# **Takaful (Islamic Insurance) Adoption in Pakistan:**

## A Moderating effect of Religiosity

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#### Abstract

The purpose of this research study is to explore the moderating effect of religiosity against the intention to adopt Takaful insurance products and services in Pakistan. Earlier studies in the field of Takaful insurance have highlighted the degree of interaction between these two factors. The study includes four independent factors in addition to the dependent variable. The dependent variable is the intention to use Takaful Insurance products and services and independent variable are relative advantage, compatibility, social influence, and customer awareness of Takaful Insurance. Data from various regions of Pakistan were collected using a convenient sampling technique and a series of questionnaires as the survey instrument. The moderate effect of the factors has been predicted using moderated multiple regression analysis. The results show that religiosity significantly moderates the interplay of relative advantage, compatibility, social influence, awareness of Takaful, and intention to use Takaful Islamic insurance products. The result suggests that religious considerations influence Pakistani Takaful Insurance seekers' decisions to use Takaful Islamic Insurance goods and services in a significant way and it support hypothesis. The results of this study should help financial institutions develop marketing strategies that take these variables into account.

**Keywords:** Takaful adoption, Religiosity, Relative advantage, compatibility, social influence, awareness.

#### Introduction

The development of the Islamic financial system has now evolved a significant shift to a new standard in the economic models specifically in Islamic insurance and banking, which have gained a progressively important share in the financial market all over the world. According to research the Takaful derives from the Arabian noun "Kafala," that called "Guaranteed each other," (Billah, 2003). The ancestry of Islamic insurance may be followed back to the "Aquila" mechanism, which was used by tribes of Mecca and Madina for the purpose of mutually compensating or paying indemnity in the event that one member of the tribe suffered a loss as Prophet Muhammad afterward agreed to the same (Cheikh, 2013). Another researcher claimed Takaful mechanism is an anatomical structure where members pool their resources and subsequently reinvest them in accordance with Islamic Sharia law (Allen, 1990). This definition was given by the Oxford Dictionary of English. In the Malaysian Takaful Act of 1984, Noordin contended that this definition, which said that Takaful is a design built on brotherhood, harmony, and collective benefits offering financial help if a case of catastrophe or loss happens to indemnify the accused one, whereby all participants have confirmed upon collectively participating (Noordin, 2014). The first Takaful operational company is "The Islamic Insurance Company Ltd of Sudan," which was developed in 1979 (Rusin, 2016).

The Takaful mechanism is a wholly mutual design as in conventional insurance; the transfer of risk from the policyholder to the operator of the insurance business is done (Alhumoudi, 2013). The concept of takaful is based on voluntary contributions from both sides, which allows for the risk component to be shared between the Takaful operator and policyholders. Contributions are made to the fund by political participants. Profits from the investments in many Sharia-compliant initiatives were kept in the fund. In the future, if any members are lost, they will be compensated by the pool. Under Islamic law and Sharia regulations, the Takaful system is in operation (Awais et al., 2020). According to another author Islamic jurisprudence, or "Fiqh," is a collection of laws and regulations found on the Holy Qur'an, Sunnah, analogical reasoning ("Qiyas"), and legal unanimity ("Ijma"), whereas Sharia is God's holy decree. The Takaful process must adhere to Shariah regulations and must not miss any deadlines (Esposito, 2014).

Noordin (2014) claims that the Malaysian Takaful Act, 1984 offers the best definition of Takaful, which reads as follows: Takaful is a social structure based on brotherhood, solidarity, and mutual aid that offers participants equivalent financial support and reimbursement in times of need in exchange for their mutual agreement to contribute to the project (Noordin, 2014). The Takaful interpretation makes use of two requirements that are fairly understood. The primary objective of insurance is to protect against financial loss, and the Takaful fund will give candidates financial compensation in that situation. The participants who qualify for financial assistance from the Takaful fund are used in the second condition even if there is no uncertainty present and they are the owners of any leftover excess. Islamic philosophy has consistently emphasized collectivism among societies, and this idea is founded on solidarity and cooperation (Hassan, 2019).

#### Takaful Adoption at the Global Level and Pakistan

The Takaful industry is expanding quickly in the international market (Kazranian, Goud, & Saeed, 2015). By the end of 2014, the cost of the Takaful inputs was pegged at USO 14 billion.

Additionally, by the end of 2017, they would exceed US\$17 billion. In the same vein, Young (2012) anticipated that by the end of 2015, the global Takaful market would be worth \$20 billion (Young, 2012). According to Kazranian (2015), Kuwait, Qatar, Bahrain, Oman, and Saudi Arabia make up the Gulf Cooperation Council, which is the region that is the hub for Takaful products adoption. In the South Asian territory, it is also increasing its volume. Saudi Arabia is in the lead with the top slot, followed by Malaysia. Globally, there are 93 Takaful windows and roughly 308 Takaful enterprises. Ahmad (2013) made a compelling case for why Takaful's worldwide market advancement rate is much lower than that of the traditional insurance market. Furthermore, there is just a big untapped market out there, especially in nations with a majority of Muslims (Ahmad, 2013).

Furthermore, the first Islamic insurance company that started its operation back in 2005 under the license of Pakistan is Pak-Kuwait Takaful insurance, according to authors Wahab (2013) and Kaunain (2016). The late start of Takaful insurance was blamed on the absence of a regulatory framework. Even though Pakistan has a majority of Muslims, the country's Takaful proportion is still quite small. At the end of 2014, the gross Takaful premium was estimated to be worth PKR 8 billion.

#### **Factors Influencing Takaful Adoption**

There is the number of factors observed by the researchers that might affect Takaful adoption all over the world. The researchers initiated these factors check with the adoption of Islamic financial system and especially Islamic financial products, particularly in the banking and insurance industries. Starting back in 2011 Syed Shah Alam has investigated Relative and Contextual factors like Trends in fashion, Price of the product, Brand name, Quality Image, Peer pressure, Good sales presentation, and Good customer service with religiosity to observe consumer buying behaviors towards Islamic products (Alam, Mohd, & Hisham, 2011). In 2013 Thambiah in his study had highlighted various factors that influence consumer behaviors to invest in Malaysian Islamic banking products (Thambiah, Ismail, Musa, & Khin, 2013). Thambiah has investigated the adoption of Takaful by relative advantage, and awareness of Islamic retail banking attributes; observe ability, uncertainty, complexity, and compatibility. She has also introduced region and religion as moderating factors that can influence the adoption of Islamic banking products. We have selected this model as our research base paper, but we have also included the model of a researcher Hassan who investigated almost similar factors in 2019 for Takaful Islamic insurance in Pakistan with any moderating variable (Hassan & Abbas, 2019). The researcher has investigated the effect of relative advantage, compatibility, awareness, social influence and religiosity (Hassan & Abbas, 2019). Likewise, there are number of researchers who had investigated almost similar factors in their papers for the adoption of Islamic financial products. Ahmad (2016) had introduced as an additional factor attitude to observe adoption of Islamic products. In 2016 researcher has introduced the factor of service quality as an additional factor with previous studies factors to observe the adoption of Islamic financial products (Ali, 2016).

#### **Literature Review**

The Takaful strategy is focused on shared accountability, solidarity, and cooperation (Alhumoudi, 2013; Awais et al., 2021). Additionally, it is a suitable representation of

collectivism, which is the central tenet of Islamic philosophy (Dahnoun, 2018). Contrary to conventional insurance, which is a risk transfer mechanism, the Takaful system shares responsibility among its participants and stakeholders (Abdulsater, 2014). Additionally, it developed the genuine mutual construct (Jaffer et al., 2010).

The goal set for the current learning is to learn more about the perception and conduct of investors regarding Takaful insurance. In the literature review, consumer and corporate behavior related to takaful will be specifically explored to support the research project with prior material. According to numerous experts throughout the world, a Muslim customer would hesitate to buy something because the premise is Islam, which has restrictions according to his or her faith, and he or she would lean to lend something that is allowed (Abdulsater, 2014; Awais et al., 2022). Further research into Islamic finance and Takaful will undoubtedly aid in determining the precise aspects that contribute to a favorable client attitude.

According to a study, Takaful insurance is replacing conventional insurance as a viable alternative for Muslims. According to Islamic doctrine, takaful is charge less from unlawful components like usury, uncertainty, and gambling because these made traditional insurance prohibited (Khan, 2013). Similarly, to this, Hussain and Pasha pointed out that under the Takaful mechanism, a common benefit is shared with an association of reciprocal responsibility and harmonization inside the Takaful union (Hussain, 2011). In line with this, Beck and Webb asserted that traditional insurance typically employs a risk transfer mechanism that transfers risk from the policyholder to the insurance provider (Beck, 2003). Ariff and Iqbal further claimed that in Takaful insurance, the risk is shared among the members. Takaful encourages social cohesion through the promotion of others' well-being (Ariff, 2011).

### The Theory of Planned Behavior

The "theory of reasoned action" which previously been provided is extended by the researcher Ajzen's "theory of planned behavior" (TPB) theory. The TPB hypothesis links intents, convictions, and explanations of human action (Ajzen,1985). The theory enhances the idea by including a component called "perceived behavioral control." Intention to act and subsequent actions are positively correlated (Norberg, 2007). However, it doesn't necessarily result in actual behavior due to a number of circumstances. Ajzen attempted to analyze people's non-volatile behavior to forecast their intentions and subsequent actions (Sheppard, 1988). A person is more assured and likely to act in accordance with his or her behavioral goal if they feel themselves to have great behavioral control.

TPB, as opposed to TRA, is a superior predictor and explanatory of behavioral intentions (Albarracin, 2001). As a result, it is frequently employed in medical research and yields results that are of great significance. In a study, Linden (2011) added that the TPB theory was useful for studying pro-social actions, and the results are generally consistent (Linden, 2011). TPB is a reliable predictive model and a useful tool for analyzing the attitudes and behaviors of people.

#### **Innovation Diffusion Theory (IDT)**

The conceptual foundation of the present research is based on Rogers' (2003) Innovation Diffusion Theory (IDT). Observability, relative benefit, compatibility, complexity, and trial

ability have been identified as the top five characteristics of inventions. Customers' understanding of IRB qualities has been enclosed in the scheme in addition to these five factors. IRB adoption in Malaysia may be constrained by clients who lack knowledge about or are unaware of the benefits of IRB services (Dusuki, 2007; Rosly, 2008); (Thambiah, Eze, Tan, Nathan, & Lai, 2010). Furthermore, it has been emphasized (Kotler, 2001) and even (Rogers, 2003) that awareness is the initial step in the acceptance of an innovation. The exceptions to this rule are the research of Kader (1995) and Baron (1994), which looked at consumers' knowledge of the existence of Islamic banking and its core concepts. However, some studies had studied customers' understanding of Islamic banking qualities. In addition, recent research on the factors influencing the use of Islamic banking in Malaysia (Dusuki, 2007; Rosly, 2008) highlighted the importance of educating the general public about the unique features of Islamic banking products and services and how they can help consumers in their financial dealings.

### Variable of Study

A study investigated how consumer behavior characteristics (variables) like relative benefit, social influence, compatibility, and awareness impacted the uptake and usage of Takaful (Hassan & Abbas, 2019). Additionally, a research study that employed religion as moderating variable also found that the adoption of Islamic financial products was moderated by several characteristics, including relative advantage, awareness, compatibility, observe- ability, complexity, and uncertainty (Thambiah, Ismail, Musa, & Khin, 2013). The objective of this research project, which was informed by a review of the literature, is to examine consumer behavior as a dependent variable and relative advantage, awareness, social impact, and compatibility as an independent variable. To determine the influence of independent variables on the dependent variable of consumer behavior, religion is utilized as a moderating variable. Now, with the aid of literature, we discuss each of these factors.

#### Religiosity

The way that religion affects a person's attitudes, knowledge, and beliefs is a good indicator of how religion has an impact on that person's life. There are a variety of religious groups with different religious beliefs, including Muslims, Christians, Buddhists, and others. When examining a civilization, it is impossible to avoid these views (Fam, 2002). These religious commitments and beliefs have an impact on how people feel and see consumption (Jamal, 2003). Because of their allegiance to particular communal or religious groups, Indian society and indigenous white British society in England, for instance, have different spending patterns (Lindridge, 2005). Furthermore, the consumer's choice of what to buy is influenced by religion, which lists what is prohibited and what is not. For instance, beef is taboo in Hinduism but permitted in Islam. While it is forbidden to eat pork in Islam and Judaism, it is permitted in Christianity. Religion actually has an impact on consumer beliefs, preferences, and dislikes (Fam, 2002).

There is a significant correlation between religious patronage and Islamic financial products (Bley, 2004). Siala (2013) also discovered a strong connection between religious motivation and the use of religiously conforming services (Siala, 2013). Furthermore, Echchabi (2015) and Husin (2016) backed the claim that religious values have a substantial influence on the acceptance of Takaful insurance.

Malaysian researcher used religion as a moderating variable to check its impact for adoption Islamic banking products (Thambiah, Ismail, Musa, & Khin, 2013). With reference to this research we had choose to put religiosity as moderating variable for this research. For this purpose 5 Likert scale is developed for religiosity which can help us to find Takaful adoption in Pakistan and how much religiosity impact on customer's perception to adopt Islamic financial product in Pakistan.

### Relative Advantage

According to Rogers (2003), a product's relative advantage is the level of innovation that distinguishes it from rivals. It is stated in a range of research domains that relative advantage had a significant role in the choice to embrace an invention. Researchers Aziz (2015), Ecchabi (2013), and Rahim (2011) have shown through their research findings that relative advantage has a substantial impact on the adoption of Takaful. Therefore, conventional insurance policies have a higher comparative advantage over Takaful products, according to the researchers (Salman, 2014). This evidence that relative advantage has a substantial impact on the adoption and use of Takaful products has been approved by Ali Hassan as well (Hassan & Abbas, 2019). Additionally, (Thambiah, Ismail, Musa, & Khin, 2013) came to the conclusion that intentions to utilize Islamicfinancial products appeared to be significantly moderated by religion.

#### **Compatibility**

According to Rogers (2003), compatibility describes how well an innovation fits into the adapter's current requirements, perceptions, and beliefs. An individual shows a keen interest in innovation if it is relevant to his or her culture, religion, societal values, and subjective norms, according to studies cited by Gerrard and Cunningham (2003). Similarly, to this, according to Langer's (2014) argument, a person will reluctant to adopt an innovation if it is against the teachings of their religion. Takaful insurance operates in accordance with Islamic Sharia law, according to certain additional study findings (Thambiah, 2010; Hussain, 2011; Echabi, 2015). Because Takaful insurance is consistent with religious beliefs and social conventions, people who lean more toward religion likely to adopt it. This evidence showing compatibility has a substantial impact on the adoption and use of Takaful goods has been approved by Ali and Hassan as well (Hassan & Abbas, 2019). Additionally, Thambiah, Ismail, Musa, and Khin (2013) came to the conclusion that intentions to utilize Islamic financial products appeared to be significantly moderated by religion.

#### Social Influence

According to an author People are subjected to peer pressure from their family, friends, and surroundings, and this influences their decision to engage in particular behaviors (Ajzen, 1985; Ellahi, Awais, & Raza, 2018). In 19<sup>th</sup> century an author asserts that social influence has a favorable impact on behavioral intention in diverse contexts (Taylor, 1995). Peer pressure and cultural norms typically influence decisions about Islamic banking and Takaful insurance (Alam, 2011; Cheikh, 2013; & Echchabi, 2013). This evidence showing social influence has a substantial impact on the adoption and use of Takaful products has also received the approval of Ali as well (Hassan & Abbas, 2019). Additionally, it was determined by (Thambiah, Ismail, Musa, & Khin, 2013) that religion appeared to have a strong moderating effect on intention to

adopt the Islamic financial products.

#### Awareness

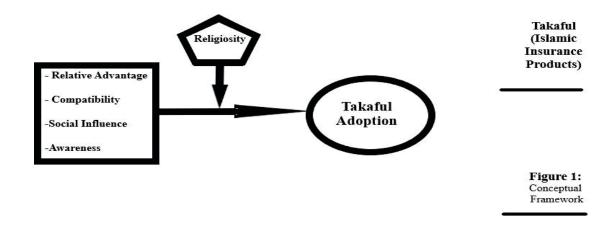
Rogers (1995), in his book Diffusion of Innovation, said that buyers' awareness of an innovation or product is the only element that influences their decision to purchase it. It also held that the acceptance of any product is highly dependent on consumer knowledge (Boztepe, 2012). The aforementioned idea is consistent with Takaful: if people are aware of its benefits, they will undoubtedly purchase it. According to (Thambiah, Ismail, Musa, & Khin, 2013) and (Alhumoudi, 2013), numerous research results revealed awareness positively influences the adoption of Takaful. This evidence that awareness significantly influences the adoption and use of Takaful goods has been approved by Ali Hassan as well (Hassan & Abbas, 2019). Additionally, (Thambiah, Ismail, Musa, & Khin, 2013) came to the conclusion that religion proved a very strong moderating variable that influences people to adopt Islamic financial products.

According to Ali (2019), Pakistanis are ready to adapt new ideas and are eager to take part in takaful, that adheres to their religious principles, morals, and cultural values but also offers more advantages for the participants as well as the broader community. Given thefore going, it asserts that Pakistan's population is 97% Muslim. As a result, it is often believed that people tend to engage in takaful. This is now a fact exist that Takaful has a significant market share with lot of potential in the Pakistani insurance sector with the availability of sufficient awareness and creative products (Hassan & Ali, 2019).

#### **Hypothesis Development**

- H 1: Religiosity moderates the strength between the relative advantage and intension to adopt Takaful.
- H 2: Religiosity moderates the strength between the compatibility and intension to adopt Takaful.
- H 3: Religiosity moderates the strength between social influence and intention to adopt Takaful.
- H 4: Religiosity moderates the strength between the awareness and intension to adopt Takaful.

#### Research Model



**Sources:** Adopted from Rogers, (1995); Thambiah, Ismail, Musa, & Khin (2013); Hassan & Abbas (2019)

## Research Methodology

This study is based upon primary data and questionnaire was developed for this purpose based upon the standard set by renowned scholars to examine the new product responses as the prime purpose of this research is to examine moderating effect of religiosity for Takaful adoption. In this causal study, the influence of independent variables relative advantage, compatibility, social influence, and awareness will be measured on the basis of respondents' self-reported perceptions of these variables in relation to their intentions to adopt and use Takaful products, with religiosity serving as moderating factor.

Faculty members and students from private and public universities in Rawalpindi and Islamabad make up the study's population. A suitable number of questionnaires are delivered to the teaching staff and students and their parents at the private and public institutions in Rawalpindi and Islamabad based on a convenient sampling of the population. Similarly some sole proprietors were also considered for data gathering. You may examine the specifics of the date gathering. The questionnaire distributed among 257 respondents through the Google forms. All respondents have responded correctly so no problem is faced in data gathering.

On a Likert scale with 1 being strongly disagreed and 5 being strongly agree, all study variables will be scored. The full list of questions is provided towards the conclusion of the thesis. The correlation and regression statistical methods are adopted to check the impact between the moderating, dependent band independent variables. The multiple linear regression econometric models have been selected in the study in which each of the independent variable is separately tested along with its interacting term. For example independent variable relative advantage is tested with moderating interacting term Religiosity-Relative advantage to check impact on Takaful usage. The regression is run in three steps in which first step has included with control variable (age, gender and marital status) and second step included with independent variable that is relative advantage and religiosity and in third step moderating interacting term has been added Religiosity-Relative advantage. The same is done with other three independent variable compatibility, social influence and awareness.

#### **Demographic Analysis and Frequency Distribution**

According to Table I, the sample respondents are split between 184 non-users (71%) and 73 Takaful users (29%). Only 31% of female participants in the research analysis, despite the fact that the participation rate for men is relatively high at 69%. Although there is evidence of a male-dominated culture, the tendency is slowly shifting. Regarding age, 69 percent of the responses came from respondents who were between the ages of 21 and 30. Twelve percent came from respondents who were between the ages of 31 and 40. With 60.3%, the single demographic is more inclined to adopt, and the married demographic is not far behind with 39.7%. People who earn more than PKR 50,000 per month are significantly more likely to invest in Takaful, with a difference of 38.4%.

Table 1
Demographical Analysis

Sr. #	Measures	Scale	Frequency	%	
1	Gender	Female	78	31%	
		Male	174	69%	
2	Age	Below 20	56	22.2%	
		21-30	174	69%	
		31-40	14	5%	
		Above 40	18	7%	
3	Marital Status	Single	212		
		Married	40		
4	Education	Matriculation	10	4%	
		Intermediate	49	19.4%	
		Graduate	148	58.7%	
		Post- Graduate	35	13.9%	
		Above Post- Graduate	10	4%	
5	Income Level Rs.	Below 20,000	136	54%	
		20,000-50,000	60	23.8%	
		50,000-75,000	22	8.7%	
		75,000-100,000	17	6.7%	
		Above 100,000	17	6.7%	
6	Saving level (%)	Below 10%	77	30.6%	
		10%-20%	43	17.1%	
		20%-30%	23	9.1%	
		Above 30%	16	6.3%	
		Don't Save	93	36.9%	
7	Professional Qualification	No	87	34.5%	
		Yes	165	65.5%	
8	Occupation	Public	39	15.5%	
		Private	103	40.9%	
		Self-owned	110	43.7%	
9	Takaful Usage	Uninsured	184	71%	
		Insured	73	29%	

# **Descriptive Analysis**

Table 2 displays the "descriptive analysis" that was produced using data analysis techniques

and SPSS IBM 21. Lowest, highest, mean, standard deviation, skewness, and kurtosis values of the study's variables. The greatest and lowest mean values for the data average, which should be around "3," are 4.23 and 3.11 respectively. Additionally, when skewness and kurtosis are both zero, the response distribution is regarded as normal (a circumstance that researchers are extremely unlikely to ever discover). According to a general guideline for skewness, a distribution is said to be significantly skewed if the value is more than +1 or lower than -1.

Kurtosis values should be between 10 and +10 when using SEM, while skewness values should be between 3 and +3 (Brown, 2006). If the number is more than +1, the general rule for kurtosis states that the distribution is excessively peaked. Similar to this, an excessively flat distribution has a kurtosis of less than -1. Distributions that exceed certain boundaries in skewness and/or kurtosis are seen to be aberrant in Hair et al. (2017). The ranges of Skewness and Kurtosis—1 to -1 and 3 to -3, respectively—are described. A value between -0.5 and 0.5 is a sign of skewness since it shows that the distribution is symmetrical. Therefore, the result outcome are fair.

Table 2

Descriptive Statistics

	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
Takaful Usage	0	1	0.28	0.45	0.96	1.08
Relative Advantage	1	5	3.65	0.68	-0.64	1.1
Compatibility	1	5	3.57	0.88	-0.62	0.3
Social Influence	1	5	3.23	0.95	-0.25	-0.43
Awareness	1	5	3.12	0.99	-0.2	-0.49
Religiosity	1	5	4.25	0.87	-1.43	1.53

#### **Correlation Analysis**

Table 3 shows the degree of connection between the independent and dependent variables as well as the influence of religiosity as a moderating variable on Takaful adoption. The table shows a favorable association between the use of Takaful and relative advantage, compatibility, social impact, and awareness. It is evident that there is a bad link between using Takaful and religiosity. A favorable association between relative advantage, compatibility, social influence, and knowledge of Takaful adoption is also produced by the moderating effect of religiosity.

Additionally, there is a (0.093) correlation between the relative advantage and the use of Takaful, showing that any change in one of them will have a favorable impact on the other variable's 0.093 change. The interacting term RA-REL is showing a positive correlation 0.52 with Takaful adoption as it confirms that there is no issue exists of multicollinearity in the study. As a result, when the findings of this study are compared to those of other studies like (Rahim & Amin, 2011; Aziz et al., 2015; Shabiq & Hassan, 2016; Hassan, 2019; Thambiah, Ismail, Musa, & Khin, 2013).

With a value of (0.091), the next variable, Compatibility, similarly illustrates the same link between the use of takaful and a relative advantage. However, compatibility's association with relative advantage is weaker as evidenced by the value of (0.615). The interaction COM-REL is showing 0.061 a positive association with Takaful adoption and no issue of multicollinearity exist. Consistent findings were seen in (Faisal, Akhtar, & Rehman, 2012; Echchabi, & Ayedh, 2015; Husin & Rahman, 2016; Hassan, 2019).

Table 3

Correlation Table

	1	2	3	4	5	6	7	8	9	10
1.Tu	1									
2.Ra	.09	1								
3.Com	.09	.61*	1							
4.Si	.06	.39**	.45**	1						
5.Awr	$.15^*$	.26**	.28**	.52**	1					
6.Rel	05	.38**	.27**	.16*	.02	1				
7.Ra-Rel	.05	.84**	.55**	.34**	.17**	.80**	1			
8.Com-Rel	.06	.65**	.87**	.41**	.20**	.70**	.82**	1		
9.Si-Rel	.05	.50**	.49**	.87**	.43**	.60**	.66**	.67**	1	
10.Awr-Rel	$.12^*$	.40**	.36**	.53**	.87**	.50**	.53**	.51**	.67**	1

The above table showing correlation among dependent, independent and moderating variable. The dependent variable TU=Takaful usage, also Independent variable includes RA= Relative advantage, COM=compatibility, SI=Social influence, AWR=Awareness, REL= Religiosity. The moderating variable interaction terms are RA-REL= Relative advantage\*Religiosity, COM-REL= Compatibility\*Religiosity, SI-REL= Social influence\*Religiosity, AWR-REL= Awareness\*Religiosity.

When social influence compared to other variables, it has a favorable but less significant association with the use of takaful (0.062). The interaction SI-REL is showing 0.047 assosiation with Takaful adoption. The correlation between relative advantage (0.615) and compatibility (0.446) is also consistent with earlier literature such as Cheikh (2013).

The connections with awareness are highly intriguing since they include associations with using takaful (0.149), relative advantage (0.261), compatibility (0.277), and social influence (0.515). The only factor that significantly positively correlates with adoption of takaful is awareness. The interacting term to examine moderator AWR-REL is associated at 1.24 with Takaful as higher association is in line with previous researches. Alhumoudi (2013), Echchabi and Echchabi (2013), Abdulsater (2014), Husin and Rahman (2016), and the results are consistent with (Hassan, 2019).

More significantly, the correlation between the adoption of Takaful and religiosity is (-0.047), followed by associations with relative advantage (0.381), compatibility (0.270), awareness (0.020), and social impact (0.159). Social influence and religiosity can both be used to measure how the society has an impact, which is why there is less of a link between the two in this context. As the moderator, religiosity is more strongly positively correlated with the adoption of

Takaful than the independent factors. As discussed above the adoption of Takaful is positively correlated with religiosity interacting terms to examine moderating effect with relative advantage at (0.052), compatibility (0.061), social influence (0.047), and awareness (0.047). (0.124). The findings agree with those of Thambiah et al. (2010), Alam et al. (2011), and Obeid and Kaabachi (2016).

### **Regression Analysis**

We used the Moderated Multiple Regression (MMR) analysis to determine the impact of moderator religiosity with independent variables relative advantage, compatibility, social influence, and awareness on the adoption of Takaful (Islamic Insurance), which is the dependent variable of the study, in order to assess the strength of interaction of religiosity between the four independent variables. As a result, the hierarchical Regression method, or moderated multiple regression, or MMR, is used in this study (Aguinis, 2004). First, data were gathered on the categorical moderator of religion, which is an independent variable. Calculating the interaction term or product term is the next step. Relative advantage, compatibility, social impact, and awareness were multiplied by the moderator variable of religiosity in order to produce the hypothesized moderator variables, also known as the interaction term or product term.

Based on the model's statistical significance, its moderating impact on the independent-dependent connection was computed, and its substantive relevance is also looked at. The statistical significance and its degree of significance (p-value 0.05) are examined using the t-value. While the two-stage multiple regressions was used to assess the moderating effect of religiosity. The first stage only includes first-order effects (i.e., the intention to adopt Takaful; all four independent factors; a moderator variable); the second stage includes the product term (each independent variable multiplied by religiosity); and the third stage includes all three terms.

Therefore, the change in R-square value from the first-order level of the model to the second-order level model must be significant in order to determine the significant level for a moderating (Aguinis, 2004; Hair, 2010). The R<sup>2</sup> number is used to determine how well the model fits. A R<sup>2</sup> number that is closer to 1.0 indicates that the stated variables account for almostall of the model's variability (Hair, 2010). In order to have a more objective measurement of the coefficient, an adjusted R<sup>2</sup> was referred to, despite the relatively large number of independent variables (four independent variables) that are used in this research, representing urban and rural customers with different sample sizes throughout Pakistan. The correction is an adjusted R square based on the number of independent variables in relation to the sample size that systematically discounts the rise in R square caused by the addition of non-significant variables (Aguinis, 2004; Hair & Andreson, 2010).

Additionally, the unstandardized regression coefficients (B) were used to interpret the direction of the positive and negative relationships between the independent and dependent variables for this study. If a B coefficient is positive, this relationship between the variable (Coefficient B) and the dependent variable will be considered to be positive. The dependent variable can also be used to explore negative relationships if the B coefficient is negative.

In Table IV we have analyzed the first moderated multiple regression analysis performed with

independent variable relative advantage to check its effect on Takaful adoption. The moderation effect of religiosity is also observed with relative advantage (RA-REL). The control variables are age, gender and marital status. From table IV it is observed that that relative advantage is showing positive relationship with Takaful adoption as B=0.095 and it is also significant at p<0.05. Also moderator religiosity is showing negative relationship with Takaful adoption as B=-0.059 and also has significant value p<0.05. The interaction term RA-REL that Relative advantage multiplied with religiosity is showing a strong positive relation with Takaful adoption as B=0.104 with a p value significant at p<0.01. So this result support our hypothesis that H1= Religiosity moderates the strength between the relative advantage and intension to adoptTakaful. The results are in line with the previous studies as well. As relative advantage has creating a change in Takaful adoption by beta 2.9 (Hassan & Abbas, 2019). Similarly relative advantage and religion interaction term has a beta of 0.085 to create an effect on Takaful adoption (Thambiah, Ismail, Musa, & Khin, 2013).

Table 4
Moderated Multiple Regression Analysis for Relative Advantage

Predictors		Takaful Ador	otion		
	В	$\mathbb{R}^2$	$\blacktriangle R^2$		
Step 1					
Control variable	$0.110_{ns}$	0.008			
Step 2					
Relative Advantage	0.095*				
Religiosity	-0.059*	0.029	0.021		
Step 3					
RA-REL	0.104**	0.051	0.022		

N=257, \*p<0.05, \*\*p<0.01, \*\*\*p<0.001, RA-REL= Relative advantage\*Religiosity

In Table V we have analyzed the second moderated multiple regression analysis performed with independent variable compatibility to check its effect on Takaful adoption. The moderation effect of religiosity is also observed with compatibility (COM-REL). The control variables are age, gender and marital status. From table V it is observed that that compatibility is showing positive relationship with Takaful adoption as B=0.063 and it is also significant at p<0.05. Also moderator religiosity is showing negative relationship with Takaful adoption as B=-0.047 and also has no significant value that is p<0.05. The interaction term COM-REL that compatibility multiplied with religiosity is showing a strong positive relation with Takaful adoption as B=0.092 with a p value significant at p<0.05. So this result support our hypothesis that H2= Religiosity moderates the strength between the compatibility and intension to adoptTakaful.

Table 5

Moderated multiple Regression Analysis for Compatibility

Predictors		Takaful Adopt	ion	
	В	$\mathbb{R}^2$	$\blacktriangle R^2$	
Step 1				
Control variable	$0.110_{\rm ns}$			
Step 2				
Compatibility	0.063*			
Religiosity	$-0.047_{\rm ns}$	0.025	0.017	
Step 3				
Com-Rel	0.092*	0.045	0.020	

N=257, \*p<0.05, \*\*p<0.01, \*\*\*p<0.001

In Table VI we have analyzed the third moderated multiple regression analysis performed with independent variable social influence to check its effect on Takaful adoption. The moderation effect of religiosity is also observed with social influence (SI-REL). The control variables are age, gender and marital status. From table VI it is observed that that social influence is showing bit weak positive relationship with Takaful adoption as B=0.037 and it is also not significant at p<0.05. Also moderator religiosity is showing negative relationship with Takaful adoption as B=-0.036 and also has no significant value that is p<0.05. The interaction term SI-REL that Social influence multiplied with religiosity is showing a strong positive relation with Takaful adoption as B=0.075 with a p value significant at p<0.05. So this result support our hypothesis that H3= Religiosity moderates the strength between the social influence and intension to adoptTakaful.

Table 6
Moderated multiple Regression Analysis for Social Influence

Predictors		Takaful Adopti	on	
	В	$\mathbb{R}^2$	$\blacktriangle R^2$	
Step 1				
Control variable	$0.110_{\rm ns}$			
Step 2				
<b>Social Influence</b>	$0.037_{\rm ns}$			
Religiosity	$-0.036_{\rm ns}$	0.017	0.009	
Step 3				
SI-REL	0.075*	0.033	0.016	

N=257, \*p<0.05, \*\*p<0.01, \*\*\*p<0.001

In Table 7 we have analyzed the first moderated multiple regression analysis performed with

independent variable awareness to check its effect on Takaful adoption. The moderation effect of religiosity is also observed with awareness (AWR-REL). The control variables are age, gender and marital status. From table VII it is observed that that compatibility is showing positive relationship with Takaful adoption as B=0.074 and it is also significant at p<0.01. Also moderator religiosity is showing negative relationship with Takaful adoption as B=0.047 and also has no significant value that is p<0.05. The interaction term AWR-REL that awareness multiplied with religiosity is showing a strong positive relation with Takaful adoption as B=0.118 with a p value significant at p<0.01. So this result support our hypothesis that H4= Religiosity moderates the strength between the awareness and intension to adoptTakaful.

Table 7

Moderated multiple Regression Analysis for Awareness

Predictors		Takaful Adoption		
	В	$\mathbb{R}^2$	$\blacktriangle R^2$	
Step 1				
Control variable	$0.110_{\rm ns}$			
Step 2				
Awareness	0.074**			
Religiosity	$-0.032_{\rm ns}$	0.037	0.029	
Step 3				
AWR-REL	0.118**	0.064	0.027	

N=257, \*p<0.05, \*\*p<0.01, \*\*\*p<0.001, AWR-REL= Awareness\*Religiosity

#### Summary of accepted and rejected hypothesis

The research study has developed four hypothesis and the results of the hypotheses based on the regression analysis are shown in the table VIII below:

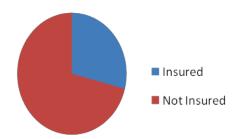
Table 8
Results of Hypothesis test

H	Hypothesis	Status
H1	Religiosity moderates the strength between the relative advantage and intension to adoptTakaful	Supported
H2	Religiosity moderates the strength between the compatibility and intension to adopt Takaful	Supported
Н3	Religiosity moderates the strength between the social influence and intension to adopt Takaful	Supported
H4	Religiosity moderates the strength between the awareness and intension to adopt Takaful	Supported

## **Research Finding and Discussion**

The results and findings are relevant with the previous researches of (Hassan, 2019; Thambiah, 2013). As this research have a R square change with 0.070 and significance F change 0.033 which implies that this research model is acceptable and religiosity have significant moderating impact on relative advantage, compatibility, social influence and awareness to adopt Takaful Insurance. This positive coefficient B values that is relative advantage-religiosity is 0.051, compatibility-religiosity is 0.034, Social influence-religiosity is 0.09 And awareness-religiosity is 0.073. It signifies that 1 unit increase in Takaful adoption has been possible with above factors and positive relationship has been examined from it. Although the values are less as 0.051, 0.034, 0.09, 0.073 values are too less as fewer people are willing to adopt Takaful insurance although positive relationship amongst religiosity as moderating variable and dependent independent variables has examined from this research. There can be possibly some other factors that can influence people to adopt Takaful products. As people are highly religious in Pakistan but their Takaful adoption rate is very low.





**Chart I: Takaful adoption percentage** 

From chart I we can examine that only 29% are willing to adopt Takaful products in Pakistan as data shows they are highly religious but possibly there are some other factors that need to be examine that influence people behavior to adopt Takaful products. As religious reason are still influencer but not have significant impact to adopt Takaful insurance products (Thambiah, 2013). Likewise, Ali has added to discussion in 2019 that lack of awareness in Pakistan hasled to low adoption rate of Takaful in Pakistan also Takaful products are not as competitive and innovative as conventional insurance products (Hassan, 2019). Our research has also contributed in line with the previous researches that religiosity is not much influencing moderator to adopt Takaful products, there are some other factors which need to examine for lower adoption rate of Takaful Insurance.

### Conclusion

There are various factors which have highlighted the research framework, most importantly the people behavior regarding Takaful usage are widely studied to investigate the hypothesis. The study's findings indicate that Pakistan has significant growth potential for the Takaful industry. Religiosity significantly impact Pakistani people behavior to adopt Takaful as concluded from

above results. Because the Takaful idea is in harmony with their beliefs, Pakistani people are quite hopeful about it. It addresses their cultural, social, and subjective standards. According to research, the biggest obstacle to the expansion of Takaful in Pakistan is a general lack of knowledge about the practice, and people's reluctance to invest in Takaful is also influenced by various prejudices. Furthermore, the underdevelopment of Takaful is due to the lack of innovative and competitive products are also responsible. At last, the research effort suggests that more new techniques are required to produce more innovative and beneficial products must be adopted by the Takaful operators for further development of Takaful. Takaful products and Takaful mechanism must grow with awareness and advertisement programs at various levels like universities. Therefore, it is vital for Islamic insurance businesses to increase customer understanding about their competitive advantage compared to traditional insurance services in order to enable consumers assess the value and utility of Islamic insurance. They should emphasize in their advertising campaigns the advantages of adopting Islamic insurance services. Pakistan Islamic insurance should emphasize that their purpose is to contribute to the growth of the nation's economic and social development in addition to the religious and financial benefits. This is crucial in Pakistan, which has seen social unrest and economic difficulties since the Asia Spring. Moreover, there are lot of other factors and aspects that need to be discovered and created to influence people so that more may adopt Takaful products. Resultantly, people are willing to buy Takaful products and it also set a benchmark for conventional insurance users, and they will surely switch toward Takaful insurance.

The credible predictor of Pakistani consumers' acceptance of this new insurance service turned out to be their level of religiosity. This result is consistent with studies by Souiden and Jabeur (2015); Souiden and Marzouki (2015) that found a significant influence of religion on Pakistani consumers' decisions to adopt Islamic banking as well as a 2013 report by Thomson Reuters that found Pakistani consumers' likelihood to use Islamic insurance products and services is significantly influenced by their commitment to following Islamic law. This implies that Pakistani Islamic insurance should target groups or individuals that have a strong sense of religious devotion while marketing their services. Some religious subgroups demand that all financial dealings, acts, and investments made by Islamic insurance be in accordance with Sharia. They may view this as a sign of trust in these financial institutions. As a result, authenticity is crucial to the expansion of Islamic insurance in Pakistan. Because of this, Islamic financial institutions must persuade prospective customers that they offer safe insurance solutions that are entirely compliant with Islamic standards.

In conclusion, In Pakistan it is obvious that religious reason is very important to certain extends to adopt Takaful Islamic insurance products. The presence of social influence is even very strong in the society to adopt Takaful products but absence of awareness abstains Pakistani people to invest for Takaful products. The significance of awareness factor to increase the importance of takaful products can never be neglected in case of Pakistan. The findings of this study have a number of significant ramifications for Islamic insurance. Clearly, the quick growth of Islamic insurance in Pakistan will depend heavily on customer education and confidence. Therefore, in order to draw in potential customers, Takaful enterprises should be careful to uphold their authenticity with regard to Sharia compliance as well as their communication strategy. Takaful managers should choose appealing and educational ads that emphasize the "Islamacity of

Product." It is advised that businesses use their advertising efforts to let customers know that "the Sharia committee" constantly checks on Islamic institutions to make sure all financial operations and transactions adhere to Sharia law. These justifications could appeal to a certain demographic of customers who desire to adhere to their religion's rules, which would increase their faith in Islamic insurance. Our findings are in line with previous research of (Hassan, 2019). Islamic financial institutions can take some help from our findings to serve a useful guidance for the formulation of a good product development and marketing strategy to increase the adoption of Takaful products.

### References

- Abdulsater, M. (2014). Awareness, Perceptions and Purchase Intentions towards Islamic General and Life Insurance Products: An Empirical Study of Australian Muslim Consumer. *University of New South Wales Business School, Sydney*.
- Ahmad, S. A. (2013). Using Arabic words in Malaysia takaful industry and impact on untapped Malay market. *Journal of Islamic and Human Advanced Research*, 3(10), 740-761.
- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckmann (Eds.), Action control, 11-39. Springer.
- Alam, S. M. (2011). Is religiosity an important determinant on Muslim consumer behaviour in Malaysia. *Journal of Islamic Marketing*, 2(1), 83-96.
- Albarracin, D. J. (2001). Theories of reasoned action and planned behavior as models of condom use: A meta-analysis. *Psychological Bulletin*, 127(1), 142-161.
- Alhumoudi, Y. (2013). Islamic insurance Takaful and its applications in Saudi Arabia (Doctoral dissertation, Brunel University).
- Allen, R. (1990). The concise Oxford dictionary of current English (8th ed.). *Oxford University Press*.
- Ariff, M. (2011). The foundations of Islamic banking: Theory, practice and education. *Edward Elgar Publishing*.
- Awais, M., Thas Thaker, M.A. B. M., Raza, A., Usman, U., Mohsin, M., & Bhatti, O. K. (2021). The process of risk management: Sketching the providers of Islamic microfinance. *PONTE International Journal of Science and Research*, 77(11).
- Awais, M., Ullah, N., Sulehri, N. A., Thas Thaker, M. A. B. M., & Mohsin, M. (2022). Monitoring and efficiency in governance: A measure for sustainability in the Islamic banking industry. *Frontiers in Psychology*, 13.
- Awais, M., Yaqub, A., Iftikhar, U., Bhatti, O. K., & Thas Thaker, M. A. B. M. (2020).

- Islamic capitalism: An approaching truth or an expectant panorama for Islamic finance-A case of Pakistan and Malaysia.
- Aziz, H. E. (2015). Current state and future prospects of Islamic banking in Morocco: An empirical investigation. *Journal of Emerging Economies and Islamic Research*, 3(2), 1-10.
- Beck, T., & Webb, I. (2003). Economic, demographic, and institutional determinants of life insurance consumption across countries. *The World Bank Economic Review*, 17(1), 51-88.
- Billah, M. (2003). Islamic and modern insurance: Principles and practices. *Ilmiah Publishers*.
- 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.
- Boztepe, H. (2012). Green marketing and its impact on consumer buying behavior. European Journal of Economic and Political Studies, 5(1), 5-21.
- Cheikh, B. A. (2013). Abstract to Islamic insurance Takaful. *Insurance and Risk Management*, 81(3), 291-304.
- Echchabi, A., & Aziz, H. A. (2013). Islamic insurance in the European countries: Insights from French Muslim perspective. *Transactions on Business and Economics*, 10 (3), 125-132.
- Echchabi, A., & Aziz, H. A. (2015). Factors influencing the Yemeni customers' intention to adopt Takaful products. *Gadjah Mada International Journal of Business*, 17(1), 25-45.
- Ellahi, N., Awais, M., & Raza, A. (2018). Islamic microfinance credit for women entrepreneurship development and its obstacles in Pakistan. *Global Economics Review*, 3(2), 76-84.
- Esposito, J. L. (2014). Islamic law: The Oxford dictionary of Islam. *Oxford University Press*.
- Fam, K. S., Waller, D. S., & Erdogan, B. Z. (2002). The influence of religion on attitudes towards the advertising of controversial products. European *Journal of Marketing*, 38(5), 537-555.

- Gerrard, P., & Cunningham, J. B. (2003). The diffusion of internet banking among Singapore consumers. *International Journal of Bank Marketing*, 21(1), 16-28.
- Hassan, S. K. (2019). Factors influencing the investors' intention to adopt Takaful Islamic insurance products Pakistan. *Journal of Islamic Marketing*.
- Rusin, M. M., & Rahman, A. A. (2016). Do Muslims intend to participate in Islamic insurance? Analysis from theory of planned behaviour. *Journal of Islamic Accounting and Business Research*, 7(1), 42-58.
- Hussain, M., & Pasha, A. T. (2011). Conceptual and operational differences between general Takaful and conventional insurance. *Australian Journal of Business and Management Research*, 1(8).
- Jamal, A. (2003). Marketing in a multicultural world: The interplay of marketing, ethnicity and consumption. *European Journal of Marketing*, 37(11), 1599-1620.
- Khan, M. M., & Bashar, K. M. (2016). Economic determinants of family Takaful: Evidence from Pakistan. *Acta Islamica*, 6(143), 1-35.
- Kazranian, S. G. (2015). ICD Thomson Reuters. Thomson Reuters.
- Khan, M. A. (2013). What is wrong with Islamic economics? Analyzing the present state and future agenda. *Edward Elgar Publishing*.
- Langer, Y. A. A. (2014). Low-cost innovations in resource-constrained markets: An adoption study (Doctoral dissertation, University of Twente).
- Linden, V. D. (2011). Charitable intent: A moral or social construct? A revised theory of planned behavior model. *Current Psychology*, 30(4), 355-374.
- Lindridge, A. M. (2005). Religiosity and the construction of a cultural-consumption identity. *Journal of Consumer Marketing*, 22(3), 142-151.
- Malarvizhi, C. A. N., Thambiah, S., & Ismail, H. (2011). Islamic retail banking adoption: A conceptual framework. *Australian Journal of Basic and Applied Sciences*, 5(12), 649-657.
- Noordin, K. A. M., Haron, S. N., & Lim, Y. H. (2014). The commercialization of modern Islamic insurance providers: A study of Takaful business frameworks in Malaysia. *International Journal of Nusantara Islam*, 2(1), 1-13.
- Norberg, P. A., Horne, D. R., & Horne, D. A. (2007). The privacy paradox: Personal information disclosure intentions versus behaviors. *Journal of Consumer Affairs*,

- 41(1), 100-126.
- Rahim, F. A., & Amin, H. (2011). Determinants of Islamic insurance acceptance: An empirical analysis. *International Journal of Business and Society*, 12(2), 37-54.
- Rogers, E. M. (1995). Diffusion of innovation (4th ed.). The Free Press.
- Rogers, E. M. (2003). Diffusion of innovations (5th ed.). Free Press.
- Salman, S. A. (2014). Contemporary issues in Takaful. Asian Social Science, 10(22), 210-216.
- Sheppard, B. H., Hartwick, J., & Warshaw, P.R. (1988). The theory of reasoned action: A meta-analysis of past research with recommendations for modifications and future research. *Journal of Consumer Research*, 15(3), 325-343.
- Siala, H., O'Keefe, R. M., & Hone, K. S. (2004). The impact of religious affiliation on trust in the context of electronic commerce. *Intelfaces*, *34*(*3*), 195-204.
- Taylor, S., & Todd, P. (1995). Decomposition and crossover effects in the theory of planned behavior: A study of consumer adoption intentions. *International Journal of Research in Marketing*, 12(2), 137-155.
- 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. *Journal of Islamic Accounting and Business Research*, 2(1), 67-76.
- Thambiah, S., Ismail, H., Ahmat, N., Ibrahim, Z., & Khin, A. A. (2013). Islamic retail banking adoption in Malaysia: The moderating effect of religion and region. *The International Journal of Applied Economics and Finance*, 7(1), 37-48.
- Wahab, A. (2013). The Scope of Takaful Insurance in Pakistani Market. *Bahria Institute of Management and Computer Sciences, Karachi.*
- Young, E., Diep, T., & Drabble, S. (2012). The world Takaful report 2012. Ernst & Young.