Factors Influencing the Entrepreneurial Behaviour of Agripreneurs in Andhra Pradesh

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Abstract

This study aims to identify the factors that influence the entrepreneurial behaviour of agripreneurs in three selected districts of Andhra Pradesh i.e. Chittoor, Krishna and Visakhapatnam, which were selected based on the highest number of agri linked enterprises. Two hundred and forty agripreneurs were selected through proportionate random sampling. Expost- facto research design was used in the study. An attempt has been made to evolve a set of factors influencing the entrepreneurial behaviour through a data reduction process of factor analysis. The factors include: need for independence, communication network, innovativeness, achievement motivation, leadership behaviour, entrepreneurial self-efficacy, decision making and business skills. Results reveal that two factors such as entrepreneurial potential and entrepreneurial skill factor accounted for the maximum percentage of the total variance on overall entrepreneurial behaviour of agripreneurs.

Key words: Agripreneurship, entrepreneurship, factor analysis.

Entrepreneurs and entrepreneurship are the pillars on which economic health of societies was built. Their role has been highlighted in opportunity creation through new ventures and maintenance of existing ones. In the present context, entrepreneurial behaviour has been operationalized as the cumulative outcome of eight components namely, need for independence, communication network, innovativeness, achievement motivation, leadership ability, decision making, entrepreneurial self-efficacy and business skills. Parimaladevi *et al*. (2006) reported that the most important factors influencing establishment of agro based enterprises were attitude towards self-employment, entrepreneurial ability and self-confidence. Dedicated personnel with managerial skills are a critical input for successful agri business (Arora, 2001). Hence, it has been felt imperative to study the determinants of entrepreneurial behaviour through a data reduction process on entrepreneurial

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behavioural components. Principle component analysis and factor analysis (with varimax rotation) was adopted to assess the determinants of entrepreneurial behaviour among agripreneurs. Principle component analysis (PCA) is a data reduction technique, i.e., it reduces a larger set of predictor variables to a smaller set with minimal loss of information. PCA may be applied before running regression analyses or for exploratory purposes to help researchers understand relationships among their variables or discover patterns in their data (Kristin and Sainani, 2014).

Material and Methods

The study was conducted by using ex-post facto research design. The state of Andhra Pradesh was selected purposively. One district was selected from each region of Andhra Pradesh based on the highest number of agro based enterprises *i.e*. Visakhapatnam from north coastal, Chittoor from Rayalaseema and Krishna from southern region of Andhra Pradesh. From the selected districts 80 agripreneurs were selected by using proportionate random sampling. Thus a total of 240 agripreneurs were included in the study. The primary data were collected using a pre-tested structured interview schedule by conducting personal interview. Data was tabulated, classified and analyzed using principle component analysis technique.

Results and Discussion

Principle Component Analysis of Entrepreneurial Behavioural Components

To study the entrepreneurial behaviour of agripreneurs, eight major components were taken into consideration. In this section, PCA and factor analysis (with varimax rotation) were used to group the components into factors based on the communalities observed.

Principle component analysis was carried out with all the components and the results are furnished in Table 1.

Table 1. Eigen values for Components of Entrepreneurial Behaviour of Agripreneurs

Component number	Eigen value	Cumulative variation (%)
I	5.109	63.86
II	1.714	85.28
III	0.156	87.23
IV	0.032	87.63
V	0.202	90.15
VI	0.351	94.53
VII	0.137	96.24
VIII	0.302	100.00

Extraction Method: Principal Component Analysis.

Table 1 provides details of Eigen values and percentage of variance explained by the components. The components which are having more than one Eigen value were selected. Thus, from the eight components, two factors were extracted and these factors together explained a total variance of 85.28 per cent towards entrepreneurial behaviour. From the results, it could be concluded that two factors having more than one Eigen value are contributing 85.28 per cent variation towards entrepreneurial behaviour of agripreneurs.

Rotated Factor (Varimax) Matrix of Components

The results of principle component analysis clearly indicated that there are two factors which explained maximum variation (85.28%) in entrepreneurial behaviour. Further, factor loading of each component under two factors were analyzed and furnished in Table 2.

Table 2. Rotated Factor (Varimax) Matrix of each Component

Sl. No.	Entrepreneurial Behavior Components	Factors	
		1	2
1.	Need for independence	0.868	-0.183
2.	Communication Network	0.923	-0.034
3.	Innovativeness	0.239	0.788
4.	Achievement Motivation	0.812	0.295
5.	Leadership Behaviour	-0.178	0.879
6.	Entrepreneurial Self-Efficacy	0.730	0.632
7.	Decision Making	0.786	0.544
8.	Business Skills	0.450	0.853
	Eigen values	**5.109**	**1.714**
	Per cent of variation explained	**63.86**	**21.42**
	Cumulative per cent variation explained	**63.86**	**85.28**

From Table 2 each factor column was scanned for identifying the components which were more significantly correlated with the particular factor. Thus, from each factor column, the components having a factor loading of more than 0.65 were selected and grouped in Table 3.

Table 3. Factors-wise Components with Factor Loading

Factors	Components of Entrepreneurial Behavior	Factor loadings
Factor 1	Need for independence	0.868
	Communication network	0.923
	Achievement motivation	0.812
	Decision making	0.786
	Entrepreneurial self-efficacy	0.730
Factor 2	Leadership behavior	0.879
	Innovativeness	0.788
	Business skills	0.853

The data in Table 3 revealed the grouping of components under each factor with their factor loadings.

Factor 1

This factor was identified as 'prime factor' as it explained 63.86 per cent of variation in entrepreneurial behaviour of agripreneurs. From Table 3 it could be inferred that under factor 1, communication network is influencing the entrepreneurship to a greater extent with the highest factor loading of 0.923 followed by need for independence (0.868), achievement motivation (0.812), decision making (0.786) and entrepreneurial self-efficacy (0.730). Since, these factors primarily deal with entrepreneurs' self-potential, it has been termed as 'Entrepreneurial potential' factor of entrepreneurial behaviour in this study.

Entrepreneurial potential factor which includes communication network, need for independence, achievement motivation, decision making and entrepreneurial self-efficacy were indicative factors of entrepreneurial behaviour and vital to start and continue the business. The success in agribusiness requires enough competence and experience to leverage the modes of business operations. Networking with concerned stakeholders could provide enough support and way forward in running the agribusiness and achievement motivation decide the expansion of any business and they are bound to have profound impact on the entrepreneurial behaviour of agripreneurs. Due to the above facts, five components *viz.,* need for independence, communication network, innovativeness, achievement motivation, decision making and entrepreneurial self-efficacy were found to be interlinked with each other and have been loaded in Factor 1.

Factor 2

Among the total variation of 85.28 per cent, the second factor explained the entrepreneurial behaviour variation to the extent of 21.42 per cent. From the results, it could be concluded that among the three components in factor 2, leadership behaviour has been found to manipulate the entrepreneurial behaviour to a greater extent with the highest factor loadings of 0.879 followed by business skills (0.853) and innovativeness (0.788). As these factors mainly deal with skills of the entrepreneurs, it has been termed as 'Entrepreneurial skill' factor.

Leadership behaviour, business skill and innovativeness are critical skills that one should possess to do business. Therefore, these three components could have been interlinked with each other and significantly loaded in a single factor namely entrepreneurial skill factor. Hence, it could be interpreted that entrepreneurial skill factor was bound to have profound impact on the entrepreneurial behaviour and contributed for 21.42 per cent of total variance.

It could be concluded from the above analysis that perceived entrepreneurial behaviour of agripreneurs could be determined by the factors such as entrepreneurial potential and entrepreneurial skill. Among these factors, entrepreneurial potential factor accounted for the maximum percentage of the total variance on the overall entrepreneurial behaviour of agripreneurs.

Conclusion

It could be concluded from the above analysis that perceived entrepreneurial behaviour of agripreneurs could be determined by the factors such as entrepreneurial potential and entrepreneurial skill. Among these factors, entrepreneurial potential factor accounted for the maximum percentage of the total variance on the overall entrepreneurial behaviour of agripreneurs.

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