

A COMPARATIVE STUDY OF STUDENT'S PSYCHOLOGICAL CAPITAL WHO HAVE ENTREPRENEURIAL EDUCATION AND HAVE NOT ENTREPRENEURIAL EDUCATION CASE (TEHRAN UNIVERSITY FACULTY OF ENTREPRENEURSHIP AND MECHANICS)

MEHDI GHANI¹, BABAK ZIAE² & MOHMAMAD HASAN MOBARAKI³

¹Science in Entrepreneurship Management, Tehran University, Iran

²Assistant Professor, Entrepreneurship Faculty of University, Tehran, Iran

³Associate Professor, Entrepreneurship Faculty of University, Tehran, Iran

ABSTRACT

The psychological capital is an important and popular research subject in the psychology and the management study. The main aim of this study was to a comparative study of students' psychological capital who have entrepreneurial education and have not entrepreneurial education. Statistical sample of this study included 186 students of Tehran University, which were selected by applying random and proportional stratified sampling method. (103 students of Faculty of Entrepreneurship and 83 students of Faculty of mechanics). One limitations were identified only two universities participated, which indicates the results are and have not entrepreneurial education generalized. The obtained data were analyzed with the use of independent t- test. The results of the research indicated that there is a significant difference between the students' psychological capital and dimensions of it(self-efficacy, hope, optimism, and resilience) in between who have entrepreneurial education are and have not entrepreneurial education also we found that entrepreneurial education was positively related with students' psychological capital (self-efficacy, hope, optimism, and resilience).

KEYWORDS: Entrepreneurship Education, Psychological Capital, Self-Efficacy, Hope, Resiliency, Optimism

INTRODUCTION

During the last two decades, entrepreneurship education has grown from a marginal academic discipline to a dynamic center piece in many U.S. business schools. Entrepreneurship development has attracted the attention of academicians, policy makers, technologists, and economists and the role of education in fostering entrepreneurship has been widely studied (Raichaudhuri, 2005). On the other hand, entrepreneurship education in engineering schools became a popular issue as engineers need business, social and interpersonal skills besides technical skills to operate effectively (Gokhale, A. 1995), (Korhonen-Yrjanheikki, K., Tukiainen, T and Takala. M, 2007). Management methodologies and defined the entrepreneurship as a discipline and concluded that it can be learned as a discipline or methodology, inspite of the former beliefs on the nontransferable nature of entrepreneurship ability due to its totally tacit characteristics. However it is often observed that the entrepreneurs lack the methodological skills and rely on their perceptions and moods. If entrepreneurship education is to produce entrepreneurial founders capable of generating real enterprise growth and wealth, the challenge to educators will be to craft courses, programs and major fields of study that meet the rigors of academia while keeping a reality-based focus and entrepreneurial climate in the learning experience environment.

ENTREPRENEURSHIP EDUCATION

The subject of entrepreneurship receiving increased attention and sustained interest in the field would appear to be more than just a fad. Indeed, as Venkatraman (1996), cited by Fiet (2000b, p. 102) has commented, this interest accurately

reflects an “emerging economic environment created by the confluence of changes in the corporate world, new technology and emerging world markets. At the global level, the reduction of trade barriers and the reality of the Euro currency, together with the advancements in telecommunications, technology and transportation, all combine to provide more opportunities, as well as more uncertainty in the world. At the societal level, privatisation, deregulation, new forms of governance, mounting environmental concerns and the growing recognition of the rights of minority groups are all presenting society with greater complexity and uncertainty. At the organisational level, decentralisation, downsizing, re-engineering, strategic alliances, mergers and the growing demand for flexibility in the workforce, all contribute to an uncertain climate. Finally, at the individual level, the individual is now faced with a wider variety of employment options, the probability of ending up with a portfolio of jobs, more responsibility at work and more stress. In addition, on a personal level, today’s individual may be a single parent with more responsibility for managing credit and securing finances for their future (Gibb and Cotton, 1998, pp. 8-9).

PSYCHOLOGICAL CAPITAL

Psychological capital has become the central topic of examination within the emerging area of positive organizational behavior (Luthans & Youssef, 2004). It is conceptualized as a second order construct comprised of the following elements: self-efficacy (Bandura, 1997), optimism (Carver & Scheier, 2003), hope (Snyder, Cheavens, & Sympson, 1997), and resiliency (Masten, 2001). There are two key aspects to each of these factors. First, they are each “state-like” in that they can be developed through training and intentional practice. This is to say that, although there may be dispositional boundaries or upper limits on the degree to which individuals are able to exhibit each of these characteristics, it is possible for most individuals to achieve some gains in each of these areas. Secondly, each element has been established as being positively associated with human performance. We will now provide a brief overview of each of these elements, with an eye toward their impact on leading new ventures.

Self-Efficacy

Self-efficacy is defined as confidence in successfully executing a task or accomplishing a goal (Stajkovic & Luthans, 1998). Displaced employees with high self-efficacy are confident that they possess the right skills and abilities to perform well in their future jobs and are confident of being reemployed (Lim & Loo, 2003). These beliefs translate into a higher level of perceived employability and motivate them in the reemployment job search process. Hope refers to the individual’s perceived capability to derive pathways to attain desired goals and to motivate oneself via agency thinking to use those pathways (Snyder, Rand, & Sigmon, 2002). Self-efficacy relates to the general belief in one’s ability to produce high levels of performance in tasks undertaken in life (Bandura, 1977).

Hope

Hope is widely used in everyday language, but as examined here is most closely associated with the theory and research of positive psychologist C. Rick Snyder. Snyder and colleagues’ hope theory (Snyder, Sympson, Ybasco, Borders, Babyak, & Higgins, 1996; Snyder, 2000, 2002) is widely recognized in clinical and positive psychology and has considerable research support. Snyder and his colleagues have specifically defined hope as a “positive motivational state that is based on an interactively derived sense of successful (1) agency (goal directed energy) and (2) pathways (planning to meet goals)” (Snyder et al., 1996). Thus, hope can be viewed as consisting of three distinct but complementary components: agency (will-power), pathways (way-power), and goals. The agency component of hope can be viewed as being the will to accomplish a specific task or goal (Snyder et al., 1996).

Resiliency

Resiliency is the extent to which individuals are able to bounce back from negative experiences and adapt to changing and stressful life demands (Tugade & Fredrickson, 2004). Resilient individuals are able to thrive and learn in the face of adversity (Masten, 2001). Two types of judgments must be made before being able to classify an individual as resilient (Masten, 1999). First, the individual must have experienced some kind of adverse or threatening event(s). Second, is the degree to which the individual was able to overcome and/or thrive under the hazards that he or she faced. Certainly the capacity to bounce back from adversity is critical to entrepreneurs, who need to persevere in the face of high risk and resource constrained conditions (Markman, Baron, & Balkin, 2005).

To summarize, these four elements (i.e., self-efficacy, optimism, hope, and resiliency) combine to form the higher-level construct of psychological capital. Just as entrepreneurship is an intentional activity, so is the building of psychological capital. In order to build self-efficacy, optimism, hope, and resiliency, individuals must go out into the world, seek out challenges, and persevere. Without so doing, individuals will have no basis for building these elements within themselves. Furthermore, psychological capital tends to be self-perpetuating. This is to say that it becomes easier to build additional psychological capital the further we move along this dimension.

Optimism

Optimism is defined as generalized positive outcome expectancy (Carver & Scheier, 2003). While self-efficacy has been established as an individual characteristic that tends to be context specific and developed through life experience (Bandura, 1977; 1997), optimism has been shown to remain relatively stable within individuals across both time and context (Schulman, Keith, & Seligman, 1993). Seligman (1990) has, however, suggested that although individuals tend to have fixed ranges in which they are able to experience optimism, it is possible through training to move persons to consistently experience the high end of their range. Thus, keeping with Luthans and Youssef's (2004) criteria of psychological capital consisting of attributes that can be developed within individuals, it does seem that there is some latitude to increase optimism over time, albeit only up to certain limits. A vast amount of research has demonstrated a positive relationship between optimism and well-being. Particularly important within the context of entrepreneurship is the finding that optimists, as opposed to pessimists, often enjoy experiencing various forms of adversity (Scheier, Carver, & Bridges, 2001).

RESEARCH METHODOLOGY

The current research from the goal point of view is an applied paper; from methodology point of view is descriptive and from the point of view of conduct is a survey research.

Research Population and Sample

This study is a descriptive correlational research. The Statistical population of this study consists of 360 students. Using a random sampling for study consisted of 186 students were selected the Cochran formula. (103 students of Faculty of Entrepreneurship and 83 students of Faculty of mechanics).

$$n = \frac{1/96^2 \cdot (.5) \cdot (.5) \cdot 360}{(.05)^2 (130 - 1) + (1/96)^2 \cdot (.5) \cdot (.5)} \cong 186$$

$$n = \frac{200}{360} * 186 \cong 103 \quad n = \frac{160}{360} * 186 \cong 83$$

Data Collection Instrument

In this study, one standardized questionnaires to collect information Luthans et al. (2007) was used.

This questionnaire has been prepared in the 6- point likert's scale of "completely disagree to completely agree". The content validity of the questionnaire has been approved by experts and professors of this field and the reliability level of it has been obtained to be 0.85 by cronbach's alpha test, which indicates a proper reliability of the questionnaire.

Research Findings

This section of the paper is related to statistical analysis and report of the research data. After collecting the questionnaire, their data have been entered to the SPSS software ver.16 and were analyzed with independent t-tests and the findings are as per the following.

Research Hypothesis 1

There is a significant difference between the students' psychological capital in between students who have entrepreneurial education and have not entrepreneurial education.

Table 1: Statistics Related to Psychological Capital

Variable	Group	Mean	Deviation	t	df	Sig
psychological capital	Faculty of Entrepreneurship	4.1898	1.0298	-3.943	184	0.000
	Faculty of mechanics	3.8013	1.3923			

The value of t- statistic is observed to be -3.943 is placed in the rejection area of h_0 which indicates the existence of significant difference between the mean of the two groups. The 95% level of certainty indicates that there is a significant relationship between the psychological capital and entrepreneurship education. With referring to the mean value of the two group, we see that the mean Faculty of Entrepreneurship is more than Faculty of mechanics.

Research Hypothesis 2

There is a significant difference between the students' self-efficacy in between students who who have entrepreneurial education and have not entrepreneurial education.

Table 2: Statistics Related to Self-Efficacy

Variable	Group	Mean	Deviation	t	df	Sig
self-efficacy	Faculty of Entrepreneurship	4.5678	1.0124	-3.062	184	0.000
	Faculty of mechanics	3.9833	1.3345			

The value of t- statistic is observed to be -3.062 is placed in the rejection area of h_0 which indicates the existence of significant difference between the mean of the two groups. The 95% level of certainty indicates that there is a significant relationship between the self-efficacy and entrepreneurship education. With referring to the mean value of the two group, we see that the mean Faculty of Entrepreneurship is more than Faculty of mechanics.

Research Hypothesis 3

There is a significant difference between the students' hope in between students who have entrepreneurial education and have not entrepreneurial education.

Table 3: Statistics Related to Hope

Variable	Group	Mean	Deviation	t	df	Sig
hope	Faculty of Entrepreneurship	4.2787	1.1379	-3.152	184	0.000
	Faculty of mechanics	3.9661	1.5083			

The value of t- statistic is observed to be -3.152 is placed in the rejection area of h_0 which indicates the existence of significant difference between the mean of the two groups. The 95% level of certainty indicates that there is a significant relationship between the hope and entrepreneurship education. With referring to the mean value of the two group, we see that the mean Faculty of Entrepreneurship is more than Faculty of mechanics.

Research Hypothesis 4

There is a significant difference between the students' resiliency in between students who have entrepreneurial education and have not entrepreneurial education.

Table 4: Statistics Related to Resiliency

Variable	Group	Mean	Deviation	t	df	Sig
resiliency	Faculty of Entrepreneurship	4.3348	1.0148	-2.983	184	0.000
	Faculty of mechanics	3.9013	1.4013			

The value of t- statistic is observed to be -2.983 is placed in the rejection area of h_0 which indicates the existence of significant difference between the mean of the two groups. The 95% level of certainty indicates that there is a significant relationship between the resiliency and entrepreneurship education. With referring to the mean value of the two group, we see that the mean Faculty of Entrepreneurship is more than Faculty of mechanics.

Research Hypothesis 5

There is a significant difference between the students' optimism in between students who have entrepreneurial education and have not entrepreneurial education.

Table 5: Statistics Related to Optimism

Variable	Group	Mean	Deviation	t	df	Sig
optimism	Faculty of Entrepreneurship	3.9898	1.0298	-2.843	184	0.000
	Faculty of mechanics	3.4013	1.2923			

The value of t- statistic is observed to be -2.843 is placed in the rejection area of h_0 which indicates the existence of significant difference between the mean of the two groups. The 95% level of certainty indicates that there is a significant relationship between the optimism and entrepreneurship education. With referring to the mean value of the two group, we see that the mean Faculty of Entrepreneurship is more than Faculty of mechanics.

CONCLUSIONS

This study aimed a comparative study of students' psychological capital who have entrepreneurial education and have not entrepreneurial education among the Tehran University students in the School of Entrepreneurship and

mechanics. The results of the research indicated that there is a significant difference between the students' psychological capital and dimensions of it (self-efficacy, hope, optimism, and resilience) in between who have entrepreneurial education are and have not entrepreneurial education. The results of the study are in line with the related literature reviewed in previous sections. Therefore, it is suggested that self-efficacy, hope, optimism and resiliency be taught in different educational levels or in the form of special programs, and The inclusion of positive psychology educational resources and training institutions and responsible entrepreneurship. It is suggested that the effect of psychological capital on entrepreneurial education of students of qualitative research methods to be used. The empirical study reported here is limited by a relatively small sample and simplistic statistical techniques. Rather than reporting on a sophisticated statistical analysis, my intention here has been to generate ideas and perform some initial tests. Further empirical work needs to be done to support and extend the propositions made in the paper.

REFERENCES

1. Adcroft, A., Willis, R. and Dhaliwal, S. (2004), "Missing the point? Management education and entrepreneurship", *Management Decision*, Vol. 42 Nos 3/4, pp. 521-30.
2. Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191–215.
3. Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37, 122–147.
4. Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman.
5. Bandura, A., Barbaranelli, C., Caprara, G., & Pastorelli, C. (2001). Self-efficacy beliefs as shapers of children's aspirations and career trajectories. *Child Development*, 72(1), 187–206.
6. Bates, T. 1995. Self employment entry across industry groups. *Journal of Business Venturing*, 12(2): 109–124.
7. Baum, J. R., & Wally, S. 2003. Strategic decision speed and firm performance. *Strategic Management Journal*, 24(11): 1107–1129.
8. Carver, C. S., & Scheier, M. F. (2003). Optimism. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of Positive Psychology*, pp. 231-243, Oxford: Oxford University Press.
9. Henry, C., Hill, F. & Leitch, C. (2005). Entrepreneurship Education and Training: Can Entrepreneurship Be Taught? Part I. *Education and Training Journal*, 47 (2). pp. 98-111.
10. Hodgetts, R., & Kuratko, D. (2001). *Effective Small Business Management*. Philadelphia: Harcourt College Publishers.
11. Holmgren, C., From, J., Olofsson, A., Karlsson, H., Snyder, K., & Sundtröm, U. (2004). Entrepreneurship Education: Salvation or Damnation? *International Journal of Entrepreneurship*, 8, pp. 55-71.
12. James, N., & Gudmundsson, A. (2011). Exploring the Impact of Entrepreneur Optimism on the New Venture Process. In Maritz, Alex (Ed.) *Proceedings of the 8th AGSE International Entrepreneurship Research Exchange*, Swinburne University of Technology, Melbourne, Vic, pp. 1375-1384.
13. Krueger, N., & Brazeal, D.V., (1994). Entrepreneurial Potential and Potential Entrepreneurs. *Entrepreneurship Theory and Practice* 18 (3), 91–104.

14. Kuratko, D. (2005). The Emergence of Entrepreneurship Education: Development, Trends, and Challenges. *Entrepreneurship Theory and Practice*, 29, 577-597.
15. Larson M, Luthans F. (2006). Potential added value of self-efficacy in predicting work. *Academy of Management Review*, 23, 741–755.
16. Law KS, Wong C, Mobley WH. (1998). Toward a taxonomy of multidimensional constructs.
17. Linan, F. and Chen, Y.W. (2009). Development and Cross-Cultural Application of Specific Instrument Measure Entrepreneurial Intentions. *Entrepreneurship Theory and Practice*, 33(3).
18. Luthans F. (2002a). The need for and meaning of positive organizational behavior. *Journal of Organizational Behavior*, 23, 695–706.
19. Luthans F. (2002b). Positive organizational behavior: Developing and managing psychological.
20. Luthans, F. (2002). Positive Organizational Behavior: Developing and Managing Psychological Strengths. *Academy of Management Executive*, 16(1), 57-72.
21. Luthans, F. and Youssef, C. (2004). Human, Social, and Now Positive Self efficacy Management: Investing in People for Competitive Advantage; *Organizational Dynamics*, Vol. 33, pp. 143-160.
22. Luthans, F., Avolio, B.J., & Youseff, C. (2007). *Psychological Capital: Developing the human capital edge*. Oxford, England: Oxford University Press.
23. Luthans, S. M., & Jensen. (2002). Hope: A New Positive Strength for Human Resource Development. *Human Resource Development Review*, 1(3), 304-322.
24. Ghani, m.(2013). The Effect of entrepreneurial self-efficacy on University of Tehran Students' Entrepreneurial Intention, *Asian Journal of Research in Business Economics and Management*
25. Schumpeter, J. (1934). *The Theory of Economic Development*, Harvard University, Cambridge, MA.
26. Seligman, M. E. P., Steen, T. A., Park, N., & Peterson, C. (2005). Positive Psychology Progress: Empirical Validation of Interventions. *American Psychologist*, 60(5), 410-421.
27. Snyder, C. R., & Lopez, S. (Eds.). (2002). *Handbook of Positive Psychology*. New York: Oxford University Press.
28. Walsh, F. (2006). *Strengthening Family Resilience*. New York: The Guilford Press

