ENTREPRENEURIAL COMPETENCIES AMONG MANAGEMENT GRADUATES: A CROSS CULTURAL STUDY

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Abstract

Entrepreneurial competencies are seen as imperative to business growth and success. The purpose of this research was to study the competencies of a group of university management graduates in India and Sri Lanka perceived to have upon completion of their college education in perusal of entrepreneurial activity. A 60-item 160 questionnaire was administered to MBA graduates of Universities via stratified random sampling method in India and Sri Lanka. Out of 160 questionnaires 136 questionnaires were return, 128 of the questionnaires were fully completed and usable for the study.

The z test portrays there was a significant difference in opinion on certain competencies needed for the success of entrepreneurship. It is find-out from the mean values that in opportunity seeking, efficiency orientation, problem solving, self-confident, and persuasion respondent from Sri Lanka perceived to have a higher level of competencies compared to the respondent from India. Cluster analysis identifies four distinct groups of students in India and Sri Lanka. Based on agglomeration schedule both the groups perceived initiative as an important variable that support other competencies. However, the students compared were different on level of initiative power, opportunity seeking, persistence, systematic planning, efficiency orientation, concern for high quality of work, commitment to work contract, self-confident, and assertiveness. This was explained by coefficient of agglomeration schedule and k means analysis in cluster analysis. The outcome of this survey provide valuable information for educators by the way to adapt their courses and curricular to prepare students and to increase their confidence for a successful business start-ups. The discussion of the findings and implications for future research are presented.

Key Words: Competencies, Management Graduates, Curricular, Entrepreneurial Activity.

INTRODUCTION:

Over the last decade concentration has been given to competence-based education (Stoof, 2005) and its relevance in entrepreneurship education and training at the university level has become apparent (Bird, 2002). A basic idea of this movement is that an educational attitude based on competency development, facilitates learning in a society. Facilitation of learning may be possible by focusing on the competency characteristics.

Competencies are underlying characteristic of an individual that is causally related to criterion-referenced effective and / or superior performance in a job or situation (Spencer and Spencer 1993). Gibb (1990) defines competence as "an ability to perform certain tasks for which knowledge, skills, attitudes and motivations are necessary". According to Boyatzis (1982) "a job competency is an underlying characteristic of a person in that it may be a motive, trait, skill, and aspect of one's self-image or social role, or a body of knowledge which he or she uses". However the origin and development of competency movement within educational field is less clear (Stoof, 2005).

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Hence, knowing the competencies the students need to acquire has great importance in the field of education, since it is possible to turn students into entrepreneurs. Study contends that possessing entrepreneurial competencies can give students a confidence in creating new ventures.

With these things in mind survey was carried-out to measure the level of entrepreneurial competencies among the graduates in India and Sri Lanka. Specifically this survey examine the competencies the management students expected to manifest are same or different across different environmental situation. The study then advocates the need to instil in university student, by the way of appropriate entrepreneurial training program and the development of most relevant entrepreneurial competencies.

The purpose of this paper is to find-out answers for the following research questions:
1. Which competencies focused by students for the success of business venture?
2. Which competencies are generic among MBA graduates?

The study intends to focus on the following aspects: shed some light on the ongoing debate over what should be taught in an entrepreneurship course. Provide valuable insights for entrepreneurship educators to help them to adjust their course content and curricular in order to instil students in development of entrepreneurial competencies.

Entrepreneurial Competencies

Entrepreneurs are permanently challenged to deploy a set of competencies to thrive in their entrepreneurial endeavour. Chandler and Jansen (1992) studied the relationship between business founders' self-perceived competencies and venture performance and identified five competency areas associated with successful business founders. These include human and conceptual competencies, ability to recognize opportunities, drive to see venture through to fruition, technical – functional competencies, and political competencies. Consistent with this argument results by Man, Wing-yan Thomas (2001) indicated six areas of entrepreneurial competencies such as opportunity, relationship, conceptual, organizing, strategic, and commitment competencies are important in the performance of business.

In a study carried out by Hood and Young (1993) among entrepreneurs and CEOs revealed that the ability to communicate both in written form and oral was one of the most frequently mentioned as essential for entrepreneurial success. Bird (1995) suggested that an entrepreneurial skill contribute to venture performance and growth. Bartlett and Ghoshal (1997) identified three categories of competencies such as attitude/traits, knowledge/experience, and skills/abilities.

Methods

Data for the study was gathered from a self-administered questionnaire conducted among university students in the South Asian region. The unit of analysis was the graduates in Master of Business Administration of different universities in India and Sri Lanka. The questionnaires were adapted from Entrepreneurship Development Institute of India (EDI), Ahmadabad and used as a means for data collection. The survey consisted of 60 items divided into eleven groups. The questions were related to the variables: initiative, opportunity seeking, persistence, concern for high quality of work, efficiency orientation, systematic planning, problem solving, self confident, assertiveness and persuasion and the dependent variable of entrepreneurial competencies for the success. The scales used in the questionnaire was based on a 5-point Likert scale (with 1 = not at all, 2 = very little, 3 = somewhat, 4 = well, 5= very well) for each close-ended question.

One hundred and sixty (160) questionnaires were distributed through stratified random sampling method to target respondents. Every sixth student was chosen from the register as a respondent. The respondents were given one week of time to return the questionnaires. After the screening, 128 of the questionnaires were fully completed and usable, yielded a response

rate of 80 per cent. SPSS version 17.0 was used to analyze the data. Descriptive analysis, Z- test and a hierarchical and k-means cluster analyses were performed to examine the hypothesized propositions.

Results

The data collected from the survey were tested for reliability test using Cronbach Alpha. The overall dimensions of the competencies for success construct had the value of 0.85 (see Table – 01). From the value it is found that the reliability co-efficient for the variables chosen for the study are more than 0.60, which is an acceptable value (Malhotra, 2004). Hence it can be concluded that the items constituting variables for the study have reasonable internal consistency.

Table – 01 Reliability Assessment on Competencies for success

Cronbach's Alpha	N of Items
.850	60

The data collected from the respondents were tabulated and analysed using appropriate statistical techniques. The Table – 02 shows the background details of the respondents. As per the table there were 128 respondents who are majoring in entrepreneurship courses from higher educational institutions from India and Sri Lanka. The MBA graduates were categorized in to two criterion groups, i.e. MBA graduates in India and MBA graduates in Sri Lanka.

Table – 02 Age Distribution of MBA graduates in India and Sri Lanka

Intervals	India	Sri Lanka
20 - 25	58 (88%)	00 (00%)
25 -30	05 (08%)	13 (21%)
30 -35	03 (04%)	35 (56%)
35- 40	00 (00%)	14 (23%)

(Percentage in parenthesis)

The age was reported as an exact measure, however, made in to class intervals for simplicity. It was found that the majority (88%) of the MBA graduates are in the age group of 20 to 25 in India and 30 to 40 (79%) in Sri Lanka.

Next the "z" test is used to identify the influence of certain competencies in perusal of entrepreneurial success. Z test was applied to find whether there is any significant different between the graduates of India and Sri Lanka regarding the competencies needed for the entrepreneurial success.

Null Hypothesis: India and Sri Lanka MBA graduates have alike opinion of competencies that are needed for the success of entrepreneurship.

Table – 03 Descriptive Statistics – Mean, Standard Deviation and Z-Value of Competencies Variable for MBA Students in India and Sri Lanka

Variables	Country	Mean	SD	"Z" Value	Hypothesis
Initiative	India	2.41	0.48	±2.04* (0.04)	Rejected
	Sri Lanka	2.23	0.54		
Opportunity Seeking	India	2.23	0.65	±2.73* (0.03)	Rejected
	Sri Lanka	2.44	0.44		
Persistence	India	2.16	0.55	±1.74 (0.08)	Accepted
	Sri Lanka	2.31	0.44		
Concern for High Quality of Work	India	2.52	0.66	±0.13 (0.88)	Accepted
	Sri Lanka	2.52	0.50		
Commitment to Work Contact	India	2.31	0.79	±1.96* (0.04)	Rejected
	Sri Lanka	2.54	0.57		
Efficiency Orientation	India	1.97	0.52	±5.67* (0.00)	Rejected
	Sri Lanka	2.48	0.48		
Systematic Planning	India	2.40	0.48	±0.81 (0.41)	Accepted
	Sri Lanka	2.44	0.38		
Problem Solving	India	1.91	0.58	±2.41* (0.01)	Rejected
	Sri Lanka	2.16	0.58		
Self Confident	India	2.37	0.43	±2.50* (0.01)	Rejected
	Sri Lanka	2.56	0.42		
Assertiveness	India	2.01	0.60	±1.65 (0.09)	Accepted
	Sri Lanka	2.18	0.52		
Persuasion	India	2.01	0.55	±3.09* (0.00)	Rejected
	Sri Lanka	2.28	0.43		
Competencies for Success	India	3.59	0.66	±3.91* (0.00)	Rejected
	Sri Lanka	3.99	0.48		

* - Significance at 5% level
N: India – 66, Sri Lanka – 62

The value of Z_o is greater than Z_e expected value in case of initiative, opportunity seeking, efficiency orientation, problem solving, self-confident and persuasion. Hence the null hypothesis is rejected and it is inferred that the significant difference exist between the Indian and Sri Lankan graduated on perceived competencies for success. it is find-out from the mean values that in opportunity seeking, persistence, commitment to work contract, efficiency orientation, systematic planning, problem solving, self-confident, assertiveness and persuasion respondent from Sri Lanka perceived to have a higher level of competencies compared to the respondent from India.

The purpose of the study was to obtain a list of competencies with the idea of facilitating the design of an instructional teaching method for postgraduate management students. It is reasonable to assume that postgraduate students are erudite in entrepreneurial activity and as such they are in their early stage of entrepreneurial development. Hence the present study was intended to determine the basic set of competencies that need be possessed by individuals in their effort to create a successful new venture. Following this, the competencies with a score mean greater than two were chosen, which means such competencies were considered by would-be entrepreneurs.

Study identifies nine competencies such as initiative, opportunity seeking, persistence, concern for high quality of work, commitment to work contact, systematic planning, persuasion, self confidence and assertiveness that were common among both parties' with higher than mean value of two. However there is relative differences in opinions have been found between graduates, as both parties have distinct attitudinal positions because of age difference.

Cluster Analysis

The cluster analysis is a data description technique (Everitt, 1980) that can be used to identify groups of individuals or "clusters", on the basis of the similarity, for example their responses to a set of questions.

Table – 04 Agglomeration Schedule for Entrepreneurial Competencies among MBA Graduates in India and Sri Lanka

| Country | Stage | Cluster Combined | | Coefficients |
		Cluster 1	Cluster 2	
India	1	1	8	24.200
	2	3	11	25.280
	3	1	2	26.980
	4	6	10	27.360
	5	6	7	29.280
	6	6	9	31.613
	7	1	3	35.253
	8	1	6	38.642
	9	4	5	45.400
	10	1	4	50.100
Sri Lanka	1	3	11	14.280
	2	3	10	16.420
	3	4	8	17.000
	4	3	9	19.773
	5	2	6	20.520
	6	2	4	21.300
	7	1	3	25.510
	8	1	2	27.544
	9	1	5	29.987
	10	1	7	32.788

The solutions of an agglomerative hierarchical cluster analysis are presented in Table – 04. Agglomerative schedule displays the objects or clusters combined at each stage and the distance at which this merger takes place. In the first stage objects one and eight are merged at a distance of 24.20 for India and three and eleven are merged at a distance of 14.28. Neither variables have been previously clustered and in the next stage when the cluster containing case one combines with another case in stage three for India and stage two for Sri Lanka. Following this stage other clusters are formed with the small difference in the

coefficient. But in the movement from stage five to six there is an increase in coefficient. This shows that there is great variation between the groups of variables in both countries.

Figure -1 Dendrogram for Entrepreneurial Competencies among MBA Graduates in India and Sri Lanka
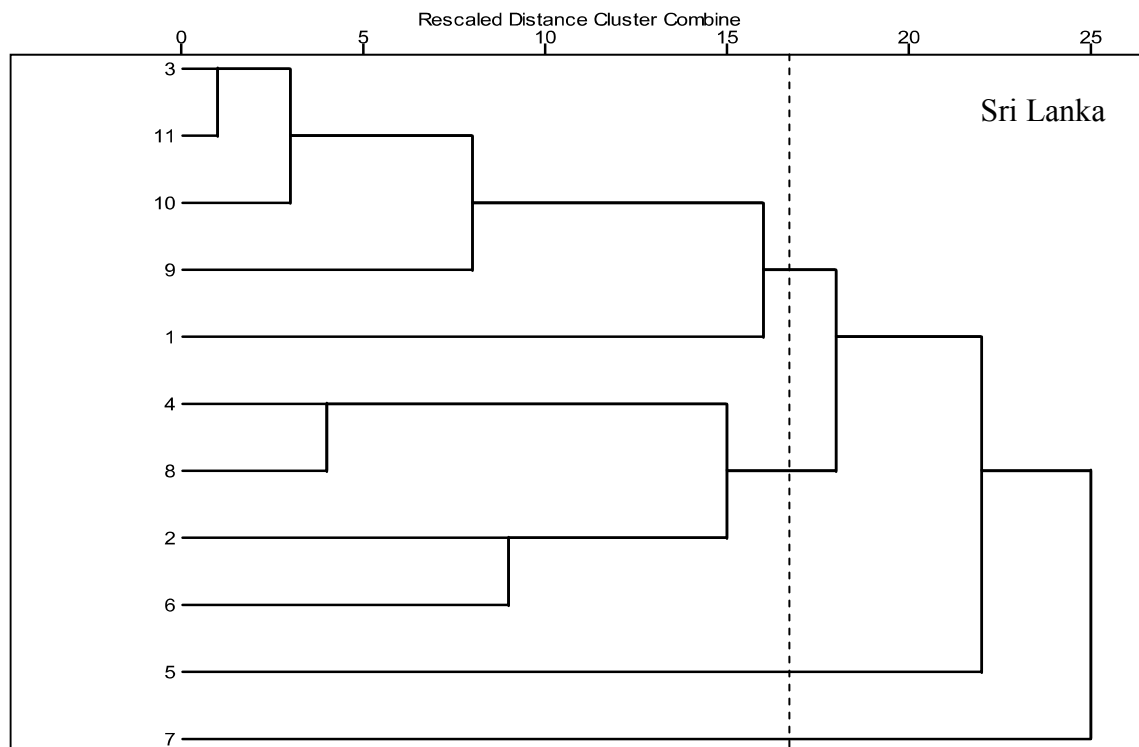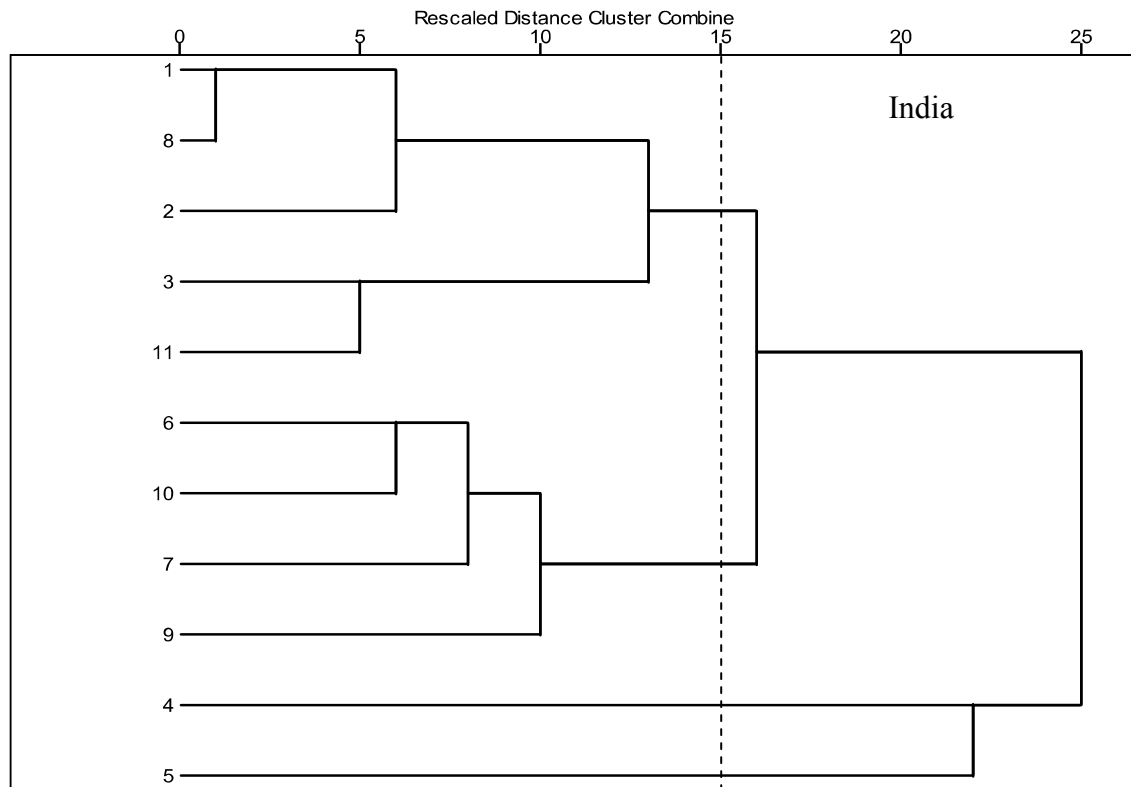
Based on agglomerative schedule and dendrogram, the study identifies four distinct groups of students in India and Sri Lanka. Clusters were characterized as achievement cluster, planning cluster, power cluster and mixed competent cluster. Indian graduates have keen interest in development of initiative power, since it develops skills in problem solving, opportunity seeking, efficiency and persistence. Efficiency in work increases the quality of work, persuasion and assertiveness. Sri Lankan graduates also alike in acquisition of initiative competencies which will enable development of the skills in opportunity seeking, systematic planning, persuasion and self confident. The competency in opportunity identification will increase the commitment in work and quality of work which leads to the success of business.

K Mean Clustering

Table – 05 K-Mean Cluster Centers for MBA Graduates in India and Sri Lanka

Country	Variables	Cluster			
		1	2	3	4
India	Initiative	2.76	2.34	2.43	2.78
	Opportunity Seeking	2.64	2.52	2.17	3.04
	Persistence	2.30	2.56	1.60	2.24
	Concern for High Quality of Work	2.47	2.75	2.28	2.13
	Commitment to Work Contract	2.54	2.88	1.27	2.75
	Efficiency Orientation	1.81	2.41	1.76	2.00
	Problem Solving	**1.51**	**2.41**	**1.91**	**1.95**
	Self-Confident	2.09	2.74	2.44	2.31
	Assertiveness	1.92	2.60	1.66	1.95
	Persuasion	**1.76**	**2.45**	**2.01**	**1.87**
	Systematic plan	2.38	2.71	2.20	2.36
Sri Lanka	Initiative	2.92	2.53	2.20	2.25
	Opportunity Seeking	2.72	1.87	2.53	2.42
	Persistence	2.60	2.47	2.69	2.27
	Concern for High Quality of Work	2.76	2.55	2.90	2.43
	Commitment to Work Contract	1.48	2.63	2.97	2.64
	Efficiency Orientation	2.32	2.27	2.54	2.50
	Problem Solving	**1.56**	**2.47**	**2.63**	**2.02**
	Self-Confident	2.44	2.57	3.01	2.39
	Assertiveness	1.52	2.40	2.50	2.14
	Persuasion	**1.76**	**2.47**	**2.21**	**1.91**
	Systematic plan	2.64	2.07	2.77	2.44

1 – Achievement Cluster   2 – Result Focus Cluster
3 – Power Cluster   4 – Mixed Competent Cluster

The k-means cluster centers show the mean values for the four distinct groups of students. It identifies that group of Indian and Sri Lankan management graduates perceive to have same level of competencies relevant to the problem solving and persuasion.

A group of students (India - 32%; Sri Lanka – 34%) in cluster one in India and Sri Lanka perceived initiative and opportunity seeking as an important factor. They have keen interest in seize unusual opportunities to start a new business, equipment, land, work space or assistance and perceive to do things that meet or exceed standards of excellence. Students are also interested to develop or use procedures to ensure work is completed on time or that work meets agreed upon standards of quality. A group of students (India - 24%; Sri Lanka – 18%) in cluster two perceived commitment as an important factor. Students are ready to make personal sacrifice or expend extraordinary effort to complete the job on time. The group of students (India - 27%; Sri Lanka – 22%) in cluster three perceived self-confident as an important factor. They believe on themselves and express confidence in their own ability to complete a difficult task or meet a challenge. Self confident motivate them to initiate and to identify new opportunities. The last group (India - 17%; Sri Lanka – 26%) perceived mixed – competencies are important for the success of business.

Conclusions

This study makes three major contributions to the field of entrepreneurship. Firstly study indicates there is a difference in competencies opinion among graduates of India and Sri Lanka. A group of Indian and Sri Lankan management graduates perceive to have same level of competencies relevant to the problem solving and persuasion. Students perceive to focus on initiative in creation of business venture. Another contribution of the study is that shed light over what should be taught in an entrepreneurship course. Finally based on the research findings, educators can design and include in their course in and out-of-class activities with the aim of instilling in students the development of relevant competencies for successful business start-ups and the survival of profitable enterprise.

Recommendations

- To improve the competency levels of students especially along the areas of initiative, opportunity seeking, persistence, concern for high quality of work, commitment to work contact, systematic planning, persuasion, self confidence, and assertiveness. The study recommends that universities should review the design of the curricular.
- Inspire students to work out activities that should be designed to mimic real world situations.
- Encourage students to organize trade fairs and exhibits that will showcase the initiative power of the graduates.
- Invite selected successful practicing entrepreneurs to share their view points with would-be entrepreneurs.

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