

Assessing the Impact of Social and Demographic Factors on Female Entrepreneurial Intention in Pakistan: GEM Data Evidence

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ABSTRACT

The major endeavor of this research paper is to assessing the impact of Social and Demographic Factors on Female Entrepreneurial Intention in Pakistan because women constitute 50% of the population of Pakistan. Data for research paper was acquired from the database of GEM 2012 APS Global Individual Level. The female entrepreneurial intention was a dependent variable while demographic perceptions, Socio-cultural perceptions, Individual perceptions, and Perceptions of economic opportunities were independent variables. Four logistic regressions were employed to test ten hypotheses. Model 01 reveals that the role model and self-efficacy have a significant and positive effect on EIs while, surprisingly, fear of failure was also found significant predictor of female entrepreneurship in Pakistan. The results of Role model, Self-efficacy and Perception of Economic Opportunities are positive and significant predictors of EIs among females. From Socio-Cultural Perceptions, Career Choice and News in Media have a negative and insignificant relation with EIs while, status and Respect perception has been found strong predictors of EIs among Pakistani females. Model 4 includes demographic variables of age, occupation and education. All perceptions (age, education and occupation) have negative impact on female EIs. In order to promote female EIs, the Government of Pakistan has to play an instrumental role in promoting entrepreneurial environment in country. In this connection, female-specific training programs, business support centers, promoting successful female entrepreneurs through print and electronic media are some common areas where GoP can work, and finally, making a conducive environment when females can run their business indecently.

Keywords: *Entrepreneurial intention, Fear of failure, Knowledge of other entrepreneurs, Perception of capabilities, Logistic Regression and Global Entrepreneurship Monitor (GEM).*

INTRODUCTION

“During the last few decades, the phenomenon of entrepreneurship has gained unprecedented importance on a worldwide scale due to being regarded as a substantial source of new employment, innovation and economic growth (Audretsch, 2002; Reynolds et al., 1999; Veciana, 1999)”. Entrepreneurship constitutes a widely studied phenomenon, which is primary valued for its contribution to the economic wealth of countries (Christensen, Johnson, & Rigby, 2002; Mai & Gan, 2007).

“There is no shortage of opinion on the definition of entrepreneurship, but according to the GEM definition, entrepreneurship as any attempt at new business or new venture creation, which may include, but not limited to self-employment, creation of a new business

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organization, or expansion of an existing business (GEM Report, 2014)". Further, Entrepreneurship refers to "owning and managing a business on one's own account and risk (Sternberg and Wennekers, 2005) and deals with the process of opportunity identification, designing, launching, and running a new business (Chell, 2013)". "Entrepreneurial activity plays not only an important role in the economic growth, but also in economic recovery, and innovativeness of the economy (Li et. al., 2009)". An entrepreneur and entrepreneurial intentions arise because of the diversity in contexts and motivations. In general, "it can be said that entrepreneurship means securing financial gain, making plans and establishing goals, having business acumen, making things happen, not being afraid, taking up and knowing how to deal with risks, being updated, following dreams, having a financial reserve and mainly, knowing how to manage (Sergio J Teixeira et. al.)". "Deep down these characteristics can be related to the theory of Hisrich and Peters (2004) which highlights what entrepreneurship demands dedication, effort and above all being available to take financial, psychological and social risks to obtain what is desired (Marques et. al., 2012)". Thus, "entrepreneurship is the capacity to create or identify business opportunities and explore them, with a view to create value and profit (Shane and Venkataraman, 2000)".

"First step in entrepreneurship process is the development of entrepreneurial intentions (EIs) (Krueger and Carsrud, 1993) which reflects the willingness of an individual to start a new business (Thompson, 2009) and it is defined as intention to start a business (De Janasz et. al., 2007)". "Exploring the determinants of EIs is vital to understand the entrepreneurial behaviors (Shane and Venkataraman, 2000)". Therefore, scholars have sought to understand the determinants of individuals' EIs. In fact, in the past decades, "entrepreneurship and entrepreneurial intentions have gained increasing attention from academics, governments and politicians worldwide, with there being an international consensus on the major role of entrepreneurship for economic development, job creation and innovation (Raposo et al., 2014)".

Women form almost half of the population of Pakistan and national progress is possible only if women walk besides men in every walk of life. "Entrepreneurship would allow young women to take charge of their future, allowing them to become self-actualized individuals who are job creators rather than job seekers (Al-Dajani and Marlow, 2013)". "Research suggests that females are less inclined toward entrepreneurship than their male counterparts (Díaz-García and Jiménez-Moreno, 2010; Mueller and Dato-on, 2010; Wilson et al., 2007)". This has been attributed to a number of complex reasons. "Among the reasons is the belief that entrepreneurship is a male domain, certain conditions within the economic and social environment which are in favor of males, lack of training and education and a general lack of confidence with regards to succeeding (Davidson et al., 2010; Pathak et al., 2013)".

Moreover, "global-oriented human development programs determined that factors such as higher levels of domestic responsibility, lower levels of education (particularly in developing countries like Pakistan), lack of female role models in the business sector, fewer business-oriented networks in their communities, lack of capital and assets, lower status in society and a culturally induced lack of assertiveness and confidence in their ability to succeed in business may prevent women from perceiving, as well as acting on, entrepreneurial opportunities (OECD, 2004; UNDP, 2006; GEM, 2012, 2015)". "Despite of female entrepreneurship represents an important engine of economic growth for developing countries (De Vita et al., 2014); there is a lack in the literature regarding the factors that influence a

woman to be involved in entrepreneurship in case of developing countries”. “Krueger (2007) states, that there is a paucity of research focusing on the antecedents or factors that encourage or inhibit entrepreneurial intentions among females”. “The decision to own a business may differ from country to country depending on cultural, social, political, and economic contexts (Chu et al., 2011)”. Consequently, “several authors (Bowen and Hisrich, 1986; Brush et al., 2009; Calas et al., 2009; Jennings and McDougald, 2007) propose to enlarge and change traditional frameworks by considering social dimensions in entrepreneurship”. Hence, “a great deal of research stresses that all social roles and dimensions of women’s lives are deeply intertwined (Bruni et al., 2005; Edwards and Rothbard, 2000; Greenhaus and Powell, 2006; Powell and Greenhaus, 2010)”. Therefore, in this backdrop, the basis of this paper is to unleash the social and individual factors which can impact on female entrepreneurial intentions in Pakistan. Since number of years, several steps have been taken in Pakistan to educate and convince the people about the significance of entrepreneurial intentions and its role in economic development.

Studies on entrepreneurship have mainly adopted two levels of analysis. Some studies focus on personal factors affecting entrepreneurship (Claar et al., 2012; Frohman, 1997; Lee, Florida, & Acs, 2004). Yet, a growing attention is being given to several contextual factors affecting entrepreneurship (De Castro et al., 2005; Krueger et al., 2000). “According to Sidanius and Pratto (2001), males are more independent and they rely more on their own beliefs”. On the other hand, “the females are more communal and they rely more on the opinions of their social circle especially when they are to make decision about their careers”. For this reason, EIs of males and females seem to be induced differently by the self-efficacy (self-beliefs) and social norms (communal factors). Therefore, we link entrepreneurial intentions to Social Entrepreneurial Environment, which refers to a collection of social norms, behavioral rules and beliefs adopted by a community. This research paper uses data extracted from GEM Adult Population Survey (APS) for Pakistan for the year 2012. GEM is an initiative to collect entrepreneurship data from all over the world by conducting nationwide surveys of adult population.

The paper is structured as follows. The first section is about the introduction and second section provides review of literature and then hypotheses were made from literature. Section 3 presents our sample, data collection procedure, measures and variables. Section 4 develops a binary logistic regression models to test for the formulated hypotheses. In the 5th section, hypotheses of the study were tested using SPSS (24). Section 5 concludes and sets up and future research extensions.

REVIEW OF LITERATURE

Over the last few years, authentic leadership has been the point of interest for researchers. Authentic leadership means a leader with the abilities to transform his/her leadership in accordance with his/her characteristics, who can demonstrate ability to prioritize things in accordance with the demand of situation or society, who has the ability to process information about feelings, goals, beliefs and values (Chan, Hannah, & Gardner, 2005; George, 2007; Walumbwa, Wang, Wang, Schaubroeck, & Avolio, 2010). According to a study conducted by Begley (2006); May, Hodges, Chan, & Avolio (2003) and Novicevic et al. (2006) people with higher levels of self-regulation manage their own responses in order to match the required

ethical standards. It shows that leaders with negative sense cannot become authentic leaders (Fields, 2007). Integrity is the virtue for any leader to be assumed as the authentic leader (Cooper, Scandura, & Schriesheim, 2005). Similarly, open and transparent relations with peers and subordinates are called relational transparency which includes true representation / acting of him/her-self. According to Gardner et al. (2005) leaders that demonstrate self-disclosure, openness are those who gains trust and are in close relations with subordinates. It helps to develop trust through the leader-subordinate relationship by sharing true feelings, thoughts and information (Kernis, 2003).

Apart from these attributes, Luthans & Avolio (2003) have also discussed that there are two more elements of authentic leaderships; positive psychological capacity and personal positive development. To achieve viable competitive advantages, positive psychological capacity plays an anchor part for the development of teams, communities, organizations and individuals (Avolio & Gardner, 2005; Luthans & Avolio, 2003). For the development of authentic leadership, positive modeling process and the positive emotions are key components of the process (Gardner et al., 2005). Conversely, cynicism towards devoted linkage of authentic leadership and positive psychological resources was discussed by (Shamir and Eilam, 2005; Endrissat et al., 2007; Luthans et al., 2017).

Self-awareness, relational transparency, internalized moral perspective and balanced processing are the four most important dimensions of authentic leadership (Penger and Cerne, 2014; Walumbwa et al., 2008). Self-awareness means to know about him/her-self and to be one by self-examination; it provides them with the ability to analyze and observe their feelings, thoughts, aspirations and mental state which ultimately help them to learn and accept their fundamental motives, feelings, value and identity (Avolio & Gardner, 2005). Recalling what has happened throughout the life (important events) and their associated emotions and reactions can trigger internal connection with one's true self (Ladkin & Taylor, 2010). Fact full and unbiased analysis of information prior to making any decision is called balanced processing; which prevents the leader to make bias decision. It also promotes balanced and accurate perception free from egoistic and self-judgmental (Gardner, Fischer, & Hunt, 2009). Leaders that possess ethical standards and values without being pressurized by any external elements come under the category of internalized moral perspective.

Snyder and Lopez (2002), Sheldon and King (2001) and Seligman and Csikszentmihalyi (2000) discussed the positive psychology and how it is being emerged as a tool to counter the prevailing negativity at work places. Avolio & Gardner (2005); Avolio et al. (2004); Avolio & Luthans, (2006); Luthans & Avolio (2003) provided their definition authentic leadership. Authentic leadership was defined as: "a process that draws from both positive psychological capacities and a highly developed organizational context, which results in both greater self-awareness and self-regulated positive behavior on the part of leaders and employees, fostering positive self-development. The authentic leader is confident, hopeful, optimistic, resilient, transparent, moral/ethical, future-oriented, and gives priority to developing employees to be leaders (Luthans & Avolio, 2003, p. 243)."

Avolio & Luthans (2006 & 2003) have presented the new theory of authentic leadership by converging the concept of positive organizational behavior proposed by Luthans (2002a, 2003b), ethical development by May et al. (2003), and transformational leadership by Avolio

(1999 & 2002), despite the fact that Henderson and Hoy (1983) had originally discussed a decade ago the conceptualizations of authentic leadership in the management and academic literature by George (2003). The foundation is built upon the earlier positive (Luthans et al., 2002), ethical (Bass & Steidlmeier, 1999) and transformational (Avolio, 1999, 2002; Avolio & Gibbons, 1988) methods to lead in the current era's challenging and uncertain environment.

Authentic leadership is responsible for instilling the positive attitudes and behaviors in subordinates (Rego, Sousa, Marques, & e Cunha, 2012). For instance, Penger & Cerne (2014) by using the model suggested by Walumbwa, Gardner, Avolio, Wernsing and Peterson (2008) examined the authentic leadership's from the employees' perspective. They focused on to explain that how authentic leadership influences work engagement and job satisfaction at all levels and to do so they acquired data from supervisors and their subordinates. They also examined that how perceived superiors' support (through an employee's perspective) can mediate the relationship between authentic leadership and the work engagement & job satisfaction. The perceived supervisor support was examined by Penger & Cerne (2014) and Eisenberger et al., (2002) with mediating role between authentic leadership and employee outcomes based on the theories proposed by Eisenberger, Huntington, Hutchison, & Sowa (1986). Organizational Support Theory by Settoon, Bennett, & Liden, 1996; Wayne, Shore & Liden (1997) – Social Exchange Theories, and the Gouldner (1960) – The Norm of Reciprocity. They discussed the importance of the approach as it leads to further experiential indication on how authentic leadership can result positive outcomes in job satisfaction and work engagement from the employees' perspective. More recently, (Sinclair, 2018) explores the role of supervisors' influence on counselor's satisfaction leading to counselors' turnover.

Research Objective

- RQ01:** Do certain social entrepreneurial environmental stimulate or impede female entrepreneurial activity in Pakistan?
- RQ02:** To assess which one is the strongest factor of social environment which stimulates or impedes the female entrepreneurial intentions in Pakistan?
- RQ03:** Do entrepreneurial intentions differ among different age categories in Pakistan?
- RQ04:** Do entrepreneurial intentions differ at different educational attainment levels in Pakistan?
- RQ05:** Do entrepreneurial intentions differ at different educational attainment levels in Pakistan?
- RQ06:** Do entrepreneurial intentions differ at different income levels in Pakistan?

Female Entrepreneurial Intentions and Environmental Conditions

“Entrepreneurial activities are an important strategy for sustainable economic development and have strong effects on economic growth and job creation (Gartner et al., 2010; Marshall and Samal, 2006)”. Female entrepreneurial activity is a dynamic, social and economic phenomenon in the U.S., Europe, and worldwide. “It has been shown that the role of female entrepreneurs has increased (De Vita et al., 2014)”. “Female entrepreneurs are increasingly important contributors to entrepreneurial activity and economic growth (Brush et al., 2010; Powell and Eddleston, 2013)”. According to Global Entrepreneurship Monitor (GEM)

relevant research, “female entrepreneurial activity is recognized as an essential contributor to world economy, mainly in the case of low and middle-income countries (GEM, 2007)”.

Some studies focus on personal factors affecting entrepreneurship (Claar et al., 2012; Frohman, 1997; Lee et al., 2004). Yet, a growing attention is being given to several contextual factors affecting entrepreneurship (De Castro et al., 2005; Krueger et al., 2000). “Much of the literature on entrepreneurship proposes that socio-cultural factors such as fear of failure, perceived capabilities, perceived opportunities, and role models are the most important drivers of entrepreneurial behavior (Arenius and Minniti 2005; Koellinger et al., 2005), especially in the case of female entrepreneurship (BarNir et al., 2011; Díaz-García and Jiménez-Moreno 2010; Koellinger et al., 2011; Langowitz and Minniti 2007; Minniti and Nardone 2007)”. “The beliefs, values and attitudes of a society determine the behavior of its members and can significantly affect the decision to become an entrepreneur (Shapero and Sokol, 1982)”. Therefore, the notion of entrepreneurial environment describes a combination of external factors influencing entrepreneurial activity has been adopted (Mai & Gan, 2007). More specifically, entrepreneurial activity has been linked to Social Entrepreneurial Environment, which refers to a collection of social norms, behavioral rules and beliefs adopted by a community. In this research study, three indicators of Social Entrepreneurial Environment (SEE): 1) Individual Perception, 2) Perception of Economy and 3) Socio-cultural perception have been used to measure SEE.

Individual Perceptions and Female Entrepreneurial Intentions

Individual perceptions include three factors like Role Model, Self-efficacy and Fear of Failure. “Bandura’s (1977) work has emphasized the relevance of two important perceptions in social learning: role model perception and self-efficacy”. Role model theory explains the process of learning by copying the action of other persons through observing them doing it. 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)”. This may, “in turn, positively influence entrepreneurial intentions and, ultimately, entrepreneurial activity (Krueger et al., 2000)”. Therefore, women are also expected to be influenced substantially from these factors. In this vein, “we can see that for women, as opposed to men, exposure to role models may have a greater positive impact on how they perceive their own entrepreneurial skills (Langowitz et al. 2006)”.

On the other hand, “self-efficacy is based on individuals’ perception of their own skills and/or abilities and their competence to perform particular tasks, and it reflects a person’s confidence in his/her own ability to succeed in such tasks (Bandura, 1989; Kickul et al., 2008)”. “But in an entrepreneurial context, self-efficacy can be defined as an individual’s confidence in his or her ability to succeed in entrepreneurial roles and tasks (Chen et al., 1998)”. Entrepreneurial self-efficacy influences choices, aspirations, and effort, as well as perseverance when entrepreneurs face difficulties (Boyd and Vozikis, 1994), and it plays an important role in the development of an intention to establish and manage a new venture (Kickul et al., 2008; Mueller and Dato-On, 2008). Some research has specifically focused on whether self-efficacy is a key factor in explaining why some individuals are motivated to become entrepreneurs and others are not (Wilson et al., 2007, 2009; Zhao et al., 2005). In this connection, the little

empirical evidence suggests that a higher proportion of women than men reject the choice of an entrepreneurial career and involvement in entrepreneurial activities because they perceive themselves as lacking the necessary abilities (Chen et al., 1998; Kickul et al., 2008; Wilson et al., 2007). “Following the main premises of SFT, women may perceive they are less efficient than men in their business abilities because they are less likely to be socialized in business roles and to be confronted with expectations for starting a business (Kalleberg and Leicht, 1991; Yordanova and Tarrazon, 2010)”. Along these lines, “Kickul et al., (2008) identified the importance of self-efficacy in the consideration of entrepreneurship as a professional career, and highlighted in their conclusions that women probably limit their options in career selection because of a perception that they lack abilities they consider necessary for entrepreneurial careers”.

“Propensity to Take the Risk was defined by a researcher (Isobel Kuip, 2003) denotes to acceptance of risk when engaging in an activity and hence related to the probability of success of any activity being less than 100%”. “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 and Shepherd, 2002) found that a more positive attitude towards risk and independence leads to stronger entrepreneurial intentions”.

Fear of failure is another important of individual perception. The academic literature has shown that entrepreneurs must be capable of confronting risky situations, and the presence of a certain degree of fear of failure can affect entrepreneurial aspirations and the level of entrepreneurial activity (Arano et al., 2010; Langowitz and Minniti, 2007; Minniti, 2009). Within the gender literature, some well-documented empirical studies have reflected the impact of gender on fear of failure. Most of them have concluded that women, in general, are more averse to taking risks than men (Kwong et al., 2009; Neelakantan, 2010; Wagner, 2007). In this manner, Minniti (2009) pointed out that women in all the countries in the GEM sample (with the exception of Japan) report fearing failure more often than men. Generally, other authors in different contexts have found similar results (Eckel and Grossman, 2003; Wagner, 2007; Koellinger et al., 2013). Roszkowski and Grable (2005) found that men are seen by society as more risk tolerant than they really are, and women as less tolerant than they can be in reality. Similarly, “Eckel and Grossman (2003) and Siegrist et al., (2002) demonstrated that both men and women often consider men more risk tolerant than women, and that women tend to believe that men have a lower fear of failure than men consider themselves to have”. All these arguments lead us to conclude the fact that women report fear of failure at a higher rate than men could explain a lower female propensity to start a business. By summarizing the above literature, the following-mentioned hypotheses have been developed:

Hypothesis 01: Role Model has a positive effect on female EIs in Pakistan.

Hypothesis 02: Self-efficacy has a positive effect on female EIs in Pakistan.

Hypothesis 03: Fear of failure has a negative effect on female EIs in Pakistan.

Perceptions of Opportunities and Female Entrepreneurial Intentions

“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)”. “Some studies in the entrepreneurship field have shown that the ability to recognize opportunities increases the probability of people becoming entrepreneurs (Baron and Ensley, 2006; Casson and Wadeson, 2007; Clarysse et al., 2011)”. “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, 2003)”. The recognition of an opportunity to set up a business is a cognitive process, and only certain individuals possess this ability. Such people are often strongly determined to create new ventures (Ozgen and Baron, 2007). “Langowitz and Minniti (2007) found evidence that the ability to recognize opportunities is positively related to the entrepreneurial intention of men and women, with the effect being stronger in the case of men”. “González-Álvarez and Solís-Rodríguez (2011), using the data provided by the GEM 2009 Spain Report, found a direct and positive relationship between the stocks of human and social capital held by men and women and the likelihood of recognizing entrepreneurial opportunities, concluding that men discover more opportunities than women because their higher stocks of human and social capital”. By summarizing the above literature, the following-mentioned hypotheses have been developed:

Hypothesis 04: Perception of opportunities has a positive effect on female EIs in Pakistan.

Socio-cultural Perceptions and Female Entrepreneurial Intentions

Finally, the entrepreneurship literature has also studied the influence of cultural and sociological aspects on EIs through cognitive approaches. In recent research, “there has been a growing recognition that the socio-cultural factors have a significant effect on the entrepreneurial process (Coduras et al. 2008; Gómez-Haro et al., 2011; Liñán et al., 2011; Thornton et al., 2011; Welter and Smallbone 2011; Aidis et al., 2008)”. Also, “this process can be differentiated according to the gender of the entrepreneur (BarNir 2012; BarNir et al. 2011; Díaz-García and Jiménez-Moreno 2010; Langowitz and Minniti 2007; Marlow and Patton 2005) and relevant differences have been identified between female and male entrepreneurship”. Instead of education and training, we review the presence of experienced and successful entrepreneurs as they convey a message to potential entrepreneurs that business is an attractive option. In this study we center on the media networks, such as television programs, radios, internet, among others, but in a general view, as played a persuasive function over people attitudes and behavior Bandura (1977, 1986). Thus, It has been suggested that stories in the public and media about successful new business stimulate potential entrepreneurs to create joint ventures, by sharing positive attitudes and perceptions for choosing entrepreneurship as a career. Perception of society similar to what is seen on media is developed in heavy media viewers and celebrities behavior is learned then copy through observation (Gross et al., 1986). Therefore, “it may be argued that a more positive perceived social valuation of entrepreneurship will lead to an increased entrepreneurial intention of respondents (Liñán et al., 2011)”. This research papers considers three important factors of socio-cultural perception and they are Career choice, Status and respect and News in media. With this background following hypotheses have been formulated:

Hypothesis 05: Career choice has a positive effect on female EIs in Pakistan.

Hypothesis 06: Status and respect has a positive effect on female EIs in Pakistan.

Hypothesis 07: News in media has a positive effect on female EIs in Pakistan.

Demographic Characteristics and Female Entrepreneurial Intentions

“Many studies have highlighted the role of demographic characteristics such as age, religion, gender, experience, background and education of entrepreneurs towards their entrepreneurial behaviors and firm’s performance (Welmilla et al., 2011; Ahmad, 2007; Davidsson, 1995)”. This study, therefore, identifies the impact of demographic factors (inclusive of age, Occupation and education) on female entrepreneurs in Pakistan. “Very few studies have examined these variables in shaping entrepreneurial behaviors (Welmilla et al., 2011; Davidsson, 1995; Minns & Rizov, 2005)”. “And some of the studies suggested to further research regarding these variables in different contexts (Ahmad, 2007)”.

“Age works as an important deciding factor in forming entrepreneurial intentions. Therefore, the person’s age is considered as a significant demographic characteristic in understanding his or her entrepreneurial behaviors and intentions (Reynolds, 1997)”. “Research has highlighted that most active entrepreneurship is over the age of 25 (Lévesque & Minniti, 2006; Reynolds, 1997)”. According to Tanveer et al. (2013), “age is a controversial factor”. According to them, “there is less chance to become an entrepreneur as the age increases, but age is positively related to a firm’s success”. “Some of the studies have identified that mostly in developing countries the entrepreneurs are in 25-34 age groups at an early stage and 35-44 age groups are of early stage entrepreneurs in the developed countries (Bosma et al., 2007; Karadeniz & Özçam, 2009)”. According to them, “among 18-24 age groups, the rates of early entrepreneurial activities are relatively low, but are at a peak amongst 25-34 age groups but then sharply decline above the age of 44”. Similarly, “Levesque & Minniti (2006) highlighted that at early age individuals start a business but decreases thereafter”. Also, “Reynolds et al. (2000) found that most entrepreneurial active people were at about 25-44 age groups”. With this background following hypothesis has been formulated:

Hypothesis 08: As age increases, the level of EIs decreases among females in Pakistan.

Education

“The role and effect of education, including training, on entrepreneurial activities has been a major topic of discussion in the last decade (i.e. Dabić et al., 2012; Dickson et. al., 2008; Fayolle et al., 2006; Kakouris, 2016; Mehtap, 2014b)”. “Education has been argued to indicate an individual’s knowledge and skills (Hambrick and Mason, 1984)”. “A higher level of education of entrepreneurs may surge stakeholders’ confidence in their ability (Carter, et al., 2003) and reflect positive signal about the future productivity of the business (Backes-Gellner and Werner, 2007)”. “Many studies (Evans and Leighton, 1989; Carr, 1996; Robson, 1998; Blanchflower, 2000; Moore and Mueller, 2002; Ritsilä and Tervo, 2002; Blanchflower, 2004) propose a positive impact of education on probability of the opting for self-employed, whereas studies done by Johansson, 2000; Blanchflower, 2004, more in Parker, 2009 and Le, 1999 state that the choice of entrepreneurship as an

employment option, decreases with increasing levels of education”. “There are some studies which present a contradicting outcome that a higher level of education might increase the chances for employment in the sector of paid employment, thus reducing the likelihood of self-employment (Johansson, 2000)”. According to “Sluis et. al., (2005), the first choice in the developing countries is paid employment followed by self-employment”. With the above context, below-mentioned hypothesis has been proposed:

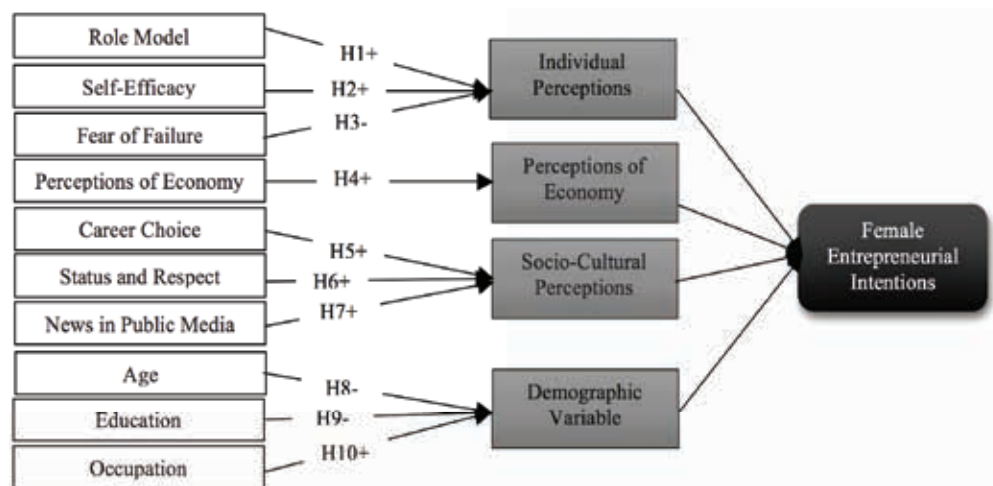
Hypothesis 09: Higher education decreases level of EIs among female Pakistan.

Occupation

In the literature, occupation is another variable that has close relation to the decision to start up a new business. “Certain studies on self-employment suggest that the unemployed are more likely to take the entrepreneurial decision than those that have a steady job (Audrestch, 2002; Evans and Leighton, 1990)”. Equally, “other empirical studies have shown that people in full-time work are less convinced by the idea of starting up their own business than the unemployed, part-time workers or students”. However, “relations between occupation and the new venture decision were found to be tenuous (Davidsson, 1995); this contradicts what was discovered by Reynolds et al. (2004), who suggest that people in full or part-time work are more likely to set up their own firms than the unemployed or those employed in other categories or work”. In our view, it has been considered that unemployment among females has a positive effect on their entrepreneurial activity, as the jobless may consider entrepreneurship as a new occupation and therefore:

Hypothesis 10: Unemployment has a positive effect on female EIs in Pakistan.

Figure-1: Research Model



METHODOLOGY

Every year, GEM Consortium conducts Adult Population Survey (18-64 years of age) in different countries to understand the perceptions and attitudes of the adult population towards entrepreneurship and therefore, data were taken for the analysis from Adult Population Survey of Pakistan 2012. The validity and reliability of this survey have been well established among the scholars' community.

The nucleus objective of this paper is to assess the impact of Social, Individual and Demographic Factors on female EIs in Pakistan. The ten theoretical hypotheses are tested with four binary logistic regressions. Each group of dependent variables will be introduced in a subsequent logit model. The first model includes only individual perceptions as independent variables. Model 2 includes perceptions on entrepreneurial opportunities. Model 3 adds socio-economic characteristics and Model 4 includes demographic perceptions.

Data collection, sample and variables

Table 01: Sample Profile

Data Profile	
Sample Size (Actual)	1999
Excluding Male Respondents	1008
Total Sample Size	987
Sample characteristics	18-64 years old
Year of Data Collection	2012
Software	SPSS V.24

Complete detail about sample is given in Table 01. All observations with missing data were eliminated to purify the data. Further, through sorting technique in SPSS, data were sorted on the basis of Gender in two halves (Male and Female) and one half (female) was considered for further statistical process. Entrepreneurial Intention was dependent variable and Individual Perceptions, Perceptions of Economy, Socio-Cultural Perceptions and Demographic Variables were independent variables in this study. The description of all variables used in this study has been shown in the table 02.

Table 02: Description of variables of study

Category of Variable		Name of Variables	GEM Coding	Explanation	0= Yes 1= No
Dependent Variable	Entrepreneurial Intentions (Female)	Entrepreneurial Intentions	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
	Perceptions of Economy	Perceptions of Economy	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 Perceptions	Career Choice	nbgoodc	“In my country, most people consider starting a new business a desirable career choice”.	0= Yes 1= No
		Status and 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 Public Media	nbmedia	“In my country, you will often see stories in the public media about successful new businesses”.	0= Yes 1= No
	Demographic Variable	Age	age	Age of a Respondent.	
		Education	education	Educational attainment of a Respondent.	
		Occupation	occupation	Type of Occupation of a Respondent.	

Proposed Regression Model

The chosen analytical technique for examining the study of relations between dependent and independent variables was logistical regression, which was carried out using the statistical program SPSS 24.0. “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.
- Logit model 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 collinearity analysis was also performed. The variance inflation factor (VIF) and condition indexes were used for this purpose.

RESULTS

Correlation

Correlation table (Table 03) shows that all variable are correlated with entrepreneurial intentions except career choice (nbgoodc), news in media (nbmedia) and age. The correlations among entrepreneurial intentions and other variables exhibit that there is a positive correlation among these variables. Surprisingly, fear of failure has been found to have positive correlation with dependent variable; however, most of research studies have reported a negative relation with dependent variable. Furthermore, age has a weak and negative correlation with all variables.

Table 04: Correlations among variables of study.

	1	2	3	4	5	6	7	8	9	10	11
futsup	1										
knowent	.136**	1									
opport	.143**	.190**	1								
suskill	.165**	.135**	.339**	1							
fearfail	.118**	.076*	0.008	-0.019	1						
nbgoodc	-0.010	0.021	.179**	.203**	0.002	1					
nbstatus	.077*	-0.011	.127**	.122**	0.022	.210**	1				
nbmedia	-0.016	0.012	.192**	.194**	.073*	.293**	.147**	1			
age	-.075*	-0.036	-0.028	-.073*	-.093**	-0.047	-0.055	-0.017	1		
Occup	.076*	0.038	0.061	0.057	0.001	0.004	0.035	-0.017	-0.038	1	
Educ	0.046	.087**	.076*	.190**	-0.041	.175**	0.059	.141**	-.217**	-.120**	1

Note: Correlation values are significant at: *0.05 and **0.01 levels (two-tailed).

Regression

Total ten hypotheses were derived from the theory to test the influence of independent variables (individual, perceptions, socio-cultural perception and perception of opportunities) on the dependent variable (entrepreneurial intention). 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-collinearity test was satisfactory, since the highest VIF was 1.212, and the highest condition index was 20.096 which was equal to 20.0 threshold suggested by Belsley et al. (1980)". Afterward, four binary logistic regressions were performed on the data. Model 01 includes individual perceptions as independent variables and model 02 contains perception of economy. Whereas, model 03 includes socio-cultural perceptions and last model contains demographic variables.

The results in Table 04 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 3) indicated significant results with the significance value of

>0.05 while model 4 was not poor fit model. The values of Cox and Snell R2 and the Nagelkerke R2 portray an indication of the amount of variation explained by the independent variables in the model. In first Model, only 6.5% and 11.3% of the variability is explained by the age, education and occupation. Consequently, when more variables were added in the model based on hypothesis, the variability explained was augmented from 11 to 19 per cent in Model 2, 11 to 19.9 per cent in model 3 and finally 12.8 to 22 per cent in Model 4. The score of the results of binary logistic regression have been mentioned in Table 05.

Table 01: Goodness-of-fit statistics.

Test	Model 1	Model 2	Model 3	Model 4
Omnibus test (sig. level)	.000	.000	.000	.000
Cox and Snell pseudo-R2	.065	.110	.115	.128
Nagelkerke pseudo-R2	0.112	.190	.199	.220
Hosmer-Lemeshow test (sig. level)	.285	.052	.265	.030
% correct	84.5	84.5	84.5	84.5

The first model added the individual variables to the equation in order to test hypotheses H1, H2, and H3: role model, self-efficacy and fear of failure. A look at model 01 reveals that the role model ($b = 0.519$, $p > 0.50$) and self-efficacy ($b = 0.204$, $p > 0.50$) have a significant and positive effect on EIs while again surprisingly fear of failure ($b = 0.206$) was also found significant predictor of female entrepreneurship in Pakistan at the 5% level. Hence, all hypotheses (H1, H2, and H3) have been accepted.

In the second model, we entered the perception of economy variable to test H4 of perception of opportunities has a positive effect on female EIs in Pakistan. A significant impact ($b = 0.209$) of perception of opportunities has been found on entrepreneurial intentions at the 5% level.

Third model was consisted of socio-cultural perceptions to test H5, H6 and H7: career choice, status and respect and news in public media. A non-significant and negative relation ($b = -0.345$) was found between career choice and EIs among females in Pakistan at the 5% level. Therefore, H5 has been found rejected. Whereas, H6 was found accepted ($b = 0.511$) as a positive and significant relation was established between status and respect and entrepreneurial intention among females in Pakistan at the 5% level. Again a significant but negative relation ($b = -0.513$) was found between news in public media and entrepreneurial intention among females in Pakistan at the 5% level. Due to this, H7 was not supported by the data and has been rejected.

Model 4 includes demographic variables of age, occupation and education. Results in the Table 05 show that as the age of a female is increasing her level of intentions to be an entrepreneur is decreasing except age category of 25-34. Probably females hold strong entrepreneurial intentions being in the said age category (25-34) but after crossing this age category, their entrepreneurial intentions start to decrease and probably prefer more stable jobs rather than choosing entrepreneurship as their career. Therefore, H8 has been proved accepted that as age increases, the level of entrepreneurial intentions decrease among females in Pakistan. Results in table 09 also show educated females do not want to become

entrepreneurship and as their level of education is being increased their level of intentions for entrepreneurship is being decreased. Hence, H09 has also been proved accepted that higher education decreases level of entrepreneurial intentions among females Pakistan. Finally, with regard to occupation, unemployment has a positive effect on female EIs in Pakistan. Surprisingly, no significant impact was found on different types of occupation and therefore, H10 has been rejected that unemployment among females does not encourage them to hold entrepreneurial intentions.

Table 05: Logistic regressions on entrepreneurial intention.

	Model 01		Model 2		Model 3		Model 4	
	B	Exp(B)	B	Exp(B)	B	Exp(B)	B	Exp(B)
Demographic Variables								
Age								
Age(1)	-.689	.502	-.556	.573	-.581	.559	-.657	.519
Age(2)	.068	1.070	.351	1.420	.402	1.495	.365	1.441
Age(3)	-1.956	.141	-1.884	.152	-1.847	.158	-1.956	.141
Age(4)	-.669	.512	-.720	.487	-.724	.485	-.813	.443
Education								
Education(1)	-.646	.524	-.316	.729	-.308	.735	-.329	.720
Education(2)	-.303	.739	-.047	.955	-.024	.976	-.043	.958
Education(3)	-.419	.658	-.302	.739	-.312	.732	-.216	.805
Education(4)	.089	1.093	.135	1.144	.130	1.139	.245	1.278
Occupation								
Occupation(1)	-1.420	.108	-1.201	-1.201	-1.160	.313	-1.335	.263
Occupation(2)	-.715	.264	-.070	-.070	-.078	.925	.037	1.037
Occupation(3)	-21.138	.999	-20.087	-20.087	-20.131	.000	-20.113	.000
Occupation(4)	-1.336	.001	-.677	-.677	-.719	.487	-.683	.505
Occupation(5)	-1.200	.051	-.374	-.374	-.441	.643	-.460	.631
Occupation(6)	-.083	.899	.669	.669	.651	1.918	.711	2.037
Individual Perceptions								
Knowent			.519	1.680	.435	1.544	.425	1.529
Suskill			1.029	2.798	.852	2.345	.987	2.683
Fearfail			.771	2.161	.749	2.115	.792	2.209
Economic perception								
Ooporty					.515	1.673	.613	1.846
Cultural Perceptions								
Nbgoode							-.345	.461
Nbstatus							.511	1.059
Nbmedia							-.513	.395
Constant	.520	1.682	--1.317	.268	-1.413	0.243	-1.440	.237

Women constitute 50% of the population of Pakistan. Therefore, this research focuses explicitly on various factors (Social and Demographic Factors) impacting on female entrepreneurial intention in Pakistan. In this section, the results have been discussed which were obtained by employing the sequential logistic regression.

Role model, self-efficacy and fear of failure have positive and significant impact of EI of females. “Bosma (2011) 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)”. Therefore, it is highly necessary to introduce various successful female entrepreneurs in Pakistan with non-entrepreneurial females through educational institutes, TV and through other media in order to educate and encourage them to hold EIs instead of looking jobs created by others. Self-efficacy has also positive impact on female EIs. Which means the majority of females perceives that they possess enough knowledge, skills and experience to commence business. “The research demonstrates that the role modeling (BarNiret al., 2011) and education (Schunk, 1995) increase the self-efficacy of the individuals”. “In Pakistan 31.24% of the total working age population (including those who are entrepreneurially active) expressed opinion that the fear of failure would prevent them from starting a business”. A good thing is that females in Pakistan, at large, do not suffer from fear of failure.

Perception of opportunities was only variable in Model 3. Results demonstrate that females in Pakistan have positive perception about availability of opportunities around them. According to 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”. In addition to this, this research also suggests that those individuals, who see enough business opportunities around them, do feel fear of failure and they perceive that they hold necessary knowledge and skill to capitalize these opportunities.

Lastly, findings about cultural perceptions also show mixed results. Career choice and news in public media are insignificant predictors of EIs among females in Pakistan, while news in media has significant and positive impact on EIs. This mean that females do not consider entrepreneurship as their career choice although status and respect variable has significant and positive impact on their EIs. Further, role media cannot be underestimated. Media has to play its due role in projecting successful female entrepreneurs as much as possible to encourage those females who negative attitude towards entrepreneurship.

Finally, the fourth model contains demographic factors and this model has produced mixed results. All categories of Age have negative impact on entrepreneurial intention among Pakistani females except category 2 (19-24 years). These results show that increasing age is decreasing entrepreneurial intentions among females. On the other hand, education and occupation also put negative impact on entrepreneurial intentions among females. Generally, “the attitude towards entrepreneurship in Pakistan is not that favorable; however, a higher percentage of males than females hold a positive attitude towards entrepreneurship (GEM, 2016)”. Further, according to GEM Pakistan Report (2012), the male TEA rate in Pakistan is more than seventeen times that of the female TEA rate. Most of the young

females after completing their education from higher education institutes prefer stable jobs over commencing entrepreneurial career in Pakistan. “Azhar et al. (2011) further documented that professional attraction of self-employment affects the entrepreneurial intentions”. Pakistan is a Muslim country and therefore, it holds diverse cultural, values, political, economic, social and educational, environments, which hamper females to start their own business outside their home.

LIMITATIONS

Like other research studies, this research study also suffers from some limitations. Firstly, as data have been borrowed from GEM consortium, the items related to individual and culture aspects are few in numbers which do not necessarily represent all aspects of these variables. Secondly, owing to categorical data (yes or no), data do not provide more options (like five-point likert scale) to respondent to express herself fully. Thirdly, the nature of data do not allow researcher to employ other statistical procedures such as structural equation modeling. Finally, sample size (991) was very limited which does not represent all females in Pakistan. These limitations are creating other areas for researchers.

IMPLICATIONS

The Government of Pakistan has to play an instrumental role in promoting entrepreneurial environment in country. As recommended by “Ul Haq et al. (2014), the Pakistani Government should create awareness of the rewards of self-employment, encourage women participation in business, it should support business startups and the government should create a conducive environment for conducting business in Pakistan”. The results of this paper forward certain recommendations to concerned quarters.

- 1 Female-specific entrepreneurial training programs should be started especially in remote and rural areas of the country. As, mainly females are engaged in agriculture in these areas, therefore, training programs should introduce those business ideas which related with agriculture.
- 2 Business support centers should established in remote areas of the country to provide the on-going business information to the women entrepreneurs residing in remote part of the country along with the services needed for women to coordinate their family and professional lives, including nurseries and transportation.
- 3 Government must strive to frame rules, regulation and lawmaking policies related with women about their mobility, property rights and the liberty to choose entrepreneurship as their career.
- 4 Government should compel print and electronic media to project successful female entrepreneurs as role models to other females to choose self-employment from time to time.
- 5 Pakistani society does not permit a single women to choose self-employment, in this connection, again government through its institutes has to take those steps through which society welcome a female if she want to be entrepreneur.

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