

DEMOGRAPHIC AND SOCIO-ECONOMIC DETERMINANTS OF ENTREPRENEURSHIP ORIENTATION AMONG UNIVERSITY STUDENTS IN HARYANA¹

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Abstract *The primary aim of the study is to investigate the effect of demographic and socio-economic factors on the entrepreneurial orientation of university students. The study hypothesised that the education discipline, students' locality, gender, Entrepreneurship Education (EE) programmes, and family business background of university students would be important predictors of Entrepreneurship Orientation (EO) among university students. The findings indicate that EO is not impacted by the gender of university students. Conversely, the family business background of the students impacts only some of the dimensions of EO including self-efficacy, autonomy, and innovativeness. Moreover, educational discipline, locality, and EE programmes have a significant impact on the risk-taking, pro-activeness, self-efficacy, innovativeness, and autonomy of university students. The findings indicated that various programmes i.e. seminars, workshops, and EE programmes should be set up at the rural, higher education, and university levels to educate and develop entrepreneurial skills among university students. Additionally, the co-curriculum of basic education should be designed in such a manner as to help students in developing their entrepreneurial skills from the very beginning.*

Keywords: *Entrepreneurship Orientation, Socio-Economic Factors, Entrepreneurship Programmes, University Students*

INTRODUCTION

In today's world, entrepreneurs, start-ups, and entrepreneurship are the buzzwords. Entrepreneurship is the force that drives economic activity, and it is considered one of the factors of production (Sanyang & Huang, 2010). Entrepreneurship is considered as one of the most prominent factors in ensuring economic growth for any economy (Upadhaya & Chadha, 2019). Amongst all the factors of production, entrepreneurship is the only factor that involves a human element, and it organises all other factors in such a manner that economic activities can take place. In the literature on entrepreneurship orientation, it has been defined using multiple perspectives. Some scholars describe it in terms of the functions an entrepreneur performs, the socio-economic change this activity brings,

the challenges along the way and the motivational forces required to tackle them. Heilman and Chen (2003) mention that entrepreneurship is potentially rewarding, but it also provides people with challenges and opportunities to maximise their power and autonomy. In order to adopt entrepreneurship as a career choice, motivation is a pertinent requirement that one needs to have (Oosterbaan et al., 2010). Entrepreneurship Orientation (EO) is defined as the possession of common traits required to carry out the series of activities one needs to conduct as an entrepreneur (Davis et al., 2010). In previous literature, the need for achievement, locus of control, propensity to take risks, tolerance of ambiguity, self-confidence, and innovativeness have been identified as factors attributed to entrepreneurial orientation (Koh, 1996). Entrepreneurship is a combination of characteristics, skills, abilities, and values of a person

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who is encouraged to initiate a business venture (Henderson & Robertson, 2000). Entrepreneurs reflect the prevailing values of their respective demographic and socio-economic factors, which have an influence on entrepreneurship. EO is an attitudinal concept and people with high levels scores of entrepreneurial orientations tend to have a favourable attitude towards entrepreneurship (Ferreira et al., 2015). It is observed that attitude is a dynamic concept and it is subject to change as per changing conditions, and these conditions can be related to demographic and socio-economic aspects (Katz, 1960).

Looking at the global scenario, it is seen that numerous developed economies around the world have a large entrepreneurial contribution to growth and development. Entrepreneurs act as economy boosters in many countries like Germany, the USA and Japan (Stam & Stel, 2011). The nations that have focused on entrepreneurial growth as a developmental strategy have articulated educational programmes with an objective to develop the entrepreneurial mindset of the future leaders of the nation, i.e. the students (Cespedes et al., 2021). It is certain that the synchronisation of the educational content in universities, colleges and other technical training institutions leads to increased entrepreneurial awareness and willingness among the youth of the country (Fretschner & Weber, 2013). This increased awareness is ultimately converted into an increase in the contribution of entrepreneurial forces to the gross domestic product. It can be a lesson for developing and least developed nations like India, Bhutan, Sri Lanka, etc. The low-income and middle-income countries can increase the level and scope of entrepreneurial education and ultimately reap benefits of it, in the form of economic growth and development (Sanchez, 2019). In developing nations like India, such efforts can reduce the problem of unemployment, which is present on a macro level and causes many other economic and social problems (Fairlie, 2005; Garg et al., 2023). This suggestion is backed by the fact that in the USA, small companies create more than 1.5 million jobs annually, which corresponds to almost 64% of the total new jobs created (Mohsin, 2022).

Therefore, the present study aims to measure the effect of demographic and socio-economic factors on the entrepreneurial orientations of university students in Haryana. We contend that education discipline, students' locality, gender, Entrepreneurship Education (EE) programmes, and family business are some of the predictors of EO. Numerous studies have been conducted to examine entrepreneurial orientation, but these studies contain significant flaws and research gaps, which the present study aims to fill. Bilić et al. (2011) looked into the contribution of entrepreneurial education to the development of an individual's entrepreneurial orientation. The present research aims to comprehensively examine the impact

of socio-economic and demographic factors, including education stream, family business background, gender, etc. Another such study is Balasubramanian et al. (2015), which examines the role of EO on university performance, but it lacks generalisation validity. In the aforementioned study, EO was examined as an antecedent of university performance. Our contention is that the ambience a university provides presents an opportunity for students to develop a positive attitude towards entrepreneurship. Universities serve as natural incubators by providing an adequate environment for the development of entrepreneurial orientation (Balasubramanian et al., 2020).

The study is organised in a systematic manner. First of all, we set the background of the study and introduce basic concepts. Secondly, the literature review section entails the comprehension of existing studies and the framing of research hypotheses. Then, the research methodology section explains all the methods and procedures followed in the present study. The discussion section summarises and interprets results in terms of policy suggestions and practical and theoretical implications. Finally, the conclusion section elaborates on the executive summary, limitations, and future research directions of the study.

LITERATURE REVIEW

Entrepreneurial orientation was primarily a construct that was conceptualised to analyse firm-level process with regards to entrepreneurial activity (Lumpkin & Dess, 2015). Many scholars have argued as to why it can't be used for individual-level analyses along with organisational research studies (Robinson & Stubberud, 2014). As per the individualistic approach, Entrepreneurial Orientation (EO) is defined as the propensity to undertake entrepreneurship as a career; it is attributed to the attitude and behaviour towards entrepreneurship. EO is about self-awareness towards the competencies required for starting and continuing a business. Conscientiousness, openness to experience, and willingness to take risks are the prime competencies required for individual EO development (Vogelsang, 2015). Reviewing the academic definitions, frameworks, and theories for the conceptual development of EO, it is seen that the work of Miller (1983) and Lumpkin and Dess (1996) are seminal in this research domain. Miller (1983) proposed that EO is a tri-dimensional concept that includes risk-taking ability, innovativeness, and pro-activeness as constituents of the entrepreneurial orientation. Later on, Lumpkin and Dess (1996) found aggressiveness and autonomy as major dimensions of EO. The current study aims to examine the EO among undergraduate and post graduate universities students as these are the probable future entrepreneurs of the country. Accordingly, the study has used four of the

five dimensions, ignoring the tendency to be aggressive toward competitors. It is logical and appropriate to assess students on the grounds of risk-taking ability, innovativeness, proactiveness, and autonomy as they are not real business operators but those who are willing to be entrepreneurs in the future. Innovativeness is defined as the ability of an individual to engage in novel idea creation and encourage creative processes such as experimentation. Autonomy is the ability to perform activities autonomously in order to put business principles into action. Pro-activeness means the willingness to complete the work actively by taking initiatives at the right time. The tendency to dedicate resources to uncertain ventures is known as risk-taking ability (Wales et al., 2020). Ikpesu (2016) mentioned that EO helps to develop a positive mental picture of entrepreneurship as an outcome of the entrepreneurial knowledge acquisition. The process-based definition of EO lays emphasises on the awareness ignited by entrepreneurial education programmes. In order to enhance overall EO, education can be a catalyst as it enables students to be decisive about the required skill set. Educated individuals are in a better position to acquire a positive outlook towards setting up a new venture (Bilić et al., 2011).

In modern times, educational institutions provide entrepreneurial education as a part of their course schemes and curricula. It is seen that when an educational institute imparts such education, it adds entrepreneurial skills to the character of the students. Entrepreneurial education mostly includes teachings about creating a business plan, and related case studies. Some researchers concerned about the conceptualisation of EE mention that the target audience of such education should be society at large, and its impact should be of a macroeconomic nature. The curricula are designed in such a manner that they activate the risk-taking ability of the students, making them more open to experience (Wilson, 2008). It is well documented that, out of all the traits required to be an entrepreneur, risk-taking ability is the most significant (Bilić et al., 2011). Moreover, the noteworthy fact is that not only the entrepreneurial shade of the educational curricula but the overall impact of education aids the growth of the entrepreneurial mindset among students (Jiatong et al., 2021). We contend that education can improve the individual EO as it raises learning orientation as a general outcome. In specific terms, entrepreneurial educational programmes and the chosen discipline of education can impact the EO. Socio-economic family background, gender, and the nature of the dwelling region also impact the individual EO and the same has been discussed by many previous studies in this direction (Kumar et al., 2021; Vashishtha, 2021). It is seen that there are significant differences between male and

female populations (Lim & Envick, 2013; Goktan & Gupta, 2015). Moreover, Nandamuri and Gowthami, (2014) found that students with a family business background tend to have higher scores on entrepreneurial orientation. Similarly, Garg et al. (2023) found that family businesses have a positive impact on the entrepreneurial willingness of the university students. We aim to investigate all of these aspects on the basis of an extensive literature survey, and the hypotheses development is subsequently explained in the next section containing a detailed report of the research methodology adopted by us for the present study.

RESEARCH METHODOLOGY

Student entrepreneurial orientation is usually defined as their tendency towards risk-taking, pro-activeness, self-efficacy, innovativeness, and autonomy and how it influences future career choices. The students' entrepreneurial orientation scale is developed by reviewing previous studies that investigated the concepts under current consideration (Bolton, 2012; Bolton & Lane, 2012, Marques et al., 2012; Mamum et al., 2017). Moreover, to confirm the scale of the study, the study has selected a random sample of 50 experts working in diverse institutions in this area for the verification of the scale of the study. The final scale of the study consists of 29 items with Cronbach's alpha of .957 assessing five factors namely: risk-taking (5 indicators and α .837), proactiveness (7 indicators; α .874), self-efficacy (4 indicators; α .766), innovativeness (6 indicators; α .839), and autonomy (7 indicators; α .800). The sample of the study comprises of 218 students studying in various universities across Haryana. Haryana has the highest level of unemployment in the country and it is necessary to analyse EO of students of Haryana. According to the latest data from the Centre for Monitoring Indian Economy (CIEME), Haryana faces the highest unemployment rate of 26.7%, followed by Rajasthan and Jammu & Kashmir with a lowest rate of 0.6% in Chhattisgarh¹. As universities are the education pillars who shapes the profession or entrepreneurial path of the students and build entrepreneurial skills in students, thus the current study mainly focuses on the university students who are in maturity stage of their education (i.e., at the level of completion of graduation and post graduation courses). The students under the study have been stratified in two categories who have attended or who had not attended the EE programme organised by their universities and departments. The study has used the ANOVA and t-test in order to determine the effect of demographic and socioeconomic factors on EO among university students.

¹ <https://indianexpress.com/article/india/chhattisgarh-states-lowest-unemployment-rate-country-7852151/>

Hypothesis Development of the Study

In order to achieve the objective of the study, the study has hypothesised the following hypothesis on the basis of available literature:

H1: The education disciplines of Universities students have an impact on their individual entrepreneurship orientations of students.

H2: There is a significant difference in entrepreneurship orientations (i.e. risk-taking; pro-activeness; self-efficacy; autonomy; and innovativeness) of students based on their locality (i.e. urban; semi-urban and rural).

H3: There is a significant difference in individual entrepreneurship orientations among students based on their gender.

H4: Entrepreneurship educational programmes organised by universities for students have a direct impact on their individual entrepreneurship orientations of students (i.e. risk-taking; pro-activeness; self-efficacy; autonomy; and innovativeness).

H5: There is a significant difference exists in the entrepreneurship orientations of university students based on their past family business (i.e. risk-taking; pro-activeness; self-efficacy; autonomy; and innovativeness).

Research Questions

The current study differs from past studies as it examines the impact of socio-economic and demographic factors on entrepreneurship orientations of university students. The primary objective of the study is to assess the entrepreneurship

orientations of students based on their socioeconomic factors which are further classified as follows:

- To examine whether the gender of students have an impact on the entrepreneurship orientations of university students.
- To examine whether the past family business of university students have an impact on entrepreneurship orientations of students.
- To examine whether the entrepreneurship orientations of university students differ significantly or not based on the discipline of education of the students.
- To examine whether the entrepreneurship orientations of university students differ significantly based on their locality (i.e. urban; semi-urban, and rural) to which the students belong.
- To examine whether the past family business of university students have an impact on entrepreneurship orientations of students.

Demographic Sample Description

Table 1 depicts the demographic profile of the respondents of the study. The sample of the study includes 44.5% of the respondents which belonged from the urban area; 10.6% are from the semi-urban area and 45% of students belong to the rural area. Moreover, 23.9% of the sample students have their family business and 71.1% students do not have any of their past family business. Similarly, 50.9% of the respondents are male and 49.1% respondents are female. To assess the difference in entrepreneurship orientation, students from three disciplines i.e., Arts, Commerce, and Science have been taken as presented in Table 1:

Table 1: Demographic Profile of the Respondents

Demographics	Characteristics	Frequency	%	S.D.
Gender	Male	111	50.9	.501
	Females	107	49.1	
Marital Status	Singles	201	92.2	.273
	Married	17	7.8	
	Art	70	32.1	
Discipline of Study	Commerce	77	35.3	.806
	Science	71	32.6	
	Urban	97	44.5	
Locality	Semi-Urban	23	10.6	.948
	Rural	98	45.0	
	Up to 1 lakh	53	24.3	

Demographics	Characteristics	Frequency	%	S.D.
Family Income	1 lakh to 3 lakh	79	36.2	.974
	3 lakh to 5 lakh	58	26.6	
	Above 5 lakh	28	12.8	
Family Business	Yes	52	23.9	
	No	166	76.1	

Source: Author's computations.

The sample of the study consisted of 218 university students in Haryana, India. To assess the internal consistency of the study's scale, the value of the Cronbach's alpha (α) has been computed for each item and construct as presented in

Table 1. The value of composite reliability (α) ranges from .766 to .957 (total EO), which confirms its construct reliability.

Table 2: Results of Cronbach's Alphas for Entrepreneurship Orientation Subsets

Construct	Cronbach's Alpha (α)	No. of Items
Total Entrepreneurship Orientation	.957	29
Risk-taking	.837	5
Self-Efficacy	.766	4
Pro-activeness	.874	7
Innovativeness	.839	6
Autonomy	.800	7

Source: Author's computations.

Table 2 represents the results of the reliability analysis of the EO Subsets used in the current study. The survey conducted for the study includes 29 items, of which 5 are about risk-taking ability, 4 are about self-efficacy, 7 are about pro-activeness, 6 are about innovativeness, and 7 items measure the autonomy of the students to measure the overall EO among university students. All the items under the survey are inherited from past literature. Ideally, the value of α should be above 0.7 for a variable to be considered reliable (Fornell & Larcker, 1981; DeVellis, 2021). The Alpha (α) values for all constructs in the study fall within this limit. The overall composite reliability of the scale is

.957 which is par excellence and which confirms the internal consistency of the scale used in the study. To examine the difference and factors affecting the EO among university students, one-way Anova has been applied based on their education discipline (i.e. arts, science, and Commerce) whose results are presented in Table 3. The variables which meet the condition of homogeneity of variance have been analysed with Fisher's one-way ANOVA and Tukey post-hoc analysis and the variables that do not fulfil the condition of homogeneity of variance have been analysed with Welch's robust test and Games Howell post-hoc analysis.

Table 3: Differences in Education Stream and Entrepreneurship Orientation

Construct	Education Discipline			Fisher's One-Way ANOVA F (Sig.)	Welch's Robust Test Statistics (Sig.)
	Arts	Commerce	Science		
Risk-taking	3.16	3.68	3.48		6.582* (.002)
Self-efficacy	3.40	3.92	3.52	8.09* (0.00)	
Pro-activeness	3.20	3.76	3.48		9.179* (.000)
Innovativeness	3.43	3.86	3.52		7.093* (.001)
Autonomy	3.46	3.84	3.54	5.619* (0.004)	

* Sig. at 1%. P-values are provided in parenthesis.

Source: Author's computations.

As per the homogeneity of variance in the variables of the study, Fisher's one-way ANOVA and Welch's test were utilised as presented in Table 3 to find out the difference in

entrepreneurship orientations of university students based on their education discipline. The results of Fisher's one-way ANOVA and Welch's test reveal that there exists

a significant difference in EO of students based on their educational discipline ($P < 0.05$). To find out the category of students in which significant differences exist, a paired comparison with Tukey and Games Howell's post-hoc analysis has been carried out. The results show that there is a significant difference ($p > 0.05$) in self-efficacy, autonomy, risk-taking capacity, pro-activeness, and innovativeness of arts and commerce students. The commerce students are profound to be more risk-takers, innovative, pro-active, and self-efficient and they have more positive belief toward EO in contrast to arts stream students. Similarly, Koe (2015) found that risk-taking capacity and innovativeness differ

significantly between business and non-business groups of students. Similarly, Taatila (2013) found in their study that the students who belong to a business venture, hotel, restaurant, and service management scored higher in EO in comparison to other science discipline students. However, there is no significant difference ($p < 0.05$) in self-efficacy, autonomy, risk-taking capacity, pro-activeness, and innovativeness of arts and science students. There is also no significant difference in risk-taking capacity and pro-activeness between commerce and science students ($p < 0.05$), as shown by the p-value in Table 4.

Table 4: Results of Post-Hoc Analysis Based on Education Discipline of Students

Dependent Variable	Discipline of Study	Discipline of Study	Mean Difference (Sig.)	Std. Error
Self-Efficacy	Art	Commerce	-.512* (.001)	.134
		Science	-.121 (.650)	.137
	Commerce	Art	.512* (.001)	.134
		Science	.391* (.010)	.133
	Science	Art	.121 (.650)	.137
		Commerce	-.391* (.010)	.133
Autonomy	Art	Commerce	-.383* (.005)	.121
		Science	-.082 (.785)	.124
	Commerce	Art	.383* (.005)	.121
		Science	.301** (.036)	.121
	Science	Art	.082 (.785)	.124
		Commerce	-.301** (.036)	.121
Risk-taking#	Art	Commerce	-.518* (.001)	.143
		Science	-.319 (.092)	.151
	Commerce	Art	.518* (.001)	.143
		Science	.199 (.256)	.126
	Science	Art	.319 (.092)	.151
		Commerce	-.199 (.256)	.126
Pro-activeness#	Art	Commerce	-.564* (.000)	.134
		Science	-.285 (.128)	.146
	Commerce	Art	.564* (.000)	.134
		Science	.279 (.061)	.122
	Science	Art	.285 (.128)	.146
		Commerce	-.279 (.061)	.122
Innovativeness#	Art	Commerce	-.436* (.005)	.136
		Science	-.095 (.799)	.148
	Commerce	Art	.436* (.005)	.136
		Science	.342** (.011)	.117
	Science	Art	.095 (.799)	.148
		Commerce	-.342** (.011)	.117

*, ** Sig. at 1% and 5% level. P-values are provided in parenthesis. # Games Howell Post-hoc Analysis

Source: Author's computations.

To test the hypothesis (H2) of the study, a one-way ANOVA has been applied to examine the difference in EO of students based on their locality as presented in Table 6. The results of Fisher's one-way ANOVA and Welch's test show that risk-taking ability, innovativeness, self-efficacy, pro-activeness,

and autonomy of students differ significantly based on their locality, as $p > 0.05$, as presented in Table 5. To examine the categories of locations in which significant differences exist, post hoc analysis with Tukey and Games Howell has been executed as presented in Table 6.

Table 5: Difference in Locality Position of University Students and Their Entrepreneurship Orientation

Construct	Locality			Fisher's One-Way ANOVA F (Sig.)	Welch's Robust Test Statistics (Sig.)
	Rural	Semi-Urban	Urban		
Risk-taking	3.20	3.81	3.60		7.587* (.001)
Self-efficacy	3.40	4.01	3.75		6.867* (.002)
Pro-activeness	3.28	3.90	3.61		7.147* (.002)
Innovativeness	3.41	3.93	3.73		6.504* (.003)
Autonomy	3.44	3.95	3.72	6.074* (.003)	
* Sig. at 1%. P-values are provided in parenthesis.					

Source: Author's computations.

Table 6: Results of Post-Hoc Analysis Based on Education Discipline of Students

Dependent Variable	Locality (i)	Locality (f)	Mean Difference (i-f)(Sig.)	Std. Error
Autonomy	Rural	Semi-Urban	-.507* (.009)	.170
		Urban	-.277* (.024)	.105
	Semi-Urban	Rural	.507* (.009)	.170
		Urban	.230 (.366)	.170
	Urban	Rural	.277* (.024)	.105
		Semi-Urban	-.230 (.366)	.170
Risk-taking#	Rural	Semi-Urban	-.609* (.005)	.184
		Urban	-.400* (.003)	.121
	Semi-Urban	Rural	.609* (.005)	.184
		Urban	.209 (.454)	.172
	Urban	Rural	.400* (.003)	.121
		Semi-Urban	-.209 (.454)	.172
Self-Efficacy#	Rural	Semi-Urban	-.609* (.005)	.182
		Urban	-.350* (.010)	.118
	Semi-Urban	Rural	.609* (.005)	.182
		Urban	.258 (.280)	.166
	Urban	Rural	.350* (.010)	.118
		Semi-Urban	-.258 (.280)	.166
Pro-activeness#	Rural	Semi-Urban	-.621* (.003)	.178
		Urban	-.327** (.016)	.117
	Semi-Urban	Rural	.621* (.003)	.178
		Urban	.294 (.202)	.168
	Urban	Rural	.327** (.016)	.117
		Semi-Urban	-.294 (.202)	.168
Innovativeness#	Rural	Semi-Urban	-.518* (.004)	.154
		Urban	-.318** (.020)	.117

Dependent Variable	Locality (i)	Locality (f)	Mean Difference (i-f)(Sig.)	Std. Error
	Semi-Urban	Rural	.518* (.004)	.154
		Urban	.200 (.363)	.145
	Urban	Rural	.318** (.020)	.117
		Semi-Urban	-.200 (.363)	.145

*, ** Sig. at 1% and 5% level. P-values are provided in parenthesis. # Games Howell Post-hoc Analysis

Source: Author's computations.

The result of post hoc analysis shows that EO differs significantly in rural students in contrast to urban and semi-urban students. The students who belong to the rural area are profound to be risk-averse, less innovative, and proactive on an average in comparison to semi-urban and urban students. They were found to be struggling to believe their capacity to execute behaviour to achieve some desired results and their autonomy towards entrepreneurship orientation is weak in contrast to students who belong to the urban and semi-urban

areas. However, the results of post hoc analysis confirms that there is no significant difference in risk-taking ability, autonomy, innovativeness, pro-activeness, and self-efficacy of urban and semi-urban students as we failed to reject the null hypothesis (p -value $< .05$).

To examine whether there exists a significant difference in EO of university students on the basis of their gender, the independent t-test has been employed to testify hypothesis 3 as illustrated in Table 7.

Table 7: Difference in Gender of University Students and Their Entrepreneurship Orientation

Dependent Variables	Male (111)		Female (107)		t-Stat	P (2 Tail)	Mean Diff	Std. Error Diff
	Mean	SD	Mean	SD				
Risk-taking	3.36	.938	3.53	.768	-1.465	.144	-.170	.116
Self-efficacy	3.62	.958	3.63	.695	-.040	.968	-.005	.113
Pro-activeness	3.43	.936	3.56	.705	-1.157	.249	-.130	.112
Innovativeness	3.53	.902	3.70	.711	-1.577	.116	-.173	.110
Autonomy	3.64	.801	3.60	.696	.343	.732	.035	.102

*, ** Sig. at 1% and 5% level. P-values are provided in parenthesis.

Source: Author's computations.

The results show that there is no significant difference in EO of students based on their gender as t-statistics are not significant ($p < .05$). Therefore, we failed to accept our H3 and conclude that the EO of students is not affected by their gender. Kristiansen (2004) has also found that there is no significant difference in students' entrepreneurship intention based on their gender. Khan and Vieito (2013) discovered in their study that gender does not affect the performance of a business headed by women as opposed to a business led by males. However, entrepreneurial ability and entrepreneurial orientation have an impact on business performance. Carter et al. (2010) discovered no significant association between gender and the performance of large corporations in the

United States. Similarly, Ali et al. (2010) found in their study did not have any impact on the entrepreneurial attributes of university students. However, Taatila (2013) found in their study that there exists a significant difference in EO of students based on their gender. They found that men score higher than women in entrepreneurship orientation; however, the magnitude of the mean difference is relatively marginal and small. Similarly, Marques et al. (2018) have found that female students are more proactive than male students.

To examine whether there exists a difference in EO of university students on basis of their family business, the independent t-test has been employed to testify hypothesis 5 as presented in Table 8.

Table 8: Differences in Family Business and Entrepreneurship Orientation

Dependent Variables	Family Business (218)				t-Stat	P (2 Tail)	Mean Diff	Std. Error Diff
	Yes (52)		No (166)					
	Mean	SD	Mean	SD				
Risk-taking	3.77	.843	3.34	.844	3.186	.002*	.427	.134
Self-efficacy	4.00	.864	3.51	.797	3.775	.000*	.488	.129

Dependent Variables	Family Business (218)				t-Stat	P (2 Tail)	Mean Diff	Std. Error Diff
	Yes (52)		No (166)					
	Mean	SD	Mean	SD				
Pro-activeness	3.97	.756	3.34	.798	5.007	.000*	.627	.125
Innovativeness	3.98	.839	3.50	.778	3.793	.000*	.478	.126
Autonomy	3.94	.807	3.52	.703	3.638	.000*	.422	.116
*, ** Sig. at 1% and 5% level.								

Source: Author's computations.

The result shows that there is a significant difference in EO of students based on their family business as t-statistics are significant ($p > .05$). Therefore, we failed to reject our H_0 and conclude that the EO of students is affected by their family business. The students who have their family business background are found to be more risk-takers, proactive and innovative in comparison to those who do not have their past family business. Marques et al. (2018) that parental occupation i.e., past entrepreneurship experience of their family members has a significant and positive relationship with the risk-taking ability of the students. The students with family businesses are more self-efficient and their autonomy towards entrepreneurship is more positive in contrast to those who do not possess family businesses. Couto and Camilo (2007) discovered that family background was one of the most important criteria distinguishing students considering starting a new business. Similarly, Castiglione et al., 2013 have also found in their study that students who have past family business backgrounds are more oriented towards starting their own business.

The EE programmes help boost the intentions of students to become an entrepreneur. The development of entrepreneurial skills and abilities such as innovativeness, pro-activeness, self-efficacy, and, risk-taking, referred to as entrepreneurial orientations, among university students is thought to be aided by education programmes connected to the entrepreneurship concepts. Earlier a lot of studies have found that entrepreneurial education plays a significant role and has a strong positive impact on Individual EO and intentions. The entrepreneurial education programmes also impact the determinants of entrepreneurial orientations i.e. risk-taking, self-efficacy, and pro-activeness of students. EE is a significant and influential aspect of creating entrepreneurial aspirations, which leads to entrepreneurial action, through individual attitudes and cognition (Naveed et al., 2021). Therefore, to examine whether there exists a difference in EO of university students on basis of attending the EE programmes organised by universities at different levels, the independent t-test has been employed to testify hypothesis 4 as presented in Table 9.

Table 9: Differences in Entrepreneurship Programmes and Entrepreneurship Orientation

Dependent Variables	Entrepreneurship Programmes (218)				t-Stat	P (2 Tail)	Mean Diff	Std. Error Diff
	Yes (52)		No (166)					
	Mean	SD	Mean	SD				
Risk-taking	3.56	.873	3.42	.859	.919	.359	.140	.152
Self-efficacy	3.92	1.03	3.56	.775	2.492	.013**	.364	.146
Pro-activeness	3.70	1.03	3.45	.777	1.470	.148	.257	.175
Innovativeness	3.85	.891	3.56	.793	1.994	.047**	.286	.143
Autonomy	3.93	.697	3.55	.746	2.855	.005*	.372	.130
*, ** Sig. at 1% and 5% level.								

Source: Author's computations.

The result shows that the EO of students is significantly affected by the attendance of entrepreneurship programmes organised by universities, as indicated by t-statistics. The students who attend entrepreneurship programmes are profound to be more innovative and their attitude towards entrepreneurship tends to be more positive in comparison to students who do not attend the entrepreneurship programmes. Marque et al. (2018) have also found in their study that Entrepreneurship

Education (EE) has a positive impact on pro-activeness and innovativeness among university students and does not have an impact on risk-taking capacity. Similarly, our results show that EE programmes do not have any impact on the risk-taking capacity ($p > .05$) of university students (Table 10). However, our results show that entrepreneurship programmes do not affect pro-activeness ($p > .05$) among students. The results show that EE programmes help the

students in achieving self-efficacy. Similarly, Chen et al. (1998) and Abou-Warda (2016) also contended that those with EE and training have a higher individual EO, or, at least, help them in achieving greater belief in their capacity

to complete entrepreneurial activities. Therefore, we failed to reject H_0 and conclude that the EO of students is affected by attending EE education programmes.

Table 10: Analysis of Hypothesis Formulated Under Study

Pathway	T-Stat/ Fisher/Welch Robust Statistic	P-Value	Decision
H1.1 Education DisciplineEO_Risk-taking	6.582	.002*	Accepted
H1.2 Education DisciplineEO_Self-Efficacy	8.09	0.00*	Accepted
H1.3 Education DisciplineEO_Pro-activeness	9.179	.000*	Accepted
H1.4 Education DisciplineEO_Innovativeness	7.093	.001*	Accepted
H1.5 Education DisciplineEO_Autonomy	5.619	0.004*	Accepted
H2.1 Locality EO_Risk-taking	7.587	.001*	Accepted
H2.2 LocalityEO_Self-Efficacy	6.867	.002*	Accepted
H2.3 LocalityEO_Pro-activeness	7.147	.002*	Accepted
H2.4 LocalityEO_Innovativeness	6.504	.003*	Accepted
H2.5 LocalityEO_Autonomy	6.074	.003*	Accepted
H3.1 Gender EO_Risk-taking	-1.465	.144	Rejected
H3.2 GenderEO_Self-Efficacy	-.040	.968	Rejected
H3.3 GenderEO_Pro-activeness	-1.157	.249	Rejected
H3.4 GenderEO_Innovativeness	-1.577	.116	Rejected
H3.5 GenderEO_Autonomy	.343	.732	Rejected
H4.1 Entrepreneurship programmes EO_Risk-taking	3.186	.002*	Accepted
H4.2 Entrepreneurship programmesEO_Self-Efficacy	3.775	.000*	Accepted
H4.3Entrepreneurship programmesEO_Pro-activeness	5.007	.000*	Accepted
H4.4Entrepreneurship programmesEO_Innovativeness	3.793	.000*	Accepted
H4.5 Entrepreneurship programmesEO_Autonomy	3.638	.000*	Accepted
H5.1 Family business EO_Risk-taking	.919	.359	Rejected
H5.2 Family business EO_Self-Efficacy	2.492	.013**	Accepted
H5.3 Family businessEO_Pro-activeness	1.470	.148	Rejected
H5.4 Family business EO_Innovativeness	1.994	.047**	Accepted
H5.5 Family businessEO_Autonomy	2.855	.005*	Accepted
* p value < 0.01, **p value < 0.05			

Source: Author's computations.

CONCLUSION AND FUTURE SUGGESTIONS

The results of the study showed that education disciplines, locality, and EE programs have a significant impact on risk-taking, pro-activeness, self-efficacy, innovativeness, and autonomy of university students. However, the results reveal that gender does not have an impact on any dimension of EO of students. Similarly, the family business of university students only has an impact on self-efficacy, innovativeness, and autonomy of university students (i.e. three major dimensions of EO). The family business does not reveal

any significant impact on risk-taking and pro-activeness of university students. The major finding of the study reveals that there is a need to increase entrepreneurship skills in other disciplines of study beyond the field of business, i.e., including arts and sciences. The main limitation of this study is that it is restricted to university students of Haryana only. Upon this limitation, a future study should be conducted by expanding the finding of this study at the national level by incorporating other dimensions of entrepreneurship orientation. The first suggestion of the study is that there is a need to arrange various programmes, seminars, and workshops at rural levels to educate and develop entrepreneurial skills in rural students. The co-

curriculum of basic education should be constructed in such a way as to develop entrepreneurial skills in students from the very beginning. Similarly, EE programmes should be organised from time to time by universities to generate curiosity in the minds of students about entrepreneurship. Moreover, entrepreneurship development classes in higher education programs need to be introduced for each discipline of students, whether they belong to science, commerce, or arts, to generate higher entrepreneurial calibre students in the country. Another important constraint of the study is a small sample size, which may not be sufficiently representative and geographically diverse. As a result, the study's findings must be replicated in different parts of India and internationally, taking into account cultural, geographical, and socioeconomic disparities as well as problems such as ethnicity and religion.

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