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The Relationship of Demographics on Entrepreneurial Orientation-A Study among University Students

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Abstract

Entrepreneurship is the purposeful activity of an individual or a group of associated individuals, undertaken to initiate, maintain or aggrandize profit by production or distribution of economic goods and services. A country can achieve sustainable economic development through promoting entrepreneurship. Entrepreneurial orientation is the process, practice and decision making activity that lead to a new entity. There is a growing popularity in academics and industry about entrepreneurship and entrepreneurial orientation. Even though our country introduced many measures to promote entrepreneurship such as start-up mission, stand up mission, students entering into this field is limited. There is a paucity of studies in this part of the region about students' entrepreneurial orientation and demographics. In this backdrop present study has been conducted to find out the relationship between entrepreneurial orientation and the various demographics of professional college students. Data was collected from 1499 students pursuing various professional courses in the State of Kerala. The tool used for data collection was a structured standardized self-rating questionnaire (Entrepreneurial Orientation Questionnaire) developed by the Entrepreneurship Development Institute (EDI), Ahmadabad. Results reveal that the level of entrepreneurial orientation is average among the students pursuing professional courses in Kerala. It also found that there is no significant difference in EO with respect to various demographic variables like Gender, Age, Being the only child in the family, and the Family entrepreneurial background. The study makes an important contribution to the field of entrepreneurship. Any individual irrespective of age, gender, family background can become an entrepreneur. The onus on academic institutions and government is to nurture the entrepreneurial spirit among students and to provide a conducive entrepreneurial environment.

Keywords: *Entrepreneurial orientation, Entrepreneurship, Demographics, Initiative, Persuasion*

Introduction

Entrepreneurship is now a hot topic and is shaping the discussions in various circles including academics and politicians. The recent Startup policy announced by the Central Government is a classical example. All governments are now according top priority to entrepreneurship activity, so as to adapt to the rapidly changing economic and political landscapes. A number of schemes are now rolled out to help potential entrepreneurs. The Government of Kerala has recently directed the Vice Chancellors of all Universities to provide all possible assistance to students who intend to become entrepreneurs. In the state of Kerala potential entrepreneurs are sanctioned duly leaves. Further, colleges and universities have established entrepreneurship cells and clubs that provide education and training programmes. In addition to business incubators, a large number of institutions that foster entrepreneurial education are now being set up with vigor and enthusiasm.

Review of literature

Research about Entrepreneurship as well as Entrepreneurial Orientation (EO) has increased in volume over a period of time. EO is the process, practice, and decision making activity that lead to a new entity (Lumpkin and Dess, 1996). According to Lee and Peterson (2000) EO is the entrepreneurial process in which entrepreneurship is undertaken in terms of the methods, practices, and decision making processes for new entry into the market. EO emphasizes on aggressive innovation, risky projects, and a proclivity to pioneer innovations that preempt competition (Miller, 1983).

According to Covin and Slevin (1989) there are three components of EO – innovativeness, proactiveness, and risk taking.

1. *Innovativeness* is a quality that reflects a tendency to support new ideas and creative processes; thereby departing from the established practices and technologies.
2. *Proactiveness* refers to 'anticipating and acting on future wants and needs in the marketplace, and risk taking is associated with a willingness to commit large amounts of resources to projects where the likelihood and cost of failure may be high' (Wiklund and Shepherd, 2003).
3. *Risk taking* involves taking bold actions by venturing into the unknown areas, borrowing money, and/or committing significant resources to ventures in environments that are totally uncertain.

Covin and Slevin (1989) developed a scale for measuring EO based on these three components. The pioneering studies conducted by Miller (1983) and Covin and Slevin (1989) in the field of EO have provided the foundations for the subsequent studies. Building on the model of Covin and Slevin (1989), Lumpkin and Dess (1996) suggested two additional dimensions of EO – competitive aggressiveness and autonomy.

1. *Competitive aggressiveness* is the intensity of a firm's effort to outperform rivals, and a strong offensive posture or aggressive responses to competitive threats (Rauch, Wiklund, Lumpkin, & Frese, 2009).
2. *Autonomy* is a series of independent actions undertaken to bring about a new venture and leading it to fruition. Depending on the individual contexts these EO constructs have been considered collectively (Lumpkin et al., 2009) or separately (Lumpkin and Dess, 2001; Wang, 2008) by various researchers.

Lee, Lim and Pathak (2011) opined that it is essential to develop EO among college students to boost future economy, and EO education should be customized according to the unique cultural context of each nation.

Entrepreneurship has been subjected to lot of empirical analysis, and it has been studied extensively in almost all dimensions. All along the history of entrepreneurship research, there have been certain misconception and misunderstandings about it. Factors like heredity, being power hungry and dishonest exploiters, those who are favoured by luck, as well as being confined to certain communities are some of the misconceptions about entrepreneurship as narrated by Kaulgud (2003). There are others who view if from a different dimension, and have looked into the aspect of entrepreneurship in a more comprehensive manner. For example, Hisrich and Peters (2002) are of the view that a potential entrepreneur may be from a variety of educational background, family situations, work experiences, gender, race or nationality. Thus volumes of literature are available about the relationship between entrepreneurship and EO with various aspects like demographics, personality variables, success factors, and so on. The focus of this study is limited to the demographics.

Entrepreneurship and Demographics

A review of literature showed that a number of studies have been conducted to identify the relationship of EO and various demographic factors. For instance Keat, Selvarajah &

Meyer (2011) examined the relationship between entrepreneur education, and inclination toward entrepreneurship with a few demographic characteristics and business background. They established that gender, working experience, and mother's occupation played a significant role towards entrepreneurship. They also established that the role of university to promote entrepreneurship and entrepreneurial curriculum and content are significant. Certain other research studies have studied a few demographic particulars of entrepreneurs, and have brought out results that are of great importance. In this regard the studies of Sharma (1980), Ronstadt (1983), Nath (2000), etc. are worth noting. Relating to the age of a person into initiation into entrepreneurial activity, Ronstadt (1983) did a study and has found that most of the entrepreneurs initiate their entrepreneurial careers between 25 and 55 years of age.

Gurol & Atson (2006) found a positive relationship between EO and a number of demographic variables like parental profession, academic qualifications of parents, their attitude towards entrepreneurship and the university environment. These findings were confirmed by Schroeder and Rodermund (2006). They also found that family background, parenting style and educational background could predict the development of EO. Dimov & Shepherd (2005) found that having relatives who are entrepreneurs is a determinant for EO.

Sharma (1980) is of the view that certain groups, especially in India, are highly entrepreneurial in nature. This was further validated by a study by Nath (2000), when he reported about the regional distribution of entrepreneurs by social groups in India. Further, he found that there are certain social groups who have an entrepreneurial mindset. Sharma (1980) established that particular social groups in India were highly entrepreneurial. Similarly Jayarathinam (1989) found that 96 per cent of the entrepreneurs had family background when their units were launched. With regard to gender differences, several studies show that men exhibit a stronger preference for self-employment than women (Grilo and Irigoyen, 2006; Caliendo et al., 2009). However, Laxman (2006) brought out certain important and pertinent points with respect to start up of units. The study established that the startup rate of women was substantially high.

Further, factors like fathers' occupation, traditional occupation of family and personal involvement had close positive relationship

with the start up rate. Laxmana and Ishwara (2008) are of the opinion that entrepreneurs are not necessarily born, but can be developed through education, training and experience. Providing an insight into the thought process of entrepreneurs, Sarasvathy (2001) says that entrepreneurs do not analyse and calculate the features of opportunities very closely, but are mentally alert to events that could tell them something about future developments.

Entrepreneurial Orientation Among Students

Evidences show that not all students are entrepreneurially oriented. Those who exhibit EO are highly achievement oriented, show high levels of motivation and an interest in new venture creation (Levenburg, and Schwarz, (2008). A number of academic research have been conducted among college students to assess the relationship between EO and attributes related to it (Gurol and Atsan, 2006; Levenburg and Schwarz, 2008; Raposo et al., 2008). Lee, Lim and Pathak (2011) studied the impact of culture on EO of university students pertaining to different cultural context. The study made use of a moderate data from among university students of five countries, having significantly different cultures. They found that there are significant differences among the students of the different nations in most of the EO dimensions. They also established the mediating impact of culture on EO. The researchers concluded that the findings point towards the need for customized education approaches, based on their respective unique cultural context, to develop EO among students.

A study by Gurol and Atsan (2006) established that students who are inclined towards entrepreneurship have certain qualities like innovation, have more incentives for success, have better inner control, and have a strong tendency to take risks than students who have no inclination for entrepreneurship.

However, there are a number of other variables that are likely to be related to EO; out of which demographics is one. Though there are a number of studies in the area of entrepreneurship and EO, a review of literature reveled that not much examination has been done in the area of the relationship between EO and demographics. There is as such a requirement for a detailed study in this regard. Such a study will facilitate an in depth knowledge about various facets of EO and demographics. The objective of the study is thus to find out the relationship between EO and the various demographics of professional college students.

Methodology

Population

The population for the study was students, pursuing various professional courses, in the state of Kerala. More focus was provided to students in their final years of study. Data was collected from students pursuing courses like BTech, MBA, MCA, BBA, etc. Students studying in different universities of Kerala were brought under the purview of the study.

Sampling

The breakup of the sample based on their course of study is provided in Table 1.

In the collection of data multi-stage random sampling was used. For this, Kerala was divided into three zones – South, Central and North. This division was done based on the revenue district in each zone. For instance the South zone consisted of the districts of Trivandrum, Kollam, Pathanamthitta, Kottayam, and Idukki. The central zone consisted of the districts of Alappuzha, Ernakulam, Thrissur, and Palakkad. The northern zone consisted of the districts of Malappuram, Kozhikkode, Waynad, Kannur and Kasragod. Adequate care was taken by the investigators to see that sampling errors are reduced to the minimum. The total sample collected for the study was 1499. Details of demographics like age, birth order occupation of parents, etc. was also collected. The demographic particulars of the sample are presented in the following tables.

There were more female samples (854) than males (645). Some institutions had more female students, thereby revealing the social status of females in the state of Kerala. Traditionally there has been gender equality and empowerment in the state. The sample collected for the present study definitely reflects this trend, which is indeed a positive sign.

Only the B.Tech and related courses had fourth year of study. Post graduate courses had only first and second year of study. BBA and allied courses has three years. This is very well reflected in the above table.

The average age of the sample stood at 21.21 years, the lowest being 17 and the highest 29 years. Majority of the sample are in the 21 and 22 age groups, as presented in the above table.

Table 5 presents the birth order of the sample collected. From the table it can be found that majority of the subjects pertained to the birth order one followed by two. A very few are in the order five, six and seven. It is worth mentioning that a large number of subjects did not understand the meaning of 'birth order'. Though the investigators informed them of the meaning of the word, substantial

number of the sample entered their date of birth in the respective space. As such, only those who have correctly stated the birth order have been presented in Table 5. It may be noted that 414 amounting to 27.7 per cent of the sample had either left the column of birth order bank or had erroneously written the date of birth. As such data pertaining to them are not available and hence not provided

Information was also elicited as to whether the respondent was single child. Table 6 presents the data.

From the above tables it can be seen that the sample chosen for the present study is representative with respect to various parameters of the universe.

Tools for Data Collection

Data for the study was collected by using a structured standardized self rating questionnaire (Entrepreneurial Orientation Questionnaire) developed by the Entrepreneurship Development Institute (EDI), Ahmadabad. The questionnaire consists of 70 items on a five point scale. The scale measures 13 competences of EO. A few competencies measured by the questionnaire include Initiative, Persistence, Systematic planning, Assertiveness, Persuasion, etc. The scale also has a correction factor consisting of five items. A few sample items of the questionnaire are presented in Table 7:

In addition to the above 13 factors, the tool also has a Correction Factor. Five items pertaining to this factor (item numbered 14, 28, 42, 56 and 70) were used to determine whether or not a respondent tries to present a very favourable image while responding. If the total score on this factor is 20 or greater, then the total scores on the 13 competencies must be corrected to provide a more accurate assessment of the strength of the competencies for that individual. The correction is done as per Table 8.

Administration of the Tool

The questionnaire was administered directly on the respondents. The respondents were provided an orientation about the need for the study and the questionnaire was then administered. In some cases the data were collected in between a training programme. The respondents are expected to express their responses on a separate response sheet for the questionnaire administered on them.

Analysis

The objectives of the present study were to find out the relationship between EO and various demographic characters.

Descriptive Statistics

The mean and standard deviation (SD) of the different types of competencies and the

overall EO score of the total sample of 1499 are presented in Table 9.

The maximum score possible for any factor is 31 (five for each item plus the six to be added to any factor as per the tool), and minimum is 11 (one for each item plus the six to be added to any factor as per the tool). The level of entrepreneurial orientation was found to be average among the students pursuing professional courses Kerala.

Findings

As stated earlier the major objective of the study was to find out the difference in EO based on the various demographic characters. This objective was framed as many previous studies pointed towards this direction. A study by Keat, Selvarajah & Meyer (2011) that examined the relationship between entrepreneurship and a few demographic characteristics found that demographics like gender, working experience, and mother's occupation played a significant role towards entrepreneurship. A few recent contributors include Gurol & Atson (2006), Schroeder and Rodermund (2006), Dimov & Shepherd (2005), etc. Gurol & Atson (2006) established a positive relationship between EO and demographic variables like academic qualifications and profession of parents and their attitude towards entrepreneurship, and the university environment. These findings were confirmed by Schroeder and Rodermund (2006). They also found that family background, parenting style and educational background could predict the development of EO. An earlier study by Jayarathinam (1989) established that 96 per cent of the entrepreneurs had family background when their units were launched. This was confirmed later by Dimov & Shepherd (2005), who found that having relatives who are entrepreneurs is a determinant for EO. Other significant contributors in this area of demographics include Sharma (1980), Ronstadt (1983), Nath (2000), etc.

For the present study the various demographics collected included gender, age, birth order, whether single child, occupation of parents etc. The difference in EO based on these demography's were analyzed, and the results are presented in the following sections.

Gender wise difference in EO

t-test was done to find out if there exists any difference in EO bases on gender. The results of the analysis are presented in Table 10.

It can be seen that there is no significant difference between males and females with

respect to EO (t-value 0.706). There is only marginal difference in the mean values and standard deviation. Results with respect to earlier studies regarding gender on entrepreneurship are inconclusive. For instance while Grilo and Irigoyen (2006) and Caliendo et al., (2009) found that men exhibit a stronger preference for self-employment than women, a study in India by Laxman (2006) established that the startup rate of women was substantially high. A study by Franco, Haase & Lautenschlager (2010) could also not establish any difference in entrepreneurship based on gender. There are however, doubts as to whether the above studies were conducted among students. A study among Caribbean students by Esnard-Flayius (2010) did not find any relationship between EO and gender. The present study has established that there is no difference between professional college students in EO, based on gender. This may be due to the uniform consideration and education imparted to the students in Kerala, regardless of their gender.

EO and Age

The age of the respondents ranged from 17 to 29 years. Highest number of respondents were of 21 years (N=496) followed by 22 years (N=303). This may be because of the overlap of samples pertaining to the various courses. The F value (F=1.054) computed to find out the difference in EO of respondents belonging to various ages did not reveal any significant difference. This again presents the aspect that age is not a determinant for EO. Though not directly related to the present study, Ronstadt (1983) found that most of the entrepreneurs initiate their entrepreneurial careers between twenty five and fifty five years of age. Since this age bracket forms the productive life of humans, the finding is obvious and seems to be only a generalist observation.

Difference in EO based on whether Single Child

The t-test conducted to find the difference in EO based on gender also did not present any difference between sing children and others. The results of the analysis are presented in Table 11.

The results show that there is no difference in EO with respect to the respondent being single child or otherwise. Earlier studies seem not to have investigated this aspect, though Franco, Haase, and Lautenschlager (2010) established that there is no direct 'family effect' on entrepreneurial intentions. As such this finding of the present study is a new contribution to the literature.

EO and Family Entrepreneurial Background

An analysis was also done to find out if there is any difference in EO with respect to who had close relatives as entrepreneurs. Earlier findings of Khanna & Palepu (1997) and Sharma & Manikutty (2005) had prompted this analysis. According to them in developing countries like India the family or clan may influence success in entrepreneurial attempts by way of greater familiarity with entrepreneurs and better access to resources to start and run an enterprise. The results of the analysis are provided in Table 12.

F value was also calculated to find out if there existed any significant difference in the level of EO and the occupation of parents. The F value was .869 and .787 with respect to occupation of father and mother of the respondents respectively. The value did not show any significant difference. Thus the results show that family background – the occupation of parents' and there being a close relative as an entrepreneur is not a determinant of EO. The finding contradicts the study of Ronstadt (1983) that factors like fathers' occupation, and traditional occupation of family has close positive relationship with entrepreneurship. The present findings also contradict the results of the Indian studies conducted by Khanna & Palepu (1997) and Sharma & Manikutty (2005). However, the finding of the present study echoes the finding of Franco, Haase, and Lautenschlager (2010), which found no relationship between entrepreneurship and family background. They have however sounded a certain amount of caution when they commented that "although there was no direct 'family effect' on entrepreneurial intentions, we cannot discard a certain influence of the family on the propensity for self-employment". The present investigator also would like to share this caution expressed by Franco, Haase, and Lautenschlager (2010).

The study has thus presented a comprehensive picture about the relationship between EO and the various demographic factors of professional college students. These findings are of paramount importance.

Conclusion

Entrepreneurship is an aspect that can help in wealth creation and the general progress of the nation. It is accorded prime importance by all levels of governments. EO of students is to be accorded the due focus and nurtured as it will help the students and making them job givers rather than job seekers. The objective of the study was to find out the relationship between EO and various demographics of professional college students. The study established that there is no significant difference in EO with respect

to various demographic variables like Gender, Age, Being the only child in the family, and the Family entrepreneurial background. The findings show that any individual irrespective of age, gender, family background can become an entrepreneur, as no difference was found in EO based on these factors.

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Table 1

Course wise Classification of Sample

No	Course	Number
1	**BBA and degree courses**	293
2	**MBA**	596
3	**BTech and allied courses**	484
4	**Other professional PG courses**	126

Table 2

Gender wise Classification of Sample

Gender	Number	Per cent
Male	645	43.03
Female	854	56.97
Total	1499	100

Table 3

Classification of Sample based on Year of Study

Year of study	Number	Per cent
First year	566	37.7
Second year	331	22.1
Third year	405	27.0
Fourth year	181	12.1
Total	1483	98.9

Note: 16 samples amounting to 1.1 per cent did not mention the year of study in the space provided in the questionnaire.

Table 4

Classification of Sample based on Age

Age (in years)	Number	Per cent
Below 20	193	12.8
20	229	15.3
21	496	33.1
22	303	20.3
23	172	11.5
24	68	4.5
25 and above	38	2.5
Total	1499	100

Table 5

Classification of Sample based on Birth Order

Birth order	Number	Per cent
1	585	39.0
2	419	27.9
3	63	4.2
4	14	0.9
5	2	0.1
6	1	0.1
7	1	0.1

Table 6

Details as to whether the respondent is a single child

Single or not	Number	Per cent
Single child	165	11.2
Not single child	1304	88.8

Note: 30 respondents amounting to 2.1 per cent of the overall sample did not respond to this question.

Table 7

Sample items of EO questionnaire

Competency	Item
Initiative	I do things that need to be done before being asked to by others
Sees and Acts on opportunities	I like challenges and new opportunities
Persistence	I try several times to get people to do what I would like them to do
Information seeking	When starting a new task or project, I gather a great deal of information
Concern for high quality of work	It bothers me when things are not done very well
Commitment to work contract	I work long hours and make personal sacrifices to complete jobs on time
Efficiency Orientation	I am not good at using my time well
Systematic planning	I plan a large project by breaking it down into smaller tasks
Problem Solving	I think of unusual solutions to problems
Self confidence	I change my mind if others disagree strongly with me
Assertiveness	I tell others when they have not performed as expected
Persuasion	I convince others of my ideas
Use of influence strategy	I do not spend much time thinking about how to influence others

Table 8

Details of Correction Factor

If Correction Factor Score is	Correction number to be subtracted from the total score of each competency
24 or 25	7
22 or 23	5
20 or 21	3
19 or less	0

Table 9

Mean and SD of EO

Competency	Mean	SD
Initiative	16.04	2.77
Sees and acts on opportunities	17.20	2.73
Persistence	17.98	2.75
Information seeking	20.08	2.93
Concern for high quality of work	18.31	2.73
Commitment to work contract	18.28	2.57
Efficiency orientation	18.11	2.71
Systematic planning	17.07	2.66
Problem solving	17.41	2.76
Self confidence	17.10	3.15
Assertiveness	16.15	3.21
Persuasion	16.20	2.68
Use of influence strategy	17.62	2.81
Overall EO	242.26	20.22

N=1499

Table 10

Difference in EO based on Gender

Gender	N	Mean	SD	t-value
Male	645	241.83	20.02	-0.706**
Female	854	242.58	20.37	

Note: ** Not significant

Table 11

Difference in EO based on Single Child or Not

	N	Mean	SD	t-value
Single child	165	240.56	20.062	-1.156**
Not single	1304	242.49	20.221	

Note: ** Not significant

Table 12

Difference in EO based on Family Entrepreneurial Background

Close relatives as entrepreneurs	N	Mean	SD	t-value
Yes	696	243.13	19.951	1.536**
No	797	241.51	20.488	

Note: ** Not significant