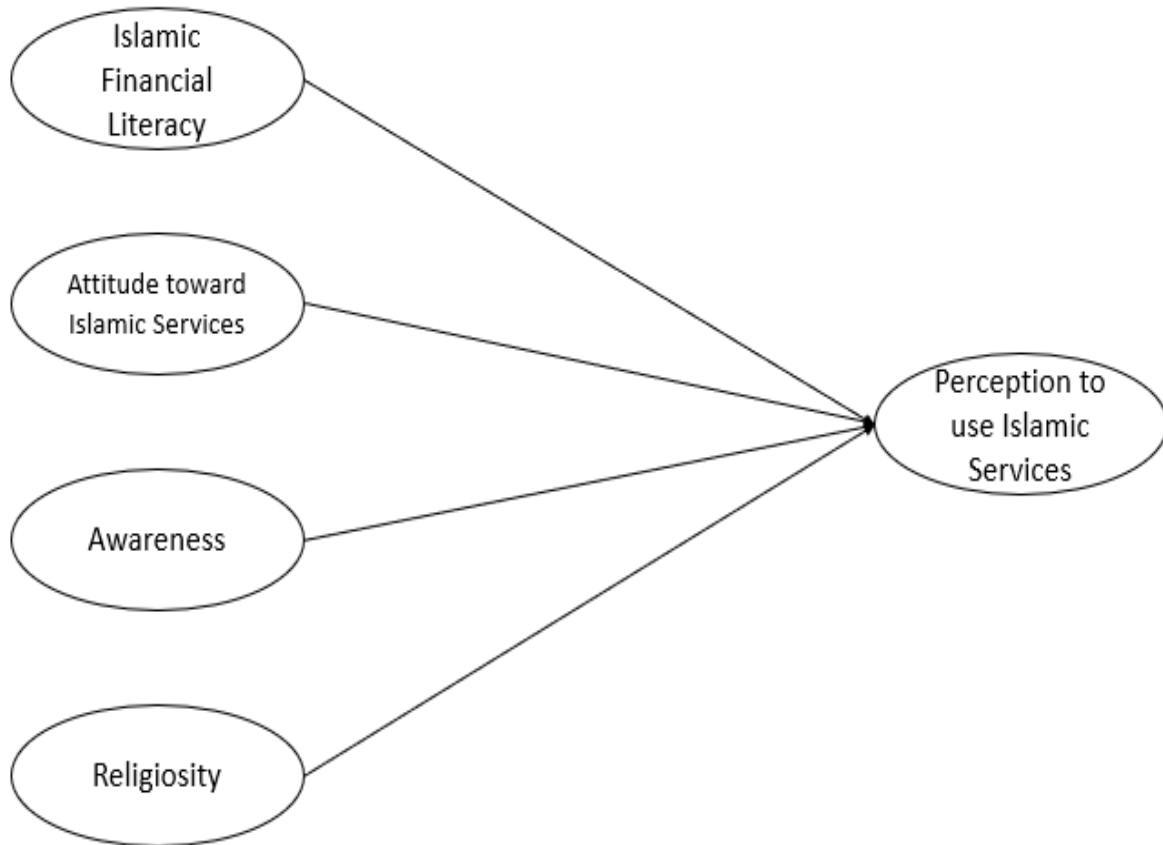
According to Aji (2018), Religious people choose products that have characteristics with their beliefs (Gait & Worthington, 2008a). Nonetheless, individuals' intentions to use Islamic financial solutions are unaffected by their religious beliefs (Amin, Rahman, et al., 2011). According to Alam et al. (2012), religiosity is a significant factor because it could alter an individual's cognition and conduct. Furthermore, aside from philosophy, religiosity has been linked to implementing Islamic banking (Schneider et al., 2015).

*H<sub>4</sub>: Religiosity significantly affects the customer's perception of Islamic banking services.*

## **2.7 Conceptual Framework**

A conceptual model has been developed to quantify Islamic financial education & its effects on customer's perception of Islamic banking services. The independent variables in Figure 1 are Islamic financial literacy, attitude towards Islamic banks, awareness related to Islamic services, & religiosity. In contrast, the dependent variable is the adoption of Islamic banking services. Because it leads to a growth in poverty, an uneven distribution of income, differences in purchasing power, credit crises, and individual exploitation at the hands of creditors, to name a few of the many adverse effects it has on society (Haron et al., 2009).

*Figure 1 Conceptual Framework*





## CHAPTER 3 : RESEARCH METHODOLOGY

### 3.1 Introduction

This chapter provides detailed look at the technique which was utilized for the current research project and includes all of its component parts. The suggested research would require a description of how the different stages of this study activity were done, as well as how the results & implications were linked together. This would be included as part of the research methodology. This research is founded on quantitative research paradigm due to the fact that the gathered data is analyzed numerically and provides an interpretation of the statistical connection between the pertinent variables. As a result, the structure of the study provides an explanation. Additionally, population that the reserach was conducted on, sampling technique, data analysis, and the determination of the sample size are examined.

### 3.2 Research Design

In order to produce superior results that persuade readers about validity & dependability of hypothesis, this is a quantitative investigation, and its goal is to provide statistical information about the topic of the thesis (Saunders & Lewis, 2012). The study's objective is to know impact of Islamic financial education, Awareness of Islamic products, religiosity, & attitude towards Islamic banking service on customer's behavior of Islamic banking. According to Saunders & Lewis (2012), Research that explains what happened is called causal research, and it's utilized to investigate the correlations between different factors. In the thesis, a cross-sectional field study survey was employed.

### 3.3 Target Population & Sample Size

Customers of Islamic banks & prospective consumers of Islamic banking services in Quetta were focus of this research. Customers of Islamic banks & potential customers of Islamic banking services in Quetta make up the study's target group. The population consists of people in the Quetta region, which is the focus of this thesis, who have actively interacted with Islamic banks or who have the capacity to do so in the future. It is necessary to choose a sample in order to study this group. A sample is a portion of the target population that has been picked to correctly reflect the larger population. In this instance, Quetta-based Islamic bank customers and potential clients will serve as the sample population. The survey used a 312-customers sample size. For SEM, a minimum sample size of 200 is advised in order to obtain appropriate statistical outcome (Kline, 2005; Weston & Gore Jr, 2006).

### 3.4 Sampling Technique

Data were collected using non-probability sampling techniques, such as convenience sampling. According to Saunders and Lewis (2012), a specific kind of sampling is known as "convenience sampling," & it involves collecting data from people who are willing to participate in an investigation simply because it is convenient for them to do so. Many researchers use this sample method since it is simple, can be obtained quickly, and doesn't need lot of money. Therefore, information was gathered from consumers of Islamic banks, as they were readily available.

### 3.5 Research Strategy & Questionnaire Administration

The survey method was used as research technique that was carried out. A questionnaire was utilized as a method for research due to the fact that questionnaires are becoming more precise and more time efficient. It provides accurate information in order to obtain a response from the respondents (Rowley, 2014). Several aspects of consumers' perceptions regarding services offered by Islamic banks were being measured through use of a questionnaire that was divided into two portions titled "respondents' profiles" and "introductory information" and contained a variety of questions.

#### 3.5.1 Measures

A survey was used to collect data in this study. Survey distributed questionnaires in target area & asked respondents to react to the given questions composed in the questionnaire. Regarding person's level of religiosity, the questions in this study are taken from another Barro and McCleary (2003), compromises of seven questions (Jamal et al., 2015). Indicators of Functional Load (IFL) scale was adopted (Antara et al., 2016).

The items of IFL that were employed in this research aren't the same as the standard and most often used items of IFL that were applied in other researches (Abdullah & Anderson, 2015; Rahim et al., 2016). In such researches, indicators of financial literacy (IFL) were derived from modified versions of basic and advanced financial literacy assessments. From that source, this thesis selected a five-item scale (Muhamad et al., 2013) to measure awareness for the Islamic bank's services. Four items regarding perception and intention were used to develop the questionnaire (Gruber, 2011; Malphrus, 2009). A scale with six factors was adopted from the data (Amin, Rahman, et al., 2017;



Ramayah & Razak, 2008), to elaborate the level of interest in utilizing Islamic banking services. All the questions and measures were ranges for seven-Likert scale from (1) strongly disagree to (7) strongly agree.

### 3.6 Pilot Study

Pilot testing was performed using a group of 50 customers. Cooper et al, (2006) discussed 'pilot study saved countless disaster survey experiments by using respondents' feedback to define and alter ambiguous, uncomfortable, or disruptive questions & techniques. Convenience sampling was applied in pilot study to pick the sample. Following ideas made by (Joe F Hair et al., 2019), 50 respondents were required for a pilot study to allow appropriate statistical testing procedures to be carried out.

### 3.7 Procedures

A quantitative method was utilized for this study's thesis. The data regarding the underlying latent constructs that were indicated by the model were collected through survey methodology which involved a questionnaire that the participants were responsible for administering to themselves. Multiple items on Likert scale ranging from 1 to 7 were used to evaluate these constructs. The instruments that were utilized in this research to gather data were split into two sections: the first portion had demographic information pertaining to the respondents, and the second part contained desired constructs. Before collecting final data, the questionnaire was put through both pre-testing and pilot testing to verify that it was easy to understand. It is helpful to perform pre-testing in order to establish face validity of questionnaire and to assist in identifying flaws with the language that is used in the questionnaire.

#### 3.7.1. Methodological Overview

In order to manage the data and conduct preliminary data analysis, like descriptive analysis & common method biases, most recent version of SPSS, which is known as SPSS-26, was used to perform the data analysis. In addition, a partial least square structural equation (PLS-SEM) was utilized to conduct an analysis of outer model (Measurement model) examination for validity & reliability of sample data, as well as the inner model (Structural model) assessment for hypothesized relations between the variables (Hair et al., 2020; Sarstedt et al., 2017b).

#### 3.7.2. Descriptive Analysis

During process of examining quantitative data obtained from questionnaires, we used current version of Statistical Package for Social Sciences (SPSS-26). Program was employed for the most part by researchers as a method of data analysis (Tabachnick et al., 2007). Resulting, this software was used to data to screen it for coding errors, missing data, statistical anomalies, and outliers, as well as to define characteristics of respondents who filled survey questionnaire (Tabachnick et al., 2007).

#### 3.7.3. Partial Least Square Structural Equation Modelling (PLS-SEM)

In field of social science research, Partial Least Squares Structural Equation Modelling, often known as PLS-SEM, is useful and adaptable technique for the construction of statistical models (Dolce et al., 2017; Sarstedt et al., 2017). Because of its adaptability and broadness, PLS makes it much simpler to examine and analyze complex route models, particularly in manner which is more exploratory (Hair et al., 2016). Both continuous & discrete types of dependent variables can be investigated in this study (Drolet & Morrison, 2001; Ali et al., 2018).

A variety of constructs, each of which is evaluated by one or more observable variables, are used in PLS-SEM to clarify the pattern of a series of interrelated dependency relationships. This is carried out in order to comprehend the data's general structure better (Joseph F Hair et al., 2019b). PLS-SEM makes the assumption that changes to one variable (x1) should impact another variable (y1) due to causal linkages. Latent constructs, in particular causal relationships b/w latent constructs, are focus of PLS-SEM analysis.

PLS-SEM methodology comprises two stages: analysis of measurement model & analysis of structural model. The first of them, known as the first-stage technique, was the one that was used in order to carry out the processing of the analysis using simultaneous estimations and measurement models. After determining validity & reliability of study in first step, structural relationships were analyzed and evaluated in second stage (Hair et al., 2020; Ringle et al., 2020).

### 3.8 Ethical Considerations

The collecting of data was carried out with the consent of the respondents, and the participants were also given assurances regarding the people's dignity and anonymity while they were taking part in the research study. It was made certain that the collected data would only be used for the sake of academic study. Consequently, the information



requested from those responses is given without any hesitance. They were doing so while bearing in mind the ethical standards.

## **CHAPTER 4: RESULTS**

### **4.1 Introduction**

Paper discussed introduction literature review to develop the conceptual framework and research methodology in previous chapters. As mentioned in chapter three, this study proposed and discussed research design, data analysis procedure, and questionnaire formulation to get research objectives. This chapter estimates results through data screening, descriptive analysis (sample characteristics), and partial least square structural equation modeling (PLS-SEM). This section is organized in six parts; the next section, section 4.2, provides pretesting of scale (questionnaire), and section 4.3 explains data screening (preliminary data analysis) summary statistics of demographic variables. Sections 4.4 & 4.5 investigate the results of PLS-SEM in which measurement model assessment & structural model assessment were reported. Final section, 4.6, presents chapter summary.

### **4.2 Pretesting Scale**

The objective of pretesting is to determine that questionnaire accurately reflects what researchers want to ask and the respondent can easily understand the questions. Pretesting is a method used to improve the design of a questionnaire and identify any error that appears to the concerned population (Bolton, 1993; Hilton, 2017). Pretesting the questionnaire was applied to a small sample size of 10 respondents. The experts (03), respondents (05), and professors (02) of the same field evaluated the questionnaire and filled the checklist given in (Appendix A Table A2). The checklist shows that the questionnaire requires changes, and the scales were adopted.

Two professors and three experts in area of marketing & behavior were approached to assess the relevance of its conceptualization of research operation. Secondly, they assess to appraise the suitability of the terminology to the investors in Islamic financial literacy, awareness, attitude, religiosity and perception. Thirdly, they make further suggestions, critics and comments on the questionnaire and its facets to validate the questionnaire. The respondents were asked to give their comments and identify any problem in regard to questionnaire and to modify and refine the questionnaire to perform proper analysis.

### **4.3 Preliminary Data Analysis**

Analysis of quantitative data gathered from the questionnaires utilised SPSS version 26. The purpose of its implementation in this study was to expose coding errors, handle issues over missing data, detect potential bias resulting from common procedures, and present an overview of the features of the sample (Tabachnick et al., 2007). Using SPSS, a thorough analysis of each variable was performed, providing first insights into the features of the sample and aiding in the initial stages of data exploration.



The SmartPLS software was used for structural equation modelling (SEM) analysis. SmartPLS, unlike standard statistical methods, does not necessitate the assumption of normality in the data distribution. This is because it utilizes bootstrapping techniques, as explained by Hair et al. (2017). This capability enables a more comprehensive analysis, especially when working with limited sample sizes or data that doesn't follow normal distribution. Additionally, measurement model's validity and reliability were thoroughly evaluated. The pilot study was undertaken to know survey instruments, guaranteeing their clarity & usefulness. Afterwards, measurement model was extensively assessed to check validity & reliability of constructs, establishing a strong basis for the upcoming SEM analysis.

#### 4.3.1 Missing Data

Missing data can be ignored under 5% except in the non-random pattern. Overall, nine questionnaires were dropped from the collected data due to incomplete responses. These dropped questionnaires had missing responses to more than 20% of the questions (Tabachnick et al., 2007). The information may cause the final analysis, so it was not included in final sample.

#### 4.3.2 Common Method Variance

When collected from same respondents, common method variance should be possible issue. When the same participants provide the measure of independent and dependent variables, this results in issue of the common method bias (Podsakoff et al., 2003). Research has collected data from same participants; therefore, it may contain potential issue of common method bias.

Furthermore, it is assumed that common method bias is present when single factor results for most of covariance among measures. This technique showed that a single factor explains 32.694% of the variance among the variables, suggesting no common method bias issue.

#### 4.3.3 Demographic Profile

Demographic profile of respondents is summarized in (Table 1). The majority respondents belong to age between 31 years to 40 years with 64.4% and 21.2% of the respondents were between 18 to 30 years. Results of Demographic profile also disclosed that most of the respondents had education possessing bachelor's and master's degrees, indicating 35.6% & 37.2%, respectively, which shows that the respondent had sufficient information. Finally, marital status category shows that 65.4% of respondents were married, and 34% were single.

#### 4.4 Assessment of Measurement Model

For validating measurement model, data were put through a series of tests to determine the reliability & validity of construct measures. It does this by describing relationship that exists between the item indicators and the latent constructs. The reliability, internal consistency, convergent validity, and discriminant validity of the instrument indicator are all evaluated as part of the process of determining its reliability and validity.

Table 1 Demographic Profile

Variables	Sections	Number	%
<b>Ages</b> (In Years)	18 - 30	66	21.2
	31 - 40	201	64.4
	41 - 50	39	12.5
	51 and above	6	1.9
		<b>312</b>	<b>100.00</b>
<b>Education</b>	Bachelor	111	35.6
	Masters	116	37.2
	Others	85	27.2
		<b>312</b>	<b>100.00</b>
<b>Marital Status</b>	Married	106	34
	Bachelor	204	65.4
	Separated	2	0.6
		<b>312</b>	<b>100.00</b>



Table 2 Measurement Model Assessment

Latent Constructs	Factor Loadings	Cronbach's alpha	Composite Reliability	AVE
<b>Customers Attitude toward Islamic Banking</b>		0.783	0.870	0.691
Att1	0.823			
Att2	0.877			
Att3	0.791			
<b>Customers Awareness</b>		0.869	0.919	0.790
Awar1	0.915			
Awar2	0.863			
Awar3	0.888			
<b>Customers Perception</b>		0.702	0.834	0.628
CPer1	0.765			
CPer2	0.850			
CPer3	0.758			
<b>Islamic Financial Literacy</b>		0.939	0.935	0.714
IFL 1	.852			
IFL 2	.875			
IFL 3	.900			
IFL 4	.878			
IFL 5	.888			
IFL7	.873			
IFL8	.902			
IFL9	.858			
IFL11	.774			
IFL12	0.754			
<b>Religiosity</b>		0.914	0.928	0.650
Reg1	0.883			
Reg2	0.830			
Reg3	0.808			
Reg4	0.868			
Reg5	0.729			
Reg6	0.754			
Reg7	0.757			

Note All the values of AVE > 0.5; CR > 0.7; therefore, all potential variables meet the conditions of (Henseler et al., 2015).

4.4.1 Indicator reliability

External loadings of every component for their respective constructs are used to assess the reliability of the items (Hair et al., 2012). Additionally, value of 0.6 can be maintained, that demonstrates acceptable level of internal item



reliability (Hair et al., 2014). Referring to Table 2, the item's outer loadings fall within the acceptable range. Because they scored lower than 0.6, the indicators IFL6 and IFL8 were eliminated from the study. The indicator was retained with the value range above 0.708 (Chin, 2010b; Hair et al., 2011), values of AVE were all above recommended value of 0.708; thus, it successfully met the criterion of item reliability (see Table 2).

**4.4.2 Internal consistency**

Composite reliability approach from Joreskog (1971) was taken into consideration in this study as part of the evaluation of internal consistency. The researchers recommended a composite dependability rating of 0.7 or above as the minimum acceptable threshold. The composite reliability may be overly generous depending on the amount of Cronbach's alpha; as a consequence, the genuine dependability of a construct is often located somewhere in the middle of these two extreme values (Joseph F Hair et al., 2019b). Each of the constructs demonstrated satisfactory dependability, with values that were greater than 0.7 (see Table 2 for details). Due to the fact that all constructs had CR and Cronbach alpha values that were higher than the suggested threshold, it was concluded that all of the constructs exhibited high levels of internal consistency and reliability.

**4.4.3 Convergent validity**

To establish validity of instrument, this study looked at both convergent & discriminant validity. Convergent validity extents to different aspects of same notion correlate with one another. Fornell & Larcker (1981), suggested evaluating convergent validity using average variance extracted, with cutoff value for AVE being at least .5. The evidence that supports the convergent validity can be seen in Table 2's AVE values, which demonstrated that all of the latent constructs had values that were more than cutoff of 0.5 (ranging from .628 to .790).

**4.4.4 Discriminant validity**

A specific measure is said to have discriminant validity if it is empirically unique and if it can capture phenomena that cannot be estimated using any of the other measures contained in structural equation model (Hair et al., 2019). Variables should have a stronger relationship with their factor than with another factor (Henseler et al., 2015).

*Table 3 Discriminant Validity (Fornell and Larcker Criteria)*

	<i>Att</i>	<i>Awar</i>	<i>C-Per</i>	<i>IFL</i>	<i>Relig</i>
<i>Attitude (Att)</i>	0.831				
<i>Awareness (Awar)</i>	-0.083	0.889			
<i>Customers Perception (C-Per)</i>	0.136	0.417	0.792		
<i>Islamic Financial Literacy (IFL)</i>	-0.048	0.391	0.457	0.857	
<i>Religiosity (Relig)</i>	-0.080	0.527	0.361	0.213	0.806

Note: The 3 shows the Fornell & Larcker criterion results to assess discriminant validity.

*Table 4 Discriminant Validity (HTMT Ratio)*

	<i>Att</i>	<i>Awar</i>	<i>C-Per</i>	<i>IFL</i>	<i>Relig</i>
<i>Attitude (Att)</i>					
<i>Awareness (Awar)</i>	0.128				
<i>Customers Perception (C-Per)</i>	0.173	0.519			
<i>Islamic Financial Literacy (IFL)</i>	0.091	0.414	0.547		
<i>Religiosity (Relig)</i>	0.107	0.567	0.407	0.206	

Note: The 4 shows the HTMT Ratio criterion results to assess discriminant validity (Henseler et al., 2015).

**4.4.4.1 Fornell & Larcker Approach**

The discriminant validity in this research is analyzed through (Fornell & Larcker, 1981) approach, and they recommended AVE to be 0.5 or above. Moreover, they suggest that average variance extracted square root should be

higher than correlation values of variables. Referring to (Table 3), the values were higher than correlations of latent constructs. Hence, this paper concludes that measure used in study has an appropriate level of discriminant validity that allows proceeding with analyzing structural model.

#### 4.4.4.2 The HTMT Approach

Furthermore, the second method used to assess the discriminant validity was hetero trait-mono trait ratio. When HTMT value is higher than either HTMT value of 0.85 (Kline, 2011) or HTMT value of 0.90 (Gold et al., 2001), there are questions with discriminant validity of test. Table 4 shows findings of HTMT analysis, despite fact that Henseler et al. (2015) stated that threshold value must be b/w .85 and .90. There is not a single number of HTMT ratio that is higher than .567 (Gold et al., 2001).

Table 5 Discriminant Validity Cross Loadings

	Att	Awar	CPer	IFL	Reg
Att1	0.823	-0.134	0.083	-0.089	-0.036
Att2	0.877	-0.009	0.142	0.019	-0.036
Att3	0.791	-0.100	0.100	-0.083	-0.135
Awar1	-0.071	0.915	0.443	0.429	0.572
Awar2	-0.111	0.863	0.293	0.267	0.410
Awar3	-0.047	0.888	0.348	0.316	0.391
CPer1	0.084	0.338	0.765	0.334	0.340
CPer2	0.189	0.349	0.850	0.395	0.246
CPer3	0.038	0.303	0.758	0.355	0.278
IFL1	-0.073	0.331	0.427	0.852	0.156
IFL11	-0.021	0.300	0.310	0.774	0.199
IFL12	-0.058	0.303	0.258	0.754	0.240
IFL2	-0.067	0.336	0.364	0.875	0.170
IFL3	-0.037	0.334	0.409	0.900	0.159
IFL4	-0.042	0.365	0.395	0.878	0.165
IFL5	-0.025	0.341	0.421	0.888	0.191
IFL7	-0.021	0.350	0.375	0.873	0.233
IFL8	-0.029	0.380	0.473	0.902	0.181
IFL9	-0.041	0.305	0.415	0.858	0.169
Reg1	-0.053	0.497	0.371	0.238	0.883
Reg2	-0.097	0.443	0.343	0.316	0.830
Reg3	-0.009	0.422	0.345	0.192	0.808
Reg4	-0.113	0.424	0.302	0.220	0.868
Reg5	-0.063	0.370	0.124	-0.027	0.729
Reg6	-0.061	0.380	0.148	-0.021	0.754
Reg7	-0.064	0.407	0.210	-0.003	0.757

Note. The highlighted value in the same factor highlights the factor loading with the same factor of each item.

#### 4.4.4.3 The Cross Loadings Approach

Finally, a cross-loading approach was applied to know discriminant validity of the constructs (Duarte & Amaro, 2018; Henseler et al., 2009). Likely, results show that cross-loadings on each indicator are higher than all of its related

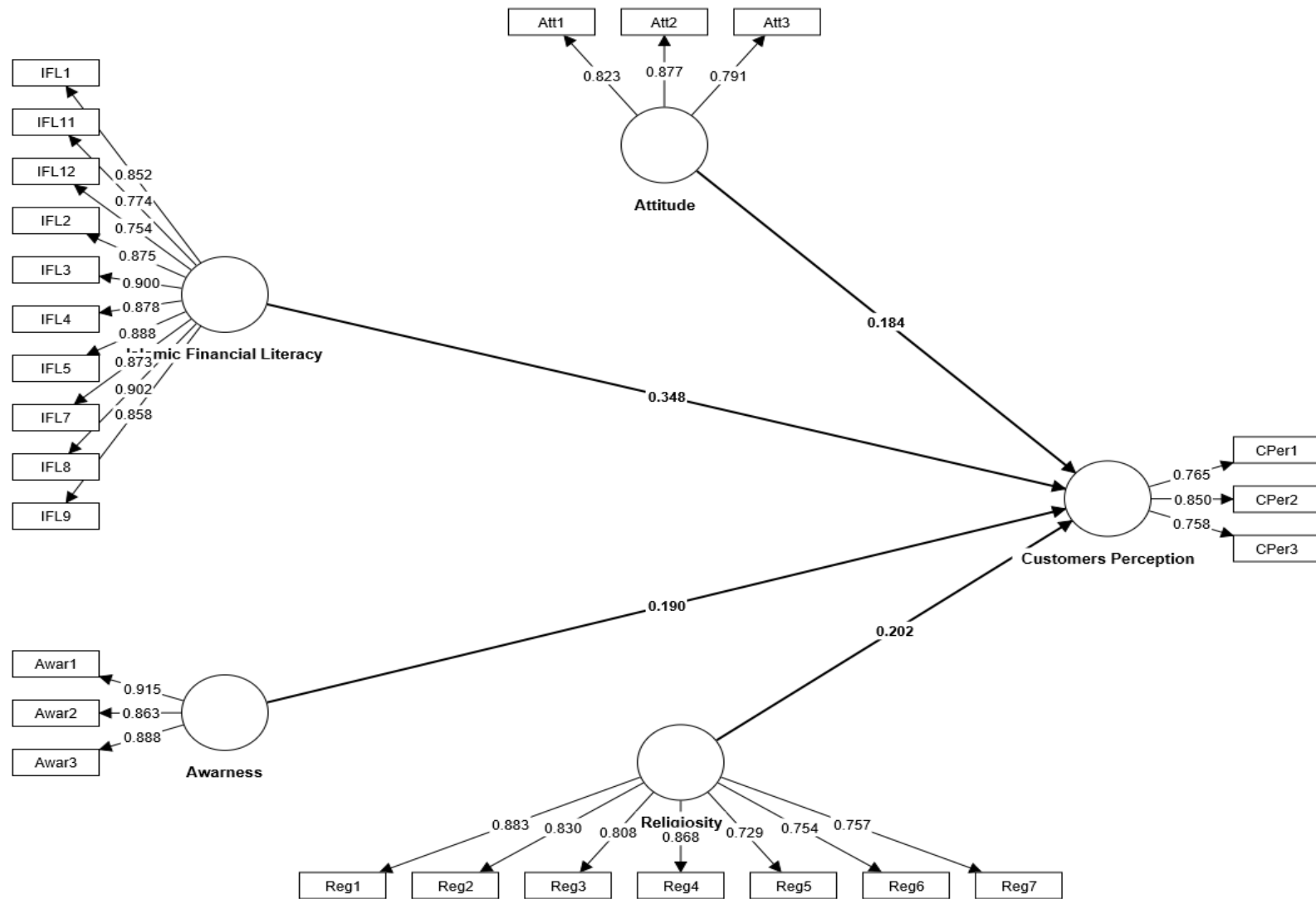


cross-loadings, suggesting that there is no issue of discriminant validity see Table 5. The measurement model for reflective constructs is also shown in Figure 2.

#### **4.5 Assessment of Structural Model**

Following step, which comes after reliability & validity of outer model have been evaluated & proven to be satisfied, is to assess structural model, also termed as inner model. It provides an explanation of the connection between the hidden constructions (Joseph F Hair et al., 2019b). Structural model evaluation method comprises both statistical test and estimation of hypothesized model. This study examined level of multicollinearity present in the predictor variables using structural model analysis.

Figure 2 Measurement Model



#### 4.5.2 Path coefficients

The researcher used standard bootstrapping approach with 5000 bootstrap samples & total of 312 cases to estimate significance of path coefficients (Hair Jr et al., 2021; Henseler et al., 2009). Table 6 shows that estimates of significance level (p-value), path coefficients ( $\beta$ ), and t-statistics for every hypothesized association in conceptual model. Determining results from bootstrapping of paths, rejection & acceptance of suggested hypothesis are assessed following previous literature in social science domain by considering alpha ( $\alpha$ ) at a significance level of 5% (Tabachnick et al., 2007).

Table 6 Structural Model (Hypothesis Testing)

Hypothesis	B	ST. D	T-Stat	P Values	Decision
Attitude $\rightarrow$ CPer	0.184***	0.049	3.743	0.000	Supported
Awareness $\rightarrow$ CPer	0.190***	0.057	3.341	0.001	Supported
IFL $\rightarrow$ CPer	0.348***	0.049	7.089	0.000	Supported
Religiosity $\rightarrow$ CPer	0.202***	0.065	3.103	0.002	Supported

Note. \*, \*\*, \*\*\* represents 10%, 5% and 1% respectively. B=path coefficients, ST. D= standard deviation of the sample, t-statistics and p values is calculated through 5000 bootstrapping.

Table 6 shows positive and significant association of customers attitude with the customers perception and intention Islamic banks customers ( $\beta = 0.184$ ,  $t = 3.74$ ,  $p = 0.000$ ), where  $\beta$  shows that 1% increase in customers attitude causes a 0.155% increase in customers perception and intention Islamic banking, therefore,  $H_1$  is supported.

Additionally, it is noted that second hypothesis of current study for learning perspective as explorative learning is also supported.

$H_2$  with ( $\beta = 0.190$ ,  $t = 3.341$ ,  $p = 0.001$ ) demonstrates an association b/w customers awareness and customers perception and intention in positive & significant direction. Furthermore, Islamic financial literacy on customers perception and intention were also investigated.

The  $H_3$  with the values of ( $\beta = 0.348$ ,  $t = 7.08$ ,  $p = 0.000$ ) shows that Islamic financial literacy is strongly associated with significant increases in customers perception and intention in Islamic banking. Finally,  $H_4$  with ( $\beta = 0.202$ ,  $t = 3.102$ ,  $p = 0.002$ ) presents that relationship b/w religiosity & customers perception and intention is positive and significant. thus,  $H_4$  is supported. Structural model of conceptual framework is shown in Figure 3.

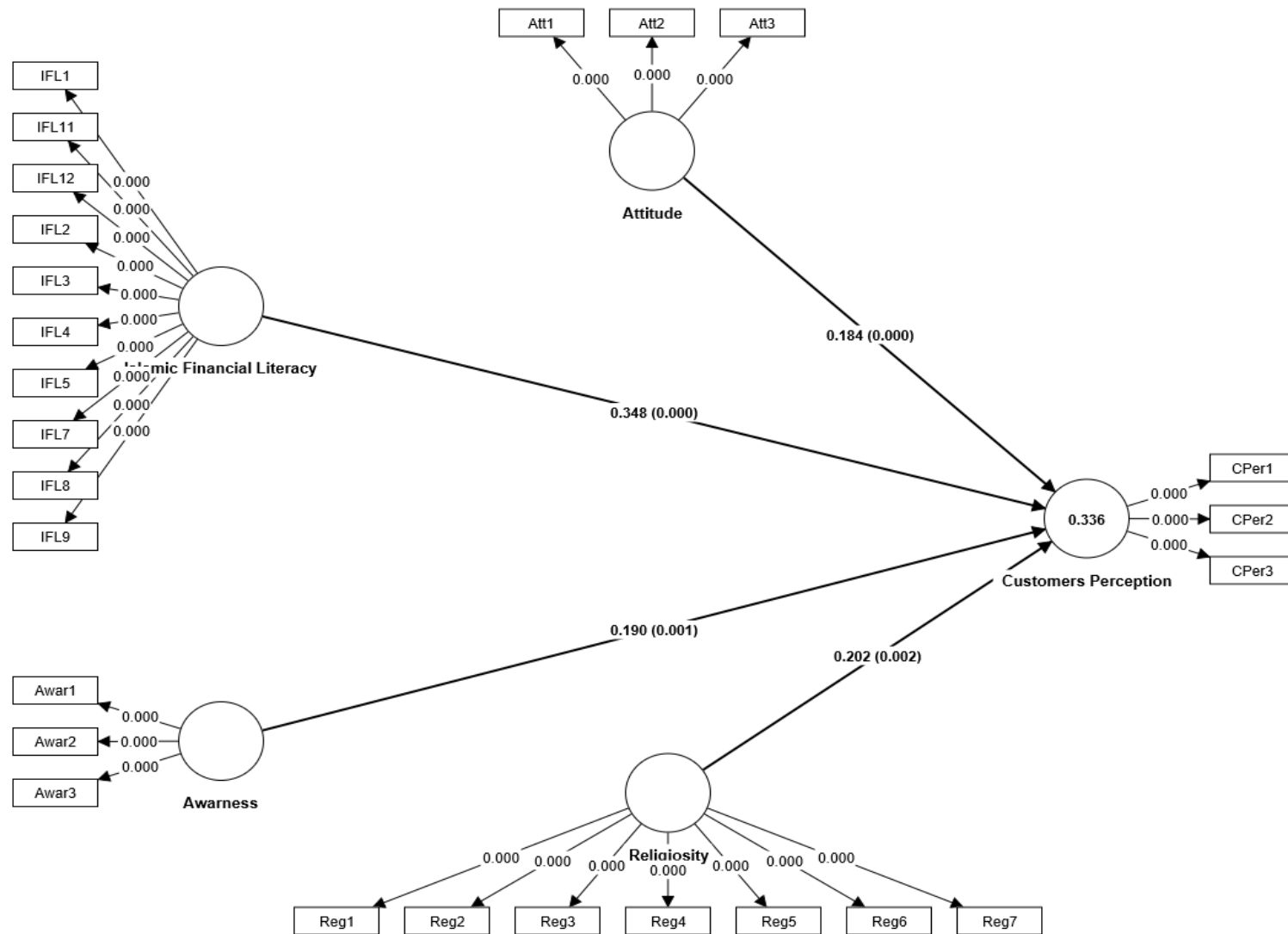
#### 4.5.3 Analysis of Variance

Other principle standard for determining structural models includes evaluation of  $R^2$  value, also entitled coefficient of determination (Hair et al., 2011; Henseler et al., 2009). R-square is measure of goodness of fit in partial least squares structural equation modeling (PLS-SEM) that shows proportion of explained variance in dependent variable. In PLS-SEM, R-square is calculated as proportion of variance in latent variable explained by independent variables. It summarizes how well the model fits the data, with higher values indicating better fit. R-square can be used to compare various PLS-SEM models to determine which model provides best explanation of the data.

The value of  $R^2$  shows percentage variation in endogenous constructs that is elaborated collectively by one or more exogenous constructs (Elliott & Woodward, 2007). Generally,  $R^2$  value of .60 is considered substantial, .33 is reasonable, and .19 is weak (Chin, 2010a). The values of  $R^2$  are given in Table 7, and value of  $R^2$  obtained for construct was .336 (as disclosed in Table 7), showing that overall model with constructs (See Figure 3) explains 33.6% of variance in customers perception and intention in Islamic banking.

In the nutshell, according to Chin (1998) guidelines, values of  $R^2$  achieved for constructs are strong. Correspondingly,  $f^2$  effect size statistic for current research is also determined, which shows the extent to which predictor construct contributes to explain endogenous variable in terms of  $R^2$  value. As per Cohen (2013) guidelines, value of  $f^2$  above .35 indicates substantial, .15 shows moderate, and .02 reflects small effect sizes. The  $f^2$  effect size for latent constructs is given in Table 7.

Figure 3 Structural Model





The  $f^2$  effect size values in Table 7 for constructs illustrate that customer attitude (0.051), awareness (0.035) and religiosity (0.044) have small effect whereas Islamic financial literacy (0.155) have a large effect on customers perception and intention in Islamic banking.

Table 7 Explained Variance, Effect Size and Multicollinearity

	R-square	R-square adjusted	Customers Perception $f^2$	Customers Perception VIF
Customers Perception	0.336	0.328		
Attitude			0.051	1.009
Awareness			0.035	1.563
Islamic Financial Literacy			0.155	1.181
Religiosity			0.044	1.386

Note.  $R^2$  = coefficient of determination,  $f^2$ =effect size, VIF= variance inflation factor for multicollinearity.

## CHAPTER 5: DISCUSSION AND CONCLUSION

### 5.1 Introduction

This study estimates the results using PLS-SEM of relationship b/w Islamic banks customers' perception and intention as endogenous latent construct, customers attitude, customers awareness, Islamic financial literacy of customers and religiosity as exogenous. This chapter discussed the results, theoretical and managerial implications, limitations, future direction, and conclusion.

### 5.2 Discussion

This study offers an important insight into the Islamic bank's customer attitude with the awareness, Islamic financial education, & religiosity. Thus, result of study extends the understanding of Islamic banks customer perception and intention of Quetta, Pakistan. The study's objectives were to identify impact in developing context with the addition of several factors. This research aims to examine how Islamic financial literacy, familiarity with Islamic goods, religious commitment, and outlook on Islamic banking services influence consumer perceptions of the industry. Islamic banking refers to financial transactions conducted in line with Islamic rules, which forbid the charging of interest & support profit-sharing and moral investment practices.

Section 4.5.2 indicates that customer attitude with the awareness, Islamic financial education, & religiosity positively affect Islamic banks customers' perception & intention with significance level of less than 5% ( $P < 0.05$ ). According to study's findings, individuals' perceptions of usefulness of Islamic banking products and services are affected by their level of Islamic financial literacy. These findings are consistent with those found in prior research (Albaity & Rahman, 2019a). The more someone knows about Islamic financial instruments, the more likely they are to feel comfortable using them. A person's knowledge of Islamic banking, their perspective on Islamic banking, and their religious values all play key roles in shaping their opinion on and desire for Islamic banking products and services. Beyond basic financial literacy, cultural and religious traditions influence how people feel about and interact with Islamic banks.

Individual preferences toward using shariah financial services can be influenced by one's level of financial education, which is defined as having information, skills, & confidence to meet one's financial demands (Mason & Wilson, 2000). The findings of this study demonstrated that intention to use Islamic financial products & services was significantly predicted by Islamic financial literacy. Few research has been done in this area by experts who are familiar with Islamic financial products (Bley & Kuehn, 2004; Strömbäck et al., 2017; Xiao et al., 2014). Because of this reality, it follows that financial literacy of businesses with regard to Islamic financing improves the likelihood that they will employ goods offered by Islamic banks. This finding is in line with findings of research conducted by Hassan and Anood (2009), which show that an investor's level of financial literacy has an effect on the investor's desire to make a decision regarding an investment.

An individual's familiarity and comprehend of the concepts, tenets, and procedures that form the foundation of Islamic finance are referred to as their level of literacy in field. Customers' perceptions of Islamic banking and Islamic



finance can be significantly influenced by how familiar they are with these concepts (Satsios & Hadjidakis, 2018). Customers who have a greater level of Islamic financial literacy are better able to make informed decisions, comprehend the advantages of Islamic banking, and recognize the unique features of Islamic banking. As a result, customers who are more financially literate in terms of Islamic finance are more likely than customers who are less literate to have a positive opinion of Islamic banking.

Secondly, next hypothesis of the thesis explains that attitude towards Islamic banking is positively related of customers of Islamic banking. According to study's findings, there is a significant relationship between attitude and intention of using Islamic goods and services. According to Louw et al. (2013), attitude contributes to the development of a good customer perception. According to Ab Rahman et al. (2018), a person's financial literacy and attitude will ultimately be influenced by their perception & intention to use of Islamic products. People who see money as only a means to an end will never be able to make effective financial plans for their future, which is the biggest difficulty recognized in this modern period.

Furthermore, according to the literature, financial attitude is generally considered to be important and helpful in influencing one's behavior (Brown & Graf, 2013; Gustman et al., 2012). Customers' perspectives on the Islamic banking service play a significant role in how well they comprehend it. A positive attitude considers how satisfied customers are with the convenience, dependability, and openness to examination of Islamic banks' services. Numerous elements, such as tailored customer care, excellent complaint handling, and the creation of innovative digital banking solutions, can be credited for the customers' positive views. When customers have positive attitude toward the Islamic banking services they receive, their overall experience and perception of Islamic banking are improved.

Islamic banks must comprehend the attitudes and viewpoints of their customers in order to effectively position themselves in the market, draw in new customers, and keep the ones they already have. Islamic banks constantly assess and address the attitudes and perspectives of their customers, they can adapt their strategies to match the expectations of their customers, enhance their reputations, and develop long-term relationships with their clients. The outcomes of this study agree with those of (Newaz et al., 2016). This outcome is consistent with Souiden and Rani (2015b) findings that religious affiliation influences intentions to use Islamic banking services in a way that is indirectly mediated by views toward these banks.

Customers' views toward Islamic banking encompass their overall evaluation of the industry. This evaluation takes into account the customers' satisfaction with the services they have gotten, their confidence in the institutions, and their thoughts regarding the degree to which Islamic banking operations correspond to moral and religious principles. Customers who have a favorable mindset toward Islamic banking are more likely to participate in Islamic financial activities and to have a long-term relationship with Islamic banks due to the fact that they have favorable views and feelings regarding the industry as a whole.

When compared to other factors, it was discovered that the association was quite powerful, favorable, and important; this is something that is backed by past studies as well. Previous research Eisingerich and Bell (2007), Mohd Kassim and Souiden (2007), Souiden and Jabeur (2015), has shown that an individual's disposition toward a product or service is a significant factor in determining whether or not they intend to make a purchase of that product or service. The demand-side component of attitude toward Islamic banks is essential to consider since it plays a vital role in facilitating the relationship to the aim.

Thirdly, another significant aspect that affects that awareness of Islamic products on customer's perception of Islamic banking. Customers view Islamic banking is the understanding of Islamic financial products. Islamic banking provides a variety of Shariah-compliant goods and services, including Islamic investment funds, Islamic mortgages, and Islamic savings accounts. Customers' perceptions of Islamic banking are influenced by how familiar they are with these products and how much awareness they have of them. Customers can assess the suitability and value of Islamic products with greater knowledge, which improves their opinion of the entire banking experience.

Previous research has revealed that awareness has a positive link with usage intention (Amin, Rahim Abdul Rahman, et al., 2011; Gait & Worthington, 2008b; M. Bizri, 2014; Thambiah et al., 2011; Wahyuni, 2012). Other researchers have also observed that awareness has a good link with usage intention. Islamic financial institutions have come to the realization that they can no longer afford the luxury of relying solely on religious considerations in order to



keep their consumers. According to Wajdi Dusuki and Irwani Abdullah (2007), they need to place an emphasis on the quality of the products and services they offer. This indicates that Islamic financial institutions have been at the forefront of promoting their goods and services as well as disseminating information about them.

Beck et al. (2013), Mansour et al. (2015), all indicated that some of the products supplied by Islamic banks are significantly different from those given by conventional banks. Islamic banking offers a range of financial products and services that adhere to Shariah principles, such as Islamic savings accounts, Islamic mortgages, Islamic investment funds, and Takaful (Islamic insurance). The level of awareness and familiarity that customers have with these products can significantly influence their perception of Islamic banking as a whole.

The concept of "awareness of Islamic products" refers to a consumer's level of knowledge and grasp regarding the particular qualities, advantages, and limitations of Islamic financial instruments. It is important to understand how these products function within the framework of Islamic finance as well as how they differ from conventional financial products. Customers who are aware about Islamic products are better equipped to assess if the products will be able to meet their financial needs and to base their decisions on that assessment.

Finally, According to Souiden and Rani (2015b), members of religious communities have a tendency to raise concerns about whether or not Islamic banks are compatible with Islamic ideals. They indicated that the key reason why customers did not have faith in the services offered by Islamic banks was because they did not know enough about the products and services offered by Islamic banks. This was also corroborated by Ahmad and Haron (2002a), who pointed out that the lack of information about Islamic banks is the primary reason for their lack of comprehensive acceptance. As a result, the investigation seems to support the idea that there is a sizable discrepancy between what is theoretically recognized and what is really practiced in the area of Islamic finance.

This result is consistent with the findings of Souiden and Jabeur (2015), who discovered that the greater a person's fear of the punishment that GOD will mete out, the greater their fear of God, and the more careful they will be as a result. Antara et al. (2016) came to the same conclusion after doing their research and discovered that a strong Islamic belief. Religious ideas and practices have a considerable impact on how people view and behave in relation to Islamic finance. Customers with strong religious commitment are more likely to have a favorable opinion of Islamic banking. They believe in the moral foundations of Islamic finance and accept that Islamic banks' acts are consistent with their own religious convictions, which accounts for their upbeat stance on the industry (Amin, Abdul Rahman, et al., 2017). Due to the role that religion plays as a motivator, customers are encouraged to seek out and select Islamic banking services, which enhances their opinion of the company as a whole.

### **5.3 Theoretical Implications**

The findings of this study contribute to the Islamic banking behavior of customers. This study provides insight into the combined influence of customer perception and intention in Islamic banking, attitude towards Islamic products and services, awareness of Islamic products and services, and religiosity typically proposed independently.

Secondly, this study contributes to a greater knowledge of the effects of asserted coherence on customer experience in Islamic banking, which has thus far been lacking in the literature. Previous research has looked at customer behavior in Islamic banking primarily from relationship in Islamic banking or service-dominant rationale.

Thirdly, conducting the empirical investigation in a developing or emerging context, the current study contributes to the literature on customer behavior Islamic banking by providing insight into the banking sector.

Finally, Customers are also more likely to identify with businesses that boost or sustain uses (Groeger et al., 2016). As a result, Islamic banking must provide exceptional quality, increasing customer comfort and enhancing business activities.

### **5.4 Managerial Implications**

In Islamic banking, gaining and sustaining customers is critical. Since getting new customers is more difficult than retaining existing (Huang et al., 2017), managers frequently search for ways to increase customer (Rust et al., 2004). Increased customer relationships (Kumar & Pansari, 2016) and customer behavior can be seen as crucial elements for businesses (Hustic & Gregurec, 2015). The study's findings suggest that customer Islamic financial literacy is useful in seeking to attract and retain customers (Baker & Wakefield, 2012; Kuruvilla & Joshi, 2010). Apart from the more typical



marketing techniques of advertising, pricing, and public relations, it can be an efficient strategy to increase customers (Quesenberry, 2020).

The present study confirmed that Islamic banking management should strengthen customer relationships (Dabbous & Barakat, 2020). This research will assist Islamic banking managers, and customers to recognize the importance of services and products offered by banks. Thus, practitioners should create a closed environment between their banks and customers, for example, through firm communications that emphasize customers values.

Moreover, these results have some managerial implications for practitioners in the Islamic banking on building an effective marketing strategy that can build strong and lasting connections with customers. The results also indicated that customer attitude and awareness of Islamic products and services plays a key role in perception and intention in Islamic banking (Kumar et al., 2018). Thus, practitioners should establish marketing strategies that strengthen customers' perceptions towards the Islamic banking, resulting in an improved banks environment and facilities. Islamic banking also benefits their existing customers who frequently visit the banks and heavily market these benefits to increase customer (Calvo-Porrall & Lévy-Mangin, 2019). The value of effective customer visits to Islamic banking is becoming more widely recognized, as indicated by the growth of concepts like customer involvement.

The Islamic banking must prioritize social bonding methods to increase and sustain commitment levels, resulting in increased customer involvement and visits. When appropriate, Islamic banks managers may also offer customized services to satisfy the unique demands of individual customers. Customer religiosity is based upon several factors, including the customer's willingness to recommend the Islamic banking to anyone looking for advice, the customer's willingness to promote friends and relatives to be doing business with the Islamic banks, and the customer's intention to communicate positively about the Islamic banks to others. This study shows that Islamic banking management in Pakistan should pay greater attention to customer needs to keep existing and prospective customers successful in the market and create competitive advantages.

It was discovered that the majority of clients who patronize Islamic banks stated that religion was the biggest motivator for them to purchase items offered by Islamic banks. As a result, there is an imperative to concentrate on the delivery of services that are both high-quality and highly effective. A convenient location, consumer education and awareness, the influence of family and friends, and prizes given out by Islamic banks are some of the other aspects that have been cited.

### **5.5 Limitations and Future Research**

Even though this study offers theoretical contributions and management implications, it also has several drawbacks. First, the current study used a sample representative of Quetta, Pakistan. The research was carried out in the setting of a specific city. As a result, the findings' generalizability and external validity could be the main concern. The study's conclusions might be tested in different Pakistani cities to address these challenges while using other geographic areas to strengthen the study's findings.

Second, the study only considered existing customers of limited Islamic banks to provide a detailed view of the market. Future research could address this limitation by including all Islamic banks customers to improve the generalizability of the findings. Finally, this research focused on a specific Islamic banking, the study's external validity is questioned.

Aside from the limitations, there are some other interesting areas for further research. This study only looked at the attitude, awareness, Islamic financial literacy, and religiosity on customer perception and intention of Islamic banking. Forums and conferences are significant outlets to raise awareness, design products according to the preferences of customers, practice transparency in transactions with customers, and ensure that products fully comply with Shariah principles. A high degree of awareness was found to be connected with public understanding and perception of Islamic banking financing and investment products in the present study. These products include Mudarabah, musharakah, Murabaha, and ijarah (lease) items. It would be fascinating if future research incorporated methodological advancement for analyzing and collecting the data. The study could incorporate the longitudinal data structure, which collects over time. Future research should look for empirical data to support these viewpoints.

In addition, subsequent research ought to broaden the ambit of the study in order to eliminate the unfavorable view of the goods and services offered by Islamic financial institutions. In addition, the findings of this study should be



replicated in other countries, states, and areas of the country as part of further research. The image that consumers have of Islamic banking products and services could be improved by conducting a comparative study across cultural contexts. Methods of quantitative research were utilized for this investigation. Because quantitative and qualitative approaches can supplement one another, the study's findings will have more significance if both quantitative and qualitative methods are utilized.

It is recommended that future research further explores the dynamic nature of these factors and their long-term impact on customers' perception. Additionally, investigating the influence of demographic variables, cultural contexts, and socio-economic factors on customers' perception would provide a more comprehensive understanding of the dynamics of Islamic banking. Such research endeavors will contribute to the ongoing efforts in advancing the field of Islamic finance and enable banks to better serve their customers' needs in an increasingly competitive financial landscape.

### 5.6 Conclusion

This thesis aimed to know impact of Islamic financial literacy, awareness of Islamic products, religiosity, & attitude towards Islamic banking service on customers' perception of Islamic banking in Quetta (Pakistan). Results highlight significant role that these factors play in shaping customers' perception of Islamic banking and provide valuable insights for banks and policymakers in the Islamic finance industry.

This research highlights interplay b/w Islamic financial literacy, awareness of Islamic products, religiosity, attitude towards Islamic banking service, and customers' attitude of Islamic banking. The findings emphasize the importance of educational initiatives to enhance Islamic financial literacy, promote awareness of Islamic products, consider customers' religiosity, and deliver high-quality banking services. By addressing these factors, banks can attract and retain customers, enhance their perception of Islamic banking, and contribute to growth and development of the Islamic finance industry.

Islamic financial literacy emerged as a crucial factor in influencing customers' perception of Islamic banking. Customers with higher levels of Islamic financial literacy demonstrated more positive perception of Islamic banking due to their ability to make informed decisions, understand the benefits of Islamic finance, and appreciate its unique features. Therefore, enhancing customers' Islamic financial literacy through educational programs and campaigns should be a priority for banks and policymakers to promote a positive perception of Islamic banking.

Awareness of Islamic products also emerged as a key factor in influencing customers' perception. Customers who were more aware and familiar with the range of Islamic financial products exhibited more favorable perception of Islamic banking. This awareness enabled customers to evaluate the suitability and value of Islamic products, resulting in a positive association with the overall banking experience. Thus, efforts to increase awareness and promote understanding of Islamic products among customers are crucial for shaping a positive attitude of Islamic banking.

Attitude towards Islamic banking service was another influential factor in shaping customers' perception. Customers' satisfaction with the quality of service, convenience, trustworthiness, and transparency of Islamic banks significantly impacted their overall perception. Therefore, Islamic banks should strive to provide excellent customer service, addressing concerns promptly and transparently, to foster a positive attitude and enhance customers' perception of Islamic banking.

### REFERENCES

- Ab Rahman, S., Tajudin, A., & Tajuddin, A. F. A. (2018). Determinant factors of Islamic financial literacy in Malaysia. *American Journal of Humanities and Social Sciences Research*, 2(10), 125-132.
- Abdullah, M. A., & Anderson, A. (2015). Islamic financial literacy among bankers in Kuala Lumpur. *Journal of Emerging Economies and Islamic Research*, 3(2), 79-94.
- Adelekan, A. S. (2021). Islamic Financing Effects on Small Medium Enterprises Competitiveness. *Journal of Islamic Economic and Business Research*, 1(1), 100-113.
- Aguirre-Urreta, M. I., & Rönkkö, M. (2018). Statistical inference with PLSc using bootstrap confidence intervals. *MIS quarterly*, 42(3), 1001-1020.



- Ahmad, N., & Haron, S. (2002a). Perceptions of Malaysian corporate customers towards Islamic banking products & services. *International journal of Islamic financial services*, 3(4), 16.
- Ahmad, N., & Haron, S. (2002b). Perceptions of Malaysian corporate customers towards Islamic banking products and services. *International journal of Islamic financial services*, 3(4), 13-29.
- Ahmed Zebal, M., & M. Saber, H. (2014). Market orientation in Islamic banks – a qualitative approach. *Marketing Intelligence & Planning*, 32(4), 495-527.
- Ainley, M., Mashayekhi, A., Hicks, R., Rahman, A., & Ravalia, A. (2007). Islamic finance in the UK: Regulation and challenges. *The Financial Services Authority (FSA), London*.
- Akbar, S., Shah, S. Z. A., & Kalmadi, S. (2012). An investigation of user perceptions of Islamic banking practices in the United Kingdom. *International Journal of Islamic and middle eastern finance and management*.
- Akhtar, S. (2007). Building an effective Islamic financial system. *BIS Review*, 38, 1-7.
- Akram, M., Rafique, M., & Alam, H. M. (2011). Prospects of Islamic Banking: Reflections from Pakistan. *Australian Journal of Business and Management Research*, 1(2).
- Alam, S. S., Janor, H., Zanariah, C., & Ahsan, M. N. (2012). Is religiosity an important factor in influencing the intention to undertake Islamic home financing in Klang Valley. *World Applied Sciences Journal*, 19(7), 1030-1041.
- Albaity, M., & Rahman, M. (2019a). The intention to use Islamic banking: an exploratory study to measure Islamic financial literacy. *International Journal of Emerging Markets*, 14(5), 988-1012.
- Albaity, M., & Rahman, M. (2019b). The intention to use Islamic banking: an exploratory study to measure Islamic financial literacy. *International Journal of Emerging Markets*.
- Ali, F., Rasoolimanesh, S. M., Sarstedt, M., Ringle, C. M., & Ryu, K. (2018). An assessment of the use of partial least squares structural equation modeling (PLS-SEM) in hospitality research. *International Journal of Contemporary Hospitality Management*.
- Ali, F., Raziq, H., Aleem, A., Latif, S., Arslan, M., & Muhammad, A. S. (2011). Customer Satisfaction and Islamic Banking in Pakistan. *International Journal of Asian Social Science*, 1(4), 89-96.
- Ali, M., & Raza, S. A. (2017). Service quality perception and customer satisfaction in Islamic banks of Pakistan: the modified SERVQUAL model. *Total Quality Management & Business Excellence*, 28(5-6), 559-577.
- Ali, M. A. (2015). Evolution & Development of Islamic Banking–The Case of Pakistan. *European Journal of Islamic Finance* (1).
- Amin, H., Abdul-Rahman, A.-R., & Abdul-Razak, D. (2013). An integrative approach for understanding Islamic home financing adoption in Malaysia. *International Journal of Bank Marketing*.
- Amin, H., Abdul Rahman, A. R., Abdul Razak, D., & Rizal, H. (2017). Consumer attitude and preference in the Islamic mortgage sector: a study of Malaysian consumers. *Management Research Review*, 40(1), 95-115.
- Amin, H., Rahim Abdul Rahman, A., Laison Sondoh, S., & Magdalene Chooi Hwa, A. (2011). Determinants of customers' intention to use Islamic personal financing. *Journal of Islamic Accounting and Business Research*, 2(1), 22-42.
- Amin, H., Rahman, A. R. A., & Ramayah, T. (2009). What makes undergraduate students enroll into an elective course? The case of Islamic accounting. *International Journal of Islamic and middle eastern finance and management*.
- Amin, H., Rahman, A. R. A., Razak, D. A., & Rizal, H. (2017). Consumer attitude and preference in the Islamic mortgage sector: a study of Malaysian consumers. *Management research review*.
- Amin, H., Rahman, A. R. A., Sondoh, S. L., & Hwa, A. M. C. (2011). Determinants of customers' intention to use Islamic personal financing: The case of Malaysian Islamic banks. *Journal of Islamic Accounting and Business Research*.
- Antara, P. M., Musa, R., & Hassan, F. (2016). Bridging Islamic financial literacy and halal literacy: the way forward in halal ecosystem. *Procedia Economics and Finance*, 37, 196-202.
- Arora, S., & Marwaha, K. (2014). Variables influencing preferences for stocks (high risk investment) vis-à-vis fixed deposits (low-risk investment): A comparative study. *International Journal of Law and Management*.
- Atkinson, A., & Messy, F.-A. (2012). Measuring financial literacy: Results of the OECD/International Network on Financial Education (INFE) pilot study.



- Aziz, S., Md Husin, M., & Hussin, N. (2017). Conceptual framework of factors determining intentions towards the adoption of family takaful-An extension of decomposed theory of planned behaviour. *International Journal of Organizational Leadership*, 6, 385-399.
- Baker, J., & Wakefield, K. L. (2012). How consumer shopping orientation influences perceived crowding, excitement, and stress at the mall. *Journal of the academy of marketing science*, 40(6), 791-806.
- Bananuka, J., Kasera, M., Najjemba, G. M., Musimenta, D., Ssekiziyivu, B., & Kimuli, S. N. L. (2019). Attitude: mediator of subjective norm, religiosity and intention to adopt Islamic banking. *Journal of Islamic Marketing*.
- Barreda, A. A., Bilgihan, A., Nusair, K., & Okumus, F. (2015). Generating brand awareness in online social networks. *Computers in human behavior*, 50, 600-609.
- Barro, R. J., & McCleary, R. M. (2003). Religion and economic growth. In: National Bureau of Economic Research Cambridge, Mass., USA.
- Bassir, N. F., Zakaria, Z., Hasan, H. A., & Alfian, E. (2014). FACTORS INFLUENCING THE ADOPTION OF ISLAMIC HOME FINANCING IN MALAYSIA. *Transformations in Business & Economics*, 13(1).
- Beck, T., Demirgüç-Kunt, A., & Merrouche, O. (2013). Islamic vs. conventional banking: Business model, efficiency and stability. *Journal of Banking & Finance*, 37(2), 433-447.
- Belouafi, A., & Chachi, A. (2014). Islamic finance in the United Kingdom: Factors behind its development and growth. *Islamic Economic Studies*, 130(1155), 1-42.
- Benjamin, D. J., Choi, J. J., & Fisher, G. (2016). Religious identity and economic behavior. *Review of Economics and Statistics*, 98(4), 617-637.
- Bhuiyan, M. A. H., Darda, M. A., & Hossain, M. B. (2022). Corporate social responsibility (CSR) practices in Islamic banks of Bangladesh. *Social Responsibility Journal*, 18(5), 968-983.
- Bin Abdullah, M. A., Hamzah, A. A., Azman, N. S., & Khalil, N. (2015). Islamic Financial Literacy: Empirical Study Among Bankers In Kuala Lumpur And Labuan. *Journal of Islamic Banking & Finance*, 32(4).
- Bizri, R. M. (2014). A study of Islamic banks in the non-GCC MENA region: Evidence from Lebanon. *International Journal of Bank Marketing*.
- Bley, J., & Kuehn, K. (2004). Conventional versus Islamic finance: student knowledge and perception in the United Arab Emirates. *International journal of Islamic financial services*, 5(4), 17-30.
- Bolton, R. N. (1993). Pretesting questionnaires: content analyses of respondents' concurrent verbal protocols. *Marketing science*, 12(3), 280-303.
- Breuer, W., Riesener, M., & Salzmann, A. J. (2014). Risk aversion vs. individualism: what drives risk taking in household finance? *The European Journal of Finance*, 20(5), 446-462.
- Brown, M., & Graf, R. (2013). Financial literacy, household investment and household debt: Evidence from Switzerland.
- Bukhari, S. M. H., Nawaz, H., Imam, A., & Qadri, M. M. (2014). RELIGIOUS ASPECTS OF FINANCE PROMISES: EVIDENCE FROM PAKISTAN. *Science International-Lahore*, 26(5), 2471-2475.
- Butt, I., Saleem, N., Ahmed, H., Altaf, M., Jaffer, K., & Mahmood, J. (2011). Barriers to adoption of Islamic banking in Pakistan. *Journal of Islamic Marketing*, 2(3), 259-273.
- Calvo-Porrá, C., & Lévy-Mangin, J.-P. (2019). Profiling shopping mall customers during hard times. *Journal of Retailing and Consumer Services*, 48, 238-246.
- Chaouch, N. (2017). An exploratory study of Tunisian customers' awareness and perception of Islamic banks. *International Journal of Islamic Economics and Finance Studies*, 3(2).
- Chen, Y., Murgulov, Z., Rhee, S. G., & Veeraraghavan, M. (2016). Religious beliefs and local government financing, investment, and cash holding decisions. *Journal of Empirical Finance*, 38, 258-271.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, 295(2), 295-336.
- Chin, W. W. (2010a). How to write up and report PLS analyses. In *Handbook of partial least squares* (Vol. 2, pp. 655-690).
- Chin, W. W. (2010b). How to write up and report PLS analyses. In *Handbook of partial least squares* (pp. 655-690). Springer.



- Cohen, J. (2013). *Statistical power analysis for the behavioral sciences*. Academic press.
- Cueva, C., & Rustichini, A. (2015). Is financial instability male-driven? Gender and cognitive skills in experimental asset markets. *Journal of economic behavior & organization*, 119, 330-344.
- Dabbous, A., & Barakat, K. A. (2020). Bridging the online offline gap: Assessing the impact of brands' social network content quality on brand awareness and purchase intention. *Journal of Retailing and Consumer Services*, 53, 101966.
- Di Mauro, F., Caristi, P., Couderc, S., Di Maria, A., Ho, L., Kaur Grewal, B., . . . Zaheer, S. (2013). Islamic finance in Europe. *ECB Occasional Paper*(146).
- Dolce, P., Vinzi, V. E., & Lauro, C. (2017). Predictive path modeling through PLS and other component-based approaches: methodological issues and performance evaluation. In *Partial Least Squares Path Modeling* (pp. 153-172). Springer.
- Drolet, A. L., & Morrison, D. G. (2001). Do we really need multiple-item measures in service research? *Journal of service research*, 3(3), 196-204.
- Duarte, P., & Amaro, S. (2018). Methods for modelling reflective-formative second order constructs in PLS: An application to online travel shopping. *Journal of Hospitality and Tourism Technology*, 9(3), 295-313.
- Dusuki, A. W., & Abdullah, I. (2006). The ideal of Islamic banking: chasing a mirage. INCEIF Islamic Banking and Finance Educational Colloquium, Kuala Lumpur, Malaysia,
- Dusuki, A. W., & Abdullah, N. I. (2007). Why do Malaysian customers patronise Islamic banks? *International Journal of Bank Marketing*.
- Dusuki, A. W., & Dar, H. (2007). Stakeholders' perceptions of corporate social responsibility of Islamic banks: Evidence from Malaysian economy. *Islamic Economics and Finance*, 249.
- Eisingerich, A. B., & Bell, S. J. (2007). Maintaining customer relationships in high credence services. *Journal of Services Marketing*, 21(4), 253-262.
- El-Gamal, M. A. (2000). *A basic guide to contemporary Islamic banking and finance* (Vol. 1). Rice University Houston, TX.
- El Qorchi, M. (2005). Islamic finance gears up. *Finance and Development*, 42(4), 46.
- Elliott, A. C., & Woodward, W. A. (2007). *Statistical analysis quick reference guidebook: With SPSS examples*.
- Engel, J. F., & Linrud, J. K. (1993). *Instructor's manual, Transparency masters: Consumer behavior*, Engel, Blackwell, Miniard. Dryden Press.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 18(1), 39-50.
- French, D., & McKillop, D. (2016). Financial literacy and over-indebtedness in low-income households. *International Review of Financial Analysis*, 48, 1-11.
- Gait, A., & Worthington, A. (2008a). An empirical survey of individual consumer, business firm and financial institution attitudes towards Islamic methods of finance. *International Journal of Social Economics*.
- Gait, A., & Worthington, A. (2008b). 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.
- Ganesan, Y., Pitchay, A. B. A., & Nasser, M. A. M. (2020). Does intention influence the financial literacy of depositors of Islamic banking? A case of Malaysia. *International Journal of Social Economics*.
- Gerardi, K., Goette, L., & Meier, S. (2010). Financial Literacy and Subprime Mortgage Delinquency: Evidence from.
- Ghosh, S. (2016). Productivity, ownership and firm growth: evidence from Indian banks. *International Journal of Emerging Markets*.
- Gilani, H. (2015). Exploring the ethical aspects of Islamic banking. *International Journal of Islamic and middle eastern finance and management*.
- Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: An organizational capabilities perspective. *Journal of management information systems*, 18(1), 185-214.



- Götz, O., Liehr-Gobbers, K., & Krafft, M. (2010). Evaluation of structural equation models using the partial least squares (PLS) approach. In *Handbook of partial least squares* (pp. 691-711).
- Groeger, L., Moroko, L., & Hollebeek, L. D. (2016). Capturing value from non-paying consumers' engagement behaviours: field evidence and development of a theoretical model. *Journal of Strategic Marketing*, 24(3-4), 190-209.
- Grohmann, A., Klühs, T., & Menkhoff, L. (2018). Does financial literacy improve financial inclusion? Cross country evidence. *World Development*, 111, 84-96.
- Gruber, T. (2011). I want to believe they really care: How complaining customers want to be treated by frontline employees. *Journal of service management*.
- Gustman, A. L., Steinmeier, T. L., & Tabatabai, N. (2012). Financial Knowledge and Financial Literacy at the Household Level. *American Economic Review*, 102(3), 309-313.
- Hair, Black, W., Babin, B., & Anderson, R. (2019). *Multivariate data analysis*. Cengage Learning.
- Hair, Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, 109, 101-110.
- Hair, Sarstedt, M., Hopkins, L., & Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM). *European Business Review*.
- Hair, Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2017). *Advanced issues in partial least squares structural equation modeling*. saGe publications.
- Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage publications.
- Hair, J. F., Page, M., & Brunsveld, N. (2019). *Essentials of business research methods*. Routledge.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing theory and Practice*, 19(2), 139-152.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019a). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2-24.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019b). When to use and how to report the results of PLS-SEM. *European Business Review*.
- Hair, J. F., Sarstedt, M., Pieper, T. M., & Ringle, C. M. (2012). The use of partial least squares structural equation modeling in strategic management research: a review of past practices and recommendations for future applications. *Long range planning*, 45(5-6), 320-340.
- Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage publications.
- Hakim, S., & Rashidian, M. (2004). How Costly is Investors' Compliance with Sharia.
- Hamzah, D. A. (2014). AComparative APPRAISAL OF 'VALUE'IN CONVENTIONAL AND ISLAMIC JURISPRUDENCE. *Journal Jurisprudence*, 24.
- Haron, S., Azmi, N. W., & Nursofiza, W. (2009). *Islamic finance banking system*. McGraw-Hill Education/Asia.
- Hasan, & Asutay, M. (2011). An analysis of the courts' decisions on islamic finance disputes. *ISRA International Journal of Islamic Finance*, 3(2), 41-71.
- Hasan, M. M., & Dridi, J. (2010). The effects of the global crisis on Islamic and conventional banks: A comparative study.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the academy of marketing science*, 43(1), 115-135.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. In *New challenges to international marketing* (Vol. 20, pp. 277-319).
- Hilton, C. E. (2017). The importance of pretesting questionnaires: a field research example of cognitive pretesting the Exercise referral Quality of Life Scale (ER-QLS). *International Journal of Social Research Methodology*, 20(1), 21-34.
- Housby, E. (2011). *Islamic financial services in the United Kingdom*. Edinburgh University Press.



- Huang, M., Cheng, Z.-H., & Chen, I.-C. (2017). The importance of CSR in forming customer–company identification and long-term loyalty. *Journal of Services Marketing*.
- Husin, M. M., & Ab Rahman, A. (2016). Do Muslims intend to participate in Islamic insurance? Analysis from theory of planned behaviour. *Journal of Islamic Accounting and Business Research*.
- Hustic, I., & Gregurec, I. (2015). The influence of price on customer's purchase decision. Central european conference on information and intelligent systems,
- Ibrahim, Harun, R., & Isa, Z. M. (2010). A study on financial literacy of Malaysian degree students. *Cross-cultural communication*, 5(4), 51-59.
- Ibrahim, M. A., Fisol, W. N. M., & Haji-Othman, Y. (2017). Customer intention on Islamic home financing products: an application of theory of planned behavior (TPB). *Mediterranean Journal of Social Sciences*, 8(2), 77-77.
- Iqbal, M., Molyneux, P., & Conermann, S. (2006). Thirty years of Islamic banking. *History, performance and prospects. Bankhistorisches Archiv*, 32(2), 155-158.
- Iqbal, Z., & Mirakhor, A. (1999). Progress and challenges of Islamic banking. *Thunderbird International Business Review*, 41(4-5), 381-405.
- Islam, J. U., & Rahman, Z. (2017). Awareness and willingness towards Islamic banking among Muslims: An Indian perspective. *International Journal of Islamic and middle eastern finance and management*.
- Ismail, A. H. (2002). *The deferred contracts of exchange: al-Quran in contrast with the Islamic economists' theory on banking and finance*. Institute of Islamic Understanding Malaysia.
- Jalil, & Rahman, M. K. (2010). Financial transactions in Islamic Banking are viable alternatives to the conventional banking transactions. *International Journal of Business and Social Science*, 1(3).
- Jalil, M. A., & Rahman, M. K. (2014). The impact of Islamic branding on consumer preference towards Islamic banking services: An empirical investigation in Malaysia. *Journal of Islamic banking and finance*, 2(1), 209-229.
- Jamal, A. A. A., Ramlan, W. K., Karim, M., & Osman, Z. (2015). The effects of social influence and financial literacy on savings behavior: A study on students of higher learning institutions in Kota Kinabalu, Sabah. *International Journal of Business and Social Science*, 6(11), 110-119.
- Jääntti, M., Kanbur, R., & Pirttilä, J. (2014). Poverty, development, and behavioral economics. In.
- Jiang, F., Jiang, Z., Kim, K. A., & Zhang, M. (2015). Family-firm risk-taking: does religion matter? *Journal of Corporate Finance*, 33, 260-278.
- Jöreskog, K. G. (1971). Statistical analysis of sets of congeneric tests. *Psychometrika*, 36(2), 109-133.
- Jöreskog, K. G., & Sörbom, D. (1996). *LISREL 8: User's reference guide*. Scientific Software International.
- Kaabachi, S., & Obeid, H. (2016). Determinants of Islamic banking adoption in Tunisia: empirical analysis. *International Journal of Bank Marketing*.
- Kamla, R. (2009). Critical insights into contemporary Islamic accounting. *Critical perspectives on accounting*, 20(8), 921-932.
- Karbhari, Y., Naser, K., & Shahin, Z. (2004). Problems and challenges facing the Islamic banking system in the west: The case of the UK. *Thunderbird International Business Review*, 46(5), 521-543.
- Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of marketing*, 57(1), 1-22.
- Khan, F. (2010). How 'Islamic' is Islamic banking? *Journal of economic behavior & organization*, 76(3), 805-820.
- Khan, M. M., & Bhatti, M. I. (2008a). Developments in Islamic Banking: The Case of Pakistan.
- Khan, M. M., & Bhatti, M. I. (2008b). Islamic banking and finance: on its way to globalization. *Managerial finance*.
- Khan, M. S., & Mirakhor, A. (1991). *Islamic banking* (Vol. 88). International Monetary Fund.
- Khattak, N. A. (2010). Customer satisfaction and awareness of Islamic banking system in Pakistan. *African Journal of Business Management*, 4(5), 662-671.
- Kiss, H. J., Rodriguez-Lara, I., & Rosa-García, A. (2016). Think twice before running! Bank runs and cognitive abilities. *Journal of Behavioral and Experimental Economics*, 64, 12-19.
- Klapper, L., Lusardi, A., & Panos, G. A. (2013). Financial literacy and its consequences: Evidence from Russia during the financial crisis. *Journal of Banking & Finance*, 37(10), 3904- 3923.



- Kline, R. B. (2011). Convergence of structural equation modeling and multilevel modeling.
- Kline, T. (2005). *Psychological testing: A practical approach to design and evaluation*.
- Kontot, K., Hamali, J., & Abdullah, F. (2016). Determining factors of customers' preferences: A case of deposit products in Islamic banking. *Procedia-Social and Behavioral Sciences*, 224, 167- 175.
- Kotler, P. (2017). Philip Kotler: some of my adventures in marketing. *Journal of Historical Research in Marketing*.
- Kumar, A., Bezawada, R., & Trivedi, M. (2018). The Effects of Multichannel Shopping on Customer Spending, Customer Visit Frequency, and Customer Profitability. *Journal of the Association for Consumer Research*, 3(3), 294-311.
- Kumar, V., & Pansari, A. (2016). Competitive advantage through engagement. *Journal of marketing research*, 53(4), 497-514.
- Kuruvilla, S. J., & Joshi, N. (2010). Influence of demographics, psychographics, shopping orientation, mall shopping attitude and purchase patterns on mall patronage in India. *Journal of Retailing and Consumer Services*, 17(4), 259-269.
- 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*.
- Lajuni, N., Wong, W. P. M., Yacob, Y., Ting, H., & Jausin, A. (2017). Intention to use Islamic banking products and its determinants. *International Journal of Economics and Financial Issues*, 7(1).
- Lee, K. h., & Ullah, S. (2011). Customers' attitude toward Islamic banking in Pakistan. *International Journal of Islamic and middle eastern finance and management*.
- Lewis, M., & Algaoud, L. (2001). Islamic critique of conventional banking. *Handbook of Islamic Banking*, Edward Elgar Publishing Limited, Cheltenham, 38-49.
- Louw, J., Fouche, J., & Oberholzer, M. (2013). Financial literacy needs of South African third-year university students. *International Business & Economics Research Journal (IBER)*, 12(4), 439-450.
- Lu, L.-C., Chang, W.-P., & Chang, H.-H. (2014). Consumer attitudes toward blogger's sponsored recommendations and purchase intention: The effect of sponsorship type, product type, and brand awareness. *Computers in human behavior*, 34, 258-266.
- M. Bizri, R. (2014). A study of Islamic banks in the non-GCC MENA region: evidence from Lebanon. *International Journal of Bank Marketing*, 32(2), 130-149.
- Mahdzan, N. S., Zainudin, R., & Au, S. F. (2017). The adoption of Islamic banking services in Malaysia. *Journal of Islamic Marketing*.
- Malphrus, S. (2009). Perspectives on retail payments fraud. *Perspectives on Retail Payments Fraud (February 11, 2009)*. *Economic Perspectives*, 33(1).
- Mamdani, M. (2002). Good Muslim, bad Muslim: A political perspective on culture and terrorism. *American anthropologist*, 104(3), 766-775.
- Mansour, W., Ben Jedidia, K., & Majdoub, J. (2015). How Ethical is Islamic Banking in the Light of the Objectives of Islamic Law? *Journal of Religious Ethics*, 43(1), 51-77.
- Mason, C., & Wilson, R. (2000). Conceptualising fi-financial literacy. *Occasional paper*, 7.
- Maurer, B. (2002). Anthropological and accounting knowledge in Islamic banking and finance: rethinking critical accounts. *Journal of the Royal Anthropological Institute*, 8(4), 645- 667.
- Metawa, S. A., & Almosawi, M. (1998). Banking behavior of Islamic bank customers: perspectives and implications. *International Journal of Bank Marketing*, 16(7), 299-313.
- Mohd Kassim, N., & Souiden, N. (2007). Customer retention measurement in the UAE banking sector. *Journal of Financial Services Marketing*, 11(3), 217-228.
- Muhamad, N. A. N., Hamid, A. A., Bahrom, H., Haniff, M. N., Ab Manan, S. K., & Aziz, R. A. (2013). Customers' Preference on Islamic Banking Products and Services: The Influence of Knowledge, Awareness and Satisfaction. *Management & Accounting Review (MAR)*, 12(1), 1-23.
- Newaz, F. T., Fam, K.-S., & Sharma, R. R. (2016). Muslim religiosity and purchase intention of different categories of Islamic financial products. *Journal of Financial Services Marketing*, 21(2),



141-152.

- Nizami, S. M. (2011). Islamic finance: the United Kingdom's drive to become the global Islamic finance hub and the United States' irrational indifference to Islamic finance. *Suffolk Transnat'l L. Rev.*, 34, 219.
- Noor, M. A. N. M., & Ahmad, N. H. B. (2012). The Determinants of Islamic Banks' Efficiency Changes: Empirical Evidence from the World Banking Sectors. *Global Business Review*, 13(2), 179-200.
- Noussair, C. N., Trautmann, S. T., Van de Kuilen, G., & Vellekoop, N. (2013). Risk aversion and religion. *Journal of Risk and Uncertainty*, 47(2), 165-183.
- Obaidullah, M. (2005). Islamic financial services. In: Scientific Publishing Centre, King Abdulaziz University Jeddah.
- Obeid, H., & Kaabachi, S. (2016). Empirical investigation into customer adoption of Islamic banking services in Tunisia. *Journal of Applied Business Research (JABR)*, 32(4), 1243-1256.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of applied psychology*, 88(5), 879.
- Quesenberry, K. A. (2020). *Social media strategy: Marketing, advertising, and public relations in the consumer revolution*. Rowman & Littlefield Publishers.
- Rahim, S. H. A., Rashid, R. A., & Hamed, A. B. (2016). Islamic financial literacy and its determinants among university students: An exploratory factor analysis. *International Journal of Economics and Financial Issues*, 6(7S).
- Rajan, S., & Santhakumar, S. (2018). Diffusion of crisis signals across the world: evidence from subprime crisis of 2008-2009. *International Journal of Emerging Markets*.
- Ramayah, T., & Razak, D. A. (2008). Factors influencing intention to use diminishing partnership home financing. *International Journal of Islamic and middle eastern finance and management*.
- Rammal, H. G., & Zurbrugg, R. (2016). Awareness of Islamic banking products among Muslims: The case of Australia. In *Islamic finance* (pp. 141-156). Springer.
- Riaz, U., Burton, B., & Monk, L. (2017). Perceptions on the accessibility of Islamic banking in the UK—Challenges, opportunities and divergence in opinion. *Accounting Forum*, 41(4), 353-374.
- Ringle, C. M., Sarstedt, M., Mitchell, R., & Gudergan, S. P. (2020). Partial least squares structural equation modeling in HRM research. *The International Journal of Human Resource Management*, 31(12), 1617-1643.
- Rowley, J. (2014). Designing and using research questionnaires. *Management research review*.
- Rust, R. T., Lemon, K. N., & Zeithaml, V. A. (2004). Return on marketing: Using customer equity to focus marketing strategy. *Journal of marketing*, 68(1), 109-127.
- Sadeghi, M. (2008). Financial performance of Shariah-compliant investment: evidence from Malaysian stock market. *International Research Journal of Finance and Economics*, 20, 15-26.
- Sardar, Z., Inayatullah, S., & Boxwell, G. (2003). Islam, postmodernism and other futures a Ziauddin Sardar reader.
- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2017a). Partial least squares structural equation modeling. *Handbook of market research*, 26(1), 1-40.
- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2017b). Partial least squares structural equation modeling. *Handbook of market research*, 26, 1-40.
- Satsios, N., & Hadjidakis, S. (2018). Applying the Theory of Planned Behaviour (TPB) in saving behaviour of Pomak households. *International Journal of Financial Research*, 9(2), 122-133.
- Scandura, T. A., & Williams, E. A. (2000). Research methodology in management: Current practices, trends, and implications for future research. *Academy of Management journal*, 43(6), 1248-1264.
- Schneider, F., Linsbauer, K., & Heinemann, F. (2015). Religion and the shadow economy. *Kyklos*, 68(1), 111-141.
- Sharma, P., Shmueli, G., Sarstedt, M., Danks, N., & Ray, S. (2019). Prediction-oriented model selection in partial least squares path modeling. *Decision Sciences*.
- Shen, C.-H., Lin, S.-J., Tang, D.-P., & Hsiao, Y.-J. (2016). The relationship between financial disputes and financial literacy. *Pacific-Basin finance journal*, 36, 46-65.



- Shmueli, G., Sarstedt, M., Hair, J. F., Cheah, J.-H., Ting, H., Vaithilingam, S., & Ringle, C. M. (2019). Predictive model assessment in PLS-SEM: guidelines for using PLSpredict. *European Journal of Marketing*, 53(11), 2322-2347.
- Şiddīqī, M. N. (1983). Issues in Islamic banking: selected papers. *Islamic economics series*.
- Siddiqui, S. H., & Banker, E. P. (2005). True Modes of Financing. *Kuwait: Islamic banking htm*.
- Souiden, N., & Jabeur, Y. (2015). The impact of Islamic beliefs on consumers' attitudes and purchase intentions of life insurance. *International Journal of Bank Marketing*, 33(4), 423-441.
- Souiden, N., & Rani, M. (2015a). Consumer attitudes and purchase intentions toward Islamic banks: the influence of religiosity. *International Journal of Bank Marketing*.
- Souiden, N., & Rani, M. (2015b). Consumer attitudes and purchase intentions toward Islamic banks: the influence of religiosity. *International Journal of Bank Marketing*, 33(2), 143-161.
- Strömbäck, C., Lind, T., Skagerlund, K., Västfjäll, D., & Tinghög, G. (2017). Does self-control predict financial behavior and financial well-being? *Journal of Behavioral and Experimental Finance*, 14, 30-38.
- Sun, S., Goh, T., Fam, K. S., & Xue, Y. (2012). The influence of religion on Islamic mobile phone banking services adoption. *Journal of Islamic Marketing*.
- Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2007). *Using multivariate statistics* (Vol. 5). Pearson Boston, MA.
- Tabrani, M., Amin, M., & Nizam, A. (2018). Trust, commitment, customer intimacy and customer loyalty in Islamic banking relationships. *International Journal of Bank Marketing*, 36(5), 823-848.
- Tehseen, S., Sajilan, S., Gadar, K., & Ramayah, T. (2017). Assessing cultural orientation as a reflective-formative second order construct-a recent PLS-SEM approach. *Review of Integrative Business and Economics Research*, 6(2), 38-63.
- Thambiah, S., Eze, U. C., Santhapparaj, A. J., & Arumugam, K. (2011). Customers' perception on Islamic retail banking: A comparative analysis between the urban and rural regions of Malaysia. *International journal of business and management*, 6(1), 187.
- Valkenburg, P. M., & Buijzen, M. (2005). Identifying determinants of young children's brand awareness: Television, parents, and peers. *Journal of Applied Developmental Psychology*, 26(4), 456-468.
- Voorhees, C. M., Brady, M. K., Calantone, R., & Ramirez, E. (2016). Discriminant validity testing in marketing: an analysis, causes for concern, and proposed remedies. *Journal of the academy of marketing science*, 44(1), 119-134.
- Wahyuni, S. (2012). Moslem Community Behavior in The Conduct of Islamic Bank: The Moderation Role of Knowledge and Pricing. *Procedia - Social and Behavioral Sciences*, 57, 290-298.
- Wajdi Dusuki, A., & Irwani Abdullah, N. (2007). Why do Malaysian customers patronise Islamic banks? *International Journal of Bank Marketing*, 25(3), 142-160.
- Warsame, M. H., & Ireri, E. M. (2018). Moderation effect on Islamic banking preferences in UAE. *International Journal of Bank Marketing*.
- Weston, R., & Gore Jr, P. A. (2006). A brief guide to structural equation modeling. *The counseling psychologist*, 34(5), 719-751.
- Wilson, R. (2006). Islam and business. *Thunderbird International Business Review*, 48(1), 109-123.
- Worthington Jr, E. L., Wade, N. G., Hight, T. L., Ripley, J. S., McCullough, M. E., Berry, J. W., . O'Connor, L. (2003). The Religious Commitment Inventory--10: Development, refinement, and validation of a brief scale for research and counseling. *Journal of counseling psychology*, 50(1), 84.
- Xiao, J. J. (2016). Consumer financial capability and wellbeing. In *Handbook of consumer finance research* (pp. 3-17). Springer.
- Xiao, J. J., Ahn, S. Y., Serido, J., & Shim, S. (2014). Earlier financial literacy and later financial behaviour of college students. *International Journal of Consumer Studies*, 38(6), 593-601.
- Yusuff, N., & Mansor, F. (2016). Proposed model for the factors influencing Muslim investors choosing Islamic unit trust funds. *Journal of Global Business and Social Entrepreneurship*, 1(2),



113-120.

Zaher, T. S., & Kabir Hassan, M. (2001). A comparative literature survey of Islamic finance and banking. *Financial Markets, Institutions & Instruments*, 10(4), 155-199.

Zainol, Z., Shaari, R., & Muhamad Ali, H. (2009). A comparative analysis on bankers' perceptions on Islamic banking. *International Journal of Business and management*, 3(4), 157 - 168.