Volume and Issues Obtainable at Center for Sustainability Research and Consultancy

Sustainable Business and Society in Emerging Economies

ISSN: 2708-2504 & ISSN (E): 2708-2172

Volume 3: Issue 4 December 2021

Journal homepage: www.publishing.globalcsrc.org/sbsee

Effect of Covid-19 Crises on Entrepreneurship Readiness of University Students in Pakistan

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ARTICLE DETAILS

History

Revised format: Nov 2021

Available Online: Dec 2021

Keywords

Entrepreneurship readiness, personality traits, covid-19 crises, Pakistan, Students

JEL Classification

L26, L31

ABSTRACT

Purpose: Aim of this study is to examine the factors (personality traits, Covid-19 crises) influencing the entrepreneurship readiness among the university students in Pakistan

Design/Methodology/Approach: The study used online survey for collection from 396 students of different university of Pakistan. The data was collected during online classes in Covid-19 pandemic. Multiple regression analysis technique was applied for the analysis of the data.

Findings: The findings of the study demonstrate that all three personality traits i.e. need for achievement, locus of control and self-efficacy is positively influencing entrepreneurial readiness. But this personality trait alone cannot do favor they need other personality traits and they require to have favorable circumstances. However, covid-19 crises have negative influence on student's readiness of being entrepreneur.

Implications/Originality/Value: The study postulate that hard and uncertain situation do have influence on student's motivation of being entrepreneur.

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Recommended citation: Rehan, F. M., Mumtaz, R., and Khan, I. Q. (2021). Effect of covid-19 crises on entrepreneurship readiness of university students of Pakistan. *Sustainable Business and Society in Emerging Economies*, 3 (4), 485-495

Introduction

Entrepreneurship can be considered as a most practical component for economic growth and progress not only at country level but also at individual level. At country level, entrepreneurship and new small size firms have significantly contributed in economic growth by providing new job opportunities. Moreover, entrepreneurship not only helps in bring social changes in the society but it also helps the economy from recuperating from crises (Ace, Arenius, Hay, and Mimniti., 2004; Djip, 2014; Fayolle, Gailly, and Lassas-Clerc, 2006). During the last few decades, numerous research studies were carried out on entrepreneurship

and economic development in various situations (Kwong and Thompson, 2016). However, the empirical landscapes continue to be fairly little in analyzing entrepreneurship in crisis situation, especially during Covid-19. In today's world, crises can be considered as one of the very critical situational factor for entrepreneurship, and these situational factors varies in different context. Similarly, Covid-19 crises effected economies as well as entrepreneurship differently in different contexts.

After emergence Covid-19 pandemic situation, various research scholar focuses their attention on the impact of corona pandemic situation on entrepreneurship (e.g. Ratten, 2020; Ratten and Jones, 2021; Syriopoulos, 2020; Chaves-Maza and Martel, 2020) but very few research studies focuses on coronavirus crises effect on entrepreneurship intention (e.g. Krichen and Chaabouni, 2021; Ruiz-Rosa, Gutiérrez-Taño, and García-Rodríguez, 2020). However, there is an essential need of the time to investigate the Covid-19 crises effect on entrepreneurial readiness in different context. Therefore, the purpose of the study is to investigate; how different personality traits effecting entrepreneurial readiness at individual level and how Covid-19 crises influences on student's entrepreneurial readiness to engage in entrepreneurship in Pakistan?

In order to answer the research questions, this study used a primary data of 396 final year university students because final year students are considered to be more potentially ready for doing entrepreneurial activities. The study used Davidsson' (1995) model in order to predict entrepreneurial readiness among the final year university students. Multiple regression technique was applied for the analysis of the data collected through an online survey during Covid-19 in early 2021. The study has made very important contribution in entrepreneurship intention literature in the context of Pakistan. The students who wanted to have more challenge in their life and wanted to made some achievement seeks high need for achievement and consequently they are more likely to be inclined towards entrepreneurship. But this personality trait alone cannot do favor they need other personality traits and they require to have favorable circumstances. Moreover, the study has one major contribution that hard and uncertain situation like covid-19 pandemic have negative effect on the entrepreneurial readiness.

Literature Review

Entrepreneurship in Pakistan

Pakistan is home to more than 200 million people, Pakistan is sixth most populous economy of world, where about 60% of the population are below 30 years of their age. According to General Entrepreneurial Monitor (GEM), Pakistan is considered as factor driven economy and entrepreneurship in Pakistan remains very limited historically. According to Small Medium Enterprises Development Authority (SMEDA) approximately 90% of the total enterprises in Pakistan are Small and Medium Enterprises (SMEs) with 40% of their share in GDP. Like many other countries, entrepreneurship and SMEs are very closely related, and these SMEs have been significantly contributing towards creation of employment opportunities. In this way, entrepreneurship and entrepreneurial activities are helping the young graduates in dealing with one of their major concern after graduation, and it is also providing support to the economy. In recent years, entrepreneurship in Pakistan is one the rise however, growth of entrepreneurial activities still lagged behind the peer countries.

Entrepreneurial Readiness

Ruiz, Soriano, & Coduras, (2016) defined entrepreneurial readiness as "confluence of a set of personal traits that differentiates individuals with readiness for entrepreneurship as especially competent to observe and analyze their environment in such a way that they channel their high creative and productive potentials, so they may deploy their capability to dare and need for self-achievement". Moreover, this definition talked about that readiness of youth relies upon on their capacity to discover various environmental opportunities, utilize their functional abilities (entrepreneurial capacity) primarily based upon available means and other personality traits such need for achievement. Entrepreneurial readiness relies upon the mental tendency of young people towards starting their own business. Past research shows that, there are number of factors that can have influence on readiness of potential entrepreneurs, these

factors includes gender, educational background, family background, personality traits (Gibb and Ritchie, 1982) and certain situational factors like current Covid-19 crisis. In this study entrepreneurial readiness among the youth was conceptualize by measuring entrepreneurship intentions.

Entrepreneurship Intention Model

Entrepreneurship intention models were developed in last two decades of last century. Shapero and Sokol's (1982) presented entrepreneurial event model (EEM), which is one of the earliest version that measure entrepreneurship intentions. As per this model, perceived desirability, perceived feasibility, and entrepreneur's tendency to act are three determinants of entrepreneurial intentions. Ajzen's (1991) developed the Theory of Planned Behavior (TPB) which is psychological version "Planned Behavior". According to Ajzen, there are three motivational elements that have an impact on entrepreneurial intentions. These elements are "attitudes toward the behavior" (in case of entrepreneurship it is attitude towards entrepreneurship), "subjective norms", and "perceived behavioral control".

In recent times, TPB is most commonly used model while predicting human behaviors. Most of the researcher who wanted to predict entrepreneurship intention have been using these two models. Both model predict behavioral intentions which act as determinant of real behavior. Furthermore, Davidsson (1995) presented a model that conglomerate the economic as well as psychological factors in order to assess the individual's intentions of starting their own business. This study used Davidsson's model because this model uses contextual and personality factor to assess the entrepreneurial intentions. Moreover, this model is the latest formal model which uses contextual factor and this study investigating the Covid-19 Crises Effect (CCE) on entrepreneurial readiness i.e. entrepreneurial intention.

Theoretical Model and Hypotheses

The theoretical framework for this study includes two predictors such personality traits (i.e. need for achievement, locus of control and self-efficacy) and a situational factor (i.e. CCE) to assess final year university student's entrepreneurship intentions. Along with these two predictor model of this studies also includes some demographical factors such as gender, field of study, and prior entrepreneurial education. Furthermore, it is observed that researchers have shown very little interest to situational factors, where Covid-19 is having a very significant effect on different behavior. Davidsson's (1995) model do examine how certain situational factors having influence on entrepreneurship intentions in different context. Few researchers investigated the impact of certain situation factor such as Arrighetti et al. (2016) uses economic crises in the context of Italy and Mouselli and Khalifa (2017) uses crises effect on university student's intention during Syrian war. The current study uses CCE as situational factor in order to predict entrepreneurial intention in the context of Pakistan.

Personality Traits

Past studies support this notion that entrepreneur's personality traits play a very decisive role while making decision of starting an enterprise (Çolakoğlu and Gözükar, 2016; Kristiansen and Indarti, 2004; Mat et al., 2015; Mouselli and Khalifa, 2017; Sesen, 2013). This study used very commonly used personality traits to predict entrepreneurship intentions such as "locus of control", "self-efficacy" (SE) and "need for achievement".

Locus of Control

Individual's internal locus of control is one of the most dominant personality traits in entrepreneurship literature. Locus of control is belief of the person that he can control the outcome of certain actions. According to Rotter's (1966) theory, individuals are ready to believe that results of certain activities are affected by their efforts when they are more internally oriented, on the other hand people who are more externally oriented believes that outcomes are affected by external conditions. Researchers considered locus of control an important factor while determining individual's entrepreneurship intentions (Gerba, 2012; Sesen, 2013; Kristiansen and Indarti, 2004; Fayolle et al. 2006). Gerba (2012) and Sesen (2013) found that individual's internal locus of control significantly influencing entrepreneurship intentions

however, Kristiansen and Indarti, (2004) and Fayolle et al. (2006) found that individual's locus of control has no significant influence on entrepreneurship intentions. Because of this contradictory evidence from the literature, this study investigated the influence of locus of control on final year student's entrepreneurship intention. Thus we formulated the following hypothesis.

H1: Final year student's internal locus of control have positive influence on entrepreneurship intentions.

Self-Efficacy

Bandura's (1977) social learning theory explains self-perceptions of performing certain behavioral actions such self-perceptions are known as self-efficacy. However, in entrepreneurship literature, SE is associated with entrepreneurship intentions and behaviors (Boyd and Vozikis, 1994). Most commonly used entrepreneurship theories i.e. EEM and TPB regarded SE as very important determinant of entrepreneurship intention (Krueger, Reilly and Carsrud 2000). Various research scholar has found positive relationship in different contexts (e.g. Chen, Greene, and Crick 1998; Krueger and Reilly 2000; Kurczewska and Bialek 2014; Lüthje and Franke 2003). According to Baum and Locke (2004) SE is main driver of goal oriented behavior such as entrepreneurship behavior. Therefore, this study formulated the following hypothesis;

H2: Self-efficacy of final years' students have positive influence on entrepreneurship intentions.

Need for Achievement

Gerba (2012) refers need for achievement as "the degree to which one sets and strives to reach goals and the degree to which one works hard and is satisfied with the results of the work" (p.263). Many research studies have associate it with entrepreneurship (Awang et al., 2016; Dess, Pinkham, & Yang, 2011; Dinis et al. 2013; Ferreira et al. 2012; Frank et al., 2007; Gerba, 2012; Zhang et al. 2014). According to McClelland's (1961) need for achievement theory, individuals with high need for achievement are more likely to engage in the activities where they predict more chances of being successful. People with more need for achievement are proactive and make plan in advance (Zhao and Seibert, 2006) and wanted to achieve their goals without any failure (Okhomina, 2010). Therefore, this study postulate that students with high need for achievement are more likely to inclined towards entrepreneurship.

H3: Need for achievement of final years' students have positive influence on entrepreneurship intentions.

Figure 1 Theoretical Framework

Covid-19 Crises Effect

Covid-19 crisis is a situational factor and can be considered as country level predictor because it has different impact in different countries. The decision to launch or start a business depend upon political, economic and social environmental factors where these business operates (Lüthje and Franke, 2003; Turker and Selcuk, 2009). During crises, economic condition of any country can get worse which result in less entrepreneurial activities. Thus current pandemic situation might have negative influence in entrepreneurship intention because current crises might have limited the financial resources, affected psychological, social and mental condition of the individuals. There are chances that during crises time, individuals are pushed towards necessity based entrepreneurship (Mouselli and Khalifa, 2017). However, impact of coronavirus yet to be examined empirically in the context of developing country like Pakistan. It is assumed that Covid-19 have negatively affected the financial, psychological and social condition which result in negative influence on entrepreneurship intention in the context of Pakistan. This study aims to make very important contribution with reference entrepreneurship intention literature by investigating current covid-19 crises effect in Pakistani context. Thus we formulate the hypothesis as;

H4: *Covid-19 crises have negative impact on the final year students' entrepreneurial intentions.*

Methodology

Method and Data

In the research study, quantitative research method was adopted in order to get better generalizability and reliable results with higher level of accuracy. In order to collect primary data, an online survey was conducted and responses were received from final year university students of Pakistan to empirically assess the association certain personality traits and situational factor with entrepreneurship intentions. We have contacted the teachers of final year university students for their assistance during data collection and requested them to share online questionnaires with their students in different universities during online classes during winter semester 2021. Approximately 500 hundred final year university students were approached, we were able to get 396 responses from the respondents. As answer to every questionnaire was mandatory therefore, we do not observe any missing value. Therefore, the effective sample size for this study was 396 responses.

Measures

Entrepreneurship intention of the final year university students was measured with following question adopted from Liñán and Chen (2009). This study used entrepreneurship intention as dependent variable. As this study used three personality traits which were considered as independent variables. Individual's *need for achievement* was measure by the questions adopted from Kristiansen and Indarti (2004). Individual's self-perception about performing certain actions i.e. *self-efficacy* was measured by the questions adopted from Liñán and Chen (2009). *Internal local of control* was measured by questions adopted from Mueller and Thomas (2001). In order to measure *Covid-19 crises effect*, the study adopted 4 item scale from Mouselli and Khalifa (2017) where respondents were asked whether their psychological conditions, financial conditions, social conditions and resources are affected by covid-19 crises. The respondents of the study were asked to rate the items from 1 (lowest) to 5 (highest) using a 5-point Likert scale. However, 1st part of questionnaire contains the *demographic information* of the respondent such as gender, field of study, and entrepreneurship education. Appendix 1 lists the items of respective variables along with its source.

Results and Findings

Descriptive Results

Among the sample of 396 final year university students, 62% were male and remaining 38% were females. As all respondents are final year university students, therefore age of the respondents varies from 21 to 23 years. With regard to the field of education, approximately 36.4% of the students were pursuing business education, 23.7% of the of the respondents are student or engineering and technology, 18.4% of the respondents were the students of social sciences following by art & language's students and medical

sciences students. Table 2 demonstrated that the mean values of the independent, and dependent variables is moderately high whereas the mean values

Table 1 Descriptive Statistics

Variables	Mean	Standard Deviation
Entrepreneurship intentions	4.356	.678
Need for achievement	4.450	.543
self-efficacy	4.068	.642
Locus of control	4.021	.721
Covid-19 crises effect	1.839	.692

Reliability and Validity of the Variables

As all the items of the constructs were adopted from previous literature. Therefore, it was important to assess the reliability of the constructs. Table 2 reported the reliability of the constructs and shows that all constructs are reliable and can be used for doing further analysis because values of Cronbach's Alpha is well above the threshold i.e. 0.70.

In order to ensure the construct validity, exploratory factor analysis was conducted by using Varimax rotation. Table 2 also reported the results factor analysis, based on this results a total of 5 factors arising where the Eigenvalue is more than 1. Result shows that the factor's loadings were significant. This affirms the construct validity of the variables. Moreover, the sampling adequacy can be reported by measuring Kaiser-Meyer-Olkin (KMO) (i.e. 0.878), the results show that Bartlett's test of sphericity is significant (i.e. 0.000) and the study concluded that results of factor analysis are appropriate.

Table 2: Factor loadings of Components and Reliability Analysis

Variables	No of Items	Components and factor loadings					Cronbach's Alpha
		1	2	3	4	5	
Need for achievement	3	0.742					0.79
		0.782					
		0.765					
Locus of control	5		0.763				0.81
			0.783				
			0.771				
			0.798				
Self-efficacy	4						0.82
				0.792			
				0.782			
				0.727			
Covid-19 crisis effect	4						0.74
					0.860		
					0.816		
					0.790		
Entrepreneurial intention	4						0.84
						0.743	
						0.793	
						0.769	
						0.776	

Multiple Regression between Demographical Factors and Entrepreneurship Intentions

This research study collected mainly three demographical factor namely; gender, field of study and prior entrepreneurship education. This study applied one-way ANOVA test to test the independence of demographical variables. The results show that gender and field of education are not significantly different from the entrepreneurship intentions but prior entrepreneurship education is significantly different from entrepreneurship intentions. The result with reference to gender are consistent with the finding of Smith et al. (2016) and with reference to entrepreneurship education result are consistent with past literature on entrepreneurship education and entrepreneurship intention (e.g. Kim, 2017; Tung, 2011; Zhang et al.

2014). (See appendix)

Multiple regression between Dependent and Independent Variables

The study used multiple linear regression to assess the impact of personality traits and situation factor on entrepreneurship intentions. Table 4 reported positive significant influence of all the personality traits i.e. need for achievement, locus of control and self-efficacy on students' entrepreneurship intentions. Therefore, this study supported the H1, H2, and H3. Furthermore, the results show that Covid-19 crises having negative significant influence on the entrepreneurship intentions. Therefore, this study also confirms the H5 i.e. the entrepreneurship intentions of final year students is negatively influenced by the Covid-19 crises. Finding of this study are consistent with the findings of Nabil and Zhang (2020) however, in past Mouselli and Khalifa (2017) reported different results then this study and the findings of this study are contradictory to the findings of the study by Mouselli and Khalifa.

Table 3: Regression Analysis

Constructs	Estimates (β)	p-value
Need for achievement	.427***	.000
Locus of control	.194***	.000
Self-efficacy	.274**	.005
Covid-19 crisis effect	-.139**	.001

Conclusion

Discussion of the Findings

The aim of this study is to investigate the influence of personality traits and covid-19 crises effect on the entrepreneurship readiness of final year university students. The empirical findings of this study are provide evidence about the state of readiness of potential entrepreneurs. The findings of this study came with very important contribution by confirming the findings of Smith et al. (2016) that there is no significant difference in entrepreneurial readiness among the male and female final year university student. However, entrepreneurship is considered to be male dominant, Zhen et al. (2014) reported that men have stronger intention of starting their own business as compare to women. The result shows that the prior entrepreneurship education significantly affecting entrepreneurial readiness of the final year university students. Thus we can say they the student who have prior entrepreneurship education during studies are more ready to be an entrepreneur. Therefore, policy maker as well as the academia should think about introducing the course related to entrepreneurship and entrepreneurial training in the curriculum. Moreover, results also show that there is no significant difference in entrepreneurial readiness of students across the different fields of study.

Additionally, individual level predictors of entrepreneurial intention are showing strong positive influence. The study shows that among other personality traits need for achievement is having more strong influence on entrepreneurial readiness of final year students. This means that the final year university students are optimist about their future goals and success therefore they wanted to be entrepreneurs in future. Findings of this research study are consistent with the findings of Nabil and Zhang (2020), Yukongdi and Lopa, (2017) and Fine et al. (2012). Therefore, individual who report high need for achievement and wanted to accomplish more achievements are more likely to seek entrepreneurship career in future. However, this personality trait is not enough alone but it is considered as one important driver of being entrepreneur. Apart from this personality trait other personality traits such locus of control and student's self-efficacy is also considered as important factor that make students to be ready for being entrepreneurs.

This study included one very important situational factor i.e. Covid-19 crises to predict the entrepreneurial readiness. This purported that this situational factor affected students financially, psychologically and socially therefore, student's intentions and readiness of being entrepreneurs is negatively affected. Which

means that during this pandemic student are less motivated to start their own business because situation is very uncertain. This finding call for further empirical research on the pandemic effect on entrepreneurial inclination.

Limitation and Future Research Avenues

However, this study contributes significantly in literature buy like all other researches, the research study under discussion is also not without limitations. The study used only three personality traits and one situational variable. Future research should consider more personality traits and situational as well as environmental factor in order to predict entrepreneurial readiness. Moreover, future research should also consider uncertain situation like conflicts in order to predict entrepreneurial readiness. The findings of this research are Pakistan's context because sample is taken from final year university students of Pakistan. Future research can undertake the sample from all university students in different context. Moreover, generalizability of the findings of this study can be an issue because the sample is taken from the population by using convenience sampling method. Future research should take probability sampling technique into account.

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Appendix 1

Variable	Items	Sources
Entrepreneurship Intentions	I am ready to do anything to be an entrepreneur.	Liñán and Chen (2009)
	My professional goal is to be an entrepreneur.	
	I will make every effort to start and run my own business.	
	I am determined to create a business venture in the future.	
Need for achievement	I will do very well in fairly difficult tasks relating to my study and my work.	Kristiansen and Indarti (2004)
	I will try to succeed and perform better than my friends.	
	I will seek added responsibilities in job assigned to me	
	I have leadership skills that are needed to be an entrepreneur.	
self-efficacy	I have mental maturity to start to be an entrepreneur.	Liñán and Chen (2009)
	I have the skills and abilities required to succeed as an entrepreneur.	
	I have the experience to start my own business.	
	Diligence and hard work usually lead to success.	
Locus of Control	If I do not succeed on a task, I do not give up.	Mueller and Thomas (2001)
	I do not believe in luck in the job.	
	I am fairly managing my financial situation.	
	I am a good time-manager.	
Covid-19 crises effect	My financial situation has been affected dramatically by the covid-19 crisis*.	Mouselli and Khalifa (2017)
	My psychological situation has been affected dramatically by the Covid-19 crisis*.	
	My social situation has been affected dramatically by the Covid-19 crisis*.	
	Covid-19 crisis restricts resources that are necessary to start up business*.	

Note: Items with * are modified.

Appendix 2

Demographical variables	<i>t- statistics</i>	df	Sig.
Gender	-0.298	393	0.582
Entrepreneurship Education	8.375	393	0.000
Field of Study	0.751	393	0.153