

Determinants of Entrepreneurial Intention analysis Among College Students In Covid 19 Time Using Deep Learning Technology

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Abstract: *Entrepreneurs have a larger role in an economy's growth and development. Students are a key source of nasant entrepreneurship in developing nations like India, therefore they are encouraged to start their own businesses. As a result, it's important to figure out what drives students to pursue entrepreneurship. The purpose of this study is to find out which personality characteristics help college students in Andhra Pradesh become entrepreneurs. Five personality characteristics were investigated in order to determine the relevant variables, and only one was shown to have a substantial positive impact on entrepreneurial inclination. Perceived attractiveness has a favourable impact on entrepreneurial desire. As a result, perceived desirability is a significant predictor of college students' entrepreneurial intentions. It implies that students who have a strong desire to be their own boss, take advantage of chances, and establish their own job are more likely to become entrepreneurs. This all work is analysing through ResNet Deep leatning technology. At final comparing results such as sensitivity, accuracy and F 1 score these are most improved compared to old techniques.*

Key words: *Entrepreneurial intention, Risk taking propensity, Locus of control, Need for achievement, Perceived desirability, Innovativeness.*

1. INTRODUCTION

In this twenty first century organizations give greater importance on innovative ideas and creativeness in every course of action (Delmar and Davidsson, 2000). Because the adoption of innovative ideas will increase the competitiveness of the firm and also helps the firm to achieve long term sustainable growth and goals of the firm. Therefore, to boost the economy and development activities countries are promoting entrepreneurship (Naffziger et al., 1994). Entrepreneurship plays a greater role in the growth and development of an economy because elements needed for the development of an economy automatically germinates through entrepreneurship development. Those elements are increased standard of living, reduction of poverty, employment, social renovation, etc. (Scott and Twomey, 1988), new jobs, generating new-fangled markets, introduction of new industries, net increase in actual output, and presentation of new sophisticated technologies (Behave, 1994). Adekiya and Ibrahim (2016) also stated that entrepreneurship development is the cornerstone of economic growth and it plays a vital role in employment generation, income generation, and hence wealth formation.

Glinskiene and Petuskiene (2011) identified that the young population especially graduate students, who are self-employed or intended to start a new venture after graduation, plays a key role in entrepreneurial development activities. Developing countries like India encourage students to take up entrepreneurship as a career choice because of the fact that students are important source of nascent entrepreneurship. Therefore there is a need to understand what motivates students to involve in entrepreneurship. But there are limited researches in this area (Fayolle and Linan, 2013; Karimi et al. 2016). There is significant relation between personality traits and entrepreneurial intention (Zhao and Seibert 2010). This study is intended to analyse the impact of personality traits on college students entrepreneurial intentions in the state of Andhra Pradesh, India.

2. LITERATURE REVIEW AND HYPOTHESES

2.1 Entrepreneurial intention

Intention is one of the important factor that influences entrepreneurial intentions (Bird, 1988). According to Ajzen (1991) intention refers to “the indication of how hard people are willing to try, of how much an effort they are planning to exert, in order to perform the behavior”. The likelihood of performing a particular behaviour is generally followed by a stronger intention. Krueger (1993) defines entrepreneurial intentions as a commitment to starting a new business. Entrepreneurial intention has the power to influence individual choice to move from unemployment or salaried employment to self-employment. Krueger et al. (2000) commented that individual accord to be self employed is considered spontaneous, sensible, and deliberately outlined. Entrepreneurial intentions (EI) refers to the perception and confidence of an individual who has a strong intention to build up a new business venture (Linan et al. 2013). Lakovleva and Kolvereid (2009) also stated that Entrepreneurial intentions can be considered as the individuals intention to build up a new business undertaking or to be self employed.

2.2 Risk-taking propensity

One of the main characteristics of an entrepreneur is the ability to bear risks. The tendency to take risk is risk tolerance. Ozaralli and Rivenburgh (2016) stated that risk tolerance is often linked with entrepreneurship. Past studies suggest that risk lenient individuals have a positive intention to build up a new business undertaking (Douglas and shepherd 2002; Franke and Luthje 2004). There are evidences in the literature that risk taking influences entrepreneurial intentions (Uddin and Bose, 2012; Zhao et al. 2010; Popescu et al. 2016). So based on the previous studies the following hypothesis is formulated.

2.3 Locus of control

“Locus of control refers to the degree to which an individual perceives success and failure as being contingent on his or her personal initiatives” (Green et al. 1996). Locus of control are internal as well as external. Internal locus of control assumes that the outcome of our activities are impacted by what we do. External locus of control assumes that the results of our actions depend on exogenous factors (Zimbardo, 1985).Mazzarol et al. (1999) also commented that high internal locus of control of the individuals has a greater influence on entrepreneurial intentions. Hence it is hypothesized that

2.4 Need for achievement

“Need for achievement can be defined as the probability of performing something in a better way as compared to others or one’s own previous performances” (Hansemark, 2003). Hard working, ambitious and competitiveness are mostly the distinguishing characteristics of people who have need for achievement. Individuals who have a need for high achievement will be more likely to become an entrepreneur (Asmara et al. 2016). So based on the previous studies the following hypothesis is formulated.

Hypothesis 3: Need for achievement has a positive impact on entrepreneurial intention.

3. THEORETICAL FRAMEWORK

The theoretical framework in this study is presented in Figure 1

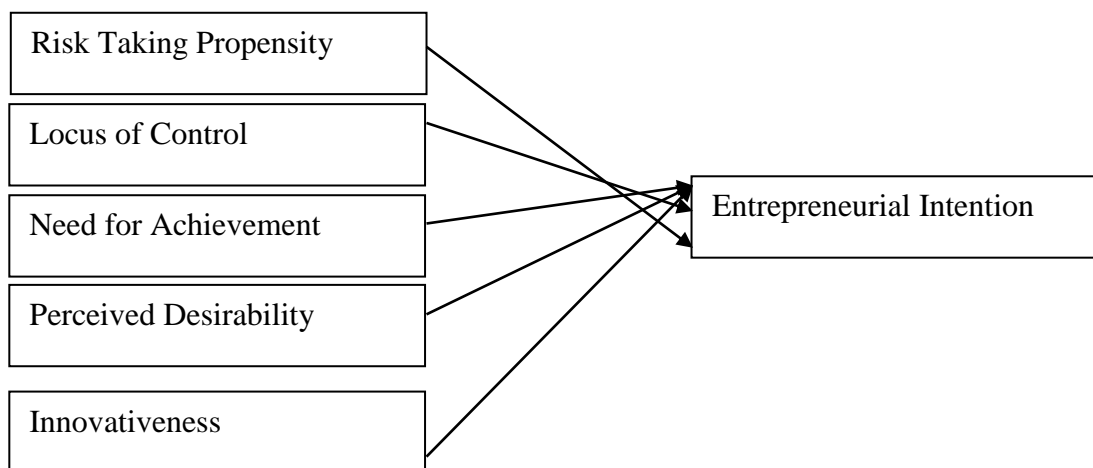


Figure 1: Theoretical Framework

Objective of the study

This sole objective of this study is to know which of the personality traits support college students in the state of Andra pradesh to become entrepreneurs.

4. MATERIALS AND METHODS

The data required for the study was collected mainly from primary sources. Primary data for the study was collected through a structured questionnaire with measurement items from previous literature and is given in the appendix. The population of the study constitutes undergraduate and post graduate students of various colleges in the state of Andra pradesh, India. The sample comprises of students from 10 colleges in Andra pradesh selected using simple random sampling method. A total of 400 students were planned and questionnaires were distributed and 281 questionnaires were received, the response rate being 70 per cent. The sample’s constituents were identified on the basis of convenience sampling technique. Responses on the various measures in the study were obtained on Likert’s five-point scale as strongly agree (5), agree (4), neutral (3), disagree (2), and strongly disagree (1). Negative statements were reversed for the purpose of analysis. The reliability of the instrument is tested using Cronbach’s alpha and the alpha values range from 0.728 to 0.783, surpassing the threshold suggested by Nunnally (1978).

5.1 Techniques

Table 1: F1 scores

Model	F1 score
#SVM	0.234
#LR	0.264
#NN	0.261
#Non linear	0.186
#ResNet	0.284

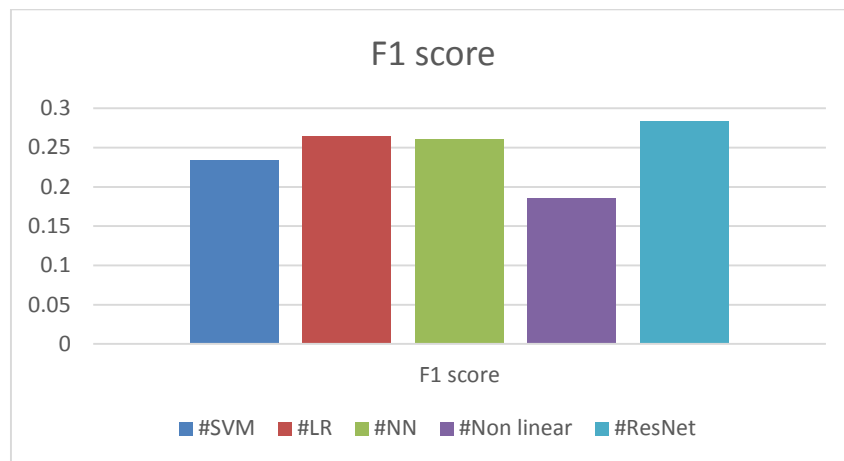


Figure: 13. F1-score

Table: 5 and Figure 13 explains about computational achievement of F_1 - score results, in this proposed method got 0.299 F_1 - score. This is best improvement compared to remaining methods which are discussed.

Table 2: Accuracy

Model	Accuracy
#SVM	0.932
#LR	0.937
#NN	0.975
#Non linear	0.943

#ResNet	0.997
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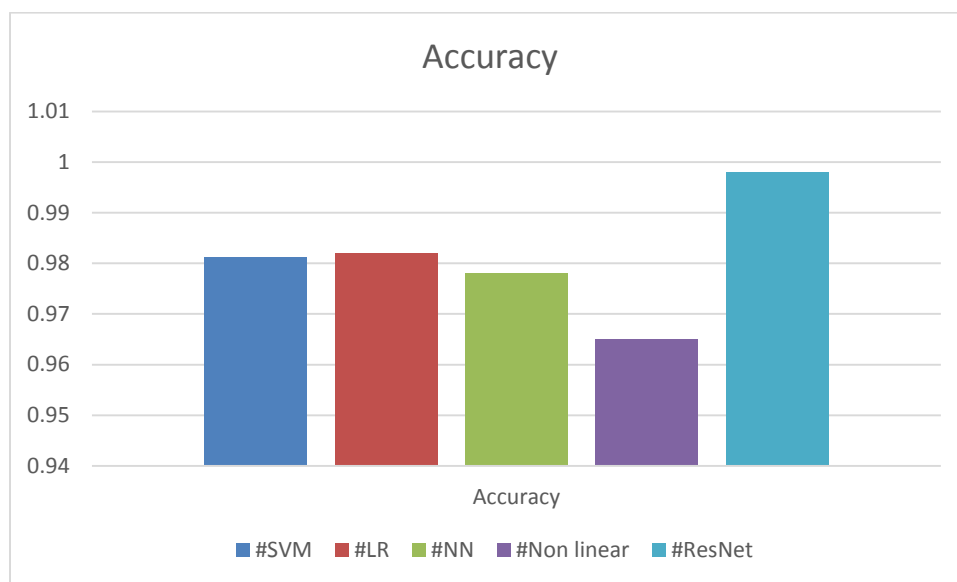


Figure: 14 accuracy analysis

Table 6 and Figure .14 explains about Accuracy discriminations of ResNet method, in this 0.997 accuracy is achieved. Nonlinear methods, LR, NN, and SVM attains more accuracy but improvement is needed, proposed method has achieves more Nemours accuracy.

5. RESULTS AND DISCUSSION

6.1 Sample Profile

Fifty eight percent of the respondents are male and 42 percent are female. Fifty two per cent of the respondents belongs to age group of 21 and below and 48 per cent are above 21 years of age. Sixty one per cent of the respondents are under graduate students and 39 per cent are post graduate students.

6.2 Correlation between independent and dependent variable.

Table 1 shows the correlation between independent variables such as risk taking propensity, locus of control, need for achievement, perceived desirability, innovativeness and dependent variable entrepreneurial intention.

Table 3 Correlation between Independent and dependent variables

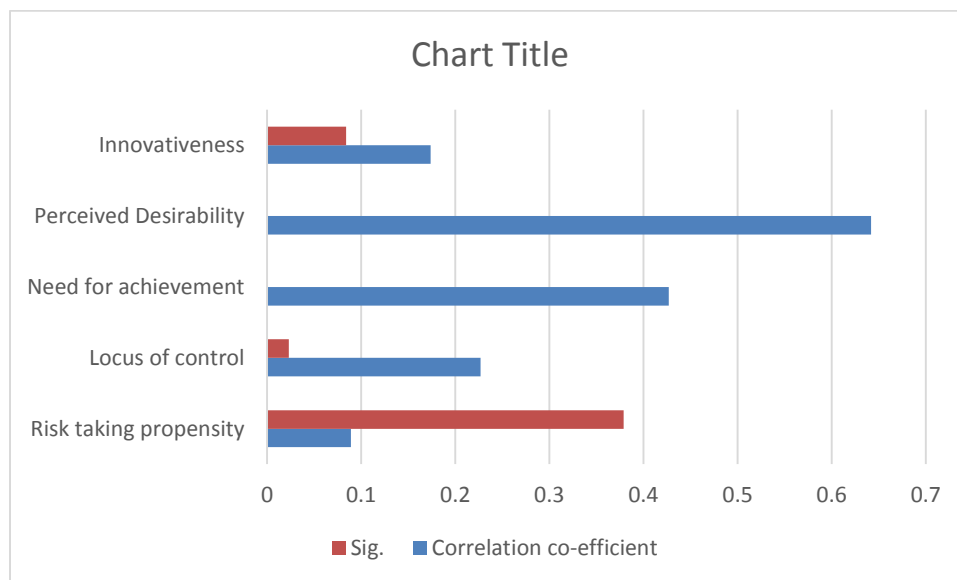
Independent Variables	Correlation co-efficient	Sig.
Risk taking propensity	0.089	0.379
Locus of control	0.227	0.023*
Need for achievement	0.427	0.000*
Perceived Desirability	0.642	0.000*

Innovativeness	0.174	0.084
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Dependent variable: Entrepreneurial intention

*Significance at 5 per cent level

Source: Authors' own



Significant correlation was observed between locus of control ($r=0.227$, $p < 0.05$), need for achievement ($r=0.427$, $p < 0.01$), perceived desirability ($r=0.642$, $p < 0.01$) and entrepreneurial intentions.

6.3 Regression Analysis

After examining the correlation, to measure the impact of independent variables on the dependent variable, a stepwise regression analysis was conducted. Table 2 depicts the results of regression analysis and Table 3 hypothesis testing results. Out of the five independent variables, only perceived desirability is found to have significant impact (beta 0.642, $p < 0.01$) on entrepreneurial intention. The adjusted R^2 value is 0.406, which suggests that 40.6 per cent of the variance in entrepreneurial intention is explained by perceived desirability alone.

Table 4 Results of stepwise regression analysis

Adjusted R square	0.406
Durbin Watson Statistic	1.864
F value of Regression model	68.774
Sig.	0.000

Table 5 Results of hypothesis testing

Sl. No	Hypotheses	Result
1	Risk taking propensity has a positive impact on entrepreneurial intention	Not supported
2	Internal locus of control has a positive impact on entrepreneurial	Not

	intention	supported
3	Need for achievement has a positive impact on entrepreneurial intention	Not supported
4	Perceived desirability has a positive impact on entrepreneurial intention	Supported
5	Innovativeness has a positive impact on entrepreneurial intention	Not supported

6. CONCLUSION

In this investigation a real time entrepreneurial impact detection system has been analysed with various techniques. It is useful for real time applications, in this a real life database of various IT software information is utilized at deep learning (ResNet) auto encoder and machine learning techniques. The machine and deep learning models are used to classify the attacks on clouds with effective manner. In this work the accuracy is 0.99 F1 score, 0.284 and TP is 359 is achieved. Which is a good improvement. This experiment further useful for real time cloud-based security identification system. To monitor any time invariant behaviour of clouds this application is helpful for future technologies.

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