

Volume and Issues Obtainable at Center for Sustainability Research and Consultancy

Journal of Business and Social Review in Emerging Economies

ISSN: 2519-089X & ISSN (E): 2519-0326 Volume 8: Issue 1 March 2022 Journal homepage: www.publishing.globalcsrc.org/jbsee

Religiosity and Entrepreneurial Intentions in Pakistan

*Romel John, Superior University, Lahore, Pakistan
Kashif Mahmood, Superior University, Lahore, Pakistan
Zia-ur-Rehman Rao, Hailey College of Commerce, University of the Punjab, Lahore, Pakistan

*Corresponding author's email: romeljohn@fccollege.edu.pk

ARTICLE DETAILS

History

Revised format: Feb 2022 Available Online: Mar 2022

Keywords

Entrepreneurial Goal Intention, Religiosity, Perceived Feasibility, Entrepreneurial Intention, Opportunity

JEL Classification

L26, M2

ABSTRACT

Purpose: The primary objective of this study is to develop an inclusive model that represents the relationship between entrepreneurial intentions and religiosity.

Design/Methodology/Approach: This research was conducted using sample of 338 undergraduate business students from universities in Punjab, Pakistan. The method used for collecting data was through self-administered questionnaire survey which contained two sections related to demographic characteristics and constructs of religiosity and entrepreneurial intentions. Analysis on the data was done using PLS-SEM.

Findings: Contrary to the theory, the results revealed that entrepreneurial goal intention (EGI) is not influenced by social norms. However, EGI is positively influenced by extrinsic and intrinsic religiosity, perceived desirability, and opportunity for entrepreneurship, where extrinsic and intrinsic religiosity was found to have a mediating role between opportunity for entrepreneurship and EGI.

Implications/Originality/Value: Deeper understanding of how religiosity influences entrepreneurial intentions in different cultures, settings and situations could help in the further advancements of knowledge in this field of study. Religious leaders, policy makers, university administrators can utilize the results of this study to encourage entrepreneurship in the country.



© 2022 The authors, under a Creative Commons Attribution-NonCommercial 4.0

Recommended citation: John, R., Mahmood, K. and Rao, Z. (2022). Religiosity and Entrepreneurial Intentions in Pakistan. *Journal of Business and Social Review in Emerging Economies*, 8 (1), 123-138.

Introduction

Entrepreneurship involves creativity, risk taking abilities, willingness, leadership, and innovation in order to find opportunities, solve problems, create jobs, and deal with everchanging and constantly evolving market uncertainties for self, community development, contribution to the economy, country or even the world (Guerrero et al., 2008; Raimi, 2015). Entrepreneurship not only contributes to the economic and financial growth of a country, but at the same time, serves

the community, brings joy and satisfaction to individuals, and facilitates people by solving their problems. To encourage entrepreneurial behavior at a micro (individual) level, there is a potential to know which factors encourage, motivate and trigger entrepreneurship and which factors are responsible in the origination of entrepreneurial intentions in individuals.

Given the importance of identifying the factors that lead towards formation of intentions of entrepreneurial action, several intentions-based models exist in the literature. Few of the most famous, credible and well utilized intentions-based models include Theory of Reasoned Action (H. Ajzen & Fishbein, 1980), Shapero's model of the Entrepreneurial Event (SEE) (Shapero & Sokol, 1982), Theory of Trying - Bagozzi and Warshaw (1990), and Theory of Planned Behavior (TPB) (Icek, 1991). Although, these models have been extensively used in variety of research related to entrepreneurial intentions, however, there is still an opportunity for integrating these models into a single systematic universal model using some alternative approach. Utilizing this opportunity, Krueger (N. F. Krueger, 2007a) formed an inclusive and comprehensive intentions-based model which incorporated all essential components of all the leading models used in the past.

Moreover, there are considerably less research studies conducted on the area linking entrepreneurship with religiosity published in well recognized journals (Musallam & Kamarudin, 2021). Leading and famous authors researching on the areas of religiosity and entrepreneurship agree that empirical research to make valid and solid argument explaining the relationship between antecedents of entrepreneurship and dimensions of religiosity is considerable insufficient (Haq et al., 2020; Henley, 2017; Hoogendoorn et al., 2016; Islam & Kirillova, 2020). Therefore, more studies are required to fill the void in literature in explaining the relationship between religiosity and entrepreneurial intentions, activity, and behavior and how religiosity influences entrepreneurship.

To explore further the emerging field of relationship between religiosity and entrepreneurial intentions, the objectives of this research study are to develop a comprehensive and inclusive model that represents the relationship between entrepreneurial intentions and religiosity while considering essential components of entrepreneurial intentions and religiosity. This research responds to the research gap identified by numerous researchers who have stressed to empirically investigate further on the relationship between religiosity and entrepreneurial intentions particularly in different contexts, cultures and counties (Block et al., 2020; Henley, 2017; Litman et al., 2019; Mattis, 2000). The target population of the study is undergraduate students belonging to business degree programs from universities in Punjab, Pakistan. Students pursuing business degrees tend to be potential entrepreneurs (Ahmed et al., 2020) as compared to students from other degree programs (Lüthje & Franke, 2004). Analyzing the entrepreneurial tendencies of such students can help policy makers and researchers in variety of ways to foster entrepreneurship in the youth especially in a religiously oriented developing countries like Islamic Republic of Pakistan.

Theoretical Background Research Model Development

Krueger's Integrated Model of Entrepreneurial Intention

One of the most widely used entrepreneurial intentions model was presented by Ajzen in 1991 (I. Ajzen, 1991) named as the Theory of Planned Behavior (TPB) which is a theoretical framework which provides a deeper understanding and explanation of antecedents of entrepreneurial intentions. According to this model, entrepreneurial intentions are formed by three primary components including attitude, social norms, and perceived behavioral control. Here attitude involves one's attitude towards an outcome of behavior, social norms are the perceptions of support, encouragement, consent, pressure, and opinion from the society while an individual is planning to initiate an entrepreneurial venture, and the perceived behavior control is the perception

of one's own abilities, competence, self-belief, and control over situations (Al-Jubari, 2019; Ferry Wibowo, 2019).

A relatively newer models of intentions was presented by Norris Krueger (N. Krueger, 2009) which comprehensively incorporated all the critical antecedents of entrepreneurial intentions presented in previous models. The model emphasizes on the perceived desirability and perceived feasibility aspects of entrepreneurial venture and how the perceived desirability and perceived feasibility of an intended entrepreneurial venture effects the perception of opportunity for initiating that entrepreneurial startup. The model also explains how such perceptions of opportunity, feasibility and desirability are formed.

According to Kirzner's theory (Kirzner, 1973), an individual tends to make decisions to operate in a market based on guesses, hunches, heuristics and intuitions when the information about market trends is not readily accessible or available. When these intuitive decisions go wrong, it creates imbalance of resources or prices in the market. This market imbalance thus fosters opportunities for others where people take advantage by manipulating market prices and market resources. For example, misallocation of resources leads shortage or surplus in the market, and in times of shortage, people take advantage by hiking the prices, or buy surplus resources when there is a surplus which was created due to inaccurate decisions that distorted the market equilibrium (Shane & Venkataraman, 2000). That implies that entrepreneurship evolves when there are opportunities in the market, and hence, entrepreneurship is heavily dependent on opportunities. Entrepreneurship is possible when an individual acts fast to tap market opportunities with or even without the availability of the required resources (Jarillo, J.C., & Stevenson, 1990), and that is the risk which an individual takes, and which makes a business opportunity an entrepreneurial venture. Business opportunities exist in the market even if someone is not aware of them. Unawareness of the opportunities does not imply that the market has no opportunities (Drucker, 1985) and entrepreneurship is all about identifying such opportunities or in other terms, market insufficiencies and manipulating the available resources creatively for venture creation (Shane & Venkataraman, 2000).

Krueger explains that entrepreneurial intentions are the outcome of perception of desirability and feasibility for creating an entrepreneurial venture (N. Krueger, 2009). He explains how desirability and feasibility for entrepreneurial venture creation acts as an antecedent of perceived opportunity for entrepreneurship (Dutton & Jackson, 1987).

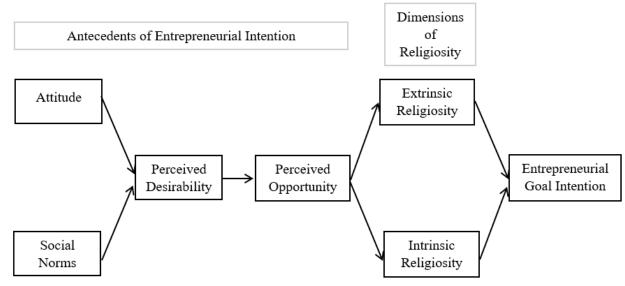


Figure 1: Research Model Source: Authors' compilation

When an individual believes that starting a business is practical and doable (perceived feasibility) and when entrepreneurship as a career is attractive to an individual (perceived desirability), this culminates into increasing the perception of opportunity in that individual (N. F. Krueger et al., 2000). To put it in simple words, an individual tends to realize entrepreneurial opportunities around him only when the entrepreneurship sounds interesting, realistic, and practical to that individual.

Hence, following was hypothesized:

- H1. A positive relationship exists between attitude towards creating an entrepreneurial venture and perceived desirability for entrepreneurship
- H2. A positive relationship exists between social norms towards creating an entrepreneurial venture and perceived desirability for entrepreneurship
- H3. A positive relationship exists between perceived desirability for creating an entrepreneurial venture and perceived opportunity for entrepreneurship

Religiosity and Entrepreneurial Intentions

Variety of studies have revealed that there is a significant relationship that exists between religiosity and entrepreneurship (Henley, 2017). This relationship exists because religiosity, in certain situations is considered as an outcome of social norms and personal attitude (Wibowo, 2017) and same is the case with the entrepreneurial intentions as explained in detail in the TPB (I. Ajzen, 1991)model of entrepreneurial intentions. Many studies have found that religion has a direct influence on entrepreneurial intentions (Abdullahi & Suleiman, 2015). Weber and Kalberg (Weber & Kalberg, 2002) presented a very convincing theoretical framework that explained and justified the religiosity-entrepreneurship relationship (Weber & Kalberg, 2002). Several researchers including David and Lawal (David & Lawal, 2018), Rajani (Ranjani, 2017), Gursoy and his team (Gursoy et al., 2017) studied this relationship in different contexts, cultures and settings and found the same positive and significant relationship between entrepreneurship and religiosity.

Religiosity is abidance to the prescribed practices and rituals associated to worshipping a higher power and to the guidelines associated to living one's life accordingly. (Mattis, 2000). Religiosity has two primary dimensions namely intrinsic religiosity and extrinsic religiosity (Allport, 1966) where intrinsic religiosity is about devotion, spirituality, and faith in the divine power (Lee & Neblett, 2019) and extrinsic religiosity is about the focus on self-satisfaction or outcome that comes through following the prescribed religious rituals and practices including attending church, praying, worshiping and holding religious memberships (Arli et al., 2021).

Religiosity tends to influence daily life decisions of individuals, and decisions taken under the religious influence promotes satisfaction (Aman et al., 2019). Deciding to find a feasible entrepreneurial venture which is desirable to an individual is also a complex yet significant life decision, and hence, both religiosity and entrepreneurship coincide with each other.

Extrinsic religiosity is the practical aspect of religiosity where an individual follows religious practices to lead a self-satisfied life (Power & McKinney, 2014) which is attained through connecting with people for personal gains (Pace, 2014). Similar to the reason why individuals seek business opportunities, extrinsically religious people tend to choose to follow religion because they find it "useful for the self in granting safety, social standing, solace, and endorsement for one's chosen way of life" (G. W. Allport, 1966). Hence, it is reasonable to mention that extrinsic religiosity plays a significant role between perceived opportunity for entrepreneurial creating and entrepreneurial goal intention (EGI).

Similarly, intrinsic religiosity is the personal aspect of religiosity where an individual follows religion as internal belief and faith within one-self, like the opportunity recognition mechanism

where an individual seeks business opportunity based on the faith and belief in an entrepreneurial opportunity that will lead towards successful business venture. Hence, following was hypothesized:

H4. Extrinsic religiosity mediates positively the relationship between perceived entrepreneurial opportunity and EGI.

H5. Intrinsic religiosity mediates positively the relationship between perceived entrepreneurial opportunity and EGI.

Research Method Ouestionnaire

A self-reported quantitative survey was adapted for this study. This questionnaire was based on previous similar research to measure entrepreneurial intentions and religiosity. Survey questionnaire is found to be one of the most effective ways to measure entrepreneurial intentions (Baruch & Holtom, 2008) and religiosity (Baumsteiger & Chenneville, 2015). Antecedent of entrepreneurial intentions including Attitude, Social Norms, Perceived Desirability and Perceived Opportunity were measured by adapting the items used in study conducted by Shook and Bratianu (Shook & Bratianu, 2010). Attitude, Social Norms and Perceived Opportunity for entrepreneurship was measured adapting the tool used in a similar study conducted by Esfandiar and his team (Esfandiar et al., 2019). Similarly, the extrinsic and intrinsic dimensions of religiosity were measured by adapting the items presented by Allport and Ross (Allport & Ross, 1967). Entrepreneurial goal intention (EGI) is the measure of entrepreneurial intention itself (Esfandiar et al., 2019). EGI for this study was measured by adapting items presented by (Liñán & Chen, 2009). Each of the items were constructed using a seven-point Likert scale. In the seven-scale Likert scale used in this study, 1 donated total disagreement and 7 donated total agreement with the statements mentioned against each item.

Participants and Sampling

Data for this research was collected from a sample of 338 undergraduate students belonging to business degree program from 10 universities from the province of Punjab, Pakistan. These universities were selected based on stratified random sampling technique. The self-reported questionnaires were administered in-person and electronically from the population of students pursuing their business degrees from 79 universities existing in the province of Punjab, Pakistan. All these 79 universities are governed and regulated by the higher education commission of Pakistan (HEC) and therefore follow similar curriculum, teaching methodology, admissions criteria etc. Hence, all these universities constitute a homogenous population, and the sample is therefore can be considered as a representative of the chosen population (Qaiser Danish et al., 2011).

Rational behind choosing undergraduate business students is because such students are actively involved in making career choice decisions including pursuing a career as entrepreneur (Barba-Sánchez & Atienza-Sahuquillo, 2018). Also, students pursuing business degrees study business management and entrepreneurship as part of their degree business degree program, and education in business and entrepreneurship is found to be significantly and positively related towards entrepreneurial behavior (Barba-Sánchez & Atienza-Sahuquillo, 2018).

A total of 338 responses were achieved using with a response rate of 53.8%. The sample group of students were between the age of 15 and 29 where majority of the respondents were males (64%) and Muslims (89%) and 11 % were Christians. Majority was Muslim because Pakistan is a country with Muslim majority (Ashraf et al., 2021).

Data Analysis

Common Method Variance

Common method variance (CMV) is a method used in self-reported surveys to measure error that has possibility to cause variations which result in reduced validity and reliability of the constructs used in the model of the study (Chin et al., 2013; Reio, 2010). These issues appear while measuring the exogenous and endogenous variables used in the study (Chang et al., 2010). It was found that no common variance existed in the constructs used in the study. Reason for the nonexistence of CVM in the constructs was because data was collected from different universities and different students, hence, statistical modification or reduction or elimination was not required.

PLS-SEM Technique

Partial least squares structural equation modeling (PLS-SEM) technique is considered one of the most suited methods to analyze and predict multifaceted relationships between variety of constructs (Fornell & Larcker, 2018). Similar studies conducted in this area used the same PLS-SEM measurement tool to test the model (Durdyev et al., 2018; Ghasemy et al., 2020) because its authentic predictive power. SmartPLS software was used to test the hypothesis through PLS-SEM technique.

Measurement Model

Reliability and validity were tested to ensure accuracy and adequacy of the measurement model used in the study. The construct validity was accessed by measuring the criteria of discriminant validity convergent validity. To test the scale reliability and its internal consistency, Cronbach's alpha was used, where 0.70 was considered as the minimum acceptable value, as suggested by the experts (Krell et al., 2014) which implies that the value less than 0.70 makes the instrument ineligible to be considered as internally consistent. All the constructs used in this study achieved minimum of 0.70 Cronbach's alpha and composite reliability coefficient value which represents that the constructs are highly internally consistent (see Table 1).

Table 1

Measurement Model (convergent validity, reliability, discriminant validity)

Measurement Model (convergent validity, reliability, discriminant validity)							
Construct & Item	Factor Loading	t-Value	CR	CA	AVE		
Attitude			0.851	0.781	0.537		
Being entrepreneur implies more advantages than disadvantages to me	0.594	11.452					
A career as entrepreneur is attractive for me	0.816	31.446					
If I had the opportunity and resources, I'd like to start a firm/company	0.671	8.888					
Being an entrepreneur would entail great satisfactions for me	0.775	22.217					
Among various options, I would rather be an entrepreneur	0.783	20.934					
Entrepreneurial Intention			0.906	0.846	0.762		
One of my professional goals is to become an entrepreneur	0.884	39.152					
I will make every effort to start and run my own or co-owned firm	0.913	70.515					
I want to start my own or co-owned business sometime in the future	0.820	19.35	0.000	0.011	0.726		
Extrinsic Religiosity I pray mainly to gain relief and protection	0.769	15.604	0.888	0.811	0.726		
What religion offers me the most is comfort in times of trouble and sorrow	0.875	36.717					
Prayer is for peace and happiness	0.905	71.48					

Intrinsic Religiosity			0.874	0.813	0.636
I enjoy reading about religion	0.812	27.782			
It is important for me to spend time in private thought and prayer	0.855	28.629			
I try hard to live all my life according to my religious beliefs	0.705	13.431			
My whole approach to life is based on my religion	0.809	25.532			
Opportunity			0.870	0.707	0.771
I've seen good opportunities for starting up a business	0.845	25.624			
I will identify a good opportunity in start-up in the near future	0.910	43.565	0.014	0.011	0.041
Perceived Desirability			0.914	0.811	0.841
I consider starting my own business very desirable	0.912	66.493			
I consider an entrepreneurial career to be very desirable Social Norms	0.922	84.316	0.816	0.720	0.528
If I were to start my own business, my parents would be supportive	0.722	8.235			
If I were to start my own business, my close friends would be supportive	0.624	5.685			
If I were to start my own business, my parents' opinions are important to me	0.758	10.705			
If I were to start my own business, my close friends' opinions are important to me	0.792	14.74			

Notes: CR = Composite reliability, CA = Cronbach's alpha, AVE = Average variance extracted

Convergent validity was measured using average variance extracted (AVE) and conformity factor analysis. It was found that for all the items, standard factor loading was significantly larger than 0.7 which was promising. The results also revealed that the values for AVE for all the constructs was greater than 0.5 (see Table 1), which qualified the least acceptable level criteria for AVE value results.

Similarly, discriminant validity was analyzed by checking whether the square root of AVE value belonging to each latent construct is larger than the correlation between the pair of latent constructs i.e. Fornell-Larcker criterion (Fornell & Larcker, 1981). These results are represented in Table 2 where it is evident that the measures and their results are different from each other and do not corelate (Cable et al., 2002; Crowell et al., 1996; Rönkkö et al., 2022). Discriminant validity of the measurement model is apparent from these results. However, Fornell- Larcker criterion (Fornell & Larcker, 1981) is criticized for lacking the ability to measure discriminant validity where multiple constructs are present in a model (Ab Hamid et al., 2017). Therefore, use of Heterotrait-monotrait Ratio of Correlations (HTMT) to measure discriminant validity of complex models with multiple constructs is a preferred method to detect discriminant validity. It is suggested that the results of Heterotraitmonotrait Ratio of Correlations (HTMT) should not exceed 0.85, however, values lesser than 0.90 are also acceptable (Roemer et al., 2021). The results show that all the values of Heterotraitmonotrait Ratio of Correlations (HTMT) for all constructs other than Perceived Desirability and Entrepreneurial Intentions were less than 0.85, where the values for Perceived Desirability 0.885 and Entrepreneurial Intentions was 0.871 which was less than 0.9 and hence was at the acceptable level (Roemer et al., 2021) (see Table 2).

Table 2 Correlations and discriminant validity by Fornell–Larcker criterion and (HTMT) ratios.

	1	2	3	4	5	6	7
1. Attitude	0.733	0.661	0.357	0.298	0.412	0.712	0.235
2. Entrepreneurial Intention	0.796	0.873	0.370	0.331	0.504	0.725	0.286
3. Extrinsic Religiosity	0.456	0.430	0.852	0.532	0.348	0.326	0.345
4. Intrinsic Religiosity	0.369	0.366	0.633	0.797	0.282	0.250	0.368
5. Opportunity	0.546	0.630	0.449	0.356	0.878	0.420	0.266
6. Perceived Desirability	0.885	0.871	0.402	0.294	0.545	0.917	0.249
7. Social Norms	0.285	0.342	0.417	0.435	0.366	0.295	0.727

Below the diagonal elements (bold) are HTMT rations and above the diagonal elements Fornell-Lacker criterion values

Structural Model

For structural model, structural equation modeling (SEM) procedure was used to test the relationships of the model used in the study. SEM was used because it provides an opportunity to simultaneously measure multiple relationships between the variables that exist in a model (Blanthorne et al., 2006). Therefore, PLS-SEM technique was applied to measure and analyze the predictive relevance through Stone–Geisser's (Q2), path coefficients and coefficient of determination (R2) and Cohen (f2) (Cohen, 1988) to calculate the effect size. This was calculated using bootstrapping process in SmartPLS software. The model was found to have predictive relevance since the Stone–Geisser's (Q2) value was greater than zero (see Table 5).

The results of Cohen (f2) (Cohen, 1988) criteria of small ≥ 0.02 , medium ≥ 0.15 , and large ≥ 0.35 value results are represented in Table 3 where most of the results show small to large effect size except for Social Norms, which shows no effect.

Table 3
Effect size - Chohen (f2) f Square

			Effect si	ze - Cho	onen (12)	1 Squar	е			
	2		3		4		5		6	
	f2		f2		f2		f2		f2	
1. Attitude									0.930	large
2. Entrepreneurial Intention										
3. Extrinsic Religiosity	0.063	small								
4. Intrinsic Religiosity	0.030	small								
5. Opportunity			0.138	small	0.086	small				
6. Perceived Desirability							0.215	medium		
7. Social Norms									0.014	None

Similarly, Table 5 shows the results of coefficient of determination (R2) where the general rule of thumb criteria for R2 value effect size is small ≥ 0.02 , moderate ≥ 0.13 , and substantial ≥ 0.26 (Cohen, 2016; Cohen & Nee, 1983, 1984). The R2 values as per the results range between 0.079 and 0.514 which represents that the effects are within reasonable and satisfactory levels.

Direct and Indirect Effects

The hypothesis presented in the study were examined through the PLS-SEM analysis using bootstrapping in Smart PLS software and the results showed substantial support for the proposed hypothesis presented in this study with the exception for the second hypothesis i.e. positive relationship exists between social norms towards creating an entrepreneurial venture and perceived desirability for entrepreneurship where ($\beta = 0.086$, t = 1.886, p > 0.05). Hence, the hypothesis two was rejected. It was found that attitude towards creating an entrepreneurial venture has positive impact on perceived desirability ($\beta = 0.692$, t = 18.429, p < 0.05), hence Hypothesis 1 is supported. Similarly positive impact of perceived desirability for creating an entrepreneurial venture was found on perceived opportunity ($\beta = 0.420$, t =8.108, p < 0.05), therefore, hypothesis 3 is supported. Positive association was found between perceived opportunity and extrinsic religiosity $(\beta = 0.348, t = 6.901, p < 0.05)$ and same was found to be true for influence of extrinsic religiosity on EGI (β =0.270, t = 4.806, p < 0.05), therefore, Hypothesis 4 is supported. Similarly, positive association was found between perceived opportunity and intrinsic religiosity ($\beta = 0.282$, t = 5.640, p < 0.05) and same was found to be true for influence of intrinsic religiosity on EGI (β =0.187, t = 3.375, p < 0.05), therefore, Hypothesis 5 is supported. Detailed results of direct effects and relevant indicators are mentioned in Table 4. Results of indirect effects are mentioned in the Table 6 which represents strong indirect effects between all constructs except social norms, which has no effect any of the constructs including EGI, intrinsic religiosity, extrinsic religiosity, and opportunity.

Table 4

	Path Analysis - hypothesis testing (Direct effect).						
			t-	P			
	Hypothesis	Path Coefficient	Value	Values	Hypothesis Result		
Attitude -> Perceived Desirability	H1	0.692	18.429	0	Supported		
Social Norms -> Perceived Desirability	H2	0.086	1.886	0.06	Not Supported		
Perceived Desirability -> Opportunity	Н3	0.42	8.108	0	Supported		
Opportunity -> Extrinsic Religiosity Extrinsic Religiosity -	H4	0.348	6.901	0	Supported		
> Entrepreneurial Intention	H4	0.271	4.806	0			
Opportunity -> Intrinsic Religiosity Intrinsic Religiosity ->	Н5	0.282	5.64	0	Supported		
Entrepreneurial Intention	Н5	0.187	3.375	0.001			

Table 5
Effect Size - (R2), Adjusted R2 and Stone–Geisser's (Q2)

	R2	Effect	Adj.R2	Q2
Entrepreneurial Intention	0.162	moderate	0.157	0.115
Extrinsic Religiosity	0.121	moderate	0.119	0.082
Intrinsic Religiosity	0.079	small	0.077	0.045
Opportunity	0.177	moderate	0.174	0.129
Perceived Desirability	0.514	substantial	0.511	0.420

Table 6

Indirect effects on dependent variables.

	Path	t-	P
	Coefficient	Value	Values
Social Norms -> Entrepreneurial Intention	0.005	1.532	0.126
Social Norms -> Intrinsic Religiosity	0.01	1.651	0.099
Social Norms -> Extrinsic Religiosity	0.013	1.691	0.092
Social Norms -> Opportunity	0.036	1.739	0.083
Attitude -> Entrepreneurial Intention	0.043	3.58	0
Perceived Desirability -> Entrepreneurial Intention	0.062	3.887	0
Attitude -> Intrinsic Religiosity	0.082	3.977	0
Perceived Desirability -> Intrinsic Religiosity	0.118	4.342	0
Attitude -> Extrinsic Religiosity	0.101	4.443	0
Perceived Desirability -> Extrinsic Religiosity	0.146	4.912	0
Opportunity -> Entrepreneurial Intention	0.147	5.264	0
Attitude -> Opportunity	0.291	6.761	0

Discussion

This research empirically tested the relationship between religiosity and entrepreneurial intentions that how religiosity influences entrepreneurial intentions of undergraduate students belonging to business degree programs in the local context of Punjab, Pakistan. All the hypothesis presented in the study were accepted except the hypothesis two, which was rejected. The results highlighted that the social norms do not have any effect on the entrepreneurial intentions, which is the unique contribution of this study. However, extrinsic, and intrinsic religiosity positively influences entrepreneurial intentions, and both these dimensions of religiosity tend to mediate the relationship between opportunity and EGI. Further, it was revealed that EGI is positively influenced by attitude perceived desirability, perceived opportunity, and extrinsic & intrinsic religiosity, both directly and indirectly.

However, according to the results, social norms have no influence on any of these constructs neither directly nor indirectly. This is a unique and interesting finding of this study which is contradictory to the existing literature where opinions and support from the society including friends and family is theoretically an extremely important aspect to an individual's intentions to participate in entrepreneurial activities and to make an entrepreneurial venture desirable to that person (N. Krueger, 2020).

Therefore, the results are not in line with the Krueger's (N. Krueger, 2009) model which explains that the perceived desirability for an entrepreneurial venture is an outcome of an individual's perception about the support and opinions from the people which an individual considers important to him or her. The Krueger's (N. Krueger, 2009) model considers social norms as a significant contributor to an individual's intentions towards entrepreneurial behavior (N. F. Krueger, 2007b), whereas the result of this study shows the opposite. A similar study conducted in Iran revealed somehow similar contradictory findings about the lack of influence of social norms on entrepreneurial intentions of undergraduate students (Omidi Najafabadi et al., 2016). One of the primary reasons for these conflicting results can be due to the unique political, economic, and financial situation of the countries like Pakistan and Iran. Particularly in Pakistan, where the political, economic, and financial situation of the country is consistently fluctuating and instable (Khan et al., 2021; Tunio et al., 2021), the family, friends and relatives tend not to encourage the younger generation to participate in entrepreneurial startups or ventures. They rather prefer suggesting the youth to opt for a stable job with consistent monthly income, which is relatively a safe and risk-free career option as compared to high-risk business initiatives in such an unstable environment (Hussain Shah et al., 2020).

Theoretical Implications

One of the primary theoretical contributions of this study is that it presents an integrated and comprehensive and contextual entrepreneurial intention model by incorporating religiosity into it and by eliminating a contextually irrelevant construct (i.e. social norms) from an existing Krueger's (N. Krueger, 2009) model.

Practical Implications

Policy makers can utilize the results of this study to develop policies, regulations and programs which can incorporate the factors leading to entrepreneurial intentions to encourage entrepreneurship in the country. Awareness campaigns, seminars, activities and programs can be initiated at a government level to encourage parents and the society to encourage entrepreneurship among the country's youth. Similarly, considering the relationship between religiosity and entrepreneurial intentions, university administration can incorporate religious teachings to the business management curriculum through which, instructors can encourage entrepreneurial intentions in business students. Students can be encouraged to pursue entrepreneurship as a career by justifying to them their religion encourages its followers for trade and business. Also, religious leaders can encourage the community to pursue entrepreneurship as career, as the result of this study explains that religious individuals tend to have inclinations towards entrepreneurship. The religious leaders can encourage their community to support and facilitate each other in entrepreneurial ventures.

Conclusion

This study presents an integrated and contextually relevant entrepreneurial intention model by incorporating religiosity into it and by eliminating a contextually irrelevant construct (i.e. social norms) from an existing Krueger's (N. Krueger, 2009) model.

The study significantly contributes to the literature and existing knowledge in understanding of factors (including religiosity) influencing entrepreneurial intentions of undergraduate students in Pakistan. Utilizing the results of this study, the religious leaders and policy makers can encourage entrepreneurship in the country.

However, the results of this study might not be the same for other countries, contexts, audience, and situations, therefore, the results of this study might not be applicable to the overall population of the country. It is therefore suggested that similar study is conducted in different provinces and cities and with participants belonging to different yet relevant degree programs such as economics.

References

- Ab Hamid, M. R., Sami, W., & Mohmad Sidek, M. H. (2017). Discriminant Validity Assessment: Use of Fornell & Larcker criterion versus HTMT Criterion. *Journal of Physics: Conference Series*, 890(1), 012163. https://doi.org/10.1088/1742-6596/890/1/012163
- Abdullahi, A. I., & Suleiman, M. S. (2015). Impact of Religion on Entrepreneurial Intention of University Students in Kano State, Nigeria. *International Conference on Empowering Islamic Civilization in the 21st Century, September*, 363–375.
- Ahmed, I., Islam, T., & Usman, A. (2020). Predicting entrepreneurial intentions through self-efficacy, family support, and regret: A moderated mediation explanation. *Journal of Entrepreneurship in Emerging Economies*, 13(1), 26–38. https://doi.org/10.1108/JEEE-07-2019-0093
- Ajzen, H., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. https://www.scienceopen.com/document?vid=c20c4174-d8dc-428d-b352-280b05eacdf7

- Ajzen, I. (1991). The Theory of Planned Behavior. In *ORGANIZATIONAL BEHAVIOR AND HUMAN DECISION PROCESSES* (Vol. 50). https://www.dphu.org/uploads/attachements/books/books_4931_0.pdf
- Al-Jubari, I. (2019). College students' entrepreneurial intention: Testing an integrated model of SDT and TPB. SAGE Open, 9(2), 1–15. https://doi.org/10.1177/2158244019853467
- Allport, G. W. (1966). The Religious Context of Prejudice. *Journal for the Scientific Study of Religion*, 5(3), 447. https://doi.org/10.2307/1384172
- Allport, G. W., & Ross, J. M. (1967). PERSONAL RELIGIOUS ORIENTATION AND PREJUDICE. In *Journal of Personality and Social Psychology* (Vol. 5, Issue 4).
- Aman, J., Abbas, J., Nurunnabi, M., Sciences, S. B.-B., & 2019, undefined. (2019). The relationship of religiosity and marital satisfaction: the role of religious commitment and practices on marital satisfaction among Pakistani respondents. *Mdpi.Com.* https://doi.org/10.3390/bs9030030
- Arli, D., Septianto, F., & Chowdhury, R. M. M. I. (2021). Religious But Not Ethical: The Effects of Extrinsic Religiosity, Ethnocentrism and Self-righteousness on Consumers' Ethical Judgments. *Journal of Business Ethics*, 171(2), 295–316. https://doi.org/10.1007/S10551-019-04414-2/TABLES/10
- Ashraf, M. A., Tsegay, S. M., & Ning, J. (2021). Teaching Global Citizenship in a Muslim-Majority Country: Perspectives of Teachers from the Religious, National, and International Education Sectors in Pakistan. *Religions* 2021, Vol. 12, Page 348, 12(5), 348. https://doi.org/10.3390/REL12050348
- Barba-Sánchez, V., & Atienza-Sahuquillo, C. (2018). Entrepreneurial intention among engineering students: The role of entrepreneurship education. *European Research on Management and Business Economics*. https://doi.org/10.1016/j.iedeen.2017.04.001
- Baruch, Y., & Holtom, B. C. (2008). Survey response rate levels and trends in organizational research. *Human Relations*. https://doi.org/10.1177/0018726708094863
- Baumsteiger, R., & Chenneville, T. (2015). Challenges to the Conceptualization and Measurement of Religiosity and Spirituality in Mental Health Research. *Journal of Religion and Health*. https://doi.org/10.1007/s10943-015-0008-7
- Blanthorne, C., Jones-Farmer, L. A., & Almer, E. D. (2006). Why you should consider SEM: A guide to getting started. *Advances in Accounting Behavioral Research*, *9*, 179–207. https://doi.org/10.1016/S1475-1488(06)09007-7
- Block, J., Fisch, C., & Rehan, F. (2020). Religion and entrepreneurship: a map of the field and a bibliometric analysis. *Management Review Quarterly*, 70(4), 591–627. https://doi.org/10.1007/s11301-019-00177-2
- Cable, D., psychology, D. D.-J. of applied, & 2002, undefined. (2002). The convergent and discriminant validity of subjective fit perceptions. *Psycnet.Apa.Org*. https://doi.org/10.1037/0021-9010.87.5.875
- Chang, S. J., van Witteloostuijn, A., & Eden, L. (2010). From the Editors: Common method variance in international business research. *Journal of International Business Studies*, 41(2), 178–184. https://doi.org/10.1057/JIBS.2009.88
- Chin, W. W., Thatcher, J. B., Wright, R. T., & Steel, D. (2013). Controlling for Common Method Variance in PLS Analysis: The Measured Latent Marker Variable Approach. *Springer Proceedings in Mathematics and Statistics*, 56, 231–239. https://doi.org/10.1007/978-1-4614-8283-3 16
- Cohen, J. (1988). Set Correlation and Contingency Tables. *Applied Psychological Measurement*, 12(4), 425–434. https://doi.org/10.1177/014662168801200410
- Cohen, J. (2016). Set Correlation and Contingency Tables: *Http://Dx.Doi.Org/10.1177/014662168801200410*, 12(4), 425–434. https://doi.org/10.1177/014662168801200410

- Cohen, J., & Nee, J. (1983). COPSET: A FORTRAN IV Program for Set Correlation Analysis. *Educational and Psychological Measurement*, 43(3), 817–820. https://doi.org/10.1177/001316448304300316
- Cohen, J., & Nee, J. C. M. (1984). Estimators for Two Measures of Association for Set Correlation. *Educational and Psychological Measurement*, 44(4), 907–917. https://doi.org/10.1177/0013164484444012
- Crowell, J. A., Waters, E., Treboux, D., O'Connor, E., Colon-Downs, C., Feider, O., Golby, B., & Posada, G. (1996). Discriminant Validity of the Adult Attachment Interview. *Child Development*, 67(5), 2584–2599. https://doi.org/10.1111/J.1467-8624.1996.TB01876.X
- David, J., & Lawal, M. C. (2018). Religiosity and Entrepreneurial Intentions in Nigeria. *Esensi: Jurnal Bisnis Dan Manajemen*, 8(2). https://doi.org/10.15408/ess.v8i2.7331
- Drucker, P. (1985). Innovation and Entrepreneurship, NewYork, Harper & Row Published.
- Durdyev, S., Ihtiyar, A., ... A. B.-J. of C., & 2018, undefined. (2018). The construction client satisfaction model: a PLS-SEM approach. *Journals.Vgtu.Lt.* https://doi.org/10.3846/jcem.2018.297
- Dutton, J. E., & Jackson, S. E. (1987). Categorizing Strategic Issues: Links to Organizational Action. *Academy of Management Review*, *12*(1), 76–90. https://doi.org/10.5465/amr.1987.4306483
- Esfandiar, K., Tehrani, M. S., Pratt, S., Altinay, L., & Sharifi-Tehrani, M. (2019). Understanding entrepreneurial intentions: A developed integrated structural model approach Service innovation View project Entrepreneurship and Religion View project Understanding entrepreneurial intentions: A developed integrated structural model approach. *Article in Journal of Business Research*. https://doi.org/10.1016/j.jbusres.2017.10.045
- Ferry Wibowo, S. (2019). COMPETING EXTENDED TPB MODELS IN PREDICTING ENTREPRENEURIAL INTENTIONS: WHAT IS THE ROLE OF MOTIVATION? In *Academy of Entrepreneurship Journal* (Vol. 25, Issue 1).
- Fornell, C., & Larcker, D. (1981). *Structural equation models with unobservable variables and measurement error: Algebra and statistics*. https://journals.sagepub.com/doi/abs/10.1177/002224378101800313
- Fornell, C., & Larcker, D. F. (2018). Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics: *Https://Doi.Org/10.1177/002224378101800313*, *18*(3), 382–388. https://doi.org/10.1177/002224378101800313
- Ghasemy, M., Teeroovengadum, V., Becker, J. M., & Ringle, C. M. (2020). This fast car can move faster: a review of PLS-SEM application in higher education research. *Higher Education*, 80(6), 1121–1152. https://doi.org/10.1007/S10734-020-00534-1
- Guerrero, M., Rialp, J., & Urbano, D. (2008). The impact of desirability and feasibility on entrepreneurial intentions: A structural equation model. *International Entrepreneurship and Management Journal*, 4(1), 35–50. https://doi.org/10.1007/S11365-006-0032-X/TABLES/6
- Gursoy, D., Altinay, L., & Kenebayeva, A. (2017). Religiosity and entrepreneurship behaviors. *International Journal of Hospitality Management*. https://doi.org/10.1016/j.ijhm.2017.08.005
- Haq, Z. A., Imran, M., Ahmad, S., & Farooq, U. (2020). Environment, Islam, and women: a study of eco-feminist environmental activism in Pakistan. *Journal of Outdoor and Environmental Education*, 23(3), 275–291. https://doi.org/10.1007/S42322-020-00065-4/FIGURES/5
- Henley, A. (2017). Does religion influence entrepreneurial behavior? In *International Small Business Journal: Researching Entrepreneurship* (Vol. 35, Issue 5). https://doi.org/10.1177/0266242616656748
- Hoogendoorn, B., Rietveld, C. A., & van Stel, A. (2016). Belonging, believing, bonding, and behaving: the relationship between religion and business ownership at the country level. *Journal of Evolutionary Economics*, 26(3), 519–550. https://doi.org/10.1007/S00191-016-0447-7/TABLES/9

- Hussain Shah, N., Khalid, W., Khan, S., Arif, M., Asad Khan, M., & Pakhtunkhwa, K. (2020). An Empirical Analysis of Financial Risk Tolerance and Demographic Factors of Business Graduates in Pakistan. *Researchgate.Net*, 10(4), 2020. https://doi.org/10.32479/ijefi.9365
- Icek, A. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*. https://doi.org/10.1016/0749-5978(91)90020-t
- Islam, M. S., & Kirillova, K. (2020). Non-verbal communication in hospitality: At the intersection of religion and gender. *International Journal of Hospitality Management*, 84, 102326. https://doi.org/10.1016/j.ijhm.2019.102326
- Jarillo, J.C., & Stevenson, H. H. (1990). (1990). A Paradigm of Entrepreneurship: Entrepreneurial Management. *World Applied Sciences Journal*, 12(11), 2088–2091. https://doi.org/10.1007/978-3-540-48543-8_7
- Khan, A. B., Sarwar, A., Dinesh Kumar, D., Rajan, S., & Muhammad Nawaz, D. (2021). The impact of political stability and firm-specific variables on the performance of Islamic banks in Pakistan. *Psychologyandeducation.Net*, 58(2), 1667–1672. http://psychologyandeducation.net/pae/index.php/pae/article/view/2322
- Kirzner, I. (1973). Entrepreneurship and competition.
- Krell, R., Hozain, A., Kao, L., surgery, J. D.-J., & 2014, undefined. (2014). Reliability of risk-adjusted outcomes for profiling hospital surgical quality. *Jamanetwork.Com*, 149(5), 467–474. https://doi.org/10.1001/jamasurg.2013.4249
- Krueger, N. (2009). Entrepreneurial Intentions are Dead: Long Live Entrepreneurial Intentions. In *Understanding the Entrepreneurial Mind*. https://doi.org/10.1007/978-1-4419-0443-0_4
- Krueger, N. (2020). Entrepreneurial potential and potential entrepreneurs: 25 years on. *Journal of the International Council for Small Business*, *I*(1), 52–55. https://doi.org/10.1080/26437015.2020.1714363
- Krueger, N. F. (2007a). The cognitive infrastructure of opportunity emergence. In *Entrepreneurship: Concepts, Theory and Perspective*. https://doi.org/10.1007/978-3-540-48543-8 9
- Krueger, N. F. (2007b). The cognitive infrastructure of opportunity emergence. In *Entrepreneurship: Concepts, Theory and Perspective* (pp. 185–206). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-540-48543-8_9
- Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5–6), 411–432. https://doi.org/10.1016/S0883-9026(98)00033-0
- Lee, D. B., & Neblett, E. W. (2019). Religious Development in African American Adolescents: Growth Patterns That Offer Protection. *Child Development*. https://doi.org/10.1111/cdev.12896
- Liñán, F., & Chen, Y. W. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship: Theory and Practice*. https://doi.org/10.1111/j.1540-6520.2009.00318.x
- Litman, L., Robinson, J., Weinberger-Litman, S. L., & Finkelstein, R. (2019). Both Intrinsic and Extrinsic Religious Orientation are Positively Associated with Attitudes Toward Cleanliness: Exploring Multiple Routes from Godliness to Cleanliness. *Journal of Religion and Health*. https://doi.org/10.1007/s10943-017-0460-7
- Lüthje, C., & Franke, N. (2004). ePub WU Institutional Repository Entrepreneurial Intentions of Business Students: A Benchmarking Study Entrepreneurial Intentions of Business Students: A Benchmarking Study. *International Journal of Innovation and Technology Management*, 1(3), 269–288.
- Mattis, J. S. (2000). African American Women–s Definitions of Spirituality and Religiosity. *Journal of Black Psychology*. https://doi.org/10.1177/0095798400026001006

- Musallam, A. H., & Kamarudin, S. (2021). Religiosity and Entrepreneurship: A Systematic Review and Future Research. *Studies of Applied Economics*, *39*(4). https://doi.org/10.25115/EEA.V39I4.4171
- Omidi Najafabadi, M., Zamani, M., & Mirdamadi, M. (2016). Designing a model for entrepreneurial intentions of agricultural students. **Http://Dx.Doi.Org/10.1080/08832323.2016.1218318, 91(6), 338–346. https://doi.org/10.1080/08832323.2016.1218318
- Pace, S. (2014). Effects Of Intrinsic and Extrinsic Religiosity on Attitudes Toward Products: Empirical Evidence of Value-Expressive and Social-Adjustive Functions. *Journal of Applied Business Research* (*JABR*), 30(4), 1227–1238. https://doi.org/10.19030/JABR.V30I4.8668
- Power, L., & McKinney, C. (2014). The effects of religiosity on psychopathology in emerging adults: intrinsic versus extrinsic religiosity. *Journal of Religion and Health*, *53*(5), 1529–1538. https://doi.org/10.1007/S10943-013-9744-8
- Qaiser Danish, R., Ehsan Malik, M., & Usman, A. (2011). The Impact of Service Quality on Students' Satisfaction in Higher Education Institutes of Punjab Studying the Effects of Compensation Offerings on Turnover Intentions of Educational Managers of Punjab: A Multilevel Analysis View project Influence of high-performance work system on employee service performance and OCB: Mediating role of resilience View project The Impact of Service Quality on Students' Satisfaction in Higher Education Institutes of Punjab. In *Journal of Management Research* (Vol. 2, Issue 2). www.macrothink.org/jmrwww.macrothink.org/jmr
- Raimi, L. (2015). Discourse analysis of entrepreneurship definitions and theories: Implication for strengthening academic research. *International Journal of Entrepreneurship and Small Business*, 26(3), 368–388. https://doi.org/10.1504/IJESB.2015.072399
- Ranjani, D. (2017). Religious diversity and entrepreneurial intentions: A macro-level analysis.
- Reio, T. G. (2010). The threat of common method variance bias to theory building. *Human Resource Development Review*, 9(4), 405–411. https://doi.org/10.1177/1534484310380331
- Roemer, E., Schuberth, F., & Henseler, J. (2021). HTMT2–an improved criterion for assessing discriminant validity in structural equation modeling. *Industrial Management and Data Systems*, *121*(12), 2637–2650. https://doi.org/10.1108/IMDS-02-2021-0082/FULL/
- Rönkkö, M., Methods, E. C.-O. R., & 2020, undefined. (2022). An updated guideline for assessing discriminant validity. *Journals.Sagepub. Com*, 25(1), 6–14. https://doi.org/10.1177/1094428120968614
- Shane, S., & Venkataraman, S. (2000). The Promise of Enterpreneurship as a Field of Research. In *Source: The Academy of Management Review* (Vol. 25, Issue 1).
- Shapero, A., & Sokol, L. (1982). The Social Dimensions of Entrepreneurship.
- Shook, C. L., & Bratianu, C. (2010). Entrepreneurial intent in a transitional economy: An application of the theory of planned behavior to Romanian students. *International Entrepreneurship and Management Journal*. https://doi.org/10.1007/s11365-008-0091-2
- Tunio, M. N., Chaudhry, I. S., Shaikh, S., Jariko, A., Brahmi, M., & Aldieri, L. (2021). Determinants of the Sustainable Entrepreneurial Engagement of Youth in Developing Country—An Empirical Evidence from Pakistan. *Mdpi.Com.* https://doi.org/10.3390/su13147764
- Weber, M., & Kalberg, S. (2002). Third Roxbury Edition the Protestant Ethic and the Spirit of Capitalism. www.roxbury.net
- Wibowo, B. (2017). Religiosity and Entrepreneurial Intention. *Etikonomi*, 16(2), 187–206. https://doi.org/10.15408/etk.v16i2.4963