

Collective Impact of Entrepreneurial Self-Efficacy and Risk Propensity on Entrepreneurial Intentions; Mediating Role of Perceived Social Support

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Abstract

In order to extend the discussion of entrepreneurship, this empirical study has indicated the crucial impact of entrepreneurial self-efficacy on entrepreneurial intentions of a person, while this relation is being moderated by ability based approach of emotional intelligence. Our findings have indicated the extent to which the students of business studies remain successful in exploring market opportunities and will turn into successful entrepreneurs under the umbrella of emotional Intelligence. Moreover it has also elucidated the influence of perceived social support in persuading self-employment. The sample of 260 business Students was taken from Pakistan. Research findings helped students witnessing those depicting higher level of emotional intelligence are more willing to take and tolerate risks and are eager to start up their own businesses. Results also revealed that risk propensity has moderate effects on entrepreneurial intentions. Implications are also being discussed for clear understanding of vitality of discussion.

Keywords: Emotional Intelligence; Perceived Social Support; Entrepreneurial Self-Efficacy; Entrepreneurial Intentions; Risk Propensity.

1. Introduction

For years, doing job-hunting could be tiresome even though you may find one which does not match your caliber or that is not possessing enough scope. Holmgren & From (1) Entrepreneurship makes contribution towards development of economy of a nation, this contribution is in the form of innovation, fostering completion as well creating employment opportunities. Multiple factors can contribute to fostering such activities like witnessing tactics to operate business successfully at home, reading success stories, taking part in relevant discussions etc. Altinay (2) Family background along with business education can better equip a person with necessary skills and vision to start new business by boosting his entrepreneurial intentions. Students of business might find ease in initiating own business as they are aware of business challenges and can deal with exigencies. Apart from seeking business knowledge we cannot refrain the salient role social support, which if available can be a source of encouragement and self-contentment.

Becoming a successful entrepreneur can attenuate the perception that it's safer to go for a job rather than to pursue entrepreneurial pursuits. Kyro (3) Entrepreneurship is a process that might take long time. So, entrepreneurial intentions might lead you to the first and foremost step for developing long term process of business activity (4) While self-efficacy, comprehensive knowledge about contexts can act like precedents to develop attitude to start up a new venture.

Petrides, Pita, & Kokkinaki (5), in the last decade, the phenomena of emotional Intelligence has grabbed the intentions of psychological literature and beyond. "An individual's ability to monitor one's own and other's feelings and emotions, to discriminate

among them, and to use this information to guide's one's thinking and actions" (6). There are two approaches of Emotional Intelligence, trait EI and ability EI. (7). Four different types of self-efficacy drawn are Opportunity identification self-efficacy, Relationship self-efficacy, Managerial self-efficacy & Tolerance self-efficacy.

Shapero & Sokol (8), "The entrepreneurial venture formation process as a life path change in which situational factors such as negative displacement (e.g., job termination), along with a positive pull from a partner, mentor, or customer, combined with a perception that entrepreneurship is both desirable and feasible, leads to the initiation of a new venture".

The primary objectives are two-fold. Firstly to fill that void in research that occurs due to the lack of discussion regarding perceived social support and to evaluate its impact on the self-employment context, comprising pivotal role and can bring resounding success to potential Entrepreneurs. Secondly, to evaluate the potent way of Emotional Intelligence supporting an individual with massive and exceptional talent to deal with exigencies, substantial risks while possessing incredible Entrepreneurial Self-efficacy.

2. Literature Review

There are plethora of studies that built mutual consensus over the relationship of entrepreneurship and education (9). McMullen & Shepherd (10) Entrepreneurial actions can originate in thoughts and beliefs that are given what one perceives and understands about a particular situation introducing a new product or service is a "worthwhile" and "feasible" endeavor. "Research has contributed to the emergence of a theory of entrepreneurial career specifying various personal characteristics, cognitions, emotions, and

social conditions that lead an individual to choose a career as a founder versus an employee” (11, 12).

Krueger & Brazeal (13) Self-efficacy is a major factor behind performance of any individual and is known to produce perceptions of competence and control, these two (competence & control) influence individual's behaviors like risk seeking behavior, opportunity recognition as well as persistence. Confidence is a major element which can enhance and boost up morale of a person who is critically evaluating market demand and addressing the unique need of public. The self-efficacy perspective is highly appropriate to the study of the entrepreneur.

“First, as a task specific construct rather than a global disposition, self-efficacy theory helps address the problem of lack of specificity in previous entrepreneurial personality research” (14). Further as a belief of one's vocational capabilities the entrepreneurial self-efficacy is beyond the task self-efficacy. This helps the entrepreneurs to derive and modify their self-efficacy in their continuous interaction with their environment. Lastly, self-efficacy is closest to action and action intentionality (15, 16), which can be used to observe entrepreneurs' behavior choice, persistence, and effectiveness keenly. “Individuals high in self-efficacy tend to set challenging goals; persist toward the achievement of their goals, even under difficult and stressful circumstances; and recover quickly from failure, even in the face of adverse conditions” (17).

Understanding the nature of the antecedent factors that influence entrepreneurial intentions is of crucial importance to the study of entrepreneurial behavior (18). “Intentionality is a state of mind directing a person's attention (and therefore experience and action) towards a specific object (goal) or a path in order to achieve something (means)” (15). Here it is clear that intentionality is based on the cognitive psychology which predicts the human behavior. Ajzen (19) Entrepreneurial intentions of an individual have the ability to predict high degree of accuracy from the attitude towards the behavior, subjective norms and perceived behavioral control. Krueger et al. (20), it seems evident that much of what we consider entrepreneurial activity is intentionally planned behavior. Hmieleski & Corbett (21) Proclivity for improvisation and innovation is strongly linked with the intention to be entrepreneurial. So we propose

H1: Emotional Intelligence will moderate the relationship between Entrepreneurial self-efficacy and Perceived social support, such that the relationship is stronger when Emotional intelligence is higher.

(7, 20, 22-26), entrepreneurial self-efficacy has also been studied as a predictor of entrepreneurial intention and or actions by many researchers and found positive relationships. “The self-efficacy construct is derived from social cognitive theory, which states that the human functioning is a result of the interplay between personal, behavioral and environmental influences” (27). Singh (28), high emotional intelligence facilitates in making the right decision & problem solving. Thus we propose

H2: Emotional Intelligence moderates the relationship between Risk Propensity and Perceived social support, such that the relationship is stronger when Emotional intelligence is higher.

Baron & Shane (29), modern scholars continue to view the proclivity to take risk as an important trait associated with entrepreneurs. Begley & Boyd (30) Risk-taking propensity as a “hallmark of the entrepreneurial personality”. Jackson & Inventory (31), Risk propensity as a personality trait involving the willingness to pursue decisions or courses of action involving uncertainty regarding success or failure outcomes. Krueger & Dickson (32), An increase in self-efficacy leads to an increase in risk taking, by affecting the perception of opportunity and threats. Social support is a multifaceted concept. “It can include the provision of material assistance, as in taking actions to further one's goals; cognitive aspects, as in helping one to think through a problem; and an emotional or affective element, as in demonstrating a liking or acceptance of another” (33). Thus we propose

H3: Perceived social support mediates the relationship between Entrepreneurial Self-efficacy and Entrepreneurial intentions, such

that Entrepreneurial Self-efficacy is positively and indirectly related to entrepreneurial intention through Perceived social support.

Salovey & Mayer (6) Some literature argued that emotional abilities can contribute to acquire social skills and in this way can enhance the quality of relationships and the availability of social support, which in turn lead to a richer sense of subjective well-being. “People with high trait EI are likely to perceive greater social support” (34). Thus we propose

H4: Perceived social support mediates the relationship between Risk Propensity and Entrepreneurial intentions, such that Risk Propensity is positively and indirectly related to entrepreneurial intention through Perceived social support.

Entrepreneur's as well as managers entail risk-taking but entrepreneurs generally believed to initiate more risks as compared with the managers. The reason behind is this that entrepreneurs face a less structured and more uncertain set of possibilities (35). Ireland, Hitt, & Sirmon (36), it is an important part of entrepreneurial thinking considered risk-taking propensity as the conceptual tool of an individual's attitude to opportunity. Sherbourne & Stewart (37), most common features of social support contains (a) emotional support, this covers caring and empathy; (b) tangible support, this covers assistance in completing tasks; (c) affectionate support, this covers expression of positive emotions; and (d) social interaction, which involves a sense of social companionship or integration. “Sources of emotional/informational support express positive and empathetic affect, encourage expression of feelings and emotion, and offer advice, guidance, and feedback, which promote a sense of safety” (37, 38). So we propose

H5: Entrepreneurial Self-efficacy is positively related to Entrepreneurial intentions through the concurrent mediation effects Perceived social support, such as this relation is being strengthened up when Emotional Intelligence is higher.

Ajzen (39) self-efficacy and proposed that it is a person's judgment regarding his/her ability to execute a targeted behavior. “In the field of entrepreneurship, self-efficacy has theoretically proposed to lead to entrepreneurial intentions and behavior (16), and has been empirically found to relate positively to entrepreneurial intentions” (7). Rhoades, Eisenberger, & Armeli (40) Psychological research that has examined perceived social support suggests that this type of support is associated with positive outcomes such as higher levels of job satisfaction, performance, and commitment. Thus we propose

H6: Risk Propensity is positively related to Entrepreneurial Intentions through the concurrent mediation effects of Perceived social support, such that this relationship is being strengthened up when Emotional Intelligence is higher.

Gürol & Atsan (41) Entrepreneurship is historically associated with risk taking. Entrepreneurship can be defined as “the 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” (42). Entrepreneurs have no other option except taking risks, because they are putting their time, effort, money each and everything at stake, without knowing their business will flourish or run down. Wee, Lim, & Lee (43) New venture creation is itself risky in nature so potential entrepreneurs should possess high tolerance towards ambiguity and uncertainty.

“People vary in how they view the risk of expending resources before knowing the distribution of outcomes” (44). Stewart Jr & Roth (45), entrepreneurs to be significantly higher in risk propensity than managers.³⁷ Inventors and entrepreneurs take more risks as compared to others because they face a less structured and more uncertain set of possibilities.

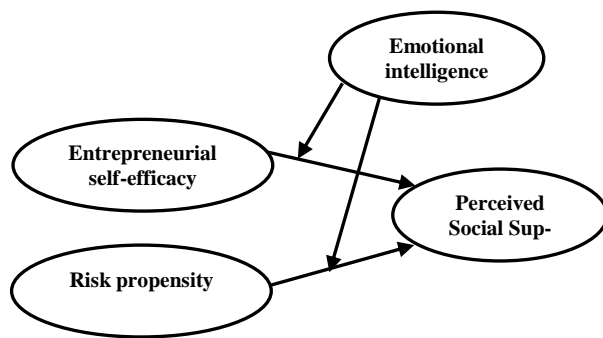


Fig.1: Conceptual Framework

3. Method

3.1. Participants and Procedure

Data was collected from university students who have acquired Master's degree in business studies and who had been exposed to the subject of Entrepreneurship. The participants were given thorough information about the purpose of the study prior to taking their responses. 260 Respondents (male=179, female=81) took about 30 minutes to fill the questionnaire in classroom setting. Response rate was 90.38 percent as 25 questionnaires were returned left blank or not filled properly. The respondents were requested to give truthful responses as it was highly commendable as they got guaranteed about the confidentiality of their responses. The ages ranged from 20 -25.

4. Measures:

4.1. Entrepreneurial Self-Efficacy

We measured Self-efficacy in entrepreneurial specific domain by instrument. The scale included 23 items covering six theoretical dimensions of as entrepreneurs/managers' ability to develop new product and market opportunities, build an innovative environment, initiate investor relationships, define core purpose, cope with unexpected challenges, and develop critical human resource. Statements such as "I have the ability to find market opportunities for new products and services", "I have the ability to identify new areas for potential growth" got tested. We used 5-point Likert scale to facilitate respondents to rate their perception. The scale was reliable ($\alpha=.75$).

4.2. Risk Propensity

"Following the assertion that risk is predisposition rather than simply situational" (46), we adopted the risk taking aspects of the multi-faceted Jackson Personality Inventory (JPI-R)" (31, 47). Volunteers rated the seven items on a 5-point Likert scale. Consistency gauged by Chronbach alpha ($\alpha=.74$). Scale incorporated questions, i.e., "Taking risks does not bother me if the gains involved are high" and "I probably would not take the chance of borrowing money for a business deal even if it might be profitable".

4.3. Emotional Intelligence

We used one of the most popular and most frequently used questionnaire to determine EI investigating all assumed aspects of EI, is the Assessing Emotional Scale (AES) (48). Scale comprising 33 items comprising statements like as, "I know when to speak about my personal problems to others" and "It is difficult for me to understand why people feel the way they do". The internal consistency through Chronbach alpha was ($\alpha=.83$). The respondents rated their perceptions on a 5-point Likert scale.

4.4. Perceived Social Support:

"To assess perceived social support in participants, we administered the Multi-Dimensional Scale of Perceived Social Support" (49). Scale consisting 12 items and respondents were asked to answer on a 5-point Likert scale. Chronbach alpha was ($\alpha=.58$). Scale comprising statements like "There is a special person who is around when I am in need" and "I can talk about my problems with my friends".

4.5. Entrepreneurial Intentions

The construct of Entrepreneurial Intention means eagerness to get self-employed. Krueger & Carsrud (50), five items adopted, utilizing a five point Likert scale. Chronbach was ($\alpha=.53$). As our target population was newly graduated so the items can both figure out would-be-entrepreneurs, as questions are like "I am very interested in setting up my own business", "I intend to start my own business within the next ten years" depicting their short and long term intentions.

5. Results

Table 1 shows age and qualification whereas table 2 shows descriptive statistics and correlation among all the variables. We employed HLM (Hierarchical Linear Model) to check the credibility of hypothesized model.

Table 1: Age and Qualification

		Frequency	Percent
Gender	Male	179	68.8
	Female	81	31.2
Qualification	Masters	189	72.7
	MPhil	71	27.3

Table 2: Descriptive statistics and correlations

		Mean	SD	1	2	3	4	5
1	ESE	4.05	0.21	(.750)				
2	EI	3.76	0.25	.504**	(.835)			
3	PSS	3.79	0.24	.745**	.410**	(.583)		
4	EPINT	4.14	0.32	.719**	.345**	.774**	(.535)	
5	RISK	4.17	0.35	.611**	.389**	.599**	.505**	(.744)

n=260. *p<.05, **p<.01

In hypothesis 1 and 2 we predict that emotional intelligence moderates the relationship between entrepreneurial self-efficacy and perceived social support; and that emotional intelligence also moderates the relationship between risk and perceived social support. As reported in table 2, interactions were significant in predicting perceived social support by entrepreneurial self-efficacy ($b = .974, p < .01$) and by risk propensity ($b = .072, p < .01$). The patterns of these two interactions are presented in figure 2. Entrepreneurial self-efficacy had a stronger positive relationship with perceived social support when emotional intelligence was high. The patterns of these interactions also indicated that in the condition in which high entrepreneurial self-efficacy was combined with high emotional intelligence, participants scored higher on perceived social support as compared to participants in the other three conditions as shown in figure 3.

Thus, individuals reporting higher levels of risk propensity combined with higher levels of emotional intelligence showed higher levels of entrepreneurial intentions. These results support hypothesis 3. Similarly, risk propensity had a stronger positive relationship with perceived social support when emotional intelligence was high rather than when it was low. The same pattern is ob-

served that high risk propensity combined with high emotional intelligence fetches high level of perceived social support than other three conditions. Thus, individuals reporting higher levels of entrepreneurial self-efficacy and higher levels of emotional intelligence showed higher levels of entrepreneurial intentions. These results support hypothesis 4.

Hypotheses 3 and 4 predicted that emotional intelligence moderates the relationship between entrepreneurial self-efficacy and entrepreneurial intentions (hypothesis 5) and it also moderates the relationship between risk propensity and entrepreneurial intentions (hypothesis 6). As reported in table 3, the interactive effect of entrepreneurial self-efficacy and emotional intelligence was significant in predicting entrepreneurial intentions ($b = .117, p < .01$). On the other hand interactive effect of risk propensity and emotional intelligence was not significant in predicting entrepreneurial intentions ($b = .084, p < .01$). These interactions are plotted as shown in figure 5. There was stronger positive relationship between entrepreneurial self-efficacy and entrepreneurial intentions when emotional intelligence was high compared to when it was low.

As expected, individuals showed significantly higher levels of entrepreneurial intentions when both entrepreneurial self-efficacy and emotional intelligence were high. Figure 4 presents the interaction between risk propensity and emotional intelligence and shows that individuals exhibited higher levels of entrepreneurial intentions when both risk propensity and emotional intelligence were high. Individuals reporting higher levels of risk propensity and higher levels of emotional intelligence exhibited higher levels of entrepreneurial intentions.

Table 3: HLM (independent variable: ESE)

		Mediator		Dependent Variable	
		Perceived Social Support		Entrepreneurial Intentions	
		M1	M2	M1	M2
Step 1					
	Entrepreneurial Self-efficacy	.860*	.733**	1.135*	.504**
	Emotional Intelligence	.406*	1.041*	.469**	.042**
Step 2					
	ESE X EI		.974**		.117**
	Change in R2		.392		.325

Table 4: HLM (Independent variable: Risk)

	Variables	Mediator		Dependent Variable	
		Perceived Social Support		Entrepreneurial Intentions	
		M1	M2	M1	M2
Step 1					
	Risk	.406*	1.006*	.469**	.061**
	Emotional Intelligence	.383*	1.041*	.441**	.042**
Step 2					
	Risk X EI		.072**		.084**
	Change in R2		.367		.263

Table 5

Dependent Variable	Mediator	Independent Variable	Direct Effects	Indirect Effects	Total Effects
Entrepreneurial Intentions	Perceived Social Support	Entrepreneurial Self-Efficacy	0.504**	0.630*	1.135**
Entrepreneurial Intentions	Perceived Social Support	Risk Propensity	0.061	0.408*	0.469**

Indirect effects were estimated to establish the mediation effect of perceived social support. The results are reported in table 5.

The results showed that indirect effect of entrepreneurial self-efficacy on entrepreneurial intentions mediated through perceived social support was significant ($b = 0.6303, p < .01$). Similarly, the indirect effect of risk propensity on entrepreneurial intentions was also significant ($b = 0.408, p < .01$).

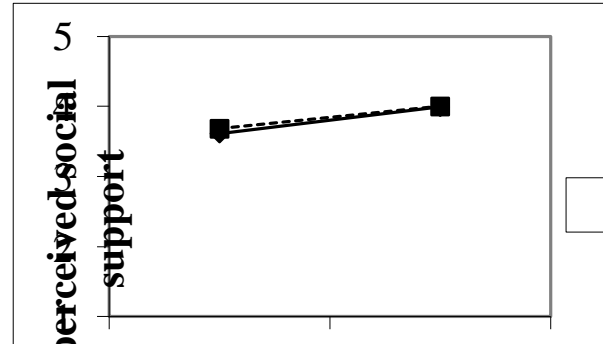


Fig. 2: Interaction of Emotional Intelligence and Entrepreneurial Self-efficacy in predicting Perceived social support

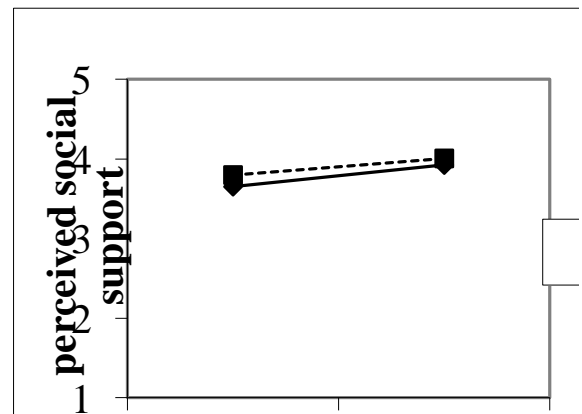


Fig. 3: Interaction of Emotional Intelligence and Risk propensity in predicting Perceived social support

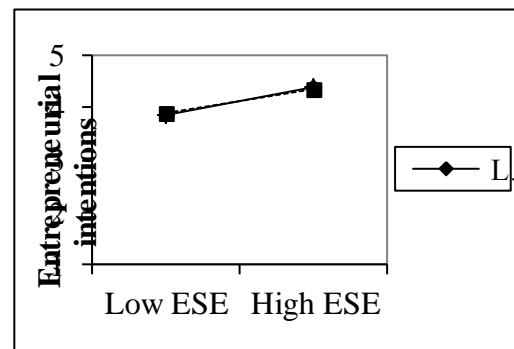


Fig. 4: Interaction of Emotional Intelligence and Entrepreneurial Self-efficacy in predicting Entrepreneurial intentions

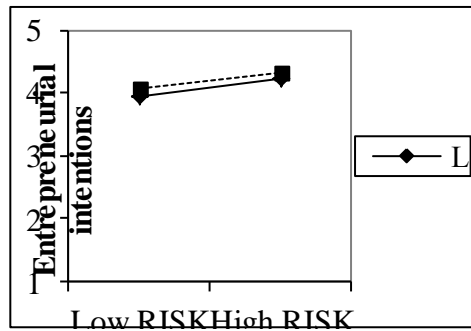


Fig. 5: Interaction of Emotional Intelligence and Risk propensity in predicting Entrepreneurial intentions

6. Discussion

Using data collected from 260 students of universities, all hypotheses are supported including perceived social support. In keeping with expectations risk propensity is moderately related to Entrepreneurial intentions. "Although data support the existence of some negative effects of risk aversion on entrepreneurial choices, the direction of causality is unclear" (51). It is supported by literature too. But risk taking attitude is positively related to Entrepreneurial self-efficacy.

Zhao, Seibert, & Hills (52) Entrepreneurial experience and risk propensity is positively related to entrepreneurial self-efficacy. Muofhe & Du Toit (53), entrepreneurship education is significantly related to entrepreneurial self-efficacy and entrepreneurial intention. Therefore, to foster entrepreneurship, an understanding of the drives and attitudes of young people is of paramount importance, as they will (or will not) become the next generation of entrepreneurs (54). As self-efficacy has significant relationship with intentions proved through our results. N. F. Krueger Jr & Brazeal (13), self-efficacy embedded in entrepreneurial potential acts as a key determinant of entrepreneurship. Results have proved a link between Emotional intelligence and perceived social support. There are several practical and theoretical implications of this research.

6.1. Theoretical Implications

As we have examined the credibility of relationship of our hypothesized model where the link between the constructs Entrepreneurial self-efficacy, Risk propensity and Entrepreneurial intentions are of focal importance. Suggested moderator Emotional Intelligence has explained how this relation will be strengthened up. Although there is not much written on risk propensity in relation to entrepreneurial intentions, so this can add up to the existing literature. Entrepreneurial self-efficacy has been discussed multiple times but not in context of supporting perceived social support, as this is a novel interference. The findings have contributed to help not only in academic way but also for potential Entrepreneurs to dig out their intentions and capabilities to get self-employed.

6.2. Practical Implications

N. F. Krueger Jr & Brazeal (13)¹⁴ Supportive family members, siblings, friends can facilitate the perception of feasibility for entrepreneurship. Therefore perceived social support can invigorates Entrepreneur possessing Entrepreneurial Self-efficacy with greater zeal to deal with the failures acting as stumbling blocks. Through the introduction of the concept of Emotional Intelligence, they got clear picture that up to what extent they are capable of recognizing, managing and exploiting their own emotions and of the people whom they are associated with. The role of emotional stability along with consistent perceived social support that can push the students who have sound business knowledge, rather than earning a fixed amount they can raise their material gains. The result has

consequently suggested that not alone the life standards could be enhanced as new venture succeeded but also risk-taking and adventuresome behavior in accordance with Entrepreneurial Self-efficacy can act as a support while facing hard times. People and particularly women who are reluctant to start any business activity can be educated in order to remove their hesitation. The purpose of Entrepreneurship instructors is not only to create awareness but also make students capable of dealing with obstacles, setbacks; prepare themselves to view opportunities and to exploit them. The course objectives should incorporate techniques through which the potential Entrepreneurs can dig out hidden capabilities.

7. Limitations and Directions for the Future Research

This study may spur future research in many ways. The first issue is generalizability, because the results are not generalizable to the wider and more educated populations like America, United Kingdom etc. Our sample was business students who are more likely to represent people who are interested in setting up their own business as compared to the people who have not acquired business education.

Secondly, study was based on cross-sectional design and did not allow us to establish causality relations. With reference to the particular context of Pakistan, it has also been argued that availability as well as nature of social support experienced by the gender may differ, with girls more generally receiving emotional support from their relevant gender. "Further, girls appear more likely to turn to others for support" (55). Perceived social support is not similar across cultures so, it may vary (56).

Kourilsky & Walstad (57) Women have more obstacles and setbacks to go through. Greve & Salaff (58) These barriers include access to credit and financial capital, technology and intellectual property, new customers, perceptions of legitimacy, and critical market or business information. Early research on risk-taking indicated that women are more risk averse than men in organizational and business situations (59).

Therefore, the construct of risk propensity is more needed to get addressed in gender specific context. It is evident from recent research that women tend to repel risk than men, while making financial decisions (60). Still other research reports show no difference between risk-taking propensities of men and women in business and entrepreneurial situations (61) With respect to female entrepreneurs various tactics can be employed to establish networks. For example, it is more convenient for women to collect information, acquire assistance and moral support as compared to men (62).

8. Conclusion

With respect to entrepreneurship the concept of self-efficacy and emotional intelligence has grabbed the attention of many in the last decades. The goal of this paper is to induce a new dimension of perceived social support. Drawing upon Bandura's theory of Entrepreneurial Self-Efficacy and Ajzen's theory of planned behavior, this paper shed light on the collective influence of Emotional Intelligence and Perceived Social Support, while moderate risk taking attitude acted as considerable factor when people plunge into any business activity. Moreover, under the umbrella of the Entrepreneur's self-efficacy renders his novel idea into indubitable accomplishment. Thus this research can provide foundation for better understanding of Entrepreneurial intentions.

References

- [1] Holmgren C, From J. Taylorism of the mind: Entrepreneurship education from a perspective of educational research. *European Educational Research Journal*. 2005;4(4):382-90.
- [2] Altinay L. The relationship between an entrepreneur's culture and the entrepreneurial behaviour of the firm. *Journal of Small Business and Enterprise Development*. 2008;15(1):111-29.
- [3] Kyro P. A theoretical framework for teaching and learning entrepreneurship. *International journal of business and globalisation*. 2008;2(1):39-55.
- [4] Lee SH, Wong PK. An exploratory study of technopreneurial intentions: A career anchor perspective. *Journal of business venturing*. 2004;19(1):7-28.
- [5] Petrides KV, Pita R, Kokkinaki F. The location of trait emotional intelligence in personality factor space. *British journal of psychology*. 2007;98(2):273-89.
- [6] Salovey P, Mayer JD. Emotional intelligence. *Imagination, cognition and personality*. 1990;9(3):185-211.
- [7] Chen CC, Greene PG, Crick A. Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of business venturing*. 1998;13(4):295-316.
- [8] Shapero A, Sokol L. The social dimensions of entrepreneurship en Kent, CA; Sexton, DL y Vespert, KH (eds.), *Encyclopedia of Entrepreneurship*. Englewood Cliffs, Prentice Hall, NJ; 1982.
- [9] Galloway L, Brown W. Entrepreneurship education at university: a driver in the creation of high growth firms? *Education+ Training*. 2002;44(8/9):398-405.
- [10] McMullen JS, Shepherd DA. Entrepreneurial action and the role of uncertainty in the theory of the entrepreneur. *Academy of Management review*. 2006;31(1):132-52.
- [11] Schjoedt L, Shaver KG. Deciding on an entrepreneurial career: A test of the pull and push hypotheses using the panel study of entrepreneurial dynamics data 1. *Entrepreneurship theory and practice*. 2007;31(5):733-52.
- [12] Sinclair RF, editor *The first step toward a theory of the entrepreneurial career*. United States Association for Small Business and Entrepreneurship Conference Proceedings; 2008: Citeseer.
- [13] Krueger Jr NF, Brazeal DV. Entrepreneurial potential and potential entrepreneurs. *Entrepreneurship theory and practice*. 1994;18(3):91-104.
- [14] Brockhaus R, Horwitz P. The psychology of the entrepreneur" in Sexton, D. and RW Smilor (Eds), *The art and science of entrepreneurship*. Cambridge, Mass: Ballinger. 1986.
- [15] Bird B. Implementing entrepreneurial ideas: The case for intention. *Academy of management Review*. 1988;13(3):442-53.
- [16] Boyd NG, Vozikis GS. The influence of self-efficacy on the development of entrepreneurial intentions and actions. *Entrepreneurship theory and practice*. 1994;18(4):63-77.
- [17] Bandura A. *Self-efficacy: The exercise of control* (WH Free). New York. 1997.
- [18] Shane S, Venkataraman S. The promise of entrepreneurship as a field of research. *Academy of management review*. 2000;25(1):217-26.
- [19] Ajzen I. *Attitudes, personality, and behavior*: McGraw-Hill Education (UK); 2005.
- [20] Krueger Jr NF, Reilly MD, Carsrud AL. Competing models of entrepreneurial intentions. *Journal of business venturing*. 2000;15(5-6):411-32.
- [21] Hmieleski KM, Corbett AC. Proclivity for improvisation as a predictor of entrepreneurial intentions. *Journal of Small Business Management*. 2006;44(1):45-63.
- [22] Fitzsimmons J, Douglas E. The impact of overconfidence on entrepreneurial intentions, proceedings AGSE Entrepreneurship Exchange, Auckland, NZ Queensland University of Technology. 2005.
- [23] Wood R, Bandura A. Social cognitive theory of organizational management. *Academy of management Review*. 1989;14(3):361-84.
- [24] Chen Y, He Y. The impact of strong ties on entrepreneurial intention: An empirical study based on the mediating role of self-efficacy. *Journal of Chinese Entrepreneurship*. 2011;3(2):147-58.
- [25] Wilson F, Kickul J, Marlino D. Gender, Entrepreneurial Self-Efficacy, and Entrepreneurial Career Intentions: Implications for Entrepreneurship Education 1. *Entrepreneurship theory and practice*. 2007;31(3):387-406.
- [26] Kolvereid L, Isaksen E. New business start-up and subsequent entry into self-employment. *Journal of Business Venturing*. 2006;21(6):866-85.
- [27] Bandura A. *Social foundations of thought and action*. Englewood Cliffs, NJ. 1986;1986.
- [28] Singh D. PC Bansal Emotional Intelligence at Work: A Professional Guide. *INDIAN JOURNAL OF INDUSTRIAL RELATIONS*. 2001;37(2):294-300.
- [29] Baron R, Shane S. *Entrepreneurship: A process perspective*: Nelson Education; 2007.
- [30] Begley TM, Boyd DP. Psychological characteristics associated with performance in entrepreneurial firms and smaller businesses. *Journal of business venturing*. 1987;2(1):79-93.
- [31] Jackson D, Inventory JP. *Revised manual*. Sigma Assessment Systems, Inc: Port Huron, MI, USA. 1994.
- [32] Krueger Jr N, Dickson PR. How believing in ourselves increases risk taking: Perceived self-efficacy and opportunity recognition. *Decision Sciences*. 1994;25(3):385-400.
- [33] Kahn RL. Conboys over the life course: Attachment roles and social support. *Life-span development and behavior*. 1980;3:253-86.
- [34] Gallagher EN, Vella-Brodrick DA. Social support and emotional intelligence as predictors of subjective well-being. *Personality and individual differences*. 2008;44(7):1551-61.
- [35] Bearse PJ. A study of entrepreneurship by region and SMSA size. *Frontiers of entrepreneurship research*. 1982;2(1):78-112.
- [36] Ireland RD, Hitt MA, Sirmon DG. A model of strategic entrepreneurship: The construct and its dimensions. *Journal of management*. 2003;29(6):963-89.
- [37] Sherbourne CD, Stewart AL. The MOS social support survey. *Social science & medicine*. 1991;32(6):705-14.
- [38] Kessler RC, Price RH, Wortman CB. Social factors in psychopathology: Stress, social support, and coping processes. *Annual review of psychology*. 1985;36(1):531-72.
- [39] Ajzen I. Attitudes, traits, and actions: Dispositional prediction of behavior in personality and social psychology. *Advances in experimental social psychology*. 20: Elsevier; 1987. p. 1-63.
- [40] Rhoades L, Eisenberger R, Armeli S. Affective commitment to the organization: The contribution of perceived organizational support. *Journal of applied psychology*. 2001;86(5):825.
- [41] Gürol Y, Atsan N. Entrepreneurial characteristics amongst university students: Some insights for entrepreneurship education and training in Turkey. *Education+ Training*. 2006;48(1):25-38.
- [42] Hisrich R, Peters M, Shepherd D. *Entrepreneurship: Starting, Developing, and Managing a New Enterprise*, (Burr Ridge, IL. McGraw-Hill Publishing Company; 2005.
- [43] Wee C-H, Lim W-S, Lee R. Entrepreneurship: A review with implications for further research. *Journal of Small Business & Entrepreneurship*. 1994;11(4):25-49.
- [44] Palich LE, Bagby DR. Using cognitive theory to explain entrepreneurial risk-taking: Challenging conventional wisdom. *Journal of business venturing*. 1995;10(6):425-38.
- [45] Stewart Jr WH, Roth PL. Data quality affects meta-analytic conclusions: a response to Miner and Raju (2004) concerning entrepreneurial risk propensity. 2004.
- [46] Jackson DN, Hourany L, Vidmar NJ. A four-dimensional interpretation of risk taking 1. *Journal of personality*. 1972;40(3):483-501.
- [47] Jackson DN, Helmes E, Hoffmann H, Holden RR, Jaffe P, Reddon JR, et al. *Basic personality inventory*: Sigma Assessment Systems, Incorporated; 1989.
- [48] Schutte NS, Malouff JM, Hall LE, Haggerty DJ, Cooper JT, Golden CJ, et al. Development and validation of a measure of emotional intelligence. *Personality and individual differences*. 1998;25(2):167-77.
- [49] Zimet GD, Dahlem NW, Zimet SG, Farley GK. The multidimensional scale of perceived social support. *Journal of personality assessment*. 1988;52(1):30-41.
- [50] Krueger NF, Carsrud AL. Entrepreneurial intentions: applying the theory of planned behaviour. *Entrepreneurship & Regional Development*. 1993;5(4):315-30.
- [51] Cramer JS, Hartog J, Jonker N, Van Praag CM. Low risk aversion encourages the choice for entrepreneurship: an empirical test of a truism. *Journal of economic behavior & organization*. 2002;48(1):29-36.
- [52] Zhao H, Seibert SE, Hills GE. The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of applied psychology*. 2005;90(6):1265.

- [53] Muofhe NJ, Du Toit WF. Entrepreneurial education's and entrepreneurial role models' influence on career choice. *SA Journal of Human Resource Management*. 2011;9(1):15.
- [54] Moy JW, Luk VW, Wright PC. Perceptions of entrepreneurship as a career: Views of young people in Hong Kong. *Equal Opportunities International*. 2003;22(4):16-40.
- [55] Frydenberg E. *Adolescent coping: Theoretical and research perspectives*: Psychology Press; 1997.
- [56] Brannan D, Biswas-Diener R, Mohr CD, Mortazavi S, Stein N. Friends and family: A cross-cultural investigation of social support and subjective well-being among college students. *The Journal of Positive Psychology*. 2013;8(1):65-75.
- [57] Kourilsky ML, Walstad WB. Entrepreneurship and female youth: Knowledge, attitudes, gender differences, and educational practices. *Journal of Business venturing*. 1998;13(1):77-88.
- [58] Greve A, Salaff JW. Social networks and entrepreneurship. *Entrepreneurship theory and practice*. 2003;28(1):1-22.
- [59] Pettigrew TF. The measurement and correlates of category width as a cognitive variable 1. *Journal of Personality*. 1958;26(4):532-44.
- [60] Schubert R, Brown M, Gysler M, Brachinger HW. Financial decision-making: are women really more risk-averse? *American Economic Review*. 1999;89(2):381-5.
- [61] Masters R, Meier R. Sex differences and risk-taking propensity of entrepreneurs. *Journal of small business management*. 1988;26(1):31.