

Effects of risk perception on relationship between women self-efficacy and start-up businesses: Evidence from Pakistan

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Abstract

Purpose – This paper intend to explore whether women entrepreneurs in Pakistan perceive more risks than men, and to check how Self efficacy of women lead to start up decisions, and how the relationship between women Self efficacy and startup decision influenced under moderating role of risk perceptions.

Design/methodology/approach – This study surveyed 200 participants in Pakistan – both women and men who were involved in entrepreneurial ventures. ANOVA tests and regression analysis were conducted to test hypothesized framework.

Findings –Study found that risk perception of Pakistan males and females vary, we proposed women entrepreneurs perceive more risk than male entrepreneurs, while results showed that women entrepreneurs self-efficacy lead them to startup businesses but in the presence of low risk perception the effect of self-efficacy on startup decisions does not partial out.

Research limitations/implications – The study reveal a consequence of gender socialization and how it impacts the start-up decisions of Pakistan women entrepreneurs. Government policies favoring entrepreneurial projects influence on risk perception of women entrepreneurs can be studied. Overall support system effect on proposed relationship can be checked to reveal how support system from family and society changes risk perception and whether it increases women self-efficacy and make women more zealous to startup businesses.

Keywords Risk perception, Self-efficacy, Women entrepreneurs

Paper type Research paper

1. **Introduction**

Starting a new venture is one of the most important decisions for an individual. Although various factors such as technology, culture and economic development carries worth for understanding the creation of new ventures (Asc 2005,Reynolds,2011).It has been confirmed by previous studies that individual factors such as self-efficacy and motivation have impact on complex decision to start a new business(Arenius and Minniti,2005,Minniti and Nardone,2007).

The perceptions related to start up decisions are found different in men and women and number of studies confirm that fewer women run companies than men.(Allen 2008,Brush 2006,Buttner and Moore,1997;Morris 2006).Women entrepreneur's perception, including their judgment related to their own competencies, motivation and attitude towards risk may influence their startup decisions(Zhao,2005).

According to Hofstede 2001, a person's culture in which he grows has impact on individual values, though risk perception is an individual factor but the culture in which a person grows has impact on his personal characteristics (i.e. risk perception). In emerging cultures people exhibit different

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characteristics (i.e. risk perception, self-efficacy, creativity etc.)

So, in this study our aim is to identify how risk perceptions in Pakistan's women entrepreneurs contribute to understanding their start up decisions and we also intend to explore whether risk perceptions partial out the influence of women self-efficacy on their startup decisions.

The concept of women and risk is a generally neglected field in entrepreneurship research; however, disagreement exists concerning how these risks affect women's behavior. Some scholars have argued that women tend to be less risk-averse if their confidence is boosted, whereas others have indicated that gender differences in risk-taking are notable, despite the fact that women and men display similar traits (Brindley, 2005). The effect of risk perception on women self-efficacy and startup businesses is offered to test in different national settings as risk perception across different nations is different. (Cecilia Dalborg and Yvonne von Friedrichs, 2014)

Risk taking is very important in entrepreneurship context. The entrepreneurs requires making risky decisions in uncertain environments and hence, the highly risk-averse individuals are less likely to become entrepreneurs (Caliendo, Fossen and Kroticos, 2006) Theory of mixed control composed of 3 distinct sources of risk (self, others, chance). This reflects that entrepreneurship is a complex and dynamic activity involving multiple sources of risk (Urbig and Mansen, 2009). Risk perception is constructed as subjective and about the controllability of uncertainty (Petrakis, 2005). Trait-based definition of risk propensity conceptualizes the construct as a cumulative tendency

to take or avoid risks that is simultaneously persistent and can change over time as a result of experience (Sim and Laurie). An important influence on a decision maker's risk perceptions is whether a problem is formed in positive and negative terms. Risk taking is influenced jointly by the situation and by characteristics of the decision maker, situational differences need to be considered before stable individual differences can be seen (Bromiley and Curley, 1992).

Studies proved entrepreneurs have greater propensity to tolerate risk than average population, as entrepreneurs perceive risk differently (Brockhaus 1980 and Segal, 2005). The use of biases and heuristics may be potentially advantageous in entrepreneurship context, by the use of biases and heuristics entrepreneurs perceive risk differently and without the use of biases and heuristics most new ventures would never get launched with an appropriate window of opportunity (Busenitz, 1999)

Findings indicate that entrepreneurs do not approach the starting up of a new venture from sequential and methodological perspective, if they approached a startup venture in a more comprehensive manner, the venture would probably never be started due to lack of information and due to low probabilities of success opportunity (Lowell W. Busenitz, 1999). As Stevenson and Gumpert (1985) stated, "successful risk takers have the confidence to assume that the missing elements of the pattern will take shape as they expect." and entrepreneurs expect things will happen as they expect.

Entrepreneurs use biases and heuristics which likely tend them to perceive less risk in a given situation

and this risk taking capacity shows confidence of entrepreneurs (Lowell W. Busenitz, 1999). Risk propensity influences the relative silence of situational threats or opportunity and thus leads to biased risk perceptions (Brockhaus 1980). The risk taking perception of entrepreneurs of new ventures and established entrepreneurs might differ, the process of being an entrepreneur may increase the desire in a naive entrepreneur to take moderate level of risk (Robert H. Brockhaus, 2000). Perceptual variables such as fear of failure, confidence about one's own skill and alertness to opportunities are significantly correlated with new business creation across different countries and across genders, Entrepreneurs significantly rely on subjective perception rather than objective expectation of success (Pia Arenius and Maria Minniti, 2005).

Gender difference do exist with regard to risk preferences among decision makers (Johnson and Ansic 1997) women are more cautious in their decisions and less likely to involve in uncertain situations as compared to men (Levin, 1998), men exhibit greater risk tolerance than women over a variety of contexts (Leonard Karakowsky and Elangovan, 2001) There are some barriers that cause women to perceive more risk in a situation and decision making.

Financial, socio cultural and growth risk are faced by females and these risk don't allow women to achieve its entrepreneurial potential (Clare Brindley, 2005). Perceptions may be influenced by self confidence levels of individuals involved in entrepreneurial ventures. A confident individual view a decision or situation as less risky while a Person with low

confidence will perceive more barriers and anticipate the decision more risky.

Women appear less risk averse when they have confidence, though women and men exhibit same traits but their risk taking capacity differ (Clare Brindley, 2005). Female entrepreneur are less willing than male entrepreneur to become involved in situations with uncertain outcomes (Sexton and Nancy Bowman-upton, 1990). The lower participation rates of women compared to men in entrepreneurship is that women have a lower propensity for entrepreneurship (koellinger et, 2008). Men were taking more risks overall, through the magnitude of the gender difference varied as a function of domain. Women entrepreneurs tend to be more conservative than men when borrowing money, so many women unwisely liquidate assets and go through their credit cards before approaching a bank for help (Weiler and Bernasek 2001).

Different cultural and societal context affects entrepreneurial activity especially in case of women, because of differing roles ascribed to them (Welter, 2006). Women have limited access to resources such as skill development training and cultural dynamics bestow on them a subordinate role dependent on men permission for all or most decision making (Datta and Gailers, 2012).

Self-efficacy plays a crucial role for turning entrepreneurial passion into reality perceived attributes to manage a task is important as it develops passion for founding startups. Individual self-efficacy, which has been defined as a person's belief in his or her own capability to perform a task influences the development of entrepreneurial

intentions and actions. Mone, 1994 discussed two measures of self-efficacy (process and outcome). The former refer to people's confidence to successfully perform a task whereas the latter refers to people's confidence to achieve an outcome. Self-efficacy is a useful explanatory model of entrepreneurial intentions (chen,1998).

People with high self-efficacy or with strong belief regarding their capabilities will be persistent in their efforts and people with low self-efficacy tend to experience depression and stress that limits their level of functioning (Wood and Bandura,1989).Self efficacy may be instrumental in determining success of new venture creation.

Self-efficacy belief leads towards entrepreneurial intention and entrepreneurial intention ultimately converts into performance i.e. startup of new venture (Nancy Boyd and George vozikis). The self-efficacy construct is appropriate for the study of entrepreneurship because of its nature; it is task-specific construct that includes an assessment of confident beliefs an individual has about internal (personality) and external (environment) constraints and possibilities and it is close to action intentionality (Boyd &Vozikis, 1994).

Empirical evidence proves that females have low self-efficacy as compare to males. Females are less willing to start their own businesses. They exhibit less confidence, more tense and reluctant behavior towards entrepreneurship (Marina Dabia,TurgulDaim,Elvan Bayraktaroglu,2012). Miskin and Rose argue that the difference between male and female entrepreneur can be explained by "the tradition of society and the persisting notion that

women carry the primary responsibilities of the home and family. Women may have less confidence than men in their business ability and are less opt to feel that they can influence the performance of their business.

Evidence proves that if a female has more confidence in her abilities and if she gets considerable support from her families then their intention towards undertaking entrepreneurial projects boost up (Vidhula Venugopal,2014).Entrepreneurship education programs can promote entrepreneurship participation in females rather than males (Marina Dabic,Turgul Daim,2012).

Women move to entrepreneurship when they have a desire for income, autonomy or a search for professional self-fulfillment (Attila Bruni,Silvia and Barbara Poggio,2004).Cognitive styles and risk preferences impact self-efficacy and entrepreneurial intentions. Individual with low risk preference had higher level of relationship efficacy and tolerance efficacy while individuals with a high risk preference found to have more opportunity identification self-efficacy. Individuals with intuitive cognitive style will have efficacy required in early stage of entrepreneurial processes that is opportunity identification efficacy while individuals with analytical cognitive styles exhibit efficacy required at later stage of entrepreneurial processes such as relationship efficacy and tolerance self-efficacy(SauloDubard Barbosa and Jill Richard Kickul,2007).

If women have intuitive cognitive style then opportunity self-efficacy will be higher in her while if she is analytical then relationship efficacy will be

higher in he (SauloDubard Barbosa and Richard Kickul,2007). Women are more risk averse or more realistic, when it comes to entrepreneurship, so in far when risk perception increases, intention to involve in startup ventures decreases but in males when risk perception increases their entrepreneurial intention increases (Marina Z. Solesvik and Paul Westhead,2015).

2. Theory and Hypotheses

“Social role theory”(Eagley ,1987) says that every individual of the society is assigned a specific role. Each role is a set of right, duties, norms, expectations and behavior that a person has to face and fulfill. Roles are assigned on the basis of culture, gender and specific social differentiation. Social role theory states that “gender differences in social behavior originate from shared expectations or stereotypes about what is appropriate behavior for men and women”.

In society roles are assigned to society members on the basis of culture, gender and specific social differentiation. In most of the cultures females are considered responsible for her family. Women appear less risk-tolerant and perceive more risks than men because of their traditional role in taking responsibility for the family and if she perceive that she is “putting the family’s resources in danger, especially in a situation of necessity, will increase their perception of risk, apart from this when a women perceive that she is doing something against her society set roles in that case despite of having capability her indulgence’s in that specific task(i.e. startup businesses) decreases.

How an individual assess risk and how a person subjectively interpret expected loss is defined as risk

perception (Sitkin and Pablo, 1992; Sitkin and Weingart, 1995), When different individuals are exposed to same events and circumstances, they will view those situations with different eyes, which results in different risk perceptions (Sitkin and Pablo, 1992; Ritchie and Brindley, 2001). Differences in risk perception may result, in turn, in some individuals (entrepreneurs) choosing riskier paths because they believe they can master them (Busenitz, 1999). Risk-taking is a critical variable for understanding enterprising behaviour, and considered to be a cornerstone of any decision to start a business (Mills and Pawson’s, 2012). The broader study on the gender marking of entrepreneurship and gender socialization has demonstrated how gender shapes entrepreneurship (Carter ,2007, Marlow and Patton, 2005), and evidences that women and men are treated differently. Brindley ,2005 argued that women reduce their risks by selecting industries in low-growth sectors of the economy and that this “makes them potentially more vulnerable to exogenous risk sources”. This points to yet another explanation, suggesting that gender effects exist relating to how women and men entrepreneurs approach situations in which risks are involved. It has been viewed that men involve in entrepreneurial projects more as compare to women one might reason for this is risk perception, it has been evidenced and proofed by previous study men perceive less risk as compare to their counterpart ,Men are more risk takers as compare to women. So we hypothesize here:

H1: Pakistani women entrepreneurs perceive more risks than Pakistani male entrepreneurs.

A high level of perceived self-efficacy increases the chances of involvement and persistence in a given

situation, unlike those with low self-efficacy. The relationship between self-efficacy and entrepreneurial plans has been evidenced to influence start-up activity (Ajzen, 2002; Boyd and Vozikis, 1994) people response to different situations depend more on their perceived ability than actual ability. Person perceptions about himself affect more his involvement in a venture rather than his actual capability.

This can lead to self-limiting behaviors because many people believe they lack necessary elements to achieve a given task, even though they possess the required knowledge (Wood and Bandura, 1989). Self-efficacy is an important factor for entrepreneurship, (Langowitz and Minniti ,2007) .Self efficacy and startup businesses have linkage. The higher the self-efficacy regarding a capability the higher are the chances to get involve in specific task. If a women perceive she is capable of doing a task ,then her perception will direct her to involve in that task. So, we hypothesize:

H2: Women self-efficacy has positive relation with startup business.

Risk preference plays an important role in entrepreneurship. In the light of social role theory if a women perceive her actions are against society defined roles then her likelihood of pursuing that specific action decreases. If women perceive that starting a venture will put her against society and culture then she will not probably involve in new ventures. Risk perception limits start up decisions (Barbosa ,2007, Krueger and Dickson, 1994, Zhao ,2005). In the present study, we suggest that risk perceptions could be a key variable that influence the

start-up decision. This line of reasoning leads to the following postulation

H3: Risk perception will moderate the relationship between women self-efficacy and start up business such that self-efficacy relation with startup business weakens when risk perception is high rather than low.

3. Methodology

Our main target population includes entrepreneurial women of Pakistan however some of our responses are collected from Pakistan male entrepreneurs to get support for our first hypothesis. Research study contains sample size of 200 entrepreneurial women of Islamabad and Muzaffarabad (ajk). Techniques used in this research study to collect data are convenience sampling technique. To collect data for different variables under study structured questionnaire instrument is used. Data of our study is analyzed by using SPSS software, regression analysis is run to test proposed hypothesis.

4. Measures

The three variables and their respective scales that we have used and reliability is given as under

Variables and Scales

- a. **Self-efficacy:** Three items of Vellerand et al., 2003 with likert scale of five point ranging from 1.strongly disagree to 5.strongly agree is used and composite reliability of this scale is 0.78
- b. **Risk perception:** Six item of Mitchell and Tan, 1999 and likert scale of six points ranging from 1.very unlikely to 6. Very likely has been used and composite reliability of this scale is 0.71.
- c. **Startup business:** Seven items adapted from Linan and Chen, 2009 and likert scale of 7

point from 1. Strongly disagree to 7. Strongly agree has been used and composite reliability of this scale 0.89

Model:

$$Y = \alpha + \beta X_1 + \beta X_2 + \beta X_1 X_2 + e$$

α =intercept(if self-efficacy and risk perception is not there, still there exist factors that change startup businesses and that factor changes is shown by α)

Y=dependent variable (Start up business)

X1=self-efficacy (independent variable)

X2=Risk perception (moderator)

5. Data analysis

To examine whether Pakistani women entrepreneurs perceive more risks than Pakistani male entrepreneurs (H1), and whether self-efficacy lead to startup business (H2), we conducted a one-way ANOVA test. To research whether risk perceptions weaken the influence of self-efficacy on start-up decisions, we analyzed our data using regression analysis.

6. Results

The self-efficacy variable has minimum variable 1 and maximum value 5, which shows maximum respondents reported that self-efficacy is high in them, while the risk perception maximum value is 6, respondents in most of the items questions asked reported they likely perceive no risk or low risk, while startup business maximum value is seven which shows people intend to involve in startup ventures when self-efficacy and other factors such as family support, financing is available to them.

Table 1
Descriptive Statistics

	N	Min	Max	Mean
ESEF1	200	1.000	5.000	4.01500
ESEF2	200	1.00	5.00	3.8050
ESEF3	200	1.00	5.00	3.7550
RP1	200	1.00	6.00	2.7450
RP2	200	1.00	6.00	3.8500
RP3	200	1.00	6.00	2.8800
RP4	200	1.00	6.00	3.8350
RP5	200	1.00	6.00	4.4500
RP6	200	1.00	7.00	2.7500
SB1	200	1.00	7.00	4.6800
SB2	200	1.00	7.00	5.3100
SB3	200	1.00	7.00	5.0900
SB4	200	1.00	7.00	2.6800
SB5	200	1.00	7.00	5.2100
SB6	200	1.00	7.00	5.7150
SB7	200	1.00	7.00	5.4050
SB8	200	1.00	7.00	5.9200
Valid N (list wise)	200			

Self-efficacy has positive significant relation with startup business, the coefficient value of startup business is significant having 0.01 value which shows that if women self-efficacy is high it will lead to startup business, here we get support for our H2. Risk perception has negative relative with startup business, the value in correlation table is -.042 which shows the higher the risk perception the lesser is chance to get involve in startup business.

Table 2
Correlations

		S-E_M	RP_M	SB_M
S-E_M	Pearson Corr.	1	.127	.459**
	Sig. (2-tailed)		.072	.000
	N	200	200	200
RP_M	Pearson Corr.	.127	1	-.042
	Sig. (2-tailed)	.072		.553
	N	200	200	200
SB_M	Pearson Corr.	.459**	-.042	1
	Sig. (2-tailed)	.000	.553	
	N	200	200	200

** . Correlation is significant at the 0.01 level (2-tailed).

One way ANOVA shows significant value, which shows startup business dependent variable is influenced by self-efficacy (independent variable) and risk perception (moderator). Both self-efficacy and risk perception significantly influence startup businesses.

Table 3
ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Reg.	42.884	3	14.295	19.773	.000 ^b
Res.	141.692	196	.723		
Total	184.576	199			

a. Dependent Variable: startup business_M

b. Predictors: (Constant), interaction, risk perception_C, Self-efficacy_C

Regression analysis {self-efficacy(I.V)-Startup business(d.v)}

The self-efficacy is bringing 62% change in startup business, while 21% change is explained in startup business by self-efficacy and self-efficacy has significant positive relation with startup business. The higher the self-efficacy the higher women involve in startup businesses.

Table 4

Dependent variable (startup business)

	Beta	R squared-change	F-value
Independent variable (Self-efficacy)	0.620	0.210	0.000

The moderation variable risk perception does not weaken the relationship between self-efficacy and startup business as the interaction term in above table is insignificant, the probable reasons behind this might be biased behavior of Pakistani women entrepreneurs, they might felt reluctant in revealing obstacles faced by them in starting up business. One reason can be women entrepreneurs do not want to show their fears to outsiders in order to protect their image and in Pakistan very few females are involved in startup ventures and show shy behavior to outsiders, sometimes they do not analyze probable restrictions to their startup businesses or if they analyze they might hide it from outsiders due to their shyness. One might reason may be they might not acknowledge risk perception as an obstacle to starting up businesses that's why they provided fake opinions to questions asked and exhibited a behavior that shows risk perception does not influence their startup businesses.

Table 5
Unstandardized Co-efficient

	Beta	Significance
Constant	5.320	0.000
Self-efficacy-C	0.682	0.000
Risk perception-C	-0.108	0.097
Self-efficacy*Risk perception	0.146	0.086

7. Discussion

The results from this study provide several insights for further discussion. Because research argues that risk perception variables are important for understanding start-up decisions, and that such effects can be assumed to interfere with women's propensity to start businesses, a study of risk perceptions is suggested as fruitful. Our empirical data suggests that risk perception carries a worth in understanding the startup decision across different gender.

The high level of self-efficacy reported in the sample suggested that the respondents all had more than enough self-efficacy to be entrepreneurs, and they considered themselves to have the abilities to cope with the tasks that entrepreneurship might bring. Self-efficacy may be linked to entrepreneurial intent but when risk perception is high then self-efficacy does not lead to startup businesses though this is not proved by our study due to biased behavior of women entrepreneurs.

The present study is not without limitations .A larger sample would provide more specific insights into how risk perceptions influence women and men. Different risk perception items should be taken to tape true risk perception. In different national settings the proposed relationship can be tested to verify results. Other moderators such as family support, government support on self-efficacy and startup decisions can be tested. Probable mechanisms between self-efficacy and startup decisions can be studied in future researches.

The main purpose of this study was to examine the ways in which risk perceptions impact women's decisions to start businesses. Three hypotheses are tested to assess the importance of risk among Pakistan women entrepreneurs. We found that Pakistani women entrepreneurs perceive less risks than male entrepreneurs, and this low risk perception or no risk perception might be due to culture of Pakistan or due to shyness of Pakistani female entrepreneurs. In Pakistani culture female do not feel comfortable in expressing their view points to outsiders and may be women do not want to show that they perceive more risk so people would consider them confident and capable. Risks perceptions influence start-up decisions, and when there is high risk perception the women self-efficacy does not lead to start up decisions. Evidently, risk perceptions cannot be ignored in understanding how Pakistani women decide to opt entrepreneurship.

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