



Exploring Socio-Economic And Entrepreneurial Attributes Of Agriculture Students: A Case Study From Siksha 'O' Anusandhan Deemed To Be University, India

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Abstract

This paper aims to investigate the entrepreneurial traits of Indian students enrolled in the Application of IT in Agriculture ELP (Experiential Learning Programme) at Siksha "O" Anusandhan University. Additionally, it seeks to determine the relationship between the students' entrepreneurial traits and socio-economic characteristics. Three entrepreneurial traits—decision-making ability, leadership ability, and information-seeking behavior—are incorporated in this study to establish the student entrepreneurial profile. Utilising pre-tested questionnaire with a 3-point Likert scale, convenient sampling was employed to get the results. Information was gathered from the Siksha 'O' Anusandhan University. A total of 34 surveys were sent via Google Form to all university students enrolled in the Application of IT in Agriculture ELP programme, and 16 of those surveys were determined to be appropriate for the investigation. Majority of the students demonstrated a medium level of leadership, information-seeking behaviour, and decision-making skill. Only undergraduate students with an ELP background in the Application of IT in Agriculture are eligible for this study, and the sample consisted of only one university. It is possible to do additional research with students from various courses and streams. Studies at different universities might be carried out to compare the degrees of entrepreneurial traits among the students. This study offers a deeper understanding of the course materials that work best for encouraging students to develop entrepreneurial traits and the materials that should be added to further develop the potential of entrepreneurs.

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Keywords: *Entrepreneurship, Entrepreneurial characteristics, India, Students, University*

Introduction

Entrepreneurship has become a very appealing option for many, particularly those who are in the critical stage of making decisions about their careers. According to recent studies, young people—especially university students—are becoming more inclined to pursue entrepreneurial endeavours. The potential to participate in the labour market while maintaining individual autonomy is the basis of this attraction (Martinez et al., 2007; Shirokova et al., 2016). Understanding university students' objectives has shifted to include their intention to pursue an entrepreneurial career, which is defined as their readiness to launch a business soon after graduating (Mueller, 2011; Reynolds et al., 2005).

The academic and scientific community has seen a rise in interest in entrepreneurship studies due to the global environment. India, whose economy is among the fastest-growing in the world, has aggressively started policies and programmes aimed at fostering an innovative and entrepreneurial culture. The Indian government, in tackling the urgent problem of creating jobs, acknowledges the enormous potential in its diverse population and varied topography to promote entrepreneurship for economic expansion.

Entrepreneurial tendencies are taught and shaped by personal attributes and environment, according to the model of entrepreneurial aspirations created by Krueger and Brazeal (1994). Prominent scholars, such as Schere (1982), McClelland (1961), Brockhous (1982), and Greenberger and Sexton (1998), have highlighted the connection between the mindset of starting a firm and innate traits of entrepreneurs. The tendency to start a business is also shaped by background variables like prior work, family history, gender, education, and ethnicity.

According to Johnson (2001) and Thompson (1999), entrepreneurial traits include drive, responsibility, ownership, autonomous decision-making, receptivity to new ideas, ambiguity tolerance, inventiveness, adaptability, problem-solving skills, opportunity recognition, risk awareness, and perseverance. Additionally, the psychological traits related with entrepreneurship—which Rauch & Frese (2007) in Brandstätter (2011) proposed—will be examined. These traits include locus of control, inclination for taking risks, self-efficacy, need for achievement, tolerance for uncertainty, and innovativeness. Cromie (2000) lists the demand for achievement, locus of control, and creative tendencies as characteristics of entrepreneurs. Critical characteristics of entrepreneurs have been found, including risk-taking, leadership, motivation, crisis-resolution skills, inventiveness, low risk aversion, and decision-making ability (Pretorius et al., 2005).

The scale created by Chaudhari et al. (2007), which includes nine dimensions—innovativeness, achievement motivation, decision making ability, risk orientation, coordination ability, planning ability, information seeking behaviour, cosmopolitaneness, and self-confidence—was used to examine the respondents' entrepreneurial behaviour. The respondents were categorised into three groups based on their entrepreneurial behaviour score: low, medium, and high based on Mean \pm SD. Simple statistical techniques including percentages, averages, multiple correlation, and regression were used to the data.

The purpose of this study paper is to investigate the entrepreneurial tendencies of Siksha 'O' Anusandhan University students in India. It focuses specifically on students who are part of the "Application of IT in Agriculture Experiential Learning Programme (ELP)." The study also aims to investigate the relationship between the socioeconomic attributes and entrepreneurial qualities of the pupils. Although entrepreneurship has many characteristics, only a few particular characteristics were chosen for this study. Three essential entrepreneurial traits—decision-making ability, leadership ability, and information-seeking behavior—are incorporated into the study to provide a thorough entrepreneurial profile of the students.

This study aims to provide important insights into the entrepreneurial landscape among university students, with a particular focus on Siksha 'O' Anusandhan University in India. It does this by drawing on a wide range of literature and empirical evidence.

The specific objectives of the present study are given below:

1. To study the entrepreneurial characteristics of the respondents.
2. To know the relation between socio-economic attributes and entrepreneurial attributes of the students.

Research Methodology

In the context of this study, convenient sampling is a non-probability sampling strategy in which study participants are chosen on the basis of their ease of inclusion and accessibility. In this instance, the researchers used a practical sample technique to collect data from Siksha "O" Anusandhan University students participating in the Experiential Learning Programme (ELP) on the Application of IT in Agriculture. A pretested questionnaire with a 3-point Likert scale was used to collect the data, and respondents may indicate how much they agreed with each statement by selecting from the following options: Always (2),

Sometimes (1), and Never (0). Participants can use this scale to indicate how frequently they have encountered or perceive different elements of attributes associated with entrepreneurship.

The researchers used Google Forms, an online survey platform, to disseminate the questionnaires to the participants. This approach to data gathering is in line with the current trend of using digital tools for surveys, which allows participants to conveniently respond from different locations and at their own pace.

The study was limited to undergraduate students enrolled in Siksha 'O' Anusandhan University's Application of IT in Agriculture ELP background. This deliberate narrowing of the topic was done with the intention of learning certain things from this academic programme. It's crucial to remember that this study purposefully only included one university in the sample in order to emphasise depth over breadth in the investigation of entrepreneurial attributes in this particular academic setting.

Pre-tested questionnaire was shared to all the 34 Application of IT in Agriculture ELP students via Google form with the help of WhatsApp. Only 16 responses were found appropriate for analysis. The findings' potential for generalisation may be limited by the relatively small sample size, however this is typical of exploratory research with particular requirements and limitations.

Convenient sampling was used in this study to provide a workable and realistic method of gathering data from a certain subset of Siksha 'O' Anusandhan University undergraduate students. The utilisation of an online survey platform and a Likert scale enhanced the efficacy of the data gathering procedure, enabling a targeted analysis of entrepreneurial attributes within the prescribed academic framework.

Results & Discussion

A. Socio-economic attribute of the Respondents

Students participating in the Application of IT in Agriculture program's socioeconomic characteristics are displayed in Table 1. Understanding the students' demographic and socioeconomic backgrounds is possible through the examination of these characteristics. The principal conclusions are listed below:

- ❖ 62.50% of the students are male, while 37.50% are female. This suggests a slight gender imbalance in the program, with a higher representation of males.
- ❖ The majority of students (68.75%) belong to the General category, followed by OBC/SEBC (18.75%) and ST/SC (12.50%). This indicates a diverse representation of castes in the program.
- ❖ A significant proportion of students (62.50%) come from an urban background, while 25.00% have a semi-urban background, and 12.50% belong to rural areas. This distribution reflects a predominantly urban enrollment.
- ❖ The family structure is predominantly nuclear (93.75%), with a small percentage (6.25%) being joint families. This suggests that most students come from nuclear family setups.
- ❖ The majority of students (87.50%) come from small families (up to 4 members), with only a small percentage belonging to medium (5-6 members) and large (7 members & above) families.
- ❖ Almost all students (93.75%) reside in Pucca houses, highlighting a relatively high standard of living among the participants.
- ❖ A significant percentage of the heads of families (87.50%) have education at the college level and above, indicating a relatively high educational background among the families.
- ❖ A substantial proportion of families (56.25%) have members employed in government jobs, followed by business (31.25%). This suggests a diverse occupational background of the students' families.
- ❖ Half of the families (50.00%) have an annual income up to 5 lakh, while 25.00% fall in the 5.1 to 7 lakh income bracket. This indicates a varied economic background among the students' families.
- ❖ The landholding pattern varies, with a notable percentage of students coming from marginal (31.25%) and medium (18.75%) landholding families.
- ❖ The distribution of economic aptitude shows that 43.75% of students fall in the medium level, followed by 37.50% in the high level and 18.75% in the low level.
- ❖ The distribution reveals that 43.75% of students fall in the medium level, indicating a substantial portion of students with a moderate understanding of economic concepts. This is essential for budding entrepreneurs who need to navigate financial aspects of business. The 37.50% in the high-level category is promising, suggesting a considerable number of students with advanced economic understanding, a valuable asset for entrepreneurial ventures. The 18.75% in the low-level category may require targeted support to enhance economic aptitude and ensure a well-rounded entrepreneurial skill set.

Table 1: Socio economic Attributes of the ELP Students Enrolled in Application of IT in Agriculture			
Sl. No.	Attributes	Percentage	
1.	Gender	a. Male	62.50
		b. Female	37.50
2.	Caste	a. ST/SC	12.50
		b. OBC/SEBC	18.75
		c. General	68.75
3.	Family Background	a. Rural (Village)	12.50
		b. Semi-urban (Block)	25.00
		c. Urban (District/City)	62.50
4.	Family Type	a. Nuclear	93.75
		b. Joint	6.25
5.	Family Size	a. Small (Up to 4 members)	87.50
		b. Medium (5-6 members)	6.25
		c. Large (7 members & above)	6.25
6.	House types	a. Kutcha	0.00
		b. Semi-Pucca	6.25
		c. Pucca	93.75
7.	Education of head of the family	a. Illiterate	0.00
		b. Read only	0.00
		c. Can read & write	0.00
		d. Primary school	6.25
		e. Middle school	0.00
		f. High school	6.25
		g. College & above	87.50
8.	Family major occupation	a. Labour	0.00
		b. Caste occupation	0.00
		c. Business	31.25
		d. Cultivation	6.25
		e. Private Job	6.25
		f. Govt. Job	56.25
9.	Family Annual Income	a. Up to 5 lakh	50.00
		b. 5.1 to 7 lakh	25.00
		c. 7.1 to 10 lakh	0.00
		d. Above 10 lakh	25.00
10.	Parents' Land Holding	a. Landless (0 acre)	12.50
		b. Marginal (Up to 2.5 acre)	31.25
		c. Small (2.51 to 5 acre)	12.50
		d. Medium (5.1 to 10 acre)	18.75
		e. Large (above 10 acre)	25.00
11.	Level of Economic Aptitude	a. Low Level (<Mean-SD)	18.75
		b. Medium Level (Mean-SD to Mean+SD)	43.75
		c. High Level (>Mean+SD)	37.5
12.	Level of Social Aptitude	a. Low Level (<Mean-SD)	6.25
		b. Medium Level (Mean-SD to Mean+SD)	31.25
		c. High Level (>Mean+SD)	62.50
13.	Level of Scientific Aptitude	a. Low Level (<Mean-SD)	12.50
		b. Medium Level (Mean-SD to Mean+SD)	87.50
		c. High Level (>Mean+SD)	0.00

- ❖ The majority of students (62.50%) exhibiting a high level of social aptitude is a positive finding for prospective entrepreneurs. Entrepreneurship often involves networking, team collaboration, and effective communication, making social aptitude a crucial attribute. The 31.25% in the medium-level category further reinforces a well-rounded social aptitude among a significant portion of the students. The 6.25% in the low-level category suggests a smaller subgroup that may benefit from additional support or interventions to strengthen their social skills in the entrepreneurial context.
- ❖ The significant proportion of students (87.50%) demonstrating a medium level of scientific aptitude is noteworthy. While entrepreneurship may not always require advanced scientific knowledge, a moderate understanding is beneficial, especially in technology-driven industries. However, the absence of students in the high-level category is surprising and merits further exploration. Identifying and nurturing students with high scientific aptitude could potentially contribute to innovation and technological entrepreneurship. The 12.50% in the low-level category may require targeted interventions to bridge gaps in scientific understanding.

In summary, the results suggest a generally positive environment for developing entrepreneurial qualities among students at Siksha 'O' Anusandhan University. The emphasis on economic and social aptitude aligns well with the multifaceted nature of entrepreneurship. However, the absence of students with high-level scientific aptitude may prompt a closer examination of the curriculum, teaching methodologies, or the identification and encouragement of students with exceptional scientific capabilities.

These findings can inform the university's entrepreneurship programs, enabling administrators and educators to tailor interventions, support mechanisms, and enrichment programs to enhance the entrepreneurial qualities of the student population. Further research could explore the correlations between these attributes and entrepreneurial success, contributing to the ongoing improvement of entrepreneurship education at the university.

So we can conclude that that, the socio-economic attributes of the ELP students enrolled in the Application of IT in Agriculture program reveal a diverse and varied demographic composition. These insights can be valuable for program administrators and policymakers to tailor support and resources to meet the specific needs of the student population. Further research may delve into the correlations between these attributes and academic performance or career outcomes.

B. Entrepreneurial Attributes of the Respondents

In this research three major Entrepreneurial Attributes were taken under study namely, Decision making ability, Leadership ability and Information seeking behavior. The results obtained from data collection were analyzed and discussed below:

Majority (81.25%) of the students were having medium level of Decision making ability followed by Low level (18.75%) and High level (0.00%) respectively. Majority (87.50%) of the students were having medium level of LA (Leadership Ability) and ISB (Information Seeking Behavior) followed by Low level (12.50%) and High level (0.00%) respectively. This result could indicate either a limitation in the data collection or that, within the given sample, no students were perceived to have a high level of decision-making ability, Leadership Ability and Information Seeking Behavior in the context of IT in Agriculture. It's essential to consider the implications of having no students in this category. So, the distribution of Decision Making Ability, Leadership Ability and Information Seeking Behavior levels among ELP students in the Application of IT in Agriculture seems to be skewed towards the Medium Level, with a notable absence in the High Level category(Fig.1, 2 & 3). Similar findings were reported by Kumar, et al., 2017.

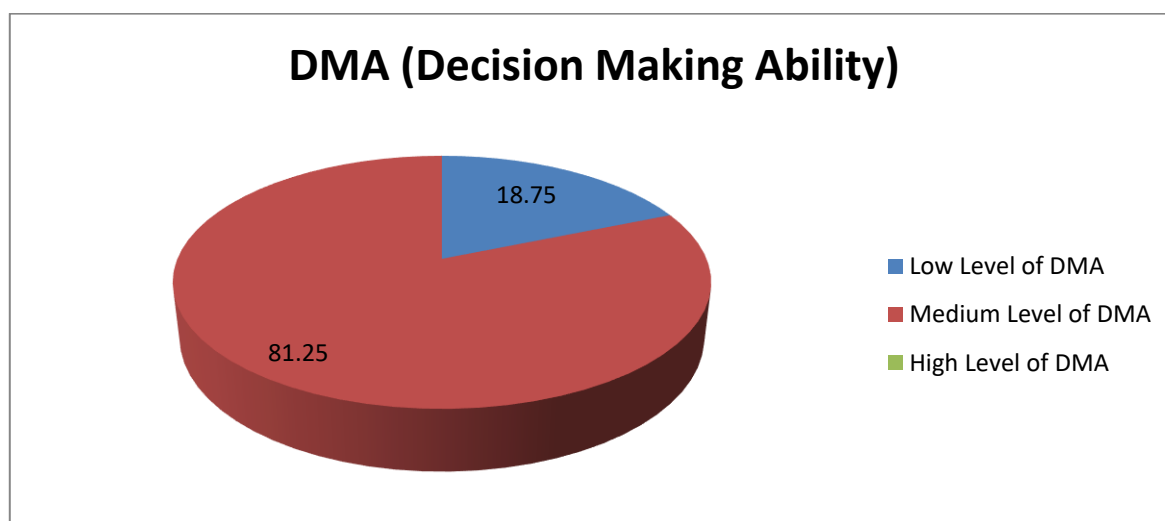


Fig.1 Level of DMA (Decision Making Ability) of the ELP Students enrolled in Application of IT in Agriculture Percentage

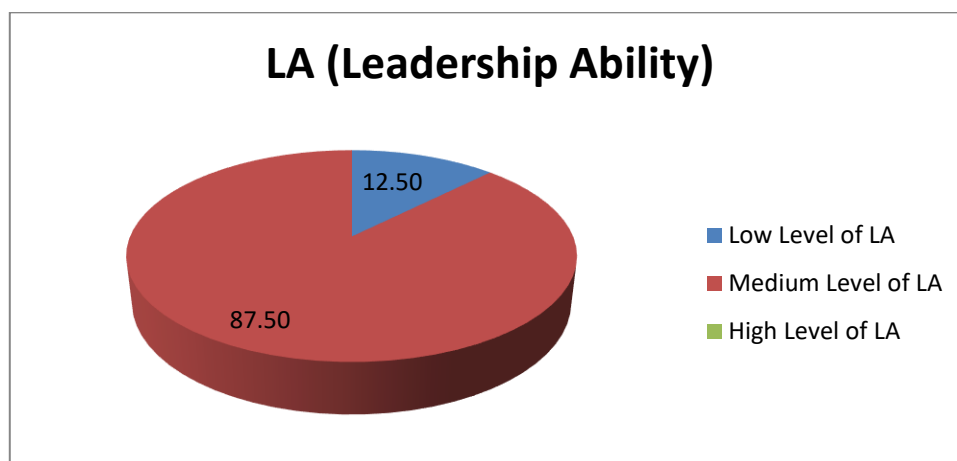


Fig.2 Level of LA (Leadership Ability) of the ELP Students enrolled in Application of IT in Agriculture Percentage

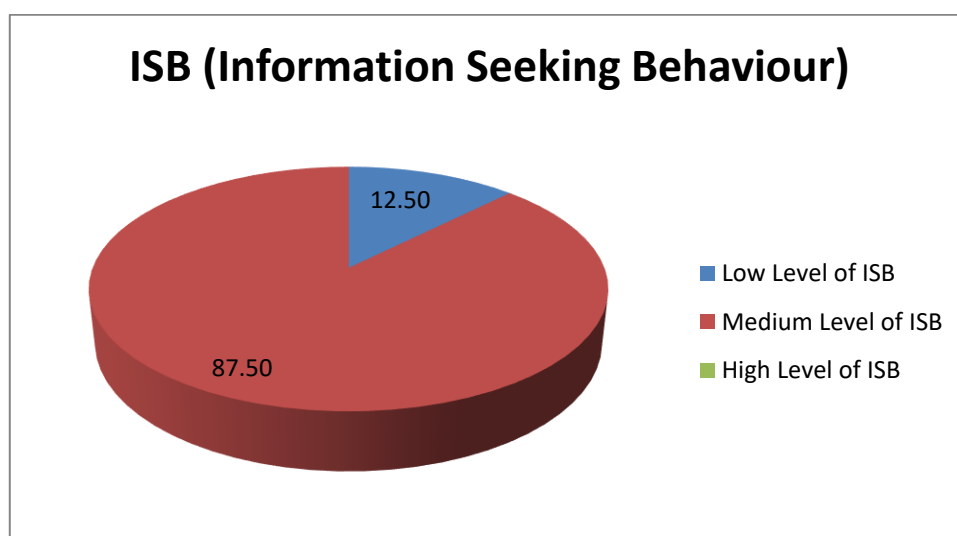


Fig.3 Level of ISB (Information Seeking Behaviour) of the ELP Students enrolled in Application of IT in Agriculture Percentage

C. Correlation Analysis

From the Table 2, it was cleared that Entrepreneurial characteristics are influenced so much by the social attributes of the student. Decision making ability was positively and significantly correlated with House types (5% level of significance) & scientific aptitude (1% level of significance) but negatively & significantly correlated with Family type (5% level of significance) means students with good house type like pucca house, good scientific aptitude and with nuclear family type were having good decision making ability. Leadership ability was positively and significantly correlated with Family Background (5% level of significance), social aptitude (1% level of significance) and scientific aptitude (5% level of significance) but negatively & significantly correlated with Family type (1% level of significance) and family size (5% level of significance) means students with good family background like Urban area, good social aptitude, good scientific aptitude, nuclear family type, small family size were having good Leadership ability. Information seeking behaviour was correlated with socio-economic attributes but not significantly.

Table 2: Correlation between socio-economic attributes and entrepreneurial attributes of the students

	Decision making ability	Leadership ability	Information seeking behaviour
Gender	-0.29	-0.32	0.11
Caste	-0.30	0.24	-0.04
Family Background	0.11	.573*	-0.13
Family Type	-.537*	-.739**	0.07
Family Size	-0.44	-.609*	0.09
House types	.537*	0.07	-0.07
Education of head of the family	-0.16	0.02	-0.09
Family major occupation	0.07	0.06	0.07

Family Annual Income	-0.26	-0.09	0.36
Parents Land Holding	-0.18	-0.10	-0.07
Economic Aptitude	0.31	0.20	-0.25
Social Aptitude	0.10	.649**	0.28
Scientific Aptitude	.787**	.592*	-0.10
*. Correlation is significant at the 0.05 level (2-tailed).			
**. Correlation is significant at the 0.01 level (2-tailed).			

Conclusion

In conclusion, this research undertook a comprehensive exploration of entrepreneurial qualities within the student body of Siksha 'O' Anusandhan University, particularly those enrolled in the Application of IT in Agriculture Experiential Learning Programme (ELP). The study focused on three pivotal entrepreneurial attributes: Decision Making Ability, Leadership Ability, and Information Seeking Behavior. The findings, drawn from participant data, underscore a prevalent medium level across these entrepreneurial characteristics. Entrepreneurial characteristics can be improved if socio-economic attributes like Family Background, Family Type, Family Size, Social Aptitude and Scientific Aptitude will be focused and improved. Notably, there is a conspicuous absence of high-level attributions, prompting reflection on the nature of data collection or the potential perception within the sampled population. This absence signals a crucial area for future inquiry. Acknowledging its limitations, particularly the exclusive focus on a single university, the study advocates for broader research horizons. Future investigations should encompass diverse academic disciplines and institutions to offer a more holistic understanding of entrepreneurial characteristics among university students. Despite these limitations, the research contributes valuable insights into the entrepreneurial attributes of university students. The emphasis on a medium level in the identified traits suggests a need for targeted interventions and curriculum enhancements to cultivate and elevate entrepreneurial potential among students. To enrich our comprehension of the factors influencing entrepreneurial characteristics in the academic context, the study recommends future comparative research across universities. Such endeavors could unravel nuanced insights, facilitating the development of more effective strategies to foster entrepreneurship within the academic landscape.

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