

Original Research Article

A Tool to Measure Entrepreneurial Skill among Agripreneurs

ABSTRACT

Entrepreneurship skills are an individual's ability to make business in a profit way. The purpose of this study is to establish a valid measure for agripreneurs skill from by means of reviewing the depths and progress of relevant entrepreneurial literature. Item selection and scoring procedure had been included in this study. On the basis of the reliability and validity testing, this study finalized the instruments to yielding seven indicators, namely, marketing dimension, psychological magnitude, managerial skill, behavioural skill, technical skill, communication competency, cognitive skill. It is recommended that future researchers apply and thereby extend the developed measure by cross-examining the instruments presented in this study across different entrepreneurs study. The results obtained will be helpful in planning and implementing the capacity development programmes.

Keywords: Agripreneurs skill index, Entrepreneurship skill, Agribusiness

1. INTRODUCTION

An entrepreneur is an individual with knowledge, skills, initiative, drive and spirit of innovation who aims at achieving goals. The ability to come up with innovative mind-sets and proceed as an effective and resourceful way of creation of new business or as an effective and innovative within an organization are recognized in all areas. Similarly, skills are equally important for all those who want to become self-employed. The widely quoted skills are leadership, technical, personal, and managerial, technical, problem solving, innovation, risk taking propensity, and social networking and considered as key competences. However, entrepreneurship research lacks consensus regarding the issue of what main skills an entrepreneur has or needs (Morales & Marquina, 2013).

Competence is an elusive construct which is not defined adequately in entrepreneurship literature (Phelan & Sharpley, 2012). Competence is an underlying quality of an individual, which results in effective and/or superior performance in a job (Klemp, 1980). The construct of competence embraces a range of skills, abilities, and other characteristics related to perform a specific task or being proficient and competent (Chell, 2013). In literature of entrepreneurship, the constructs of skills and competences used interchangeably (Phelan & Sharpley, 2012; Chell, 2013). Though, some researchers argue that skills are also fall under the construct of “competencies” (Mischel, 1973). Parry (1998) distinguished between competencies and skills, as “skills tend to be situational and specific, whereas competencies are generic and universal”. Kanungo and Misra (1992) differentiated the skills from competences as “skills refer to the ability to engage in an overt behavior whereas competencies relate to the ability to engage in cognitive activity”. To be more focused on skills, they are multidisciplinary, and contain cognitive, affective, and behavioral elements (Chell, 2013).

2. METHODOLOGY

The study mainly focused on construction of index to measure agripreneurial skill of agripreneurs. An index defined as a technique of totalling or reducing a single composite series data on a number of distinct, but related variables expressed in different units of measurement (Hooda,2001). Agripreneurial skill index measures the skill of individual agripreneurs. Agripreneurial skill index refers to ability and capability of entrepreneur to turn ideas into action by devoting necessary time & effort and sustain the process of enterprise resulting in rewards of monetary, personal satisfaction and independence. Composite index procedure has been followed by Janani (2015).

2.1. Establishing agripreneurial skill index

2.1.1 Selection of indicators and sub indicators

Identification of indicators are carried out through literature review. Seven indicators were identified to measure skill of agripreneurs. Agripreneurs Skill Index developed considering seven indicators viz., Marketing skill, Psychological magnitude, Managerial skill, Behavioral skill, Communication competency and Cognitive skill. For each indicator, a list of sub indicators were identified through literature review and

discussion with experts. The selected indicators and sub indicators are screened and subjected to judge's opinion.

2.1.2. Relevancy rating of indicators

The judges are requested to indicate the relevancy of each indicators and sub indicators. The responses were obtained on four point continuum viz., 'Most relevant', 'Relevant', 'Somewhat relevant', 'Not relevant' with scores of 4,3,2 &1. Based on judges responses, the Relevancy Weightage (RW) of i^{th} indicator (RW_i) was worked out by using the following formula.

Relevancy weightage (RW) =	(Most Relevant X 4) + (Relevant X 3) + (Somewhat Relevant X2) + (Not Relevant X1)
	Maximum Possible Score

Considering relevancy weightage, the indicators and sub indicators were screened for their relevancy. Accordingly, indicator having relevancy weightage of more than 0.75 were considered. Using this process, seven components having more than 0.75 relevancy weightage were selected.

3. RESULTS AND DISCUSSION

After data collection, the relevancy weightage score was calculated with seven major indicators and the scores are presented in Table 1

Table 1 List of selected agripreneurial skill indicators with their relevancy weightage

S. No	Indicators	Relevancy weightage
1	Marketing skill	0.88
2	Psychological magnitude	0.89
3	Managerial skill	0.98
4	Behavioural skill	0.79
5	Technical skill	0.83

6	Communication competency	0.93
7	Cognitive skill	0.89

Followed by identified major indicators of agripreneurs skill, sub indicators identified for each of the major indicator in table 2.

Table 2 list of indicators and sub indicators with their relative weightage

S. No	Dimensions of Agripreneurial skill	Relevancy weightage score
1	Marketing Dimensions	0.88
	1. Market survey	0.88
	2. Consumer preference	0.96
	3. Demand forecasting	0.93
	4. Competitive product pricing	0.82
	5. Competitive aggressiveness	0.66
	6. Sales orientation	0.81
2	Psychological Dimensions	0.89
	1. Autonomy	0.72
	2. Risk taking	0.92
	3. Pro activeness	0.90
	4. Self –efficacy	0.91
	5. Self confidence	0.93
	6. Achievement motivation	0.88
	7. Self –control	0.72
	8. Goal setting	0.81
	9. Aspiration	0.79
	10. Perseverance	0.91
11. Strategic planning	0.86	
3	Managerial Dimensions	0.98
	1. Planning	0.98
	2. Decision making	0.99
	3. Leadership	0.97
	4. Human resource management	0.90
	5. Team / group work	0.88
	6. Time management	0.94
	7. Delegation	0.80
	8. Finance/accounting	0.88
9. Coordination skill	0.88	
4	Behavioural Dimensions	0.79
	1. Change orientation	0.79
	2. Conflict management	0.93

	3. Negotiation	0.93
	4. Social responsibility	0.78
	5. Problem solving/ design skill	0.90
5	Technical Dimensions	0.83
	1. Stock purchase	0.83
	2. Product quality control	0.89
	3. Business skill	0.74
	4. Legal/administrative	0.79
	5. Technical business management	0.79
	6. Monitoring environment	0.73
	7. Business/ venture launch	0.68
6	Communication competency	0.93
	1. Collaboration and Networking skill	0.93
	2. Soft skill	0.85
	3. Interpersonal skill	0.93
	4. Listening skill	0.91
	5. Presentation skill	0.88
7	Cognitive Dimensions	0.89
	1. Innovativeness	0.89
	2. Dealing with external factors	0.81
	3. Conceptual skill	0.85
	4. Critical thinking	0.95

3.1. Standardization of index

In the next stage, reliability and validity of index was done for standardization of the index.

3.1.1. Reliability

The reliability of the scale was determined by 'Cronbach's alpha' method. The reliability coefficient is 0.65. When the purpose of the test is to compare the mean scores of two groups of narrow range a reliability coefficient of 0.50 or 0.60 would suffice. Hence, the constructed agripreneurial skill index is reliable as the reliable coefficient (rtt) was >0.60.

3.1.2. Content Validity

Content validation was carried out by subjecting the selected ten items to judge's opinion. The judges were requested to indicate their presumed relevance to which the sub indicators and items covered the different aspects of entrepreneurial skill. The responses were obtained on a four-point continuum of 'most adequately covered', 'more

adequately covered', 'less adequately covered' and 'least adequately covered'. Scores of 4, 3, 2 and 1 were given for the points on the continuum respectively.

Totally 30 judges responded by sending their judgments. The mean score 2.5 was fixed as the basis for deciding the content validity of the scale. If the overall mean score of the sub indicators and its items as rated by the judges was above 2.5 the scale will be declared as valid and if not otherwise. In the present case, the overall mean score worked out as 3.51 and therefore the constructed index said to be valid

3.1.3. Quantification of indicators

Each indicator measured by means of scoring procedure developed for the study. To develop a composite agripreneurs skill index and to derive meaningful conclusions, separate index was developed for each indicator. The scoring procedure has been followed by Janani (2015). The operationalization of each indicator are furnished below.

3.1.4. Operationalization and administration of indicators:

1. Marketing Skill Index (MSI):

It refers to the ability to organize the marketing function with set of process for promoting, supporting and delivering value to customers. It was quantified by set of sub indicators. Marketing skill index worked out by using the following formulae

$$MI = \frac{SMS \ x_i}{TMS \ y_i}$$

Where,

MSI = Marketing Skill Index

SMS x_i = Secured scored by an individual on marketing skill

TMS y_i = Total possible score for an individual on marketing skill

2. Psychological Magnitude Index (PMI):

Psychological magnitude refers to systematic and persistent practice of mental skills for the purpose of enhancing performance, achieving greater and physical activity satisfaction. It focuses on efficacy of individuals in organization. The psychological magnitude worked out by using formula,

$$PMI = \frac{SPM \ x_i}{TPM \ y_i}$$

Where,

PMI = Psychological Magnitude Index

SPM x_i = Secured scored by an individual on psychological magnitude

TPM y_i = Total possible score for an individual on psychological magnitude

3. Managerial Skill Index (MSI):

It refers to the abilities and capabilities of an executive possess to perform the managerial work in organization. The managerial skill index worked out by using formula,

$$MSI = \frac{SMSx_i}{TMS y_i}$$

Where,

MSI = Managerial Skill Index

SMS x_i = Secured score by an individual on managerial skill

TMS y_i = Total possible score for an individual on managerial skill

4. Behavioral Skill Index (BSI):

It refers to the reflective ability of the individual in relation to the characteristics of the situation he / she may come up against. The behavioral skill index worked out by using formula,

$$BSI = \frac{SBS x_i}{TBS y_i}$$

Where,

BSI = Behavioral Skill Index

SBS x_i = Secured score by an individual on behavioral skill

TBS y_i = Total possible score for an individual on behavioral skill

5. Technical Skill Index (TSI):

It refers to ability to manage the enterprise in technical aspects and have knowledge on technical in each & every aspects of business. The technical skill index worked out by using formula,

$$TSI = \frac{STS x_i}{TTS y_i}$$

Where,

TSI = Technical Skill Index

STS x_i = Secured score by an individual on technical skill

TTS y_i = Total possible score for an individual on technical skill

6. Communication Competency Index (CCI):

It refers to individual ability to manage communication between employee and other stakeholders. The communication competency index worked out by using formula,

$$CCI = \frac{SCC \ x_i}{TCC \ y_i}$$

Where,

CCI = Communication Competency Index

SCC x_i = Secured score by an individual on communication competency

TCC y_i = Total possible score for an individual on communication competency

7. Cognitive Skill Index (CSI):

It refers to the ability of individual to process & articulate the acquired knowledge and then relate & apply it from previously gained information. The cognitive skill index worked out by using formula,

$$CSI = \frac{SCS \ x_i}{TCS \ y_i}$$

Where,

CSI = Cognitive Skill Index

SCS x_i = secured score by an individual on cognitive skill

TCS y_i = Total possible score for an individual on cognitive skill

Further the index has been administered and the scores obtained were analysed using cumulative frequency method to classify agripreneurs skill into five categories.

Table.3 Classification of agripreneurial skill into categories

S. No.	Category	Score
1.	Very strong	5
2.	Strong	4
3.	Moderate	3
4.	Weak	2
5.	Very weak	1

4. Conclusion

In order to develop and manage a successful business, entrepreneurs need a range of entrepreneurial skills (Phelan & Sharpley, 2012). Entrepreneurs' skill allowed entrepreneurs to perform the functions of enterprise that governs their success (Shefsky, 1996). Entrepreneurship skill is very important as mentioned by author, the developed index would help to measure skill possession of agripreneurs and categorize into five categories like very strong, strong, moderate, weak, and very weak. Each indicators had a sub set of indicators which directly measuring the respective indicators. The results obtained will be helpful in planning and implementing the capacity development programmes. The index findings would be plays a vital role to identify the skills already with agripreneurs. This index would be beneficial for the Institutions who arrange capacity development programs, NGO, Private companies, Entrepreneurship training institutes etc. The purpose of this paper was to conduct a pilot study and pre-test the validity and reliability of the items measuring the agripreneurial skills set constructs. Therefore it can be concluded that all the constructs of agripreneurial skills set are reliable, and valid.

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