

Effect of Entrepreneurial Education on Entrepreneurial Intention of Indian Students

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Abstract:

The main purpose of this study is to confirm whether entrepreneurial education along with other factors i.e., personal attitude, social valuation and entrepreneurial capacity significantly influence entrepreneurial intention among the students. Data have been collected by administering entrepreneurial intention questionnaire (EIQ) among the students of a renowned central university of India. The paper applies the linear regression model to examine the determinants of entrepreneurial intention. Only one constructs social valuation has been found insignificant in predicting entrepreneurial intention. Moreover, entrepreneurial capacity explains more variance than personal attitude i.e., India has comparatively less liberal entrepreneurial environment for entrepreneurs than other nations. This is one of the some studies which have examined the factors influencing the entrepreneurial intention among young adult undergraduate students.

Keywords: Entrepreneurship, Entrepreneurial Intention, Entrepreneurial Capacity, Social Valuation, Students

Introduction

Entrepreneurship is considered as one of the emerging fields among the researchers and has created interest in academia and policymakers (Shane & Venkataraman, 2000). Entrepreneurship has been given a lot of recognition due to its bigger role in value creation, economic

development. It also increases market efficiency and usher welfare to the society. Entrepreneurial activities bring innovation, create employment opportunities and improve competitiveness (Zahra et al. 1999).

Among Indians, entrepreneurship is found to be secondary career opportunity when compared to factor-driven countries and BRIC nations. For many years, the

Global Entrepreneurship Monitor (GEM) have confirmed in their international reports that entrepreneurial initiatives/activities in India are impelled by necessities. Total Early-stage Entrepreneurial Activity (TEA) in India is 10.6%, quite below than the average (16.8%) of all factor-driven economies. In fact, the TEA rate of India is found to be third lowest among all the factors driven economies. India's rank is first with 28% level of innovation among the factor-driven nation. Where, in average the innovation-driven economies exhibit a level of 31% for innovation, thus being a factor driven economy, India's level of innovation is not much below as compared to average level of innovation among innovation driven nations (Mike Herrington and Penny Kew, 2016)

Creating own venture is quite a phenomena which requires time to take place while intention to start own business is considered as a first step in the process of venture creation. Krueger and Carsrud (1993) opined that entrepreneurial intention gives deeper insights about entrepreneurial process because it describes how a new venture creation takes place.

Since existing literature only confined to the adult entrepreneurs aging between 25 to 44 years and majority of the researchers opined that people from this age group are

more likely to start their own venture (Ahmad, S.U, 1974). Thus, in order to understand the factors affecting entrepreneurial intention to venture creation, this study is focused to the students who are younger than 25 years (ranging between 17 to 23 years). The main objective of this study is to analyze and measure the impact of entrepreneurial education, entrepreneurial capacity, personal attitude and social valuation on the entrepreneurial intention among university students. Since the education provided by universities plays a vital role in career selection of the students significantly thus, universities may be prevised as prominent source of future entrepreneurs.

Literature Review

In the literature, many authors have tried tested the entrepreneurial intention, inclination, or propensity of students (Arafat and Saleem, 2017; Roy, Akhtar and Das, 2017; Ang and Hong, 2000; Autio et al., 1997; Henderson and Robertson, 2000; Lu'thje and Franke, 2003; Scott and Twomey, 1988; Turker et al., 2009; Veciana et al., 2005; Wang and Wong, 2004). Approaches adopted by these researchers in their studies closely overlap with the mainstream of entrepreneurship literature. Some of these researchers paid their

attention on personality characteristics or demographic and personal background of respondents while some authors, in their studies, focused on cognitive state of people toward venture creation. Roy, Akhtar and Das, (2017); Gurol and Atsan, (2006); Ang and Hong (2000) measured entrepreneurial inclination of university students. Their studies focused specifically on testing the role of some personality traits (risk-taking propensity, tolerance of ambiguity, internal locus of control, Innovativeness, and Need for Achievement) and pull factors (affection for money, desire for security and status), rather than the differences in the contextual factors relied upon demographic and personal background of students. In one of their research in Singapore, Wang and Wong (2004) explicated entrepreneurial interest. They uncover that notable factors in explaining the interest towards entrepreneurship are gender, family business background, and level of education. Henderson and Robertson (2000) also delineated how young adults perceive entrepreneurship. They confirmed that natural traits of people play significant role while they perceive entrepreneurship.

The literature provides some handy insights into the impact of contextual factors. In a previous manuscript, Scott and Twomey (1988) analyzed the aspirations of

university students and they unearthed parental influence and work experience as significant factors. Kolvereid, L., (1996) tried comparing the role of socio-cultural factors in a four-dimensional model. They suggested that for the start-up only one factor social status of entrepreneurs might be considered as a predicting factor. In one another cross-cultural study conducted in four different countries, Heuer, A and Kolvereid, L., (2014) discovered that attitudes of university students are found to be significantly different while they perceive of entrepreneurship. They also suggested that taking their distinctive societal ambiance into consideration, every country should customize the contents of entrepreneurial education so as to nurture entrepreneurship. In their research, entrepreneurial intention of university students was measured by Autio et al. (1997) and Veciana et al. (2005) through a process-based approach. Autio et al. (1997) also examined the robustness of entrepreneurial intention in different cultural settings. In their study, they indicated that the entrepreneurial inclination of university is influenced by the image of entrepreneurs and impetus from the university environment. In one of their study in Catalonia and Puerto Rico, desirability, feasibility, and inclination towards

entrepreneurship among the students were tested by Veciana et al. (2005) taking gender and entrepreneurial history of students into consideration. Although among the participants, their perceptions of desirability towards entrepreneurship were found significantly favorable but their perceptions of feasibility were negative thus, their inclination towards entrepreneurship was relatively low.

Luthje and Franke (2003) proposed personality traits and contextual factors model. In their work they unearthed that there might be an association between two personality traits (risk-taking propensity and internal locus of control) and influence of attitude on entrepreneurship. In their research Turker et al. (2009) also pondered about the impact of both internal factors

(motivation and self-efficacy) and external factors (perceived opportunities, perceived support and perceived level of education) on entrepreneurial intention of university students. The study revealed that both the internal factors and of three external factors, perceived support were found statistically significant. In a cross-cultural study, Turker, D. and Selcuk, S.S., (2009) confirmed that entrepreneurial tendency is an outcome of self-efficacy, perceived level of education, and perceived opportunities while comparing the entrepreneurial propensity of American and Egyptian university students. In this study, they found higher entrepreneurial tendency among American students as compared to level of entrepreneurial tendency among Egyptian students.

Hypotheses

The hypotheses to be tested are summarized in table 1.

Table 1: Hypotheses

S.No	Description	
1	Personal Attitude significantly influences the Entrepreneurial Intention	PA → EI
2	Social Valuation significantly influences the Entrepreneurial Intention	SV → EI
3	Entrepreneurial Capacity significantly influences the Entrepreneurial Intention	EC → EI
4	Entrepreneurial Education significantly influences the Entrepreneurial Intention	Edu → EI

Methodology

The study is based on the sample of undergraduate students of a central university studying business as they are more promising to start their own business after completion of their education. “Convenient sampling” method has been used for this study as it has been often used in the domain of entrepreneurship research (Kolvereid, 1996; Krueger et al., 2000; Tkachev & Kolvereid, 1999; Fayolle & Gailly, 2015; Liñán & Chen, 2009; do Paço et al. 2011).

For this study, Aligarh Muslim University was chosen as students come here from different geographical regions (Northern, Southern, Western, Eastern and Northeastern part of India) with their cultures and customs. Empirical data for this research have been collected out of the population undergraduate students studying business.

Questionnaires were administered to the students studying business. The survey work was carried out in the month of August 2017 in Aligarh Muslim University, Aligarh. Total 230 questionnaires were distributed. 193 questionnaires were returned by the respondents, of them, 14 questionnaires

were rejected due to incompleteness and lack in appropriateness. Hence, the final sample size was made up of 179 usable questionnaires which consist of 104 male and 75 female students. For their study, authors have used Entrepreneurial intention questionnaire (EIQ) to collect data.

The EIQ has been divided into six sections. The first is Personal Data of the respondent, second entrepreneurial capacity, third is entrepreneurial Intention, fourth is entrepreneurial education, fifth is social Valuation and the sixth one is professional attraction which has been referred as an independent variable ‘personal attitude’ here in this study.

Collected data was loaded into SPSS 20 to analyze it statistically. In plenty of researches regression analysis technique have been used (Heuer & Kolvereid, 2014; Kolvereid & Isaksen, 2006) to measure the impact of independent variables (PA, SV, EC and Edu) on dependent variable (EI) and in this study, we have also adopted the same. We divided our analysis into three parts; descriptive analysis, correlation and regression analysis.

Table 2: Methodological Synthesis

Sample Size	179
Sample Method	Convenient

Location	Aligarh Muslim University, Aligarh, U.P, India
Mode of data collection	Questionnaire-based survey (EIQ)
Statistical Tools	Descriptive Statistics, Correlation, Simple Linear Regression Analysis

Descriptive Analysis

The descriptive statistics are given as below:

Table 3: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Entrepreneurial Intention (EI)	179	1	7	5.0250	1.52847
Personal Attitude (PA)	179	1	7	5.0925	1.49969
Social Norms (SN)	179	1	7	4.5000	1.21551
Entrepreneurial Capacity (EC)	179	1	7	4.3050	1.18085
Entrepreneurial Education (Edu)	179	1	7	4.7075	1.46623

Seven point Likert scale was used to measure the responses where 4 is the neutral value. Values below 4 show relatively negative values on the scale and above 4 are somewhat positive values. From the results, it has been interpreted that EC shows the lowest mean which indicates that people are not capable enough to control their business. The lowest SD of EC connotes that the group has homogeneity in respect of EC. PA shows highest mean in the above table hence it can be referred that individuals are showing somewhat positive attitude towards entrepreneurship, but PA has also found to be second most heterogeneous group as compared to SV, EC and Edu with second highest SD value.

Correlation

The results of correlation among the variables are shown in Table 4. The correlation matrix provides primary support for the hypotheses. The PA, SV, EC and Edu have been found positively correlated. PA ($r = .660$), Edu ($r = .505$) and EC ($r = .566$) delineate a high degree of correlation at the 1% level of significance with EI. Only SV ($r = .066$) is positively correlated to EI at 5% level of significance.

Table 4: Correlations

	EI	EC	Edu	SV	PA
EI	1				
EC	.724**	1			
Edu	.207	.234*	1		
SN	.562**	.569**	.354**	1	
PA	.650**	.500**	.380*	.680**	1

**Correlation is significant at the .001 level

*Correlation is significant at the .05 level

Regression Analysis

Hypotheses were tested using regression analysis through SPSS 20.0 in two stages. In the first run Personal Attitude, Social Norms, Entrepreneurial Capacity and Entrepreneurial Education were taken together as independent variables while Entrepreneurial Intention as dependent variable. In the first model of regression Social Norms was found to be insignificant thus eliminated. In order to check whether there will be any differences in the results, second run of regression was performed with the rest variables. First model of regression produced the value of R^2 as 0.616. Thus, 61.6% of variance is explained by the independent variables. The result from the first regression model is not in support of second hypothesis i.e. Social Norms significantly influences Entrepreneurial Intention. Second model of regression showed up results similar to the first regression model exhibited 61.4% of total variance with R^2 Value of .614 which is somewhat similar to R^2 revealed by first regression model. These results can be rated as highly satisfactory since previous studies which used linear regression could explain upto 40% of total variance (Linan and Chen, 2009).

Table 5: Coefficients^a

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Personal Attitude	.480	.098	.471	4.906	.000
	Social Norms	-.062	.097	-.049	-.638	.525
	Entrepreneurial	.288	.115	.223	2.496	.015

Capacity						
2	Entrepreneurial Education	.254	.105	.244	2.425	.018
	Personal Attitude	.479	.097	.470	4.913	.000
	Entrepreneurial Capacity	.272	.112	.210	2.424	.018
	Entrepreneurial Education	.248	.104	.238	2.384	.020

Note: Dependent Variable Entrepreneurial Intention (EI)

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.785 ^a	.616	.596	.97172
2	.784 ^a	.614	.599	.96792

Discussion

From the results showed here it's evident that PA and EC and Edu are significantly influencing EI. Some previous researches have also confirmed similar findings however, EC has been found moderately related to EI (Kolvereid & Isaksen, 2006). Here PA shows more regression coefficient value (Beta) as compared to other variables, thus PA shows more strength of relationship with EI. India have less favorable environment for entrepreneurs as compared to other countries. EC has been found significantly related to EI in those countries where environment is not much favorable

for entrepreneurs (Kolvereid & Isaksen, 2006). The current study has been failed in finding the support for second hypothesis (H₂) i.e., relationship between SV and EI. Linan and Chen, (2009) confirmed that influence of SV is mediated by PA and EC hence SV does not have a direct effect on EI. Here, the findings also indicate that Edu is also significantly influencing EI but in order to make it generalized we need to take contents of the course into consideration as this study is based on sample of undergraduate students studying business in Aligarh Muslim University, Aligarh and the contents of the course may differ from

university to university. In their study, Honig, B., (2004) suggested that the contents of any business course which is often offered as entrepreneurial education is not that much enough. It may only be useful in increasing feasibility perceptions, but will not affect desirability.

Implications

The findings suggest that entrepreneurial intention among Indian students is highly influenced by EC. In other words, EC or self-efficacy plays a key role in development of EI among Indian students. Higher influence of EC on EI explains that individuals have lower levels of volitional control over the entrepreneurship. The results of this research also unfold that environment in India is less munificent venture creation as compared to other nations. Development of EC or self-efficacy should be the focal-point of the policymakers and policy should be framed in such a way so as to make the environment more favorable for new venture creation. Limitations of this manuscript should also be taken into consideration before implementing the findings. The first limitation of the study is that we have used the sample of only undergraduate students from Department of Commerce, Aligarh Muslim University which does not represent

the whole population of undergraduate students studying business in India. Secondly, size of the sample is relatively small. Future researchers should look for those factors which influence subjective norms such as age, culture, gender, etc. Future researchers should also take a larger sample size from different universities to have better results.

Conclusion

Because of having an important role in economic development, entrepreneurship has attracted the attention of academicians and policymakers. Entrepreneurial Intention models are widely being used to have better understanding of the entrepreneurial phenomenon. We have used EIQ to measure the level of influence of PA, SV, EC and Edu on EI. In the current manuscript, results verified that three factors PA, SV and Edu are significantly Influencing EI while SV is not influencing EI significantly. The main objective of this study is to find out whether these factors have an influence on entrepreneurial intention or not. We can conclude that three of the four factors Personal Attitude, Entrepreneurial Capacity and Entrepreneurial Education influence the EI, which is consistent with some other studies thus confirms the robustness of this study. We can finally conclude that, with

regards to our study about measuring influence on entrepreneurial intention, higher attitude toward entrepreneurship, stronger belief in one's own entrepreneurial capacity and better knowledge about venture creation lead to higher entrepreneurial intention which creates more possibilities of new venture creation.

References

- Ahmed, S. U. (1985). nAch, risk-taking propensity, locus of control and entrepreneurship. *Personality and Individual differences*, 6(6), 781-782
- Arafat, M. Y., & Saleem, I. (2017). Examining start-up Intention of Indians through cognitive approach: a study using GEM data. *Journal of Global Entrepreneurship Research*, 7(1), 13.
- Ang, S. H., & Hong, D. G. (2000). Entrepreneurial spirit among east Asian Chinese. *Thunderbird International Business Review*, 42(3), 285-309.
- Autio, E. et al., 2001. Entrepreneurial Intent among Students in Scandinavia and in the USA. *Enterprise and Innovation Management Studies*, 2(2), pp.145–160.
- Chandler, G.N. & Lyon, D.W., 2001. Issues of research design and construct measurement in entrepreneurship research: The past decade. *Entrepreneurship: Theory and Practice*, 25(4), pp.101–114.
- Do Paço, A.M.F. et al., 2011. Behaviours and entrepreneurial intention: Empirical findings about secondary students. *Journal of International Entrepreneurship*, 9(1), pp.20–38.
- Fayolle, A. & Gailly, B., 2015. The impact of entrepreneurship education on entrepreneurial attitudes and intention: Hysteresis and persistence. *Journal of Small Business Management*, 53(1), pp.75–93.
- Gürol, Y., & Atsan, N. (2006). Entrepreneurial characteristics amongst university students: Some insights for entrepreneurship education and training in Turkey. *Education+ Training*, 48(1), 25-38.
- Henderson, R., & Robertson, M. (2000). Who wants to be an entrepreneur? Young adult attitudes to entrepreneurship as a career. *Career Development International*, 5(6), 279-287.
- Heuer, A. & Kolvereid, L., 2014. Education in entrepreneurship and the theory of planned behaviour. *European Journal of Training and Development*, 38(6), pp.506–523.
- Honig, B. (2004). Entrepreneurship education: Toward a model of contingency-based business planning. *Academy of Management Learning & Education*, 3(3), 258-273.
- Kolvereid, L. & Isaksen, E., 2006. New business start-up and subsequent entry into self-employment. *Journal of Business Venturing*, 21(6), pp.866–885.
- Kolvereid, L., 1996. Prediction of employment status choice intentions. *Entrepreneurship: Theory and Practice*, 21(1), pp.47- 58.

Krueger, N.F. & Carsrud, A.L., 1993. Entrepreneurial intentions: Applying the theory of planned behaviour. *Entrepreneurship & Regional Development*, 5(4), pp.315–330.

Liñán, F. & Chen, Y., 2009. Development and Cross-Cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 33(3), pp.593–617.

Luthje, C., & Franke, N. (2003). The ‘making’ of an entrepreneur: testing a model of entrepreneurial intent among engineering students at MIT. *R & D Management*, 33(2), 135–147.

Mike Herrington and Penny Kew, G. E. M. (2016). Global Entrepreneurship Monitor 2016/2017. *Global Entrepreneurship Monitor*, 1–180.
<https://doi.org/10.1017/CBO9781107415324.004>

Roy, R., Akhtar, F., & Das, N. (2017). Entrepreneurial intention among science & technology students in India: extending the theory of planned behavior. *International Entrepreneurship and Management Journal*, 13(4), 1013-1041.

Scott, M. G., & Twomey, D. F. (1988). The long-term supply of entrepreneurs: students' career aspirations in relation to entrepreneurship. *Journal of small business management*, 26(4), 5.

Shane, S. & Venkataraman, S., 2000. The promise of entrepreneurship as a field of research. *Academy of management review*, 25(1), pp.217–226.

Thompson, E.R., 2009. Individual entrepreneurial intent: Construct clarification and development of an internationally reliable metric. *Entrepreneurship Theory and Practice*, 33(3), pp.669-694.

Tkachev, A. & Kolvereid, L., 1999. Self-employment intentions among Russian students. *Entrepreneurship and Regional Development*, 11(3), pp.269–280.

Turker, D. & Selcuk, S.S., 2009. Which factors affect entrepreneurial intention of university students? *Journal of European Industrial Training*, 33(2), pp.142–159.

Veciana, J. M., Aponte, M., & Urbano, D. (2005). University students' attitudes towards entrepreneurship: a two countries comparison. *International Entrepreneurship and Management Journal*, 1(2), 165–182.

Wang, C. K., & Wong, P. K. (2004). Entrepreneurial interest of university students in Singapore. *Technovation*, 24(2), 163-172.

Zahra, S.A., Nielsen, A.P. & Bogner, W.C., 1999. Corporate entrepreneurship, knowledge, and competence development. *Entrepreneurship: Theory and Practice*, 23(3), p.169.