

Entrepreneurial Talent and Willingness for Entrepreneurship among Agricultural Graduates

Bhavika Joshi ¹, Serene Shekhar ² and Sarita Sanwal ³

*1*Reserach Scholar, *2*Assistant Professor, Department of Extension & Communication Management, ASPEE College of Home Science & Nutrition, SDAU, Gujarat; India

*3*Assistant Professor, Department of Human Development & Family Studies, ASPEE College of Home Science & Nutrition, SDAU, Gujarat; India

Corresponding author email: shekhar.sdau@gmail.com

ABSTRACT

Self-employment is a way-out for teaming unemployed youth. The study was undertaken in seven colleges of Sardarkrushinagar Dantiwada Agricultural University of Gujarat State; to seek the answer that whether the revised curriculum is able to attain its objectives of creating entrepreneurs among students. A pre-structured interview scheduled and a standardized tool was used to measure independent variables (basic profile) and dependent variable (entrepreneurial talent and willingness to set-up enterprise) respectively. Frequency, percentage, range, correlation coefficient and CRD were used to tabulate the data. The findings revealed that 49.45 per cent of the agricultural graduates had medium entrepreneurial talent and among them only 11.66 per cent of respondents were willing to start their own venture. The reason for non willingness for entrepreneurial venture was 'lack of financial assistance'. Among seven colleges, veterinary science college ranked first in entrepreneurial talent and willingness for entrepreneurial venture. Programme of study, year of study and mass media exposure showed positive correlation with entrepreneurial talent.

Key words : *Entrepreneurial Talent, Agricultural University, Willingness*

Young people are major human resource for development, key agent for social change and driving force for economic development and technical innovations. India has 430 million young people in the age group 15 – 34 years. In about seven years the median age in India will be 29 years and would make it the youngest country in the world (State of the Urban Youth, India 2012). Planning Commission has strongly recommended self-employment as a way-out for teaming unemployed youth. Self employment is possible only if educational institutes produce 'entrepreneurs', not the job seekers.

The Indian Council of Agricultural Research recognizes 65 universities as Agricultural Universities. In the view to create entrepreneur, the Agricultural Universities have provided the young minds with opportunity to explore, discover, and break boundaries to address real-world issues. The new revised curriculum has recommended 1-2 years of experiential learning and infusion of vocational courses that aims at removing weakness in the present education system and to create a cadre of highly skilled professionals who can create their own enterprises. To seek the answer that whether the revised curriculum is able to attain its objectives of creating entrepreneurs among students of various colleges, the following study was conducted among students of varied colleges of Sardarkrushinagar Dantiwada Agricultural University, S. K. Nagar of Gujarat state with objectives:

1. To determine entrepreneurial talents among the respondents (2) To find entrepreneurial willingness among the respondents (3) To compare entrepreneurial talent of the respondents of various colleges (4) To find association, if any, between basic profile and entrepreneurial talent of the respondents

METHODOLOGY

The study was undertaken in seven colleges of Sardarkrushinagar Dantiwada Agricultural University of Gujarat State during January 2013 to August 2014. Three stages random sampling procedure was followed to collect the data. A representative sample of 180 students perusing undergraduate degree were selected.

Personal characters such as age, sex, programme of study, year of study and birth order; socio-economic characters such as: caste category, family type, family size, family income, family occupation, family education, place of living; and communicational characteristics of the respondents were taken as independent variables. Entrepreneurial talent and willingness for entrepreneurship were taken as dependent variable.

A pre-structured interview scheduled was developed to collect the data for measurement of independent variables. A standardized tool developed by Dr. Surila Agrawala and Dr. Ira Das (2000) was

used for the measurement of dependent variable. The scale consists of seven sections that measure the seven dimensions of entrepreneurial talent i.e. risk taking ability, achievement motivation, leadership, self concept, persuasion, attitude and problem solving ability. The collected data were classified and tabulated keeping in view the objectives of the study and were analysed by applying following statistical tools (Sahu, 2010).

RESULTS AND DISCUSSION

After analyzing the data related to personal and socio-economic characteristics of the respondents, the following results were obtained.

Table1
Distribution of respondents according to personal, socio-economic and communicational characteristics of respondents

| Variables | Frequency | Percentage |
|--|-----------|------------|
| Personal | | |
| Age (years) | | |
| 18-19 | 167 | 92.78 |
| 20-24 | 013 | 07.22 |
| Sex | | |
| Male | 90 | 50 |
| Female | 90 | 50 |
| Programme of study in bachelor degree | | |
| Agriculture | 42 | 23.33 |
| Horticulture | 22 | 08.89 |
| Home Science and Nutrition | 31 | 17.22 |
| Basic Science and Humanities | 12 | 12.22 |
| Veterinary Science and Animal Hus | 16 | 21.67 |
| Renewable Energy and Environment Engineering | 18 | 06.67 |
| Dairy Science and Food Technology | 39 | 10.00 |
| Year of Study | | |
| First | 37 | 20.55 |
| Second | 90 | 50.00 |
| Third | 50 | 27.78 |
| Fourth | 3 | 01.67 |
| Birth Order | | |
| Eldest | 37 | 20.56 |
| Middle | 81 | 45.00 |
| Youngest | 62 | 34.44 |
| Socio-economic characteristics | | |
| Caste Category | | |
| General | 89 | 49.45 |
| OBC | 56 | 31.11 |
| SC/ST | 35 | 19.44 |
| Type of Family | | |
| Joint family | 071 | 39.45 |
| Nuclear family | 109 | 60.55 |
| Family Size | | |
| Small (3 members) | 036 | 20.00 |
| Medium (4-6 members) | 123 | 68.33 |
| Large (more than 6 members) | 021 | 11.67 |
| Family Income | | |
| Low (10,000 - 3,40,000) | 149 | 82.78 |
| Medium (3,41,000 - 6,70,000) | 023 | 12.78 |
| High (6,71,000 - 10,00,000) | 008 | 4.44 |

| Family Occupation | | |
|--|-----|-------|
| Farming and Animal Husbandry + Home making | 78 | 43.33 |
| Government Job + Home making | 53 | 29.44 |
| Business + Home making | 26 | 14.45 |
| Private Job + Government Job of mother | 23 | 12.78 |
| Place of living | | |
| Rural | 101 | 56.11 |
| Urban | 079 | 43.89 |
| Mass Media Exposure | | |
| Low (5-12) | 030 | 16.67 |
| Medium (13-19) | 145 | 80.55 |
| High (20-27) | 005 | 02.78 |

Table 1 indicates that large majority of respondents belonged to age group of 18-19 years.

Half of the respondents were male and other half were female. Proportionate number of respondents were randomly selected from seven different programme of study of the university. About half of the respondents were studying in second year. Forty five per cent of the respondents belonged to middle birth order among their siblings. Nearly half of the respondents belonged to general caste category. Majority (60.55%) of the respondents belonged to nuclear family type with sixty eight per cent of the respondents had medium family size. Maximum (82.78%) of respondents belonged to low family income. The major occupation of the parents was found to be farming and animal husbandry. About fifty six per cent of the respondents were living in rural area and majority (80.55%) of respondents were having medium mass media exposure.

Entrepreneurial talent among the respondents : The data presented in Table 2 depicts the percentage score of respondents in seven dimensions of entrepreneurial talent i.e. risk taking ability, achievement motivation, leadership, self concept, persuasion, attitude and problem solving ability. It can be inferred from Table 2 that 45.55 per cent of the respondents had medium risk taking ability. The findings reaffirm with the findings of Di-Masi (2004). The finding in contrast to the study of Tim Mazzarol (2007). It can be concluded from the study that the agriculture students have propensity for taking calculated risks which is a virtual characteristic of an entrepreneur who takes calculated risk and prepares oneself to delve into moderate risks rather than the mythical high-risk “gambler” approach.

The respondents were found to be high in achievement motivation. Similar findings were stated by Mc Clelland (1961) and, Sagie and Elizur (1999) that described the need for achievement as an impetus drive in undertaking obligated responsibilities perfectly and achieving success. Thus, it can be said that the respondents who possess a high level of need for

achievement might probably involve themselves in entrepreneurial activity.

Agricultural students. The slightly more than one third of were found to have low leadership. It means the respondents would be unable to make decision, administer and execute the resources to extract profit from the venture.

Self-concept influences the complex process of a new venture creation and also plays an important role in development of entrepreneurial intentions and actions. Table 2 inferred that almost half of the respondents had high self concept. The findings reaffirm with the findings of Bird's (1988). This means that the respondents have high belief and confidence in themselves and are aware of their strength and weaknesses.

However, persuasion is considered to be of least importance by Rahe and Morales (2006) for entrepreneurship but Table 2 shows that maximum number of respondents had medium persuasion which means the respondents were able to influence others and get their work done. On the subject of positive

attitude towards other entrepreneurs, half of the respondents had medium and positive attitude towards entrepreneurs which means that the respondents may be able to appreciate and learn from others' success.

Slightly more than half of the respondents had medium problem solving ability. Thus it can be stated that very less number of the respondent had high problem solving ability which means the respondents may find difficulty in overcoming from difficult situations.

Further, the data presented in Table 2, reflect that near to half (49.45%) of the respondents had medium entrepreneurial talent. The findings reaffirm the findings of Harris *et al.* (2008) and Nurmi *et al.* (2007). The finding in contrast is Wang *et al.* (2004)

Ranking of seven dimensions of entrepreneurial talent: The seven dimensions of the entrepreneurial talent were ranked so as to get an idea of the area of talent in which the agricultural students are lagging behind. It was found that among the seven dimensions of entrepreneurial talent, the respondents showed highest score for 'achievement motivation' followed by self concept and risk taking ability. Problem solving ability was found to be the last among the dimensions of entrepreneurial talent. So, it can be concluded from the above findings that respondents possess the willpower to work for their economic development, are also aware of their strength and weaknesses and they are also enthusiastic to take risk in carrying out an entirely new venture. But at the same time, they lack the capability to overcome hurdles to carry out their ventures successfully. It means that even if the respondents may start their own ventures but might not be able to carry them out successfully.

Table 2
Distribution of the Respondents According to Entrepreneurial Talent and its Seven Dimensions. (n=180)

| Sr. No. | | Frequency | Per cent |
|-----------|---|-----------|----------|
| 1. | Risk taking ability | | |
| | Low (3-6) | 30 | 16.67 |
| | Medium (7-10) | 82 | 45.55 |
| | High (11-14) | 68 | 37.78 |
| 2. | Achievement Motivation | | |
| | Low (7-10) | 13 | 07.22 |
| | Medium (11-14) | 53 | 29.45 |
| | High (15-18) | 114 | 63.33 |
| 3. | Leadership | | |
| | Low (3-6) | 67 | 37.22 |
| | Medium (7-9) | 51 | 28.33 |
| | High (10-12) | 62 | 34.45 |
| 4. | Self Concept | | |
| | Low (5-8) | 05 | 02.78 |
| | Medium (9-15) | 84 | 46.68 |
| | High (16-20) | 91 | 50.55 |
| 5. | Persuasion | | |
| | Low (1-5) | 024 | 13.33 |
| | Medium (6-9) | 115 | 63.89 |
| | High (10-12) | 041 | 22.78 |
| 6. | Attitude toward entrepreneurs | | |
| | Low (27-40) | 039 | 21.67 |
| | Medium (41-50) | 106 | 58.89 |
| | High (51-62) | 035 | 19.44 |
| 7. | Problem solving ability | | |
| | Low (1-5) | 80 | 44.44 |
| | Medium (6-9) | 92 | 51.11 |
| | High (10-11) | 08 | 04.45 |
| 8. | Entrepreneurial talent (Overall) | | |
| | Low (72-92) | 38 | 21.11 |
| | Medium (93-113) | 89 | 49.45 |
| | High (114-134) | 53 | 29.44 |

Table 3
Ranking of seven dimensions of entrepreneurial talent (n=180)

| Sr. No. | Dimensions of Entrepreneurial Talent | Scores | Per cent | Rank |
|---------|--------------------------------------|------------|----------|------|
| 1. | Risk taking ability | 1663/2520 | 65.99 | III |
| 2. | Achievement motivation | 2652/3420 | 77.54 | I |
| 3. | Organizational ability | 1321/2160 | 61.16 | V |
| 4. | Self concept | 2663/3600 | 73.97 | II |
| 5. | Persuasion | 1403/2160 | 64.95 | IV |
| 6. | Attitude toward entrepreneurs | 8171/13500 | 60.52 | VI |
| 7. | Problem solving ability | 1046/2520 | 41.51 | VII |

Willingness to Set-up their own Enterprise: It becomes mandatory to find out the willingness of the agricultural students to set-up their own venture.

It can be inferred from Table 4 that very less respondents (11.6%) were willing to set up their own enterprise. The reasons stated by the respondents who were not willing to setup enterprise are given in Table 5.

Table 4
Distribution of the Respondents According to Willingness to Set-up their own Enterprise (n=180)

| Sr. No. | Reasons for lack of willingness to set up own venture | Per cent | Rank |
|---------|---|----------|------|
| 1. | Lack of Finance | 93.71 | I |
| 2. | Lack of income security | 83.64 | II |
| 3. | Lack of family support | 61.00 | III |
| 4. | Lack of proper guidance | 52.20 | IV |
| 5. | Lack of confidence | 49.05 | V |

Table 5
Reasons for Lack of Willingness to set up own Venture (n=180)

The Table 5 indicates that majority (93.71%) of the respondents considered “lack of finance” as main reason for not initiating their own venture followed by “lack of income security” and “lack of family support.”

Comparison of Entrepreneurial Talents of Various Colleges: In order to verify the significant difference of entrepreneurial talent among various colleges, the data were analysed as per method of Complete Randomized Design (CRD).

Table 6
ANOVA for Critical difference in Entrepreneurial Talents of Various Colleges

| Sources of variatio | Degree of freedom | Sum of square | Mean square | Calculated 'F' | Table at 5% level |
|------------------------------------|-------------------|-----------------|-------------|----------------|-------------------|
| Treatments (between the treatment) | 6 | 10708.38 | 1784.73 | 13.18** | 2.15 |
| Error (with in treatment) | 173 | 23412.12 | 135.33 | | |
| TOTAL: | 179 | 34120.55 | | | |

The analysis given in Table 6 shows that the test was found to be highly significant that indicates that there was a significant difference among the entrepreneurial talent of various colleges.

Ranking of Entrepreneurial Talent of Various Colleges : It can be revealed from Table 7 College of Veterinary Science and Animal Husbandry ranks first in entrepreneurial talent among seven colleges followed by College of Dairy Science and Food Technology and College of Basic Science and Humanities. The reason could be that the students

graduating from the above colleges are able to create their own enterprise by opening their clinic, pursue private practice, open pet a hospital or clinic, open laboratory or start dairy business. The College of Renewable Energy and Environment Engineering ranks fourth in Entrepreneurial talent among the seven colleges and College of Home Science and Nutrition ranks fifth in entrepreneurial talent. The College of Agriculture ranks last in entrepreneurial talent among seven colleges of Sardarkrushinagar Dantiwada Agricultural University. The reason could be that agricultural sector (either input marketing or retail) is overcrowded with interference from other relevant sectors such as Business; Management etc. which lead to tough competition in the agricultural enterprise. Thus, the agricultural graduates prefer government or fixed salaried private jobs rather than taking risk in starting up an enterprise in agriculture field.

Table 7
Ranking of Entrepreneurial Talent of Various Colleges

| Sr. No. | Name of colleges | Treatment of marks | Rank |
|-------------|--|--------------------|----------------|
| 1. | Agriculture | 94.71 | VII |
| 2. | Horticulture | 102.38 | VI |
| 3 | Home Science and Nutrition | 102.77 | V |
| 4 | Basic Science and Humanities | 105.91 | III |
| 5 | Veterinary Science and Animal Husbandry | 116.87 | I |
| 6 | Renewable Energy and Environment Engineering | 103.25 | IV |
| 7 | Dairy Science and Food Technology | 110.00 | II |
| S.Em.= 2.52 | | C.D. at 5% = 7.04 | C.V. % = 11.07 |

Association between basic profile entrepreneurial talents of the respondents: To see the association between personal, socio-economic and communicational characteristics of the respondents and their entrepreneurial talent, correlation analysis was carried out and the results are given in Table 8.

Age showed no significant association with entrepreneurial talent of the respondents. The findings affirmed with the finding of Patel (1990), Patel (1995), Nandapurkar (1980), Nagesha (2005), but the finding in contrast is Anitha (2004). Sex showed no association with entrepreneurial talent. The findings in contrast is Popescu (2012) that states that female and male entrepreneurs only differ significantly with respect to a range of aspect of entrepreneurship.

Entrepreneurial talent varies from one college to another. The findings affirmed with the finding of Hassan and Wafa (2010). It was found that with increase in number of years of study entrepreneurial talent also increases. The findings affirmed with the finding of Guichard and Huteau (2001). Birth order

Table 8
Association between personal, socio-economic characteristics and entrepreneurial talents of the respondents (n=180)

| Sr. No. | Independent variables | | Dependent variable |
|---------|-----------------------|--------------------|--------------------------------------|
| | | | Entrepreneurial talent (Y) |
| | | | Correlation coefficient of (r) value |
| 1. | Age | (X ₁) | 0.290 ^{NS} |
| 2. | Sex | (X ₂) | -0.093 ^{NS} |
| 3. | Programme of study | (X ₃) | 0.441 ^{**} |
| 4. | Year of study | (X ₄) | 0.271 ^{**} |
| 5. | Birth order | (X ₅) | -0.226 ^{**} |
| 6. | Caste category | (X ₆) | 0.670 ^{NS} |
| 7. | Family type | (X ₇) | -0.106 ^{NS} |
| 8. | Family size | (X ₈) | 0.094 ^{NS} |
| 9. | Family income | (X ₉) | -0.015 ^{NS} |
| 10. | Family occupation | (X ₁₀) | -0.002 ^{NS} |
| 11. | Family education | (X ₁₁) | -0.184 [*] |
| 12. | Place of living | (X ₁₂) | 0.033 ^{NS} |
| 13. | Mass media exposure | (X ₁₃) | 0.530 ^{**} |

** Significant at 5 per cent level; ** Significant at 1 per cent level; NS = Not Significant.*

showed negative and significant association with entrepreneurial talent of the respondents which means young siblings in a family have more entrepreneurial talent. The findings affirmed with the finding of Koh (1996). The findings of Collins and Moore (1970), Garavan and O' Cinneide (1994), Gould (1969), Howell (1972), and Kets de Vries (1977) affirmed that family background such as birth order has effect on entrepreneurial talent. Caste category, family type, family size, family income has no relationship with entrepreneurial talent. Family occupation showed no association with entrepreneurial talent. The findings are in contrast with the findings of researches that suggested the influence of father's occupation on individual's inclination towards entrepreneurship Dunn (2004). Family education showed negative but significant association with entrepreneurial talent of the respondents. It leads to a conclusion that with increase in family education, entrepreneurial talent decreases. The reason can be that the respondents belonging to educated family prefer and are inclined towards secure jobs more than taking risk in business. Mass media exposure showed positive and high significant association with entrepreneurial talent of the respondents. It means that those who are aware of latest technologies and market up and downs possess high entrepreneurial talent.

CONCLUSION

Findings revealed that near to half of the agricultural graduates had medium entrepreneurial talent, but even then maximum numbers of respondents were not willing to start their own venture. The reason, as stated by them is lack of financial assistance for initiating an enterprise. Further, it was found that there was a significant difference among the Entrepreneurial talent of various colleges. The College of Veterinary Science and Animal Husbandry ranked first in Entrepreneurial Talent among seven colleges of varied discipline. The reason could be that the students graduating from the veterinary colleges are able to be self-employed by opening their clinic, pursue private practice, open pet a hospital or clinic, open laboratory or start dairy business. The findings may lead to conclusion that introduction of experiential learning programme and infusion of vocational courses through revised curriculum of Agricultural University as per fourth Deans Committee have developed entrepreneurial talent up to some extent among students. The traits such as leadership ability and problem solving ability need to be emphasized in revised curriculum. Financial assistance need to be teamed for agricultural graduates who wish to set-up their enterprise.

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