



PERCEIVED ENTREPRENEURIAL COMPETENCIES AMONG TAMIL ENTREPRENEURS IN EASTERN AND NORTHERN PROVINCES OF SRI LANKA

S.Balendran

Department of Commerce, Faculty of Commerce and Management, Eastern University, Sri Lanka

ABSTRACT

Received: 29th July 2024

Revised: 06th December 2024

Accepted: 10th December 2024

Published: 02nd December 2025

Keywords:

*Entrepreneurial Competencies,
Small and Medium Enterprises,
Regional Differences*

This study examines the perceived entrepreneurial competencies among Tamil entrepreneurs in the Eastern and Northern provinces of Sri Lanka. The primary purpose is to identify and compare the differences and similarities in the entrepreneurial skills required in these regions. Utilizing a descriptive research design, the study surveyed 370 entrepreneurs from small and medium-sized enterprises (SMEs) in both provinces. Data was collected through a structured questionnaire using stratified random sampling. The findings reveal distinct regional strengths: Northern entrepreneurs excel in developing long-term relationships, translating ideas into business contexts, and maintaining operational efficiency, while Eastern entrepreneurs are more proficient in identifying unmet consumer needs, treating new problems as opportunities, and employing diverse learning methods. These differences highlight the need for region-specific strategies to support entrepreneurial development. The study's conclusions suggest that targeted interventions addressing the unique competencies of each region can enhance entrepreneurial success and foster balanced growth across both provinces.

*Corresponding sbalan822@yahoo.com.au

© Faculty of Commerce and Management, Eastern University Sri Lanka. All rights reserved.

1. Introduction

Entrepreneurship has emerged as a critical driver of economic development, particularly in developing countries like Sri Lanka (Ditablan & Abad, 2009). The role of Small and Medium Enterprises (SMEs) in fostering economic growth, generating employment, and alleviating poverty has gained significant recognition in recent years. As the backbone of Sri Lanka's economy, SMEs contribute substantially to income generation and regional development, especially in rural areas where approximately 80% of the population resides (Amaratunge, 2003).

While external factors such as finance, manpower, and promotions have traditionally been considered crucial for business success, there is growing recognition of the importance of internal factors, specifically the competencies of entrepreneurs themselves. Entrepreneurial competencies, defined as underlying characteristics such as generic and specific knowledge, motives, traits, self-images, social roles, and skills which result in venture birth, survival, and/or growth (Baum & Locke, 2004), are increasingly seen as key determinants of business success in SMEs.

Despite the acknowledged importance of entrepreneurial competencies, research in this area, particularly in the context of developing countries like Sri Lanka, remains limited (Man & Lau, 2000). This study aims to address this gap by focusing on the entrepreneurial competencies of Tamil-speaking entrepreneurs in the Eastern and Northern Provinces of Sri Lanka. These regions, which have historically faced economic challenges, present a unique context for examining the role of entrepreneurial competencies in business success.

The primary objective of this paper is to identify the competencies perceived to be important by entrepreneurs in the Eastern and Northern Provinces of Sri Lanka. By understanding these competencies, we can gain valuable insights into the factors that contribute to entrepreneurial success in this specific cultural and regional context. This knowledge can inform policymaking, entrepreneurship education, and support programs tailored to the needs of Sri Lankan entrepreneurs.

This study adopts a competency approach (Boyatzis, 1982), which offers a practical means of identifying behaviors associated with effective performance in entrepreneurship. By examining the relationship between entrepreneurial competencies and business success, we aim to contribute to the growing body of literature on entrepreneurship in developing countries and provide actionable insights for fostering a more robust SME sector in Sri Lanka.

2. Literature Review

The competency approach has become an increasingly popular means of studying entrepreneurial characteristics (For example, Barney, 1991; Chaston, 1997; Feurer & Chaharbaghi, 1994; Kravis & Lipsey, 1992; Lumpkin & Dess, 1996). According to Barney (1991), competencies are seen as behavioural and observable, and therefore are more closely linked to performance than any other entrepreneurial characteristics such as personality traits, intentions or motivations (Grant, 1991; Herron & Robinson, 1993). Porter (1985) has categorized six major areas of entrepreneurial competencies relating to an SME context. Those are opportunity, relationship, conceptual, organising, strategic, and commitment competencies. They are supposed to play different roles in affecting SME's performance directly and indirectly. Helfat (2003) took the view that competencies were keys to entrepreneurial success. Changanti and Parasuraman (1996) identified abilities associated with predominant roles played by entrepreneurs in their businesses, finding them to be associated with successful entrepreneurs. In a subsequent study, Chandler and Hanks (1994)

found evidence of the direct relationship between the founders' entrepreneurial and managerial competencies and the firm's performance.

Entrepreneurial competencies are closely associated with the firm's performance and competitive capacity building (Man & Lau, 2000). It is also highly correlated with business growth and success (Begley et al., 1987). Acquiring and leveraging entrepreneurial competencies are of key importance for those entrepreneurs who are willing to achieve high performance. Chaston (1997) pointed out that different competencies are needed at different stages of business development whereas Man et al. (2002) suggest that entrepreneurial competencies are more important during the start-up phase, while managerial competencies are more significant at the growth stage. Roper (1998) and, Keats and Bracker (1987), argued that the lack of formal structural frameworks has led to uncertainty in the mechanism by which different entrepreneurial characteristics affect SME performance. Hence, it is necessary to make use of a sound theoretical model for examining the relationship between entrepreneurial competencies and firm performance.

An evaluation of the impact of entrepreneurial characteristics on the performance of small-scale manufacturing industries in Nigeria by Adegbite et al., (2006) identified the entrepreneurial characteristics and the factors that influenced the optimum business performance of 100 randomly selected small-scale manufacturing industries engaged in food and beverage; textile and wearing apparel; wood and wood products; chemical and pharmaceuticals; and fabricated metal products. The results showed that human resource factors and sales revenue were found to be inadequate and severely inhibited the potential of the entrepreneurs for performance and growth. However, length of years in business and working experience were found to have a positive contribution to their performance. While the majority (7) of the 10 Personal Entrepreneurial Characteristics (PEC) of the respondents made a negative contribution to the sales revenue, only demand for efficiency and product quality, information seeking, and systematic planning and monitoring had a positive impact. The study concluded that the negative attributes exhibited by the respondents in most of the PECs were critical factors in the dismal performance of the small-scale manufacturing industries, which need to be developed in the entrepreneurs through training.

Di Zhang et al., (2011) looked into the personal characteristics and strategic orientation of entrepreneurs in Canadian manufacturing companies as substantial impacts on their firm's performance. The findings imply that entrepreneurs do not simply react mechanically to external environmental changes. How they seek and interpret information and formulate organizational strategies is partially influenced by their characteristics. Entrepreneurs develop their ways of utilizing the human capital that they bring to their firms.

The study of Bautista et. al. (2007) dealt with the levels of entrepreneurial competencies of practising entrepreneurs in Baguio, Dagupan, and San Fernando, and of entrepreneurship students of selected business schools in Cordillera Administrative Region, (CAR), Philippines. Competencies measured were Opportunity Seeking, Persistence, Commitment to Work Contract, Demand for Quality and Efficiency, Risk-Taking, Goal Setting, Information-Seeking, Systematic Planning and Monitoring, Persuasion, and Self-

Confidence. The inquiry revealed that students were weakest in Opportunity Seeking, Risk Taking, and Self-Confidence. Practicing entrepreneurs were weakest in risk-taking. Generally, the competencies of students do not significantly vary by school, age, gender, or year. The study suggested that the competency levels of students especially in the areas of opportunity-seeking, risk-taking, and self-confidence can be done by universities by reviewing the design of their curriculum to promote entrepreneurship through apprenticeship programs, ocular visits, forums or symposia, linkages with SLU-EISSIF, DTI, TESDA newsletters or magazines, competitions trade fairs and exhibits competitions. Other recommendations were addressed to practicing entrepreneurs and universities.

The literature on entrepreneurship has highlighted the role of entrepreneurs in the business success of SMEs. An entrepreneur is an individual who develops and grows businesses through creative and innovative activities, by introducing new products or services, by improving the existing methods of production or service. Thus, the competencies of entrepreneurs make a business more successful and may lead towards its sustainable competitive advantage as well. Entrepreneurial competencies are related to the performance of the firm and its competitiveness (Man et al., 2002), growth and success of business (Colombo & Grilli, 2005). According to many studies, the entrepreneur's psychological and behavioural, demographic characteristics, managerial and technical skills are the most important determinants for the performance and success or failure of small and medium-sized enterprises (Chandler and Hanks, 1994; Man et al., 2002; Man et al., 2008; Rasmussen et al., 2011). It is very essential to understand entrepreneurs in the context of emerging economies because the entrepreneurial competencies for business growth and survival in emerging economies are different from those of developed economies (Solesvik, 2012). Also, Capaldo et al (2004) stated that entrepreneurial competencies vary according to different contexts. Thus, this paper argues that in the context of Malaysia, external integration plays a vital role and improves the relationships between entrepreneurial competencies and business success.

3. Research Methodology

Research Design

The present study falls under the category of "Descriptive studies" as the nature of the problem is to describe the existence of the different variables. This type of research is also a survey-based study. The major strength of survey research has its wide scope and ability to collect the detailed information from a sample of a large population.

Population, Sample Size & Sampling Method

In this research, entrepreneurs who run their own small and medium-sized enterprises (SMEs) in the East and North provinces of Sri Lanka have been considered as population. The size of the population was estimated as 1939 which was obtained from the Sri Lankan SME portal, out of which 1046 were from the eastern province and 893 were from the Northern Province. The entrepreneurs who had registered their

enterprises alone had been considered for this study. The sample size was determined as 300 within the total population of 1939 (1046 from the Eastern province and 893 from the Northern Province). Among the total population, 20% was taken as the sample which ended with 179 from the Eastern province and 210 from the Northern province. In anticipation of non-response, an additional 2 percent of the total population was included in the sample resulting in 197 from Eastern and 231 from Northern Province. Therefore, the total sample was 428. The researcher adopted a stratified random sampling method to identify the respondents from both the Eastern province and the Northern Province.

Data Collection & Analysis

Table 1: Frequencies and Percentage Distribution of Profile of the Respondents

Demographic Variables	Eastern Provinces		Northern Provinces	
	Nos.	Percent	Nos.	Percent
Gender				
Male	173	83.2	139	85.8
Female	35	16.8	23	14.2
Age				
20 or under	-	-	3	1.9
21-30	24	11.5	40	24.7
31-40	95	45.7	60	37.0
41-50	20	9.6	28	17.3
51-60	69	33.2	29	17.9
61 or above	-	-	2	1.2
Marital Status				
Married	158	76.0	131	80.9
Single	50	24.0	31	19.1
Educational level				
Uneducated	2	1.0	23	14.2
Elementary School	2	1.0	20	12.3
Middle School	29	13.9	28	17.3
High School	15	7.2	7	4.3
Higher Secondary	28	13.5	19	11.7
Certificate Course	81	38.9	22	13.6
Diploma	18	8.7	30	18.5
Bachelor degree	23	11.1	8	4.9
Post-graduate	10	4.8	5	3.1
Total	208	100.0	162	100.0

(Source: Survey Data)

A well-formulated questionnaire was prepared to obtain the data relating to various aspects. The data collected for this study were conducted using the primary method. The data were collected from the respondents who were Tamil-speaking entrepreneurs in the East and North provinces of Sri Lanka. The researcher contacted all 428 respondents in person, with the help of a moderator and also through telephone. A total of 428 questionnaires were surveyed, which explained the nature and reasons for the study and assured respondents of the confidentiality of any information provided. Among 428 responses, 35 from

Eastern Province and 23 from Northern Province were found to be improperly filled and hence rejected. Finally, the effective sample size was settled at 370. A more detailed characterization of the sample is presented in the following table (See Table 1). Responses from the subjects on all scales were scored, added and interpreted according to prescribed scoring rules. Data were analyzed using SPSS version 16 for Windows. From the raw scores, the general descriptive statistical analysis was completed to identify the frequencies, the valid percentages and the standard deviations (minimum scores, maximum scores and averages). Descriptive analysis for age, gender, marital status, education, job type and other details were investigated. These group statistics included Mean Scores – to determine the arithmetic average of a group of numbers, and Standard Deviation – to measure the extent to which a group of scores differs from the mean.

4. Analysis and Discussion

This research analyzed the level of ten entrepreneurial competencies possessed by small and medium owners in the Eastern and Northern provinces of Sri Lanka. The Cronbach alpha coefficient values were found to be more than the acceptable level of 0.7 mentioned by Nunnally (1978), which shows that the items have relatively high internal consistency. The results of the descriptive analysis are presented in the following tables.

Table 2: Mean and Standard Deviation of Opportunity Competency

SI. No	Opportunity Competency	Provinces	Mean	SD
1	Identify goods or services that the customer wants	Eastern	4.64	.588
		Northern	4.69	.605
2	Perceive unmet consumer needs	Eastern	4.46	.620
		Northern	4.28	.900
3	Actively look for products or services that provide real benefit to customers	Eastern	4.40	.948
		Northern	4.48	.724
4	Seize high quality business opportunities	Eastern	4.30	.890
		Northern	4.36	.839

(Source: Survey Data)

Table 3: Mean and Standard Deviation of Relationship Competency

SI. No	Relationship Competency	Provinces	Mean	SD
1	Develop long-term trusting relationships with others	Eastern	4.42	.632
		Northern	4.54	.688
2	Negotiate with others	Eastern	4.09	.925
		Northern	4.16	.841
3	Interact with others	Eastern	4.19	.833
		Northern	4.10	.886
4	Maintain a personal network of work contacts	Eastern	4.31	.859
		Northern	4.36	.786
5	Understand what others mean by their words and actions.	Eastern	4.22	.644
		Northern	4.10	.850
6	Communicate effectively with others	Eastern	4.35	.679
		Northern	4.23	.782

(Source: Survey Data)

Table 4: Mean and Standard Deviation of Analytical Competency

SI. No	Analytical Competency	Provinces	Mean	SD
1	Understand the broader business implications of ideas, issues and observations	Eastern	4.38	.934
		Northern	4.41	.760
2	Translate ideas, issues and observations into the business context	Eastern	4.06	.915
		Northern	4.20	.765
3	Take reasonable job-related risks	Eastern	4.02	.890
		Northern	3.98	.971
4	Monitor progress toward objectives in risky actions	Eastern	4.11	.800
		Northern	4.07	.909

(Source: Survey Data)

Table 5: Mean and Standard Deviation of Innovative Competency

SI. No	Innovative Competency	Provinces	Mean	SD
1	Look at old problems in new ways	Eastern	4.01	.879
		Northern	3.80	.820
2	Explore new ideas	Eastern	4.25	.864
		Northern	4.31	.860
3	Treat new problems as opportunities	Eastern	4.61	3.989
		Northern	4.01	.908

(Source: Survey Data)

Table 6: Mean and Standard Deviation of Operational Competency

SI. No	Operational Competency	Provinces	Mean	SD
1	Plan the operations of the business	Eastern	4.45	.809
		Northern	4.45	.756
2	Plan the organisation of different resources	Eastern	4.34	.928
		Northern	4.40	.743
3	Keep the organisation running smoothly	Eastern	4.26	.959
		Northern	4.46	.740
4	Organise resources	Eastern	4.70	3.968
		Northern	4.39	.758
5	Coordinate tasks	Eastern	4.39	.700
		Northern	4.40	.727

(Source: Survey Data)

Table 7: Mean and Standard Deviation of Human Competency

SI. No	Human Competency	Provinces	Mean	SD
1	Supervise subordinates	Eastern	4.35	.720
		Northern	4.44	.822
2	Lead subordinates	Eastern	4.38	.698
		Northern	4.31	.899
3	Organise people	Eastern	4.85	5.017
		Northern	4.27	.867
4	Motivate people	Eastern	4.44	.679
		Northern	4.37	.866
5	Delegate effectively	Eastern	4.44	.866
		Northern	4.28	.846

(Source: Survey Data)

Table 8: Mean and Standard Deviation of Strategic Competency

S.No	Strategic Competency	Provinces	Mean	SD
1	Identify long term issues, problems or opportunities	Eastern	4.56	2.932
		Northern	4.16	.833
2	Be aware of the projected directions of the industry and how changes might impact my business	Eastern	4.39	.873
		Northern	4.16	.919
3	Prioritise work in alignment with business goals	Eastern	4.38	.776
		Northern	4.43	.781
4	Redesign my business to better meet long term objectives and changes	Eastern	4.24	.838
		Northern	4.27	.766
5	Align current actions with strategic goals	Eastern	4.66	3.953
		Northern	4.30	.865
6	Assess and link short term, day to day tasks in the context of long term direction	Eastern	4.74	5.018
		Northern	4.04	.861
7	Monitor progress toward strategic goals	Eastern	3.97	.825
		Northern	4.18	.828
8	Evaluate results against strategic goals	Eastern	3.93	.857
		Northern	4.16	.787
9	Determine strategic actions by weighing costs and benefits.	Eastern	4.01	.771
		Northern	3.91	.843

(Source: Survey Data)

Table 9: Mean and Standard Deviation of Commitment Competency

SI. No	Commitment Competency	Provinces	Mean	SD
1	Dedicate to make the business work	Eastern	4.16	.994
		Northern	4.39	.774
2	Refuse to let the business fail	Eastern	4.38	.914
		Northern	4.43	.730
3	Have an extremely strong internal drive to succeed	Eastern	4.24	1.031
		Northern	4.46	.773
4	Commit to long term business goals	Eastern	4.26	.999
		Northern	4.33	.856

(Source: Survey Data)

Table 10: Mean and Standard Deviation of Learning Competency

SI. No	Learning Competency	Provinces	Mean	SD
1	Learn from a variety of means	Eastern	4.75	.822
		Northern	4.19	.818
2	Learn proactively	Eastern	4.28	.958
		Northern	4.21	.847
3	Learn as much as I can in my field	Eastern	4.27	.965
		Northern	4.26	.858
4	Keep up to date in my field	Eastern	4.28	.845
		Northern	4.31	.906
5	Apply learned skills and knowledge to actual practices	Eastern	4.17	.982
		Northern	4.38	.743

(Source: Survey Data)

In comparing entrepreneurial competencies between Northern and Eastern provinces, several notable differences emerge. Northern entrepreneurs demonstrate stronger capabilities in developing long-term trusting relationships (Mean: 4.54) and translating ideas into the business context (Mean: 4.20) compared to their Eastern counterparts. Additionally, Northern entrepreneurs are slightly more adept at exploring new ideas (Mean: 4.31) and keeping their organization running smoothly (Mean: 4.46). They also show a higher commitment to refusing to let the business fail and maintaining a strong internal drive to succeed.

On the other hand, Eastern entrepreneurs excel in perceiving unmet consumer needs (Mean: 4.46) and treating new problems as opportunities (Mean: 4.61). They are more proficient at organizing resources (Mean: 4.70) and demonstrate superior innovative thinking by looking at old problems in new ways (Mean: 4.01). Furthermore, Eastern entrepreneurs are notably better at learning from a variety of means (Mean: 4.75) and identifying long-term issues and opportunities (Mean: 4.56).

In addition to the primary differences in competencies, there are variations in how both provinces manage and apply these skills. For instance, Northern entrepreneurs have a slight edge in monitoring progress toward strategic goals (Mean: 4.18) compared to Eastern entrepreneurs (Mean: 3.97) and in evaluating results against strategic goals (Mean: 4.16) versus Eastern's (Mean: 3.93). Conversely, Eastern entrepreneurs display greater proficiency in applying learned skills to actual practices (Mean: 4.17) and organizing people effectively (Mean: 4.85).

Table 11: Mean and Standard Deviation of Personal Strength Competency

SI. No	Personal Strength Competency	Provinces	Mean	SD
1	Maintain a high level of energy	Eastern	4.19	.884
		Northern	4.18	.803
2	Motivate myself to function at an optimum level of performance	Eastern	4.22	.931
		Northern	4.21	.902
3	Respond to constructive criticism	Eastern	4.14	.967
		Northern	4.13	.814
4	Maintain a positive attitude	Eastern	4.25	.900
		Northern	4.24	.973
5	Prioritise tasks to manage my time	Eastern	4.71	.865
		Northern	4.69	.763
6	Identify my strengths and weaknesses and match them with opportunities and threats	Eastern	4.69	.758
		Northern	4.68	.794
7	Manage my own career development	Eastern	4.72	.889
		Northern	4.70	.891
8	Recognise and work on my own shortcomings	Eastern	4.19	.942
		Northern	4.18	.870

(Source: Survey Data)

Discussion

The analysis of entrepreneurial competencies across Northern and Eastern provinces reveals a complex landscape of regional strengths and areas for improvement. In the realm of opportunity competencies, Northern entrepreneurs excel in identifying goods or services that customers want and actively seeking products or services that provide real benefits. This suggests a strong alignment with market demands and a proactive approach to seizing business opportunities. However, Eastern entrepreneurs outperform their Northern counterparts in perceiving unmet consumer needs, highlighting their keen awareness of market gaps that could be leveraged for competitive advantage. This difference underscores the importance of region-specific consumer insights in shaping entrepreneurial strategies.

In terms of relationship competencies, Northern entrepreneurs exhibit superior abilities in developing long-term trusting relationships and negotiating with others, reflecting a strong emphasis on building and maintaining valuable business networks. This is complemented by their effective personal networking skills. Conversely, Eastern entrepreneurs demonstrate stronger interpersonal interaction skills, which may contribute to more dynamic and flexible business relationships. These variations suggest that while Northern entrepreneurs may have an edge in structured relationship-building, Eastern entrepreneurs are adept at

creating and sustaining meaningful interactions, potentially offering different but complementary strengths in business networking.

When examining analytical competencies, Northern entrepreneurs show a slight advantage in translating ideas into the business context and understanding broader business implications. This suggests that Northern entrepreneurs may be more effective in contextualizing their ideas within the business environment and making informed decisions based on a comprehensive understanding of business dynamics. On the other hand, Eastern entrepreneurs show comparable ability in monitoring progress toward objectives and managing job-related risks, indicating a balanced approach to risk management and objective tracking across both regions.

Innovative competencies reveal distinct strengths in Eastern entrepreneurs, who excel at treating new problems as opportunities and approaching old problems in new ways. This suggests a robust capacity for creative problem-solving and a willingness to innovate. Meanwhile, Northern entrepreneurs are slightly more proficient in exploring new ideas, reflecting a strong inclination towards innovation. These differences highlight the varying approaches to innovation in each region, with Eastern entrepreneurs showcasing a more proactive stance towards transforming challenges into opportunities and Northern entrepreneurs demonstrating a solid foundation in generating and exploring new ideas.

Finally, the operational, human, strategic, commitment, learning, and personal strength competencies further illuminate regional differences. Eastern entrepreneurs stand out in organizing resources and learning from diverse means, while Northern entrepreneurs excel in operational efficiency, supervisory skills, and commitment to business continuity. These findings point to a nuanced picture where both regions exhibit unique strengths that, when leveraged effectively, can contribute to regional and overall entrepreneurial success. Tailoring support programs to harness these distinct competencies could enhance entrepreneurial development and promote balanced growth across Northern and Eastern provinces.

5. Conclusion

This comprehensive analysis of entrepreneurial competencies across Northern and Eastern provinces highlights significant regional differences and strengths in various domains. Northern entrepreneurs demonstrate exceptional skills in building long-term relationships, translating ideas into business contexts, and maintaining operational efficiency. In contrast, Eastern entrepreneurs exhibit notable strengths in identifying unmet consumer needs, treating new problems as opportunities, and leveraging diverse learning methods. These insights underscore the need for region-specific strategies to support and enhance entrepreneurial development. By recognizing and leveraging the distinct competencies of each region, policymakers and business support organizations can create targeted interventions that foster regional strengths, address specific challenges, and ultimately drive balanced and sustainable entrepreneurial growth across both provinces.

Competing interest : The authors declare that they have no competing interests

Acknowledgements: Authors are grateful to thank the referees for the useful comments also expressed sincere thanks to the editorial board for effort to publish this article

References

- Adegbite, S. A., Ilori, M. O., Irefin, I. A., Abereijo, I. O., and Aderemi, H. O. S. (2006), "Evaluation of the impact of entrepreneurial characteristics on performance of small scale manufacturing industries in Nigeria". *Journal of Asia Entrepreneurship and Sustainability*, Vol.3, No.1.
- Amaratunge, S. (2003), "Role of small industries in economic development of Sri Lanka: A quantitative aspect".
- Barney, J. B. (1991), "Firm resources and sustained competitive advantage". *Journal of Management*, Vol.17, No.1, pp.99-120.
- Baum, J. R., and Locke, E. A. (2004), "The relationship of entrepreneurial traits, skill, and motivation to subsequent venture growth". *Journal of Applied Psychology*, Vol.89, No.4, pp.587-598.
- Bautista, R. S., Barlis, M. J. P., and Nazario, A. G. (2007), "The personal entrepreneurial competencies of BS Entrepreneurship students of the Cordillera Administrative Region and practicing entrepreneurs in the cities of Baguio, Dagupan, and San Fernando, La Union: A comparison". *Paper presented at the 10th National Convention on Statistics (NCS)*, EDSA Shangri-La Hotel.
- Begley, T. M., and Boyd, D. P. (1987), "Psychological characteristics associated with performance in entrepreneurial firms and smaller businesses". *Journal of Business Venturing*, Vol.2, No.1, pp.79-93.
- Boyatzis, R. E. (1982), "The competent manager: A model for effective performance". Wiley.
- Capaldo, G., Iandoli, L., and Ponsiglione, C. (2004), "Entrepreneurial competencies and training needs of small firms: A methodological approach". *Paper presented at the 14th Annual IntEnt Conference*, Napoli.
- Chandler, G. N., and Hanks, S. H. (1994), "Founder competence, the environment, and venture performance". *Entrepreneurship Theory and Practice*, Vol.18, No.3, pp.17-89.
- Chaganti, R., and Parasuraman, S. (1996), "A study of the impacts of gender on business performance and management patterns in small businesses". *Entrepreneurship Theory and Practice*, Vol.21, No.2, pp.73-75.
- Chaston, I. (1997), "Small firm performance: Accessing the interaction between entrepreneurial style and organizational structure". *European Journal of Marketing*, Vol.31 No.11/12, pp.814-831.
- Colombo, M. G., and Grilli, L. (2005), "Founders' human capital and the growth of new technology-based firms: A competence-based view". *Research Policy*, Vol.34. No.6, pp.795-816.
- Di Zhang, D., and Bruning, E. (2011), "Personal characteristics and strategic orientation: Entrepreneurs in Canadian manufacturing companies".
- Ditablan, E. C., and Abad, J. I. (2009), "Entrepreneurship unlimited: Opportunities and resources". National Bookstore.
- Feurer, R., and Chaharbaghi, K. (1994), "Defining competitiveness: A holistic approach". *Management Decision*, Vol.32, No.2, pp.49-58.
- Grant, R. M. (1991), "The resource-based theory of competitive advantage: Implications for strategy formulation". In M. Zack (Ed.), pp.3-23.

- Helfat, C. E. (Ed.). (2003), "The SMS Blackwell handbook of organizational capabilities: Emergence, development, and change". Blackwell Publishing.
- Herron, L., and Robinson, R. B. (1993), "A structural model of the effects of entrepreneurial characteristics on venture performance. *Journal of Business Venturing*, Vol.8, No.3, pp.281-294.
- Keats, B. W., and Bracker, J. S. (1987), "Towards a theory of small firm performance: A conceptual model". *American Journal of Small Business*, Vol.12, No.4, 41-58.
- Kravis, I. B., and Lipsey, R. E. (1992), "Sources of competitiveness of the United States and of its multinational firms". *The Review of Economics and Statistics*, Vol.74, No.2, pp.193-201.
- Lumpkin, G. T., and Dess, G. G. (1996), "Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, Vol.21, No.1, pp.135-172.
- Man, T. W. Y., and Lau, T. (2000), "Entrepreneurial competencies of SME owner/managers in the Hong Kong services sector: A qualitative analysis". *Journal of Enterprising Culture*, Vol.8, No.3, pp.235-254.
- Man, T. W. Y., Lau, T., and Chan, K. F. (2002), "The competitiveness of small and medium enterprises: A conceptualization with focus on entrepreneurial competencies". *Journal of Business Venturing*, Vol.17, No.2, pp.123-142.
- Man, T. W. Y., Lau, T., and Snape, E. (2008), "Entrepreneurial competencies and the performance of small and medium enterprises: An investigation through a framework of competitiveness". *Journal of Small Business and Entrepreneurship*, Vol.21, No.3, pp.257-276.
- Porter, M. (1985), "Competitive advantage: Creating and sustaining superior performance". The Free Press.
- Rasmussen, E., Mosey, S., and Wright, M. (2011), "The transformation of network ties to develop entrepreneurial competencies for university spin-off emergence. *Paper presented at the Academy of Management Conference*", August 12-16, San Antonio, Texas, USA.
- Roper, S. (1998), "Entrepreneurial characteristics, strategic choice, and small business performance". *Small Business Economics*, Vol.11, No.1, pp.11-24.
- Solesvik, M. (2012), "Entrepreneurial competencies in emerging economy context. Paper presented at the 17th Nordic Conference on Small Business Research, Helsinki, May, pp.23-25
- Stevens, G. C. (1989). "Integrating the supply chain". *International Journal of Physical Distribution and Materials Management*, Vol.19, No.8, pp.3-8.