

Entrepreneurial Management Capabilities-The Differential Effect of Role Models

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Abstract

Entrepreneurs require a variety of skills and competencies to successfully manage an enterprise. As the business grows, the need for incorporating professional management practices increases which necessitates in possessing entrepreneurial management capabilities. However, such skills and capabilities are a function of various factors. Existence of role models is one among such socio-demographic factors. The purpose of this research is to understand the impact of role models on entrepreneurial management capabilities of those who wish to take-up entrepreneurship as a career. A sample of 200 management students were selected and served with a questionnaire schedule and the responses are statistically tested through ANOVA and T-Test. The analysis concludes that role models exert a significantly positive influence on the entrepreneurial management capabilities. Among the five components considered, four, namely; autonomy, risk taking, pro activeness and drive and energy are significantly affected by the existence of role models. Whereas the component of self-confidence prevails uniformly across the sample despite the prevalence of role models. Thus the effect of role models on the entrepreneurial management capabilities proves to be highly significant.

Keyword: Entrepreneurship, Entrepreneurial Role Models, Entrepreneurial Management Capabilities, Entrepreneurial Orientation, Differential Effect, Effect

Introduction

‘If you aspire to be an entrepreneur, you should consider finding some great role models to emulate’ – says Forbes magazine. An entrepreneur is one who ‘organizes, manages and assumes the risks of a business or enterprise’. Entrepreneurial orientation refers to the set of personal and psychological traits, values, attributes, and attitudes robustly correlated with an impulsion to take on entrepreneurship (McClelland et al, 1953). Entrepreneurs require a variety of skills and competencies to successfully manage an enterprise. Thus, entrepreneurial competencies are the fundamental characteristics possessed by a person which give rise to result in new venture creation, survival, and growth (Bird, 1995). Further to these competencies, any business founder must assume three predominant roles- entrepreneurial, managerial and functional roles while handling his or her business (Chandler & Jansen, 1992). In this context, Chandler and Hanks (1994) found direct relationships between the founders’ entrepreneurial and managerial competencies and firm performance. Rae (2007) concurs that both an entrepreneurial and managerial skill-set are required to run a successful venture and conceptualizes these as ‘entrepreneurial management capabilities’.

Entrepreneurial Management Capabilities

As the firm becomes bigger and becomes more complex, the need for incorporating professional management practices are likely to increase. Different capabilities are needed at various stages of business growth. The

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entrepreneurial attributes required during a start-up business are perhaps not relevant during growth phases and even during post-growth period. Thus, the role of the entrepreneur needs to keep changing along with the business, as it grows and matures. But, quite often, the founder-entrepreneur is not able to make the much required capability-transition which probably might be caused by two main facts – complexity of the growing business and the dynamic competitive environment. However, each stage of growth poses its own challenges for the organization (Nieman and Pretorious, 2004). Given this context of business, an entrepreneur without enough managerial competencies will be doomed to suffer failures in business. Built on McClelland (1973)'s research, Boyatzis (1982) defines managerial competencies as underlying characteristics of a person, which result in effective and superior performance of the business. The entrepreneurial management capabilities thus, imply that the entrepreneurs' propensity, practice, performance and decision making etc. have to be made in a managerially proficient manner. The following five components have been adapted from the literature to comprehend entrepreneurial management capabilities:

- i. *Autonomy*: Autonomy means the capability and determination to be self-directed in search of opportunities. The history of entrepreneurship is filled with stories of self-determined pioneers. The need for autonomy of an entrepreneur is characterized by a drive to control and influence others, an urge to win arguments and a passion to persuade and prevail, which are essential qualities of managerial competency.
- ii. *Risk taking*: The foremost factor that separates entrepreneurs from non-entrepreneurs is the uncertainty and riskiness of self-employment. All business endeavors involve some degree of risk. Entrepreneurs must not only be risk takers but also risk-handlers (Longenecker & Schoen, 2001). Risk handling is an essential managerial behavior.
- iii. *Proactiveness*: Proactiveness means 'acting in anticipation of future problems, needs, or changes'. A proactive person is someone who can actively take personal initiative (Crant, 2000) to create favorable conditions for influencing and changing the status quo in a persistent and action-oriented manner (Bateman and Crant, 1993). Individuals with proactive personality are unconstrained by situational forces, while pursuing their goals in the external

environment. A manager needs to be essentially proactive.

- iv. *Drive and energy*: Entrepreneurs are driven to succeed and expand their business. They are always on the move, full of energy and highly motivated. They are driven to succeed and derive plenty of self-motivation.
- v. *Self Confidence*: An entrepreneur is regularly called upon to perform tasks and make decisions that require great amounts of faith in one self. He or she needs to have a strong but, realistic self-belief and sustained ability to achieve the predetermined goals.

Analysis of entrepreneurship is largely the study of people who act creatively in business situations. Thus, study of entrepreneurship is nothing but exploring the 'people side of entrepreneurship' which has less effectively been explored of late. As per the established literature, entrepreneurial behavior of any society is determined by diverse factors which spread across socio-demographic, personal and external pitches (Gurol and Atsan, 2006). Of these, the socio-demographic factors examine the person's social and family backgrounds, gender and the early experiences, while the environmental model investigates the contextual factors and focuses on personality characteristics of entrepreneurs, extensively known as trait model. A common thread among these literatures is that whether possessing specific characteristics help the firm to be successful or not. While entrepreneurship has been viewed as essential to economic progress of the developing nations, surprisingly little research has been conducted on the factors that can swing an individual's intention to start new businesses (Karimi et al., 2010). Understanding the determinants of entrepreneurial orientation and behavior can help the educators, consultants, advisors and policy makers to find the right model to foster entrepreneurship for a faster economic development. Given the existing challenges embracing a wide range of economies across the globe, the initiative of invigorating superior entrepreneurial activity has become an inevitable task for the governments. Hence, designing a comprehensive, coherent and consistent move towards fostering entrepreneurship has become a compulsive priority.

The Role of Role Models

The relevance of role models for entrepreneurs manifests in the accepted business press that is littered with manifold

references to entrepreneurial endeavors and successes stories. Many entrepreneurs affirm that their business start-up decisions and the progress of their business have been influenced by others. These 'others' are often entrepreneurs and may range from famous people to former colleagues or family members. The OECD (2009) and the European Commission (2003) recognize the prevalence of entrepreneurial role models amongst the vital stimuli for entrepreneurship. It has long been acknowledged by research that role models may have a profound influence on career decisions (Krumboltz et al., 1976). Entrepreneurial role models within the family or the circle of friends are unique sources of tacit knowledge about business strategy and entrepreneurial decision-making (Mueller 2006). Even though entrepreneurial role models have become a familiar phenomenon, their occurrence, function and characteristics have yet been studied only to a limited extent by academics. Role model involves two theoretical constructs: the concept of role and the concept of modelling. Gibson (2004) argues that role models serve three interrelated purposes: to provide learning; to provide motivation and inspiration; and to help individuals define their self-concept. Nauta and Kokaly (2001) added another function to role models: to provide support and guidance. Therefore, entrepreneurial role models can be seen as a possible source for entrepreneurship learning and inspiring students to become successful entrepreneurs in business.

Review of Literature

Among the literature reviewed, many studies have strongly supported the positive relationship between having role model and entrepreneurial career choice. However, some studies failed to yield consistent findings and some more empirical works consider role models as the exogenous influencers. On the international arena, Nematoollah Shiri et al, (2012) found a significantly positive correlation between entrepreneurial intentions and role models in Iran. The study of Niels et al. (2012) from The Netherlands confirms the influence of role models by finding that around 54% of the entrepreneurs have a role model during either the pre-or the post-start-up phase. Specifically, out of these, 81% were found to have during pre-start-up phase and 63% during the post-start-up stage, that too within the first 3 years of operations. Most of the studies show that the presence of role models within the family, relatives or friends strongly influence

entrepreneurial activities (BarNir et al., 2011). Van Auken H, Fred L. Fry and Paul Stephens (2006) examine the impact of role model activities on potential entrepreneurs' desire to own a business. Wang and Wong (2004) and Phan et al. (2002) found in Singapore and Australia that students were more likely to commence starts-up upon graduation if their parents were already in businesses. Scherer et al. (1989), Krueger (1993), and Krueger et al. (2000) argue that role models affect a person's attitude and perceived ability to be successful in a business. Kolvereid (1996) also concluded that the role models indirectly persuade the career choices of the potential entrepreneurs. Apart from some conceptual studies establishing a link between role models and entrepreneurial orientation, empirical research on the importance of role models for nascent entrepreneurship has been scarce and there is still little knowledge of the nature of influence the entrepreneurial role models can exert upon the entrepreneurial orientation of the prospective entrepreneurs. This study attempts to fill the gap by analyzing the impact of role models on the entrepreneurial management capabilities of those who wish to take-up entrepreneurship as a career choice.

Objective

The principle aim of this research is to understand the impact of the role models on entrepreneurial management capabilities of those who wish to take-up entrepreneurship as a career choice.

Hypothesis

Our Hypothesis is that the role models exert a significantly positive influence on the entrepreneurial management capabilities of the potential entrepreneurs.

Methodology

Since, potential entrepreneurs can be anyone, the current research focusses only on the sample frame of graduating management students. The younger generations of the society are the potential sources of nascent entrepreneurship and hence it is vital to identify their prevailing attitudes towards entrepreneurship which is influenced by socio-demographic factors, in addition to many other variables. A sample of 200 students, who indicated beforehand that they were interested in taking-up entrepreneurship, among a population of around 1200

final year post-graduate students from 20 institutions existing in Warangal region of the state of Telangana, were selected. The sample comprises of 125 male and 75 female students. The respondents were served with a questionnaire schedule containing five statements (**Table-I**) adopted from the EAO scale of Robinson et al. (1991) and customized for the present study, to be marked on a five-point scale from strongly agree (5) to not agree at all(1). The responses are statistically tested through ANOVA and T-Test for establishing the differential effect of role models on the entrepreneurial management capabilities for understanding entrepreneurial orientation.

understanding. Further, the effect size is estimated for micro analysis of the variance and the error bars are generated to comprehend the dispersion.

I. Scale reliability

Internal consistency is a necessary but not sufficient condition for measuring homogeneity or uni-dimensionality in a sample of test items. Alpha is a commonly employed index of test reliability. The alpha value of the scale employed is 0.867 which is highly significant.

Table I: Entrepreneurial Management Capabilities with statements

Component	Statement
Autonomy	I prefer to make my own decisions
Risk-taking	I prefer to take risk in future life
Proactiveness	I can calculate the future needs of my business
Drive and energy	I depend on my instinct & intuition while making decisions
Self-confidence	I have confidence in my own skills and capabilities

II. Analysis of variance

The responses were processed with ANOVA test to figure-out whether the independent variable – ‘having a role model’ or ‘not having role model’, had an impact on the dependent variable – entrepreneurial management capability. The F ratios (**Table-II**) proved statistically significant for four components out of the total five. The components-autonomy (28.888); risk-taking (70.972); proactiveness (15.619); and drive and energy (46.158) have yielded statistically significant F ratios while one component-self-confidence didn’t yield significant ‘p’ value. The significant F ratios imply that the means differ more than would be expected by chance alone. The statistically significant variances institute the existence of differences between the two groups concerning four out of five constructs tested for understanding the entrepreneurial management capability. Next, the means of the two groups are compared to determine the nature of difference for the statistically significant components.

Results and Analysis

The existence of role models is categorized into two types for the purpose of the present study as ‘have’ and ‘don’t have’. Each of the five constructs of entrepreneurial management capability is tested for variance between the groups having or not-having role models and the corresponding means are compared for an in-depth

Table-II: Entrepreneurial Management Capabilities versus Existence of Role Models

Entrepreneurial Management Capabilities Versus Existence of Role Models							
Components	Cronbach's Alpha	ANOVA		t-test for Equality of Means			Effect Size Cohen's 'd'
		F	Sig.	Mean Difference	t	Sig. (2-tailed)	
Autonomy	0.867	28.888	.000	0.99233	5.375	.000	0.769
Risk-taking		70.972	.000	1.33248	8.424	.000	1.235
Proactiveness		15.619	.000	0.64706	3.952	.000	0.565
Drive and energy		46.158	.000	1.1279	6.794	.000	0.989
Self-confidence		2.662	.104	0.29923	1.632	.104	0.231

III. Difference Between Group Means

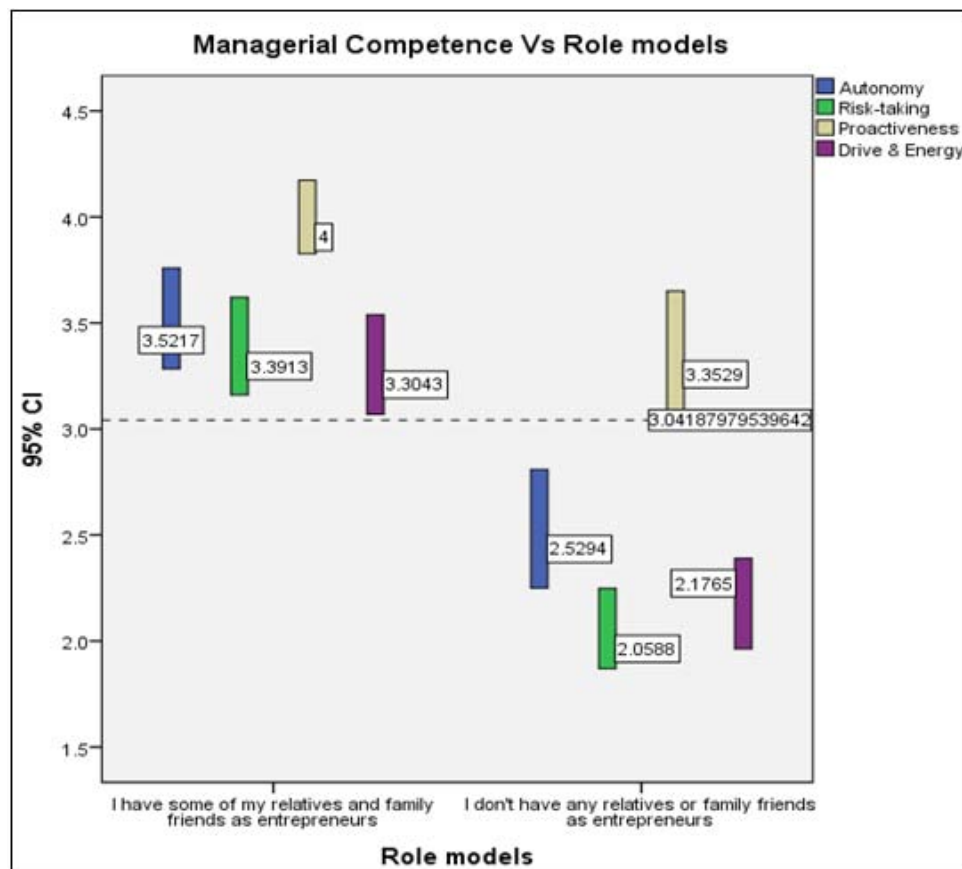
The t-test for appraising the mean difference between the two groups proves statically significant in all the cases thus confirming the ANOVA results. The observed mean differences are discussed competency wise:

- i. *Autonomy*: The statistically significant ($p < 0.01$) t value (5.375) for the competency of autonomy imply that the means of the two groups differ considerably. Further, the positive nature of the derived t value indicates that the mean of those ‘have’ is much higher than that of ‘don’t have’ by a margin of 0.99 on a scale up to 5.0000 (Table-II). The error bar (Figure-I) graphically presents the extent of mean difference between the two groups of respondents for autonomy. The directional difference of the means indicate that those have role model exhibit stronger inclination towards autonomy than those without role models.
- ii. *Risk-taking*: The highly significant t value (8.424) implies that the probability of similarity of the means of the two groups of respondents is very weak. The

means of two groups differ considerably by a margin of 1.33 on a maximum scale of 5.00 (Table-II). The positive nature of the mean difference implies that the ‘haves’ are more specific and focused on risk-taking as a component of entrepreneurial management capability.

- iii. *Proactiveness*: The component of proactiveness also attracts similar responses from the two groups of sample. The t value (3.952) is highly significant implying that the two groups differ considerably (0.64) on the component of proactiveness and those with role models show sharp focus over those don’t have (Table-II). However, the noteworthy point here is that despite the mean difference of 0.64, the means of both groups stand higher than the total sample mean indicating that having role model adds value to the already existent capability.
- iv. *Drive and energy*: The t value (6.794) is statistically significant and the means also differ at a scale of 1.12 (Table-II) implying that the probability of similarity between the two groups is weak. Further, the haves believe more strongly than the other group

Figure I: Managerial Competence vs. Role Models



as evident from the positive nature of the t value. Figure-1 graphically represents the variance and means of the two groups for the component of drive and energy.

- v. *Self-confidence*: The component of self-confidence showed up a non-significant ANOVA and ‘t’ values implying that the role of role models is not that much influential to be considered. But the noteworthy point here is the mean values and the mean difference between the two groups as derived through statistical analysis. Both the groups operate with a mean difference of 0.29 (on a scale of 01 to 05) which is totally negligible since a uniform mean value between the groups with varying socio-demographic environments isn’t always possible. Hence, the means of both the groups can be taken to be more or less similar. Next is the nature of the mean values of both the groups having and not-having role models. Both groups yield mean values of 3.65 and 3.35 respectively which are on the higher side of the scale and even sample mean. Thus, regarding the component of self-confidence, it is observed that the total sample, irrespective of the existence of role models, is strongly focused and highly confident. The role models’ effect on the self-confidence of the sample is almost negligible.

Table III:

‘d’	Standardized mean difference.	Percentage of variance explained.
Small	0.20	1%
Moderate	0.50	10%
Large	0.80	25%

IV. Effect Size

In the case of ANOVA test, it is possible to have a strong statistical significance and a low effect size at the same time. Such result implies that an association exists between the two variables under study, but that the relationship is small and not of great practical significance. Hence, significant p-values alone aren’t sufficient to indicate the size of an effect. Then, it is imperative for the researcher to define the size of the effect for the cases where group means are closer to each other. Statistically, Cohen’s d standardizes the effect size measurement at three levels indicating small, medium, and large effects. In general,

the value ≤ 0.20 is a small effect size, 0.50 is a moderate effect size and ≥ 0.80 is a large effect size (Cohen, 1992). Thus, the ‘d’ score indicates the practical significance of the associations under study.

The Cohen’s ‘d’ values are derived from the mean values and respective standard deviations of each group on each of the components. In the present data, the ‘d’ values of the components of risk taking and drive and energy stand at 1.235 and 0.989 respectively indicate large effect implying that having role models positively impacts more than 25% of the population. Further, the ‘d’ values for the components of autonomy (0.769) and proactiveness (0.565) falls in the range between 0.50 and 0.80 on the standardized mean difference scale implying a moderate effect which can influence up to 25% of the population. Hence, it can clearly be understood that role models (IV) can influence the respondents on the skills of risk-taking and drive and energy (DVs) to a maximum extent, that is to say, more than 25% while it runs up to a maximum of 25% in case of autonomy and proactiveness components. Thus, the effect of role models on entrepreneurial management capabilities of the potential entrepreneurs is extremely significant, as supported by the effect size measurement.

Conclusion

The hypothesis that role models exert a significantly positive influence on the entrepreneurial management capabilities of the potential entrepreneurs is assertively supported by the analysis. Those having role models are more focused on four out of five competencies of entrepreneurial management capability and those don’t have role models exhibit some variance on the same components, as understood from the error bar analysis. However, the component of self-confidence has proved to be a unique feature prevailing uniformly across the population and further undetermined by the existence of role models, Thus, the presence of role models helps the prospective entrepreneurs to be more focused on management capabilities which is an essential factor to be an entrepreneur.

References

BarNir, A., Watson, W. E., & Hutchins, H. M. (2011). Mediation and moderated mediation in the relationship among role models, self-efficacy, entrepreneur-

- ial career intention, and gender. *Journal of Applied Social Psychology*, 41(2), 270-297.
- Batemen, T. S., & Crant, J. M. (1993). The proactive component of organizational behavior: A measure and correlates. *Journal of Organizational Behavior*, 14(2), 103-118.
- Bird, B. (1995). Towards a theory of entrepreneurial competency, advances in entrepreneurship. *Firm Emergence and Growth*, 2, 51-72.
- Boyatzis, R. E. (1982). *The competent manager: A model for effective performance*. Wiley, New York.
- Chandler, G. N., & Hanks, S. H. (1994). Market attractiveness, resource-based capabilities, venture strategy, and venture performance. *Journal of Business Venturing*, 9(4), 331-349.
- Chandler, G. N., & Jansen, E. (1992). The founder's self-assessed competence and venture performance. *Journal of Business Venturing*, 7(3), 223-236.
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112 (1), 155-159.
- Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management*, 26(3), 435-462.
- European Commission. (2003). Rural development in the European Union. European Communities. Retrieved from <http://ec.europa.eu/agriculture/publi/fact/rurdev2003/en.pdf>
- Gibson, D. E. (2004). Role models in career development: New directions for theory and research. *Journal of Vocational Behavior*, 65(1), 134-156.
- Gürol, Y., & Atsan, N. (2006). Entrepreneurial characteristics amongst university students: Some insights for entrepreneurship education and training in Turkey. *Education + Training*, 48(1), 25-38.
- Karimi, S., Chizari, M., Biemans, H. J. A., & Mulder, M. (2010). Entrepreneurship education in Iranian higher education: The current state and challenges. *European Journal of Scientific Research*, 48(1), 35-50.
- Kolvreid, L. (1996). Prediction of employment status choice intentions. *Entrepreneurial Theory and Practice*, 21 (1), 47-57.
- Krueger, N. (1993). The impact of prior entrepreneurial exposure on perceptions of new venture feasibility and desirability. *Entrepreneurship Theory and Practice*, 18(1), 5-21.
- Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5-6), 411-432.
- Krumboltz, J., Mitchell, A., & Jones, G. (1976). A social learning theory of career selection. *The Counseling Psychologist*, 6(1), 71-80.
- McClelland, D.C. (1973). Testing for competence rather than for intelligence. *American Psychologist*, 28(1), 1-40.
- McClelland, D. C., Atkinson, J. W., Clark, R. A., & Lowell, E. L. (1953). The achievement motive. New York: Appleton. 107-138.
- Mueller, P. (2006). Entrepreneurship in the region: Breeding ground for nascent entrepreneurs? *Small Business Economics*, 27(1), 41-58.
- Nauta, M., & Kokaly, M. (2001). Assessing role model influences on students' academic and vocational decisions. *Journal of Career Assessment*, 9(1), 81-99.
- Shiri, N., Mohammadi, D., & Hosseini, S. M. (2012). Entrepreneurial intention of agricultural students: Effects of role model, social support, social norms and perceived desirability. *Archives of Applied Science Research*, 4(2), 892-897.
- Bosma, N., Hessels, J., Schutjens, V., Praag, M. V., & Verheul, I. (2012). Entrepreneurship and role models. *Journal of Economic Psychology*, 33(2), 410-424.
- Nieman, G., & Pretorius, M. (2004). *Managing growth: A guide for entrepreneurs*. Cape Town: Juta.
- OECD. (2009). *Measuring entrepreneurship: A collection of indicators 2009 edition*. OECD-Eurostat Entrepreneurship Indicators Programme.
- Phan, P. H., Wong, P. K., & Wang, C. K. (2002). Antecedents to entrepreneurship among university students in Singapore: Beliefs, attitudes and background. *Journal of Enterprising Culture*, 10(2), 151-174.
- Rae, D. (2007). *Entrepreneurship: From opportunity to action*. Basingstoke: Palgrave Macmillan.
- Robinson, P. B., Stimpson, D.V., Huefner, J.C., & Hunt, H.K. (1991). An attitude approach to the prediction of entrepreneurship. *Entrepreneurship Theory and Practice*, 5(4), 13-31.
- Scherer, R. F., Adams, J. S., Carley, S. S., & Wiebe, F. A. (1989). Role model performance effects on development of entrepreneurial career preference. *Entrepreneurship Theory & Practice*, 13(3), 53 - 71.
- Shiri, N., Alibaygi, A., & Faghiri, M. (2013). Factors affecting entrepreneurial motivation. *International Journal of Agricultural Management and Development*, 3(3), 175-180.

- Van Auken, H., Stephens, P., Fry F., & Silva, J. (2006). Role model influences on entrepreneurial intentions: A comparison between USA and Mexico. *International Entrepreneurship and Management Journal*, 2(3), 325-336.
- Wang, C. K., & Wong, P. K. (2004). Entrepreneurial intent of university students in Singapore. *Technovation*, 24(2), 163-172.
- Wright, S., Wong, A., & Newill, C. (1997). The impact of role models on medical students. *Journal of General Internal Medicine*, 12(1), 53-56.