ECONSTOR
Make Your Publications Visible.

A Service of
ZBW
Leibniz-Informationszentrum Wirtschaft
Leibniz Information Centre for Economics

Soomro, Raheem Bux; Honglin, Yuan

Article

Examining entrepreneurial intentions in adult population in China and Pakistan: GEM data evidence

Pakistan Journal of Commerce and Social Sciences (PJCSS)

Provided in Cooperation with:
Johar Education Society, Pakistan (JESPK)

Suggested Citation: Soomro, Raheem Bux; Honglin, Yuan (2018) : Examining entrepreneurial intentions in adult population in China and Pakistan: GEM data evidence, Pakistan Journal of Commerce and Social Sciences (PJCSS), ISSN 2309-8619, Johar Education Society, Pakistan (JESPK), Lahore, Vol. 12, Iss. 3, pp. 732-757

This Version is available at:
https://hdl.handle.net/10419/193445

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

https://creativecommons.org/licenses/by-nc/4.0/

WWW.ECONSTOR.EU

Mitglied der Leibniz-Gemeinschaft

Pakistan Journal of Commerce and Social Sciences
2018, Vol. 12 (3), 732-757
Pak J Commer Soc Sci

Examining Entrepreneurial Intentions in Adult Population in China and Pakistan: GEM Data Evidence

Raheem Bux Soomro (Corresponding author)
Shah Abdul Latif University, Khairpur Mir's, Sindh, Pakistan
Email: rb.soomro@salu.edu.pk

Yuan Honglin
School of International Trade and Economics (SITE)
Jiangxi University of Finance and Economics, Nanchang, China
Email: yhl6910@163.com

Abstract

This research manuscript is aimed at to examine entrepreneurial intentions through the cognitive approach of Chinese and Pakistani adults. Data for this research was acquired from the database of GEM 2012 APS Global Individual Level. The entrepreneurial intention was a dependent variable while independent variables were individual perceptions, socio-cultural perceptions and perceptions of economic opportunities. Their effect on intentions is tested along with some control variables. Four logistic regressions were employed to test three hypotheses. Fear of failure was not found as a significant predictor of entrepreneurial intentions in both countries. Gender is also not a significant predictor of entrepreneurial intentions in China. But it is significant in Pakistan; therefore, we can say that males are more likely to hold entrepreneurial intentions in Pakistan. The results of role model, self-efficacy and perception of economic opportunities are positive and significant predictors of entrepreneurial intentions in both countries. From socio-cultural perceptions, status and respect and news in media have been found strong predictors of entrepreneurial intentions among Chinese adults while career choice and news in media have been found strong predictors of entrepreneurial intentions among Pakistani adults. Pakistani government should encourage Small and Medium Enterprise Development Authority to provide basic entrepreneurial training (Entrepreneurial Idea Generation) to adults and commercial and micro-finance banks/institutes to lend small and big loans to adults who prefer to open their firms/businesses.

Keywords: entrepreneurial intention, fear of failure, knowledge of other entrepreneurs, perception of capabilities, perception of opportunities and global entrepreneurship monitor (GEM).

1. Introduction

Entrepreneurship is increasingly recognized as an important driver of productivity, innovation, job creation and both economic and social development (Audretsch, 2012; Shane and Venkataraman, 2000; Parker, 2009; Wennekers et al., 2005). The entrepreneurial activities affect an economy in three different aspects. *First*, knowledge spills are created through entrepreneurial activities. *Second*, competition increases in the

economy as the number of business entities increase. The increased competition in turn enhances the quality of products. *Finally*, knowledge diversification also occurs as an output of entrepreneurial activities (Van Stel, 2006). Hisrich (2005) defined entrepreneurship as a process of creating something new with value by devoting the necessary time and effort, assuming the accompanying financial, psychic, and social risk, and receiving the resulting rewards. Entrepreneurship is a behavior (Drucker, 1985; Gartner, 1988) and mostly forms voluntarily but as the prophet Mohammad (PBUH) said people's actions depend on their intentions. Understanding the formation of entrepreneurial intentions underpins an informed appreciation of the behavior of entrepreneurs (Fitzsimmons and Douglas, 2011). Entrepreneurial intention has been defined as a state of mind which directs and guides the actions of the individual towards the development and implementation of new business concepts (Bird, 1988). Therefore, the formation of entrepreneurial intentions is very important to understand entrepreneurial behavior (Sardeshmukh, 2010).

The question of what separates those who choose to pursue entrepreneurial pursuits from those who opt not to be entrepreneurs is an intriguing issue (Gartner, 1989), and investigating the role of individual differences in entrepreneurial behavior and intentions is a growing field of research (Kim, 2008; Krueger et al., 2000; Lin˜an and Chen, 2009; Van Auken et al., 2006). The personality traits and demographic variables that differentiate entrepreneurs from non-entrepreneurs were the initial focus of interest. A new line of analysis, the cognition, has emerged as an important theoretical perspective for understanding and explaining entrepreneurial behavior (Goodwin & Wofford, 1990; Sánchez, 2011b). Neisser (1967) defines cognition as all processes by which sensory input is transformed, reduced, elaborated, stored, recovered, and used. Mitchel et al. (2002) consider that entrepreneurial cognitions are the knowledge structures that people use to make assessments, judgments, or decisions involving opportunity evaluation, venture creation, and growth. From this perspective, since the decision to become an entrepreneur is considered to be both conscious and voluntary (Krueger, 2000), it seems reasonable to analyze how that decision is taken. The analysis of cognition thus contributes significantly to the study of entrepreneurship (Allinson et al., 2000; Mitchell et al., 2002). Indeed, some authors suggest that the future of entrepreneurship research should be focused on the study of cognitive social categories (Sánchez, 2011).

Therefore, with this background, it becomes necessary to find out which cognitive factors induce individuals to form entrepreneurial intentions. On the basis of these cognitive factors we can also understand as what differentiates one country from the other in terms making entrepreneurial intentions. This comparison between two countries (China and Pakistan) is an exciting case, where the former is an important global economic player and later is affected by the existing economic distress. A mutual understanding may lead us to highlight the major stimulating factors and thus learning from each other.

If we talk about Chinese economy, it consists of more than 4.3 million SMEs, which are an impetus to the economic growth of China with a contribution of about 60 percent to the GDP, and providing 82 percent of the total employment opportunities (Liu, 2008). Therefore, economic growth of China has been increased tremendously owing to the entrepreneurial nature of Chinese people. Chinese are born to do business and being their own boss, and have the motivation to become private entrepreneurs (Chu et al., 2011; Chen et al., 2006). On other hand, the people in Pakistan are more interested to enter into

stable employment, particularly the public sector jobs. However, the government has been making efforts for creating awareness about the fruits of self-employment in Pakistan. Therefore, the share of SMEs in the overall GDP is only up to 30 percent, far below than China. The entrepreneurs are proving to be the major player in economic prosperity of China, while their role in Pakistan is very low. Through this study, if we find some similarities between entrepreneurial intentions among adults in China and Pakistan, we might then have a better idea of what works for formation of entrepreneurial intentions. If we find some differences, we may find areas that could justify further research.

Until now, the cognitive entrepreneurship literature, has studied the influence exerted by some perceptions on the intentions of individuals to start-up a new business venture, however, findings remain inconclusive (Kim, 2008). Further, most of the research studies have assessed entrepreneurial intentions either using small sample size and at an individual level of university students at various educational levels in China and Pakistan. In order to fill this gap, this study is an attempt to bridge this gap to some extent by measuring the impact of cognitive perceptions on adult population in both countries. Thus, research questions of this research study are:

- Do individual perceptions factors hinder individuals to enter into entrepreneurial intentions in both countries?
- Do social and cultural factors hinder individuals to form entrepreneurial intentions in both countries?
- Does perception of economy hinder individuals to form entrepreneurial intentions in both countries?
- Do entrepreneurial intentions differ on the basis of demographic variables in both countries?

A binomial logit model has been applied to find answers for above-mentioned research questions. This research paper uses data extracted from GEM Adult Population Survey (APS) for Pakistan and China for the year 2012.The first section is about the introduction and second section provides review of literature and then hypotheses were made from literature; the third section is about data and methodology. In the fourth section, hypotheses of the study were tested using SPSS21. The last section discusses findings.

2. Literature Review

2.1 The Cognitive Approach

Psychologists have claimed that assessment of intentions is the most obvious way of predicting the behavior (Ajzen, 1991). Some research is based on the idea that whatever the individual thinks, says or does is influenced by the cognitive processes through which individuals acquire, use and process information (Baron and Markman, 1999). In the entrepreneurship context, behaviors as new ventures, creation of new values are outcomes of entrepreneurial intentions (Bird, 1988). Intention is a cognitive representation of an individual. The relevance of cognitive approach theory in shaping the behavior of individual's in entrepreneurial decisions and actions has been confirmed by a number of various studies (Gaglio, 2004; Baron, 2004; Krueger 2000; Mitchell et al., 2002). The cognitive theory tries to understand the development of competencies and the regulation of actions of individuals. Since being a successful entrepreneur requires

competencies, and entrepreneurship is a planned action, social cognitive theory is relevant for the study of entrepreneurial intentions (Krueger et al., 2000). Baron (1998) argued that cognitive perspectives could contribute to entrepreneurship research and he suggested that several cognitive processes such as counterfactual thinking, planning fallacy, attribution style and self-justification might explain why and when entrepreneurs think differently than non-entrepreneurs. A few empirical studies have shown the effect of cognitive theory on entrepreneurial decisions (Mitchell, 1994; Shane et al., 2003; Armitage and Conner, 2001). Cognitive psychology is not only an aid to understanding individuals and their behavior, considering their mental processes when they interact with other people, but also addresses the environment in which these mental processes and interactions take place (Mitchell et al., 2002). The Theory of Social Cognition introduces the idea of knowledge structure; i.e. the mental models (cognitions) that are used to achieve personal effectiveness in certain situations**.** Thus, since entrepreneurship is defined as relating to individuals or teams that create products/services for other people, Cognitive Psychology is increasingly useful to help establish the phenomena associated with entrepreneurship (Sánchez, 2011). By summarizing, the field of entrepreneurial cognition includes all facets of cognition that can significantly play a vital role in certain aspects of the entrepreneurial process. Now in this paper three main categories of perceptions will be discussed those may affect the adults' entrepreneurial intention.

2.2 Individual Perceptions and Entrepreneurial Intentions

Perceptions about the environment forces put significant influence on adults' entrepreneurial intentions. Bandura's (1977) work has emphasized the relevance of two important perceptions in social learning: role model perception and self-efficacy. Why are some people more likely to become entrepreneurs while others shy away? A great deal of research dealing with this question focuses on the influence of entrepreneurial role models (peers) on the decision to start a firm (Bosma et al., 2012; Chlosta et al., 2012; Fornahl, 2003; Kacperczyk, 2013; Minniti, 2005; Nanda and Sørenson, 2010; Sorenson and Audia, 2000). Role models may provide information, guidance, and support and are an important influence in career decision making in general (Buunk et al., 2007; Lent et al., 1994). While living in a society we start to follow other successful people around us. Individual decisions to engage in a certain behavior are often influenced by the behavior and opinions of others, the demonstration of their identity and by the examples they provide (Ajzen, 1991; Akerlof, 2000). The presence of experienced and successful entrepreneurial role models in a community conveys a message to the other potential entrepreneurs that business is an attractive career option (Zapalska and Zapalska, 1999). Moreover, the knowledge of individuals in the similar lines of business is also necessary for support and advice (Aldrich, 1999). This may, in turn, positively influence entrepreneurial intentions and, ultimately, entrepreneurial activity (Krueger et al., 2000). Minniti (2004) holds that the prevalence of role models makes the blur future clear. The concept of self-efficacy is derived from social learning theory and refers to a person's belief in his or her capability to perform a particular task (Bandura 1977). According to Bandura's social learning theory (1977), there is a link between self-perceptions of personal skills in performing certain tasks and career decisions. These perceptions are often referred to as self-efficacy. In the context of entrepreneurship, Boyd and Vozikis (1994) linked ESE with entrepreneurial intentions and actions while Krueger and Brazeal (1994) regarded it as a prerequisite of an entrepreneur. Like Chen et al.,

(1998), by entrepreneurial self-efficacy we understand the self-belief in one's ability to adopt the role and conduct the tasks of an entrepreneur successfully". Thus, "research on self-efficacy in entrepreneurial behavior has been characterized by making distinctions between entrepreneurs and non-entrepreneurs (Chen et al., 1998; Markman et al., 2005). Entrepreneurial self-efficacy is also the key personal capability that motivates entrepreneurial behaviors (Tyszka et al., 2011) and enables entrepreneurs to overcome difficulties during the entrepreneurship process; these behaviors include opportunity recognition, the marshalling of resources, and improving the performance of the new business (Tumasjan & Braun, 2012). In a given situation, entrepreneurs perceive more opportunities than those who have low levels of entrepreneurial self-efficacy, who perceive the same situation to have more costs and greater risks (Cooper & Lucas, 2005; Vecchio, 2003). Both leading theories which explain entrepreneurial intentions, Ajzen's Theory of Planned Behavior and Shapero-Krueger's Entrepreneurial Event Model, treat perceptions of ESE as an important contributor to entrepreneurial intentions (Krueger and Reilly 2000). These links have been empirically verified by various scholars (Krueger and Reilly 2000; Lüthje and Franke 2003; Chen et al., 1998). People who have a higher level of self-efficacy also feel more competent to overcome perceived obstacles and they anticipate more positive results (Vecchio, 2003) and persist in the effective search and organization of activities in the midst of uncertainty (Trevelyan, 2009). Therefore, entrepreneurial self-efficacy not only influences individuals' decisions to choose an entrepreneurial career but also directs their future performance in the process of managing and developing a new venture (Bandura 2000). Thus, it suggests that entrepreneurial self-efficacy is positively related to entrepreneurial intention in this research study.

Propensity to Take the Risk is the characteristic that sets out a clear difference between an entrepreneur and an employee is the ability to take risks (Drucker, 2014; Hvide, 2014; Kreiser et al., 2013). As a business involves many risks, an entrepreneur must have the will to face them and manage them (Brandstätter, 2011; Hisrich and Peters, 2002; Rauch and Frese, 2007; Zhao et al., 2010). Propensity to Take the Risk was defined by a researcher (Kuip, 2003) denotes to acceptation of risk when engaging in an activity and hence related to the probability of success of any activity being less than 100%. Jackson (1994) defined the propensity to take risks as the individual's ability to make certain decisions and actions even under conditions of uncertainty. How entrepreneurship and fear to fail are linked, is a question which has long been dealt with by authors (Kihlstrom, 1979). According to a researcher (Wong, 2005), some entrepreneurs are unable to tolerate the business failure despite knowing that it is a common phenomenon among such ventures. This attitude obstructs the aspiring entrepreneurs. Another researcher (Douglas et al., 2002) found that a more positive attitude towards risk and independence leads to stronger entrepreneurial intentions. By summarizing the above literature, the following-mentioned hypotheses have been developed:

- **H_1:** Individual perceptions have a positive effect on the entrepreneurial intentions of an adult population in China and Pakistan

2.3 Entrepreneurial Intentions and Perceptions of Opportunities

According to the theory of planned behavior, individuals' attitudes influence their behavior (Ajzen, 1991). The entrepreneurial behavior is viewed as the creation of a new organization to pursue an opportunity (Starr and Bygrave, 1991), which is also the

product of both intuitive and rational systems of entrepreneurs. The process of entrepreneurship starts with the opportunity perception (Shane, 2000). An opportunity is the chance to fulfill the demand prevailing in the marketplace by creatively combining their sources in order to supply the demanded product or service (Kirzner, 1979). According to Krueger (2000) opportunities are not found, but constructed. Entrepreneurially alert individuals are sensitive to identify unemployed resources like land, technology or inventions which have not yet been exploited, and areas of commercial activity which have not been tried yet (Ardichvili et al., 2003). Due to this reasons, entrepreneurs are distinguished by their ability to perceive and exploit opportunities overlooked by others (Kirzner, 1985; Schumpeter, 1942). Recently, empirical evidence also suggests that the ability to perceive opportunities is positively associated with entrepreneurial endeavors (Wong, 2005; Lee, 2005; Arenius 2005). In accordance with a researcher (Ahmad, 2012), the entrepreneurial economic conditions in a nation may influence the creation of new firms. Both a positive and a negative relationship have been confirmed between economic growth and the rate of entrepreneurship (Audretsch, 2002; Carree, 2002). A positive correlation between entrepreneurship rates and economic development is detected in high-income countries, while in low and middle-income countries, these correlations tend to be negative (Tang, 2004). The GEM Report 2005 show large differences between countries like Japan, France, Belgium and Sweden with low entrepreneurial activity and countries like the USA, Canada, Australia and South Korea with high entrepreneurial activity. Some developing countries like Brazil and Mexico top the list of countries with high entrepreneurial activity (Reynolds et al., 2005). In this sense, the general economic condition will have a macro-economic effect on the aggregate level of entrepreneurial intentions and on the overall start-up rate (Thurik et al., 2002). Hence, above discussion leads to following proposition:

- **H_2:** Perceptions of opportunities have a positive effect on the entrepreneurial intentions of an adult population in China and Pakistan.

2.4 Socio-Cultural Perceptions and Entrepreneurial Intentions

Hofstede defines culture as the collective programming of the mind which distinguishes the members of one human group from another (Hofstede and Hofstede, 2005). Good cultural values also have great impact the entrepreneurial intention. As Hofstede (1980) pointed out, culture shapes people's cognitive schemes, programming behavioral patterns which are consistent with the cultural context. Culture includes some social, moral ethical values, norms and beliefs that must be socially acceptable (Hofstede, 1990). Moreover, these cognitive schemes derived from culture can help entrepreneurs in several aspects (Busenitz and Lau, 1996): reducing the uncertainty of making a decision, identifying cause/effect relationships to advance the development of ideas and opportunities; facilitating forecasts and predictions about outcomes; and, what is most important in this study, increasing the start-up intention. Normally, researchers analyzed that culture facilitated the entrepreneurship because of high individuality, low ambiguity, and low in power remoteness and high intention for commencement of new business (Hayton, 2002). Differences around the countries were detected in the level and nature of ability and willingness about cognitions. In a subsequent study on (Mitchell et al., 2002a, 2002b) entrepreneurial cognitions across cultures were found to be broadly similar, but with significant differences depending on the national culture. Hence, below-mentioned hypothesis has been drawn:

- **H_3:** Socio-cultural perceptions have a positive effect on entrepreneurial intentions of an adult population in China and Pakistan.

3. Research Model

This research study examines entrepreneurial intentions in adult population in China and Pakistan by utilizing GEM data. In this connection, above-mentioned conceptual model has been developed which demonstrates the relationship between dependent (Entrepreneurial Intentions) and independent variables (Individual Perceptions, Perceptions of Economy and Socio-Cultural Perceptions). Further, three control variables (Age, Gender and Education) have been also added in the model.

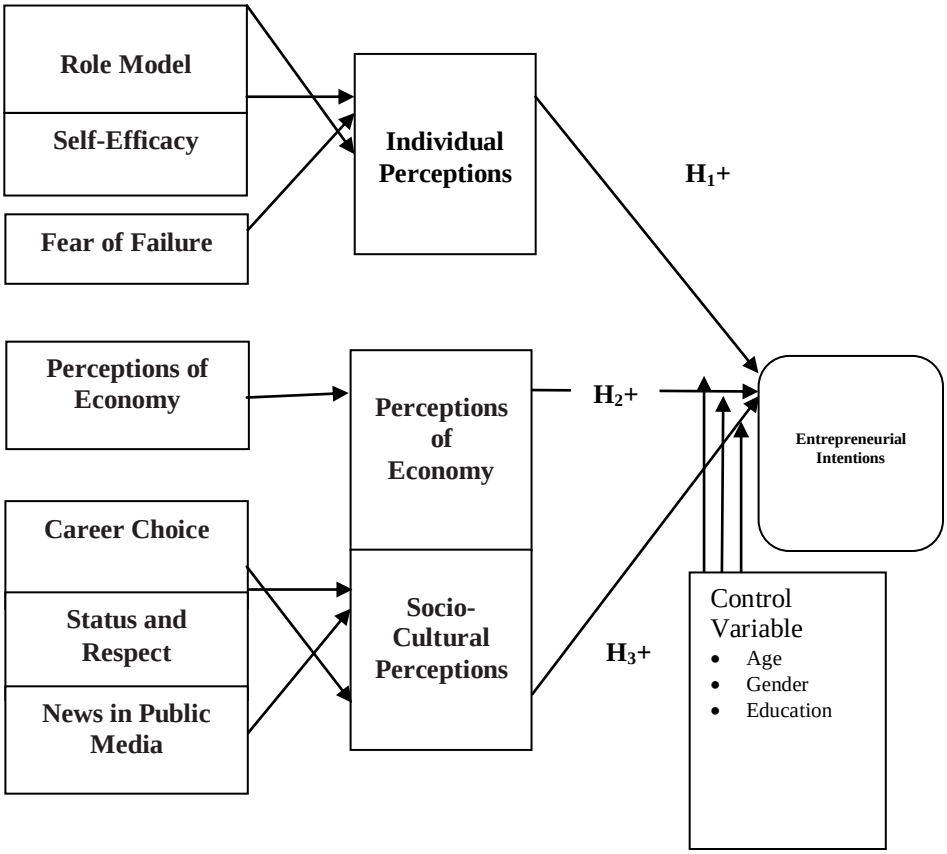

Figure 1: Cognitive Factors which affect Entrepreneurial Intention

4. Methodology

The data for this study come from the GEM Adult Population 2012 survey (Global Entrepreneurship Monitor, 2012). This survey is being conducted by the GEM consortium globally to measure the perceptions and attitudes of the adult population (18-64 years of age) every year about entrepreneurship. The sample size for China is 3,683 adults, while for Pakistan sample size is 1,999 adults. The table I shows the sample profile for both China and Pakistan.

Table 1: Profile of Respondents

Profiles	China			Pakistan		
	Frequency	**Total**	**%**	**Frequency**	**Total**	**%**
Gender						
Male	1779		48.3	1009		50.5
Female	1904	3683	51.7	990	1999	49.5
Age						
18-24	651		17.7	561		28.1
25-34	890		24.2	571		28.6
35-44	915		24.8	404		20.2
45-54	716		19.4	282		14.1
55-64	511	3683	13.9	181	1999	9.1
Education						
None	47		1.3	821		41.1
Primary	284		7.7	519		26.0
Lower Secondary	1140		31.0	510		25.5
Upper Secondary	1259		34.2	103		5.2
Post-secondary non-	595		16.2	45		2.3
tertiary	358	3683	9.7	01	1999	0.1
First stage of tertiary						

Source: Global Entrepreneurship Monitor Adult Population Survey (APS) 2012

GEM questionnaires include some cognitive items that may allow analyzing entrepreneurial intentions at an aggregate level (Reynolds, 2005). The variables used in this study to measure cognitive concepts of intentions and their explanations used are shown in the table 2.

Table 2: Description of Variables of Study

Category of Variable		Name of Variables	GEM Coding	Explanation	Measure
Dependent Variable	Entrep. Intention	Entrep. Intention	futsup	Are you, alone or with others, expecting to start a new business, including any type of self-employment, within the next three years?	0= Yes 1= No
Independent Variables	Individual Perceptions	Role Model	knowent	Do you know someone personally who started a business in the past 2 years?	0= Yes 1= No
		Self-efficacy	suskill	Do you have the knowledge, skill and experience required to start a new business?	0= Yes 1= No
		Fear of Failure	fearfail	Would fear of failure prevent you from starting a business?	0= Yes 1= No
	Perception of Economy	Perceived Opportunity	opport	In the next six months, will there be good opportunities for starting a business in the area where you live?	0= Yes 1= No
	Socio-Cultural Perception	Career Choice	nbgood c	In my country, most people consider starting a new business a desirable *career* choice.	0= Yes 1= No
		Status &Respect	nbstatus	In my country, those successful at starting a new business have a high level of status and respect.	0= Yes 1= No
		News in Media	nbmedia	In my country, you will often see stories in the public media about successful new businesses.	0= Yes 1= No

4.1 Proposed Regression Model

Since the dependent variable is a binary with possible options fall into one of the two categories (dependent =1), or not (dependent =0), therefore the binary logistic regression model has been applied. Further, "logit models do not make assumptions about the statistical distribution of the variables (Greene, 2002)". In this empirical study, therefore, the use of a logit model would be fully justified on three grounds:

- The dependent variable is dichotomous;
- The great majority of independent variables are also dichotomous or categorical;
- It allows analyzing the effect of a certain level of the independent variables on the probability of the studied event being present (in this case, being a potential entrepreneur).

The goodness-of-fit of the models has been checked by the Omnibus test for model coefficients, the Hosmer-Lemeshow test, the rate of correct classification and pseudo-R2 statistics. In order to evade the biased estimation of the coefficients in this study, a co-linearity analysis was also performed. The variance inflation factor (VIF) and condition indexes were used for this purpose.

5. Results

5.1 Correlation

Correlation table for China (Table 3) shows that all variables are significantly correlated with entrepreneurial intentions except fear of failure. The correlations among entrepreneurial intentions and other variables exhibit that there is a positive correlation among these variables. While role model, perception of opportunities and self-efficacy have a significant and strong positive correlation with entrepreneurial intentions. Furthermore, gender and age have a week and negative correlation with almost variables.

Table 3: Correlations among Variables of Study (China)

	1	2	3	4	5	6	7	8	9	10	11
Futsup	1										
Knowent	.148**	1									
Oopporty	.134**	.183**	1								
Suskill	.155**	.168**	.284**	1							
Fearfail	-.017	.064**	.079**	.089**	1						
Nbgoodc	.046**	.137**	.157**	.142**	.091**	1					
Nbstatus	.020	.088**	.123**	.127**	.155**	.280**	1				
Nbmedia	.052**	.126**	.106**	.114**	.154**	.200**	.334**	1			
Gender	-.075**	-.040*	-.062**	-.063**	.003	-.003	.016	.000	1		
Age	-.203**	-.081**	-.013	-.022	.054**	-.023	.025	-.049**	-.017	1	
Education	.171**	.060**	-.013	.036*	-.072**	-.073**	-.054**	-.036*	-.033*	-.397**	1
Note: Correlation values are significant at: *0.05 and * *0.01 levels (two-tailed).											

The results of correlation for Pakistan are given in the table 4 where all variables are significantly and positively correlated with entrepreneurial intentions except gender and age. The strength of correlations of fear of failure, career choice and status and respect is lesser as compared to other variables. Role model is strongly and significantly correlated with all variables except gender and age.

Table 4: Correlations among Variables of Study (Pakistan)

	1	2	3	4	5	6	7	8	9	10	11
Futsup	1										
Knowent	.255**	1									
Oopporty	.148**	.276**	1								
Suskill	.174**	.204**	.366**	1							
Fearfail	.047*	.164**	.166**	.206**	1						
Nbgoodc	.095**	.142**	.254**	.263**	.126**	1					
Nbstatus	.084**	.088**	.149**	.248**	.145**	.313**	1				
Nbmedia	.155**	.151**	.246**	.306**	.244**	.296**	.259**	1			
Gender	-.333**	-.337**	-.206**	-.278**	-.198**	-.115**	-.012	-.115**	1		
Age	-.030	.011	-.014	-.011	-.026	-.035	-.042	-.007	-.039	1	
Education	.107**	.115**	.049*	.154**	.054*	.138**	.065**	.148**	-.160**	-.188**	1
Note: Correlation values are significant at: *0.05 and * *0.01 levels (two-tailed).											

5.2 Regression

Total three hypotheses were derived from the theory to test the influence of independent variables (perceptual variables) on the dependent variable (entrepreneurial intention) for Chinese and Pakistani adult population. Hypotheses have been tested through a subsequent logit model by entering each group of variables. A co-linearity analysis was performed to avoid biased estimations of the co-efficient. For this purpose, Variance Inflation Factor (VIF) and Condition indexes were used. The multi-colinearity test was satisfactory, since the highest VIF was 1.208, and the highest condition index was 5.177, well below the 20.0 threshold suggested by Belsley et al. (1980). Afterward, four binary logistic regressions were performed on the data. Model 01 includes only demographic characteristics as independent variables and model 02 contains individual perceptions. Whereas, model 03 includes perceived opportunities and last model contains includes socio-cultural perceptions.

For data on China, the results in Table 5 portray that the Omnibus test is always significant (p<0.0005), which indicates acceptance of the hypothesis that β coefficients are different from zero. This statistical test provides an overall indication of good performance of the model. Further, the Hosmer-Lemeshow test is a highly reliable test to check the fitness of model. A value<0.05 shows a poor fit model in this test. To find out the fitness of all models, the results demonstrate that all the Models (from 1 to 4) indicated significant results with the significance value of >0.05. The values of Cox and Snell R^2 and the Nagelkerke R^2 portray an indication of the amount of variation explained by the independent variables in the model. In first Model, only 6.1% and 9.3% of the variability is explained by the age, gender and education. Consequently, when more variables were included in the model based on hypothesis, the variability explained was increased from 9.2 to 14 per cent in Model 2, 9.8 to 14.9 per cent in model 3 and finally 9.9 to 15 per cent in Model 4.

Table 5: Goodness-of-Fit Statistics (China)

Test	Model 1	Model 2	Model 3	Model 4
Omnibus test (sig. level)	.000	.000	.000	.000
Cox and Snell pseudo-*R2*	.061	.092	.098	.099
Nagelkerke pseudo-*R2*	.093	.140	.149	.150
Hosmer-Lemeshow test (sig. level)	.149	.573	.045	.465
% correct	77.1	77.2	77.3	77.2

Finding for Pakistani data are shown in Table 6. Omnibus test is significant (p<0.0005) in case of Pakistan as values of all model are <.005 denoting acceptance of the hypothesis that β coefficients are different from zero. Further, this test provides an overall indication that the model is performing well. In this test, poor fit is indicated by a significance value <0.05. The results of Hosmer-Lemeshow test demonstrate that the Model 3 and 4 were not significant as their value were <.05. Whereas, values of the rest of the Models (1 and 2) showed the significant results as their significant value were>.05. The values of Cox and Snell R^2 and the Nagelkerke R^2 indicate the amount of change in the independent variable explained by the model. These are described as pseudo-R2 statistics. In Model 1 only 12% and 17.3% of the variability is explained by gender, age and education. Consequently, the variability explained increased from 14.7 to 21.2 per cent in Model 2 after the inclusion of more variables, 14.8 to 21.4 per cent in model 3 and finally 15.9 to 23 per cent in Model 4.

Table 6: Goodness-of-Fit Statistics (Pakistan)

Test	Model 1	Model 2	Model 3	Model 4
Omnibus test (sig. level)	0.000	0.000	0.000	0.000
Cox and Snell pseudo-*R2*	0.120	.147	.148	.159
Nagelkerke pseudo-*R2*	0.173	.212	.214	.230
Hosmer-Lemeshow test (sig. level)	0.603	.061	.013	.014
% correct	73.1	74.7	74.7	74.8

The score of the results of binary logistic regression for China have been mentioned in table 7. Model 1 is the basic model which includes only control variables of gender, age and education. Results in table 07 show that gender itself does not happen to be a good predictor of entrepreneurial intentions in China. With regard to gender, males are 1.47 times more likely in comparing females to show a positive intention (odds ratio). Both men and women are likely to possess similar entrepreneurial intentions. In case of effect of age on entrepreneurial intentions, a linear effect of age has been observed. As the age of an adult is increasing his/her intentions to be an entrepreneur are decreasing. Probably adults after the age of 50 years does not prefer to become an entrepreneur by leaving his/her stable job. Finally, with regard to education level, it was observed that education does not predict entrepreneurial intentions at different levels.

Using a 0.05 significance level, H_1 has been verified in model 2 where self-efficacy, role model and risk aversion are proposed to cause impact on the intentions of adults. The

results showed that all the predictors have a significant influence on the prediction of entrepreneurial intentions among adult population in China except fear of failure. Similarly, the odds ratio Exp *(B)* in model 1shows for fear of failure is a poor predictor of entrepreneurial intentions. Due to this reason, H_1 has been supported partially. Proposition 02 has been tested in model 03 which includes adults' perception about the availability of entrepreneurial opportunities where they live. H_2 has satisfactorily been supported owing to a significant and positive β coefficient of an odds ratio of 1.377. Finally, in order to test H_3, three socio-cultural perceptions (status and respect, news in media and career choice) were tested in Model 4. However, results provide support only to two perceptions (news in media and career choice) with positive coefficients. This means that the odds ratio for entrepreneurship as a career choice is 1.054 while the odds ratio for news in media is 1.133. This situation may be prevailing owing to a wider coverage of media of successful entrepreneurs. These results partially support H_3.

Table 7: Logistic Regressions on Entrepreneurial Intention for China

	Model 01		Model 2		Model 3		Model 4	
	B	Exp(B)	B	Exp(B)	B	Exp(B)	B	Exp(B)
Social Variables								
Gender(1)	0.389	1.475	0.342	1.408	0.324	1.383	0.326	1.385
Age								
Age (1)	1.527	4.603	1.525	4.597	1.518	4.562	1.499	4.478
Age (2)	1.463	4.32	1.32	3.743	1.325	3.763	1.315	3.724
Age (3)	1.175	3.239	1.045	2.844	1.052	2.862	1.047	2.848
Age (4)	0.8	2.226	0.738	2.093	0.741	2.099	0.737	2.089
Education								
Education (1)	-0.589	0.555	-0.522	0.593	-0.511	0.6	-0.519	0.595
Education(2)	-1.046	0.351	-0.991	0.371	-1.007	0.365	-1.026	0.358
Education(3)	-0.625	0.535	-0.536	0.585	-0.553	0.575	-0.567	0.567
Education (4)	-0.484	0.617	-0.448	0.639	-0.448	0.639	-0.455	0.635
Education (5)	-0.124	0.883	-0.037	0.964	-0.038	0.962	-0.035	0.966
Individual Perceptions								
Knowent			0.514	1.673	0.468	1.596	0.454	1.575
Suskill			0.558	1.748	0.479	1.615	0.47	1.6
Fearfail			-0.067	0.936	-0.076	0.927	-0.087	0.917
Economic perception								
Oopporty					0.32	1.377	0.311	1.364
Cultural Perceptions								
Nbgoodc							0.052	1.054
Nbstatus							-0.017	0.983
Nbmedia							0.125	1.133
Constant	-2.123	0.12	-2.53	80	-2.515	0.081	-2.602	0.074

Table 8 presents the results of logistic regression for Pakistan. Model 1 is a basic model which includes demographic variables (gender, age and education of respondents). In case of Pakistan, gender is a significant predictor of entrepreneurial intentions. Based on statistical results, we can claim that males are more likely to hold entrepreneurial intentions in Pakistan than their counterparts with odds ratios of 4.852. Age is also a predictor of entrepreneurial intentions in Pakistan. Across all age categories, entrepreneurial intentions remain same among Pakistani adults. Lastly, with regard to education, it can be seen in a table that at primary level adults do not hold entrepreneurial intentions, however as their level of education is increasing, their intentions to start their own business are also increasing.

A look at odds ratios Exp *(B)* in model 2 revels that the role model (2.095) and self-efficacy (1.396) have a significant and positive effect on entrepreneurial intentions while fear of failure does not. Therefore, H_1 has partially been supported. Further, model 3 (perceived opportunity) also portrays a positive and significant effect on entrepreneurial intention. Finally, model 4 demonstrates the results of socio-cultural perceptions. The results showed that only two individual perceptions (role model and self-efficacy) have significant coefficients with the expected signs. In particular, the effect of status and respect is the strongest predictor in this category and news in media is behind it (odds ratios are 1.303 and 1.511, respectively). Whereas, career choice found have negative effect on entrepreneurial intentions among Pakistani adults.

Table 8: Logistic Regressions on Entrepreneurial Intention for Pakistan

	Model 01		Model 2		Model 3		Model 4	
	B	**Exp(B)**	**B**	**Exp(B)**	**B**	**Exp(B)**	**B**	**Exp(B)**
Social Variables								
Gender(1)	1.579	4.852	1.349	3.853	1.340	3.820	1.401	4.060
Age								
Age(1)	.339	1.403	.322	1.380	.321	1.378	.350	1.419
Age(2)	.358	1.431	.357	1.429	.352	1.422	.399	1.491
Age(3)	.470	1.600	.415	1.514	.418	1.519	.478	1.613
Age(4)	.199	1.220	.097	1.102	.098	1.102	.122	1.130
Education								
Education(1)	-.256	.774	-.055	.947	-.087	.917	.023	1.023
Education(2)	.203	1.225	.342	1.407	.313	1.368	.405	1.500
Education(3)	.008	1.008	.112	1.119	.087	1.091	.156	1.169
Education(4)	.523	1.686	.630	1.878	.603	1.827	.669	1.952
Individual Perceptions								
Knowent			.739	2.095	.703	2.020	.688	1.990
Suskill			.333	1.396	.286	1.331	.148	1.159
Fearfail			-.247	.781	-.257	.774	-.333	.717
Economic perception								
Oopporty					.176	1.192	.111	1.117
Cultural Perceptions								
Nbgoodc							-.016	.984
Nbstatus							.265	1.303
Nbmedia							.412	1.511
Constant	-2.234	.107	-2.626	.072	-2.629	.072	-3.016	.049

In accordance with the statistical results obtained here, mixed results have been found in support of our hypothesis. In case of China, fear of failure and status and respect for entrepreneurs found no support to accept hypotheses. While in case of Pakistan based upon the empirical support, career choice and fear of failure did not significantly influence on entrepreneurial intentions, while all other hypothesis have been found accepted.

6. Discussion and Conclusion

This research study aimed at is to assess the role of cognitive perceptions in predicating an entrepreneurial intention in China and Pakistan among adults. Therefore, in this section, we discuss the results that we obtained by running the sequential logistic regression. Initially, the first model contains the demographic factors and they produced mixed results. Gender is a positive but insignificant predictor of entrepreneurial intentions in China. That's means, in China; both genders have showed almost same interest regarding entrepreneurial intentions. Further, it is also evident from a GEM report 2011; the Total Entrepreneurial Activity (TEA) rate for females was 22.4 % (25.7 % for males). This second position shows that there is no dissimilarity between intentions of male and female. "These results are consistent with a previous study (Anwar, 2014)". According to Chu (2011), the Mao led revolution of 1949 changed and elevated the status of women in Chinese society. Furthermore, author of this paper has personally seen the high involvement of females in launching and running their businesses during the stay in China hence, this phenomenon is validating our claim regarding gender in China. On the other hand, gender is a positive and a significant predictor of entrepreneurship in Pakistan. It means that males hold more entrepreneurial intentions than their counterparts. "The male population has a more positive attitude towards entrepreneurship in Pakistan as compared to the female population (GEM Pakistan Report 2012)". One of the possible reasons is that after getting married, mostly a female is required to work as a house-wife and look-after her children. Furthermore, lack of availability of finance and other resources, unfavorable external environment, cultural barriers, lack of entrepreneurial knowledge and skills may prevent a female from forming entrepreneurial intentions.

Outcomes of self-efficacy and role model portray that both are significant predictors of entrepreneurial intentions in both countries. With respect of the influence of role model and self-efficacy, the findings corroborate previous assertions and findings that support these variables as an important construct towards entrepreneurial intention (Markman et al., 2002; Krueger, 2003; Segal et al., 2005; Van Auken et al., 2006). Self-efficacy is grounded in social cognitive theory (Bandura, 1997). Social Cognitive Theory (Bandura, 1986) and entrepreneurial self-efficacy can be very useful as applied tools for developing entrepreneurship learning, competencies and intentions. Bandura's social cognitive learning process observationally by imitation occurs in three components, namely behavioral models, behavior of the model influences and internal processes of learning (Surya, M. 2014). Human functioning is, therefore, regulated by an inter play of self-generated and external sources of influence. In our societies, we generally follow our successful people in our life endeavors. The SCT postulates that observation and imitation is given across models that can be parents, educators, and friends, and can even be heroes taken from television. Bosma (2012) argued that role models provide living evidence that certain goals are achievable and it enhances the desire to become an entrepreneur by providing legitimization and encouragement to turn entrepreneurial ambitions into reality (Arenius, 2005; Koellinger, 2007; Mueller, 2006)". Thus, it is very important to introduce and promote popular entrepreneurs of both countries and their experiences by the print and electronic media to encourage adults to form entrepreneurial intentions. Zia Imran, Monis Rahman, Ali Rehan, Farhan Masood and Qaiser Abbas are some of famous and young Pakistani entrepreneurs (Casey Imafidon, 2015). According to He Yini (2015), Wang Xinwen, Zhou Wei, Chen Hua, Cai Yanqing and Huang

Chengsong are some of successful and young entrepreneurs**.** These entrepreneurs from both countries may be invited as a resource person or trainer among educational institutes or in public gatherings as students can meet them and share their views to form a career as an entrepreneur. Further, more than 95% people in Pakistan belong to Islam and therefore, "figures such as Abdul Rahman Bin Auf – the companion of the prophet Muhammad (PBUH) may also be highlighted to promote the idea that to start a business is in line with Islam in Pakistan (S. Zamberi et al., 2014)". Bandura in (Hisrich, et al., 2008) also stated that almost all learning phenomena resulting from direct experience occurs through observation of the others' behaviors (behavioral model).

Like self-efficacy, the perception about the availability of opportunities is also positive and significant in both countries. Therefore, "individuals high in self-efficacy are more likely to believe they have an actionable idea (Wennberg et al., 2013), perceive more opportunities (Krueger and Dickson 1994), and generate more alternatives for consideration along a series of entrepreneurial decisions (Kickul et al., 2009)". Further, according to a GEM report, the 33% Chinese foresee business opportunities in areas where they are living. Also according to a GEM report (2012), "the people of Pakistan perceive more opportunities in the surrounding environment and perceive to have more capabilities than many of its peer countries".

Lastly, findings about cultural perceptions show mixed results. In China, career choice and public media are positive and highly significant predictors of entrepreneurial intentions. This means that adults consider entrepreneurship as their career choice and the same can also be verified from gender where there is no significant difference in forming entrepreneurial intentions among both genders. This type situation may be prevailing in China owing to continuous promotion of entrepreneurs through public media. In Pakistan, status and respect and news in media are strong predictor of entrepreneurial intentions. Those entrepreneurs successful at launching a new business/firm have a high level of status and respect in society, but amazingly most respondents do not consider starting a new business as a good career choice. This situation may prevail in Pakistan that people allocate more priority to enter into stable employment, particularly public sector jobs, over finding self-employment.

Further, it is recommended that in order to encourage youth in forming entrepreneurial intentions, all the possible measures should be taken to make the adults aware of the benefits of self-employment in Pakistan. Moreover, the efforts are needed to develop an entrepreneurial climate in the country. For this purpose, a government is mainly responsible to direct micro-finance and commercial banks to lend loans to adults who prefer to open their firms/businesses and also to establish entrepreneur advisory desk at a various level which can provide advices to prospective entrepreneurs. Furthermore, newly established firms/businesses also need an efficient and effective legal system which can protect them whenever it becomes necessary for them. It is also clear from statistical results media can play a vital role in developing entrepreneurial intentions, therefore, print and electronic media have also to play their due role in exploring and promoting successful entrepreneurs in both countries as young people can be reinvigorated to pick entrepreneurship as their career of choice.

6.1 Practical Implications of the Study

In this paper three types of factors including Individual Perceptions, Perceptions of Economy and Socio-Cultural Perceptions and control variables have significant influence on entrepreneurial intentions of adult population in China and Pakistan. This study holds implications for practitioners, business persons and young entrepreneurs as well as for governments.

Our most inspiring result is that gender plays no role in determining entrepreneurial intent in China while it plays significant role in Pakistan. According to an estimate, "the women labour force's participation in Pakistan is only 22.7 percent, with most of them working as unpaid labourers or domestic workers on low wages and legally unacceptable working conditions (Quddus, 2018). This implies that there is great need of attention of policy makers, educationist, NGOs, bank managers and others to be paid to motivate and facilitate females in Pakistan towards entrepreneurship because almost half of Pakistan's population comprises women.

Another result of this study indicates that age negatively affects entrepreneurial intention of adults in China and positively in Pakistan. Furthermore, a linear effect of age has been observed in both countries. As the age of an adult is increasing his/her intentions to be an entrepreneur are decreasing. Existing literature has documented positive and negative effects of age on entrepreneurship. The view on the positive effect of age on entrepreneurship is that the quantity of financial and human capital that a person possesses and that is essential for starting and conducting a business increases with age (Arenius and Minniti 2005; Parker 2009). By contrast, self-employment may also decrease with age because entrepreneurship is assessed as a riskier employment option (Boden 1999; Parker 2009) and as an option that often requires longer working hours (Blanchflower 2004). Our findings support the latter and are consistent with literature, which suggests that younger people have greater chances of becoming entrepreneurs (Arenius and Minniti 2005; Carter et al., 2001).

The strong impact of self-efficacy on entrepreneurial intention has been reported in both countries. Which necessitates for providing more purposive and effective entrepreneurship education and training to adults to enhance their efficacy in performing specific tasks and roles of an entrepreneur. To do so, educators can engage students in various learning opportunities such as business plan writing, role modeling and case studies (Wilson et al., 2007; Fayolle et al., 2006; Chen et al., 1998)". Bank managers may provide easy and quick access to finance for adults who want self-employment. Policy makers should try to provide conducive environment (infrastructure, basic utilities, peace and others) to adults in both countries and especially in Pakistan.

Negative relation of fear of failure with EI in both countries is another important result of this study. This result guide government of both countries in stimulating an environment where individual's motivation to undertake entrepreneurial activities can be enhanced. Further, it is responsibility of a society, to form a social-cultural environment which favors entrepreneurial activities and accepts failures in business.

6.2 Theoretical Implications of the Study

Because attitudes are likely to lead to intentions, and these, in turn, to behaviors (Ajzen, 1991; Krueger and Carsrud, 1993), future research should continue to consider what factors are related to entrepreneurial attitudes and intentions (Harris et al., 2007). The

findings of this study attempted to significantly contribute to the existing literature by examining the impact attitudinal characteristics (Role Model Self-Efficacy, Fear of Failure, Career Choice, Status and Respect, News in Public Media Individual Perceptions, Perceptions of Economy and Socio-Cultural Perceptions) on entrepreneurial intentions of adult population in China and Pakistan.

The results of this research can play a significant role in comprehending entrepreneurship and can motivate the numerous adults to be entrepreneurs in both countries. TPB theory suggests that an individual's subjective norms, attitudes towards the behaviour, and perceived behavioral control shape intentions and subsequent human actions (i.e. the action of becoming an entrepreneur) (Zampetakis et al., 2009). This research paper suggests some more independent variables to consider in examining intentions of people in future studies.

Several studies have suggested that entrepreneurial perceptions are the key mechanisms through which environmental characteristics influence outcomes, such as firm creation (Edelman & Yli-Renko, 2010), our results show that entrepreneurs' perceptions of opportunity are significantly better in both countries and therefore, further research can be conducted in examining influence of GEM entrepreneurial framework conditions (EFCs) in both countries.

6.3 China and Pakistan Comparison

There are more than 4.3 million SMEs in China, which are an impetus to the economic growth of China with a contribution of about 60 percent to the GDP, and providing 82 percent of the total employment opportunities (Liu, 2008). This high number of SMEs plays significant role in the economy of China therefore; China is famous as world's factory because the majority of tags, labels and stickers display the "Made in China". Chinese are born to do business and being their own boss, and have the motivation to become private entrepreneurs (Chu et al., 2011; Chen et al., 2006). On other side of the coin, Pakistanis prefer to get into stable employment like the jobs in public sector. Due to this reason, SMEs contribute only 30% in the overall GDP of Pakistan, which is much less than China.

Male dominant society leaves fewer business opportunities for female and thus, we have gendered entrepreneurship in Pakistan. Moreover, the females who do business; the social, cultural, traditional, and religious norms make the environment complex for them in Pakistan (Rajput and Ali, 2009). In China, the gender is a positive, but an insignificant predictor of business activity. It means that to become entrepreneur, being male or female does not matter. The women attained the status equal to the men in all walks of life. The rate of female business ownership also increased over time.

Although, people in both countries perceive ample number of opportunities for doing business where they live. Unfortunately, we may conclude that people in Pakistan do not hold inclination towards entrepreneurship. Moreover, the stagnant economy, limited access to capital, limited supply of utilities, higher taxes, wide-spread corruption and sharp devaluation in Pakistani Rupee against major currencies make very difficult to do business in Pakistan. Due to this reason, Pakistan holds 144 position out of 190 countries Ease of Doing Business database (Ease of Doing Business database, 2017). Whereas, China occupies 78 position out of 190 countries on same list and this position of China is due to lower wages, friendly business ecosystem, lower taxes and duties on imports and

exports, stable currency, ample supply of required utilities and infrastructure. Initiating the entrepreneurial activity is hampered by fear of failure in Pakistan, whereas Chinese are more entrepreneurial in their endeavors.

REFERENCES

Ahmad, S. a. X. S. (2012). Entrepreneurial environments and growth: evidence from Malaysia GEM data. *Journal of Chinese Entrepreneurship, 4*(1), 50-69.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 79-211.

Ajzen, Icek. (1991). Theory of planned behaviour. *Organizational Behavior and Human Decision Processes, 50*(2), 179-211.

Akerlof, G. a. K. R. (2000). Economics and identity. *The Quarterly Journal of Economics, 115* (3), 715-753.

Aldrich, H. (1999). *Organizations Evolving*, Sage, London.

Allison, C. W., Chell, E., & Hayes, J. (2000). Intuition and entrepreneurial behavior. *European Journal of Work & Organizational Psychology, 9*(1), 31- 43.

Andura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.). *Encyclopedia of Human Behavior, 4*, 71-81. New York: Academic Press.

Anwar ul Haq, M., Usman, M., Hussain, N., & Anjum, Z. U. Z. (2014). Entrepreneurial activity in China and Pakistan: a GEM data evidence. *Journal of Entrepreneurship in Emerging Economies, 6*(2), 179-193.

Ardichvili, A., Cardozo, R., & Ray, S. (2003). A theory of entrepreneurial opportunity identification and development. *Journal of Business venturing, 18*(1), 105-123.

Arenius, P. and De Clercq, D., (2005). A network-based approach on opportunity recognition. *Small Business Economics, 24*(3), 249-265.

Arenius, P., & Minniti, M. (2005). Perceptual variables and nascent entrepreneurship. *Small Business Economics, 24*(3), 233–247.

Armitage, C.J. and Conner, M. (2001). Efficacy of the theory of planned behavior: A Meta analytic review. *British Journal of Social Psychology, 40*(4), 471-499.

Audretsch, D. (2012). Entrepreneurship research. *Management Decision, 50*(5), 755-764.

Audretsch, D. B., Carree, M. A., Van Stel, A. J., & Thurik, A. R. (2002). Impeded industrial restructuring: the growth penalty. *Kyklos, 55*(1), 81-98.

Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191-215.

Bandura, A. (1986a). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (2000). Cultivate self-efficacy for personal and organizational effectiveness. *Handbook of Principles of Organization Behavior*, 120–136.

Bandura, A., (1977). *Social Learning Theory.* Prentice Hall, Englewood Cliffs, N.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York: W.H. Freeman and Company.

Baron, R. A. (1998). Cognitive mechanisms in entrepreneurship: why, and when, entrepreneurs think differently than other persons. *Journal of Business Venturing, 13*(4), 275-294.

Baron, R. A. and Markman, G. D. (1999). *Cognitive mechanisms: potential differences between entrepreneurs and non-entrepreneurs. Frontiers of Entrepreneurship Research, Babson College*, Wellesley, MA.

Bird, B. (1988). Implementing entrepreneurial ideas: The case of intentions. *Academy of Management Review, 13*(3), 442-454.

Blanchflower, D. (2004). Self-employment: more may not be better. *Swedish Economic Policy Review, 11*(2), 15–73.

Boden, R. (1999). Flexible working hours, family responsibilities, and female self-employment. *American Journal of Economics and Sociology, 58*(1), 71–83

Bosma, N., Hessels, J., Schutjens, V., Van Praag, M., Verheul, I., (2012). Entrepreneurship and role models. *Journal of Economic Psychology, 33*(2), 410-424.

Boyd, N., and G. Vozikis. (1994). The Influence of Self-efficacy on the Development of Entrepreneurial Intentions and Actions. *Entrepreneurship Theory and Practice, 18* (4), 63–77.

Brandstatter, H. (2011). Personality aspects of entrepreneurship: A look at five meta-analyses. *Personality and Individual Differences, 51*(3), 222-230.

Busenitz, L.W. and Lau, C.M. (1996). A cross-cultural cognitive model of new venture creation. *Entrepreneurship Theory and Practice, 20*(4), 25-39.

Buunk, A. P., Peiro, J. M., & Griffioen, C. (2007). A positive role model may stimulate career-oriented behavior. *Journal of Applied Social Psychology, 37*(7), 1489-1500.

Carree, M. A., Van Stel, A. J., Thurik, R. and Wennekers, S., (2002). Economic development and business ownership: an analysis using data of 23 OECD countries in the period 1976-1996. *Small Business Economics, 19*(3), 271-290.

Carter, S., Anderson, S., & Shaw, E. (2001). *Women's business ownership: a review of the academic, popular and internet literature*. Report to the Small Business Service, University of Strathclyde, Glasgow, RR002/01.

Casey Imafidon (2015). 8 Inspiring Pakistani Entrepreneurs You Should Follow. [Online] Available at: https://pakwired.com/8-inspiring-pakistani-entrepreneurs-you-should-follow/ (August 15th, 2018).

Chen, C., P. G. Greene, and A. Crick. (1998). Does Entrepreneurial Self-Efficacy Distinguish Entrepreneurs from Managers? *Journal of Business Venturing, 13* (4), 295–316.

Chen, G., LI, J. and Matlay, H. (2006). Who are the Chinese private entrepreneurs? A study of entrepreneurial attributes and business governance. *Journal of Small Business and Enterprise Development, 13*, 148-160.

Chlosta, S., Patzelt, H., Klein, S. B., Dormann, C., (2012). Parental role models and the decision to become self-employed: The moderating effect of personality. *Small Business Economics, 38*(1), 121-138.

Chu, H. M., Kara, O., Zhu, X. and Gok, K. (2011). Chinese entrepreneurs: motivations, success factors, problems, and business-related stress. *Journal of Chinese Entrepreneurship*, *3*(2), 84-111.

Chu, H. M., Kara, O., Zhu, X. and Gok, K. (2011). Chinese entrepreneurs: motivations, success factors, problems, and business-related stress. *Journal of Chinese Entrepreneurship*, *3*(2), 84-111.

Cooper, S. & Lucas, W.A. (2005). Measuring entrepreneurial self-efficacy. A paper prepared for the EDGE Conference 11-13th, Singapore.

Ease of Doing Business Report (2017). International Bank for Reconstruction and Development / The World Bank, 14th Ed., 07.

Drucker, P. (1985). *Innovation and Entrepreneurship.* Harper & Row, New York, NY.

Drucker, P. (2014). *Innovation and Entrepreneurship*; Routledge: New York, NY, USA.

Fitzsimmons, J. R. and Douglas, E. J. (2011). Interaction between feasibility and desirability in the formation of entrepreneurial intentions. *Journal of Business Venturing, 26*(4), 431-40.

Fornahl, D., (2003). Entrepreneurial activities in a regional context, published in Dirk Fornahl and Thomas Brenner (Eds): Cooperation, Networks, and Institutions in Regional Innovation Systems. Cheltenham: Edward Elgar, 38-57.

Gaglio, C. M. (2004). The role of mental simulations and counterfactual thinking in the opportunity identification process. *Entrepreneurship Theory and Practice, 28*(6), 533-552.

Gartner, W. B. (1989). Who is an entrepreneur? Is the wrong question? *Entrepreneurship Theory and Practice*, *13*(4), 47-68.

Global Entrepreneurship Monitor (2017). [Online] Available: http://www.gemconsortium.org/ (March 27th, 2017).

Goodwin, V. L. & Wofford, J. C. (1990). A cognitive processes perspective on leadership behavior and effectiveness. *Presented at the National Academy of Management Meeting*, ISBN, Miami Beach, Florida.

Hayton, J. C., George, G., & Zahra, S. A. (2002). National culture and entrepreneurship: A review of behavioral research. *Entrepreneurship theory and practice*, *26*(4), 33-52.

Hisrich, R. D., & Peters, M. P. (2002). *Entrepreneurship*, 5th ed.; McGraw-Hill Irwin: Boston, MA, USA.

Hisrich, Robert D.; Peters, Michael P.; Shepherd, Dean A. (2005). *Entrepreneurship.* (6th Ed.) Mc. Graw Hill/Irwin, New York.

Hisrich, Robert D.; Peters, Michael P.; Shepherd, Dean A. (2008). Entrepreneurship. 7th Edition. Published by McGraw-Hill.

Hofstede, G. (1980). *Culture's Consequences: International Differences in Work-Related Values*, Sage, Beverly Hills, CA.

Hofstede, G. and Hofstede, G. J. (2005). *Cultures and organizations, software of the mind*. McGraw-Hill, New York, NY.

Hvide, H. K., & Panos, G. A. (2014). Risk tolerance and entrepreneurship. *Journal of Financial Economics*, *111*(1), 200–223.

Isobel van der Kuip; Ingrid Verheul, (2003). *Early development of entrepreneurial qualities: the role of initial education*. Centre for Advanced Small Business Economics, Faculty of Economics Erasmus University Rotterdam.

Jackson, D. N. (1994). *Jackson Personality Inventory: Revised Manual*; Sigma Assessment Systems, Inc.: Port Huron, MI, USA.

Kacperczyk, A., (2013). Social influence and entrepreneurship: The effect of university person entrepreneurial entry. *Organization Science, 24*(3), 664-683.

Kickul, J., Gundry, L. K., Barbosa, S. D., & Whitcanack, L. (2009). Intuition versus analysis? Testing differential models of cognitive style on entrepreneurial self-efficacy and the new venture creation process. *Entrepreneurship Theory and Practice, 33*(2), 439-453.

Kihlstrom, R. E., & Laffont, J. J. (1979). A general equilibrium entrepreneurial theory of firm formation based on risk aversion. *Journal of political economy, 87*(4), 719-748.

Kim, G. (2008). Entrepreneurship and self-employment: the state-of-the-art and directions for future research. *New England Journal of Entrepreneurship, 11*(1), 39-52.

Kirzner, I. (1979*). Perception, Opportunity, and Profit: Studies in the Theory of Entrepreneurship*. University of Chicago Press, Chicago, IL.

Kirzner, I. (1985), *Discovery and the Capitalist Process*, University of Chicago Press, Chicago, IL.

Koellinger, P., Minniti, M. and Schade, C. (2007). I think I can, I think I can: overconfidence and entrepreneurial behaviour. *Journal of Economic Psychology, 28*(4), 502-527.

Kreiser, P., Marino, L., Kuratko, D., & Weaver, K. M. (2013). Disaggregating entrepreneurial orientation: The non-linear impact of innovativeness, proactiveness and risk-taking on SME performance. *Small Business Economics, 40*(2), 273–291.

Krueger Jr, N. F., and D. V. Brazeal. (1994). Entrepreneurial Potential and Potential Entrepreneurs. *Entrepreneurship: Theory & Practice, 18* (3), 91–104.

Krueger Jr, N. F., and M. D. Reilly. (2000). Competing Models of Entrepreneurial Intentions. *Journal of Business Venturing*, *15*(5/6), 411-432.

Krueger Jr., N., & Dickson, P. R. (1994). How believing in ourselves increases risk taking: perceived self-efficacy and opportunity recognition. *Decision Sciences, 25*(3), 385-400.

Krueger, N. F. (2000). The cognitive infrastructure of opportunity emergence. *Entrepreneurship Theory and Practice*, *24*(3), 5-23.

Krueger, N. F., Reilly, M. D. and Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, *15*(5/6), 411-432.

Krueger, N.F. (2003). The cognitive psychology of entrepreneurship in Acs, Zoltan J. and Audretsch, D.B. (Eds), *Handbook of Entrepreneurship Research: An Interdisciplinary Survey and Introduction*, Kluwer, London, 105-140.

Kruger, J. and Evans, M. (2004). If you don't want to be late, enumerate: unpacking reduces the planning fallacy. *Journal of Experimental Social Psychology, 40*(5), 586-598.

Lee, L., Wong, P. K., Chen, J. and Chua, B. L. (2005). *Antecedents for entrepreneurial propensity and intention: findings from Singapore, Hong Kong, and Taiwan.* NUS Entrepreneurship Centre Working Papers (WP: 2005-06), Singapore.

Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior, 45*(1), 79-122.

Lin˜an, F. and Chen, Y. W. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice, 33*(3), 593-617.

Liu, X. (2008). SME development in China: a policy perspective on SME industrial clustering", in Lim, H. (Ed.), *SME in Asia and Globalization*, ERIA Research Project Report 2007-5, 37-68, [Online] Available at: www.eria.org/SME%20Development%20in%20China_A%20Policy%20Perspective%20on%20SME%20Industrial%20Clustering.pdf (August 27th, 2018).

Lüthje, C., & Franke, N. (2003). The 'making'of an entrepreneur: testing a model of entrepreneurial intent among engineering students at MIT. *R&d Management, 33*(2), 135-147.

Minniti, M. (2004). Entrepreneurial alertness and asymmetric information in a spin-glass model. *Journal of Business Venturing, 19*(5), 637-658.

Minniti, M., (2005). Entrepreneurship and network externalities. *Journal of Economic Behavior and Organization, 57*(1), 1-27.

Mitchell, R. K. (1994). *The composition, classification, and creation of new venture formation expertise* (PhD dissertation). Management Department, University of Utah, Salt Lake City, UT. [Online] Available https://www.ronaldmitchell.org/publications/mitchell%201994%20dissertation.pdf (July 17th, 2018).

Mitchell, R. K., Busenitz, L., Lant, T., McDougall, P. P., Morse, E. A., & Smith, B. (2002b). Are Entrepreneurial Cognitions Universal? Assessing Entrepreneurial Cognitions across Cultures. *Entrepreneurship Theory and Practice, 26*(4), 9-32.

Mitchell, R. K., Busenitz, L., Lant, T., McDougall, P. P., Morse, E. A. and Smith, J. B. (2002). Toward a theory of entrepreneurial cognition: rethinking the people side of entrepreneurship research. *Entrepreneurship Theory and Practice, 27*(2), 93-104.

Mitchell, R. K., Busenitz. L., Lant, T., McDougall, P. P., Morse, E. A., & Smith B. (2002a). Toward a Theory of Entrepreneurial Cognition: Rethinking the People Side of Entrepreneurship Research. *Entrepreneurship Theory & Practice, 27*(2), 93-104.

Mitchell, R. K., Morse, E., Seawright, K. & Smith, B. (2000). Cross-cultural cognitions and the venture creation decision. *The Academy of Management Journal, 43*(5), 974-993.

Mitchell, R. K., Smith, J. B., Morse, E. A., Seawright, K. W., Peredo, A. M., & McKenzie, B. (2002). Are entrepreneurial cognitions universal? Assessing entrepreneurial cognitions across cultures. *Entrepreneurship Theory & Practice, 26*(4), 9-32.

Mitchell, R., Smith, B., Seawright, K. and Morse, E. (2000). Cross-cultural cognitions and the venture creation decision. *Academy of Management Journal, 43* (5), 974-993.

Mueller, P. (2006). Entrepreneurship in the region: breeding ground for nascent entrepreneurs? *Small Business Economics, 27*(1), 41-58.

Nanda, R., & Sørenson, J. (2010). Workplace peer effects and entrepreneurship. *Management Science, 56*(7), 116-1126.

Neisser, U. (1967). *Cognitive psychology*. Prentice NJ -Hall Englewood Cliffs, New York.

Parker, S. C. (2009). *The Economics of Entrepreneurship*. Cambridge: Cambridge University Press.

Quddus, S. (2018). Women in poverty. [Online] Available at: https://www.thenews.com.pk/print/313125-women-in-poverty (July 7th, 2018).

Rajput, A. A. and Ali, M. (2009). A preliminary investigation of entrepreneurial women in Potohar region of Pakistan. *Journal of Chinese Entrepreneurship, 1*, 193-208.

Rauch, A., & Frese, M. (2007). Let's put the person back into entrepreneurship research: A meta-analysis on the relationship between business owners' personality traits, business creation, and success. *European Journal of Work and Organizational Psychology, 16*(4), 353-385.

Reynolds, P., Bosma, N., Autio, E., Hunt, S., De Bono, N., Servais, I., Lopez-Garcia, P. and Chin, N. (2005). Global entrepreneurship monitor: data collection design and implementation 1998-2003. *Small Business Economics, 24*(3), 205-231.

Sánchez, J. C. (2011). Entrepreneurship as a legitimate field of knowledge. *Psicothema, 23*(3), 427-432.

Sardeshmukh S, S. R. (2010). An examination of skills and abilities in a process model of entrepreneurship. [Online] Available at: http://www.swinburne.edu.au (April 30th, 2018).

Schumpeter, J. (1942), *Capitalism, Socialism and Democracy*. Harper & Brothers, New York, NY.

Segal, G., Borgia, D. and Schoenfeld, J. (2005). The motivation to become an entrepreneur. *International Journal of Entrepreneurial Behaviour and Research., 11*(1), 42-57.

Shane, S. A. and Venkataraman, S. (2000). The promise of entrepreneurship as a Feld of research. *Academy of Management Review, 25*(1), 217-226.

Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review, 25*(1), 217-226.

Shane, S., Locke, E. A. and Collins, C. J. (2003). Entrepreneurial motivation. *Human Resource Management Review, 13*(2), 257-279.

Sorenson, O., Audia, P. G., (2000). The Social Structure of Entrepreneurial Activity: Geographic Concentration of Footwear Production in the United States, 1940–1989. *American Journal of Sociology, 106*(2), 424-462.

Starr, J. and Bygrave, W. (1991). The assets and liabilities of prior start-up experience: an exploratory study of multiple venture entrepreneurs*"*, in Churchhill, N., Bygrave, J., Covin, D., Sexton, D., Slevin, K., Vesper, K. and Wetzel, W. (Eds), *Frontiers of Entrepreneurship Research*, Babson College, Wellesley, MA, 213-227.

Surya, M. 2014. Psychology for Teachers: Concepts and Applications. Second printing. Bandung. Alfabeta, Co.

Thurik, A. R., Uhlaner, L. and Wennekers, S. (2002). Entrepreneurship and its conditions: a macro perspective. *International Journal of Entrepreneurship Education, 1*(1), 25-64.

Trevelyan, R. (2009). Entrepreneurial attitudes and action in new venture development. *International Journal of Entrepreneurship and Innovation, 10*(1), 21-39.

Tumasjan, A., & Braun, R. (2012). In the eye of the beholder: how regulatory focus and self-efficacy interact in influencing opportunity recognition. *Journal of Business Venturing, 27*(6), 622–636.

Tyszka, T., Cieslik, J., Domurat, A., & Macko, A. (2011). Motivation, self-efficacy, and risk attitudes among entrepreneurs during transition to a market economy. *The Journal of Socio-Economics, 40*(2), 124-131.

Van Auken, H., Fry, F. L., & Stephens, P. (2006). The influence of role models on entrepreneurial intentions. *Journal of Developmental Entrepreneurship, 11*(2), 157-167.

Van Auken, H., Stephens, P., Fry, F. L. and Silva, J. (2006). Role model influences on entrepreneurial intentions: a comparison between USA and Mexico. *International Entrepreneurship and Management Journal, 2*(3), 325-336.

Van Stel, A., Carree, M., & Thurik, R. (2005). The effect of entrepreneurial activity on national economic growth. *Small Business Economics, 24*(3), 311-321.

Vecchio, R. P. (2003). Entrepreneurship and leadership: Common trends and common threads. *Human Resource Management Review, 13*(2), 303-327.

Wadeson, N., (2006). Cognitive aspects of entrepreneurship: decision-making and attitudes to risk *in Casson, M. (Ed.), The Oxford Handbook of Entrepreneurship.* Oxford University Press, Oxford and New York, NY.

Wennberg, K., Pathak, S., & Autio, E. (2013). How culture molds the effects of self-efficacy and fear of failure on entrepreneurship. *Entrepreneurship and Regional Development, 25*(9–10), 756-780.

Wennekers, S., van Stel, A., Thurik, R. and Reynolds, P. (2005). Nascent entrepreneurship and the level of economic development. *Small Business Economics. 24*(3), 293-309.

Wong, P. a. L. L. (2005). Antecedents for entrepreneurial propensity in Singapore. *NUS Entrepreneurship Centre Working Papers (WP 2005-12),* Singapore.

Yini, H. (2015). Top 10 young Chinese entrepreneurs defining the future. *Daily China*. [Online] Available at:http://www.chinadaily.com.cn/business/2015-03/23/content_19877822_5.htm (August 17th, 2018).

Zamberi Ahmad, S., Roland Xavier, S., & Rahim Abu Bakar, A. (2014). Examining entrepreneurial intention through cognitive approach using Malaysia GEM data. *Journal of Organizational Change Management, 27*(3), 449-464.

Zapalska, A., & Zapalska, L. (2000). Small business ventures in post-communist Hungary. *Journal of East-West Business, 5*(4), 5-21.

Zhao, H., Seibert, S. E., & Lumpkin, G. T. (2010). The relationship of personality to entrepreneurial intentions and performance: A meta-analytic review. *Journal of Management, 36*(2), 381-404.