A Study on The Influence of Personality Traits on Entrepreneurial Intention among Working Professionals in the Indian Technical Organizations

Abstract
In the context of more employees leaving their full time jobs to start their own business, the present study attempts to see the influence of big five personality factors on entrepreneurial intention. A survey was conducted among 108 technical employees in India. The results indicated that openness to experience and extraversion are the only significant predictors of entrepreneurial intention. The results of the study would enable managers to identify the employees with entrepreneurial intention and accordingly they could strategize the recruitment and retention strategies.

Keywords: Entrepreneurial intention, big five personality, technical employees in India, openness to experience.

Introduction
In recent times, entrepreneurship seems to be in the upswing. In the scenario where the rates of corporate downsizing and layoffs increase, there are individuals who fear a loss of jobs and find an idea of being their own bosses quite attractive. Even those individuals having a stable job dream of setting up their own business and keeping the profits to themselves. As per the NASSCOM India Startup report, 2014 India has become the brooding ground for startups and innovation. Some common examples are Housing.com, Paytm, Redbus.in, Mu sigma etc. About 72% of the founders are less than 35 years old, where most of them hold a professional corporate background. This is a highly attractive sector especially when India is actively experiencing the startup boom in the recent decades. The Government of India’s initiative of Start Up India and Digital India is a ladder on which the budding entrepreneurs can climb up their career with. India serves as the fastest growing startup-base worldwide and stands third in technology driven product startups just after US and UK respectively. The report reveals that the boom in the startup ecosystem has generated employment for around 80,000 to 85,000 people in total. More than 65% of the startups are located in NCR, Mumbai and Bangalore, in India.

As per the report by Economic Times(2016), the defining factors of an individual to startup in India are: age group of 24-28, engineering degree from the Indian Institute of Technologies (IITs), highly driven as they are ready to work round the clock as they have no family obligations given their age, success of batch mates and tightly knit peer group, fearless in chasing big goals and solving nationwide complex
problems, well networked and able to mobilize friends and big investor cheques.

The no.of people who leave their jobs to start become entrepreneurs have also been increasing. For the same reason, many organizations encourage intrapreneurship in their organizations. This refers to the act of behaving like an entrepreneur while working within an organization. It can also be referred to as a corporate management style where the organization is ready to encourage innovation and risk taking venture within the structure of the organization. Being an intrapreneur it is supposed to be beneficial to both the individual and the organization. As far as such employees are aligned to the business objectives, the organization should be ready to provide access to financial resources to create and innovate within the formal structure. In this direction, recently Google has decided to set up an in-house startup incubator called 'Area 120' to help retain its entrepreneurial talent and give them an avenue to explore new ideas ( Google, 2017).

According to Shane and Venkataraman (2000), entrepreneurship comprises both "enterprising individuals" and "entrepreneurial opportunities". Researchers have always been interested to understand the differentiating characteristics of entering individuals. Henley (2007) points out that entrepreneurship is intentional activity. The intention is formed at least a year in advance of new venture creation, suggesting a link between entrepreneurship and intention. Wong and Choo (2009) add that that intention is the single best predictor of entrepreneurial behaviour. The present study attempts to understand the influence of personality factors on entrepreneurial intention among working professionals.

Review of Literature

Katz and Gartner,(1988) defines entrepreneurial intention as the search of information that can be used to fulfill the goal of venture creation. Intention is the single best predictor of entrepreneurial behaviour. Entrepreneurial intention refers to ones intent to start a business (Krueger et al, 2000).

According to Shook,Priem& McGee (2003), the development of entrepreneurial intention is primarily explained by three theoretical models:

1) Model of implementing entrepreneurial ideas (IEI) (Bird, 1988).
2) Model of the entrepreneurial event (SEE) (Shapero, 1982).

TPB focuses on attitudes as the best predictors of intention. The three factors TPB uses to predict entrepreneurial intent are attitude toward the act, social norms and perceived behavioural control. ) Entrepreneurial Event (SEE) is another model that supports the formation of entrepreneurial intention. SEE suggests entrepreneurial intention will depend on perceived feasibility and perceived desirability of the prospect of starting a business along with the propensity to act. Attitude towards the act of TPB aligned with perceived desirability, and perceived behavioural control approximates perceived feasibility (Autio, Keeley, Klofsten, Parker & Hay., 2001).

There are articles that have made a very important contribution to the entrepreneurial literature by examining the difference between entrepreneurial takeover intention and entrepreneurial start up intention (Miao, 2015).According to the McStay (2008) , previous studies about entrepreneurship can be divided in to three distinct approaches 1) Trait approaches- the personality traits that differentiate between entrepreneurs and non-entrepreneurs 2) Behavioral approaches and 3)Cognitive approaches. Weiner (2015) identified the trajectories of three different entrepreneurial intent as traditional, social and intrapreneurship.

Most of the studies on entrepreneurial intention have been done among graduate and post graduate students (Douglas& Shepherd, 2002.,Ethem,2005., Ismail et al., 2009.,Samuel, Ernest &Awuah, 2013) and business students(Evan, 2005., Van Gelderen, 2008) specifically. However, few studies have looked specifically at the entrepreneurial process for later life entrepreneurs, and the relationship between that process and both the personal characteristics of and the environmental conditions for individuals who become later life entrepreneurs (Palmer, 1998, Peng,Lu& Kang, 2012) and also among adult entrepreneurs (Hatak, Harms, &Fink, 2015).

Historically, personality characteristics such as innovativeness, achievement orientation, and risk-taking were emphasized as being important for entrepreneurship (Knight, 1921; McClelland, 1961).The 'trait-oriented approach' attempts to find out the intrinsic personality characteristics that cause individuals to take such risks. As per many researchers, traits have been a positive predictors and indicators of entrepreneurs. Those traits like high need for achievement, risk taking propensity and internal locus of control (Brice, 2002) and emotional intelligence (McLaughin, 2012).

Rauch and Frese (2007) proposed a model titled, Entrepreneurs' Personality Characteristics and Success which described how broad personality attributes commonly known as the “Big Five Personality Traits” (conscientiousness, agreeableness, neuroticism, openness to experience, and extraversion) affect specific personal characteristics ( need for achievement, locus of control, and risk-taking) and impact entrepreneurial goals, which then
shape business creation and success. This research proposed the adoption of 'Big Five Personality traits' to better differentiate the various individual traits of people who intend to become entrepreneurs. Brice (2002) also noted that it may be possible to use several of the Five-Factors to distinguish between entrepreneurs and others. Big five personality traits were also found to predict entrepreneurial Intention which, in turn, predicted Entrepreneurial Performance (Williams, 2011). Several studies have looked at the impact of big five personality factors on entrepreneurial intention, but mostly on student samples (Akanbi, 2013., Ismail et al., 2009, Chen, Jing and Sung., 2012, Liang, Chia and Liang., 2015).

There have been very few studies that have linked demographic variables like age, gender, and work experience with the entrepreneurial intentions of an individual. Among the demographic variables influencing entrepreneurial intention, Orhan and Scott (2001) interestingly noted that women employees experiencing the glass ceiling effect tend to develop entrepreneurial intentions. Several other demographic variables like families, academics, career advisors, friends, successful entrepreneurs, and business people were also found to influence the decision to become an entrepreneur (Samuel, Ernest & Awuah, 2013). There have been contradictory results on the influence of demographic variables on entrepreneurial intention. Hatak, Harms, and Fink, (2015) study noted that as employees age they are less inclined to act entrepreneurially whereas Kristiansen and Indrati (2004) noted that age, gender and educational background have no statistically significant impact on entrepreneurial intention.

Durmat (2014) noted that there is a research gap in the area of formation of entrepreneurial intentions among individuals; the idea should be researched among entrepreneurs rather than potential entrepreneurs or students for that matter. After reviewing the literature on personality traits and entrepreneurial intention, the researchers have also come to an observation that many of the studies done using personality traits to predict entrepreneurial behavior and performance have been conducted among students, citizens of a country, established entrepreneurs etc. It has not yet been done among working professionals to predict the entrepreneurial intentions among them which would give more insightful information to organizations.

The work experience as a variable can be studied only among people who have been employed at least once in their life. There have been very few studies that compare such entrepreneurial activities and behaviors of people who belong to different cultures. Such a cross cultural study has been less undertaken by researchers. Because there are various social and demographic factors that influence an individual to take up business as an option to make money instead of employment. The literature on sociological front stresses on role models as individuals that someone models on how positively they feel about the role model. If an individual has a strong positive attitude towards an entrepreneurial role model, the individual will take on their normative behavior and attitudes as their own (Gnyawali & Fogel, 1994) which might be expected to lead the individual to see a greater perceived value of entrepreneurship. Based on the research gap identified, the present study attempts to understand the influence of big five personality factors on entrepreneurial intention among technical professionals in India. Thus the following hypothesis was formed,

H1: There is a relationship between big five personality factors (extraversion, openness to experience, agreeableness, openness to experience and neuroticism) and entrepreneurial intention.

Methodology

Sampling details

Ideally in this research the sample should consist of those employees who are completely willing to be an entrepreneur in a particular time frame. As it is practically difficult to identify those intentions without personally interacting with such individuals, the sample consist of currently working employees who hold a work experience of minimum 1 year and above in the Indian technical companies( like IT/ITES, Telecom, Infrastructure/Power sectors). The respondents were all above the age of 20 years and the upper limit of age was 35 as the study wanted to focus only on relatively young employees who are at relatively early stage of their career. Only full time employees were considered for the study. A survey was conducted by convenient sampling technique and the sample size was 108.

Tools

The independent variable for the study big five personality factors ((extraversion, openness to experience, agreeableness, openness to experience and neuroticism) was measured using the big five personality inventory (Goldberg, 1993) with 44 items and reliability of 0.77. The dependent variable for the study was measured using The Entrepreneurial intention scale (Brice & Spencer, 2007) with 5 items and high reliability of 0.89. Both scales were measured on five point likert scales with ratings from 1 to 5. 1-Disagree strongly, 2-Disagree a little, 3-Neither agree nor disagree4-Agree a little, 5-Agree strongly.

Analysis And Results

The data collected was scored and analyzed using SPSS version 16.0 to identify the relationship between the dependent and the independent variables. The descriptive
statistics were used to analyze the dependent, independent and socio demographic variables. The socio demographic details of the sample is given in Table 1 and descriptive statistics for the variables of study are given in Table 2.

### Table 1: Demographic Details of the Sample

<table>
<thead>
<tr>
<th>Demographic variable</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>74</td>
<td>69</td>
</tr>
<tr>
<td>Female</td>
<td>34</td>
<td>31</td>
</tr>
<tr>
<td>Age group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-25</td>
<td>79</td>
<td>73</td>
</tr>
<tr>
<td>26-30</td>
<td>23</td>
<td>21</td>
</tr>
<tr>
<td>31-35</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Likelihood to start own business</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>1-5yrs</td>
<td>32</td>
<td>30</td>
</tr>
<tr>
<td>5-10yrs</td>
<td>25</td>
<td>23</td>
</tr>
<tr>
<td>More than 10 yrs</td>
<td>29</td>
<td>27</td>
</tr>
<tr>
<td>Never</td>
<td>17</td>
<td>16</td>
</tr>
<tr>
<td>Total work experience</td>
<td>Mean=4yrs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SD=1.29</td>
<td></td>
</tr>
<tr>
<td>Current work experience</td>
<td>Mean=2yrs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SD=2.07</td>
<td></td>
</tr>
</tbody>
</table>

Along with the survey the respondents were also asked about how soon are they likely to start their own business. 30% of them would like to start a business in the next 1 to 5 years, 23% would like to start in the next 6 to 10 years, 27% of them would like to start in more than 10 years, and 16% of them would never like to start their own business. However, the least number of participants that is 4% of them would like to start their business in less than a year. Thus we could see that about 62% of the sample intends to start their own business in the next 10 yrs. From an organizations perspective, they should be more interested in the 37% of sample who plan to start their own business in the next 5 years. It is also interesting to note that 5% of the sample intend to start own business within one year which is an indication for people who are likely to leave the job unless given an entrepreneurial opportunity.

The mean, standard deviation and bivariate correlations of all study variables are given in Table 2. The preliminary correlation analysis reveals that all the personality variables except agreeableness are correlated with entrepreneurial intention. It is also interesting to note that neuroticism is negatively correlated with entrepreneurial intention. However, correlation does not imply causation and for getting more insights on the influence of personality factors on entrepreneurial intention, simultaneous regression analysis was carried out. The predictor variables considered were the big five personality variables (openness to experience, extraversion, agreeableness, conscientiousness and neuroticism) and the dependent variable was entrepreneurial intention. The regression results are indicated in Table 3.
The adjusted R square value for the model was 0.202 and the overall model was found to be significant ($F= 3.922^*$) at 0.05 level of significance. Among the predictor variables openness to experience was found to be the most significant predictor followed by extraversion. The other predictors, conscientiousness, agreeableness and neuroticism were not found to be significant predictors of entrepreneurial intention. Thus H1 was partially rejected

**Table 2: Descriptive Statistics of the Research Variables.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial intention</td>
<td>3.34</td>
<td>1.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Openness to experience</td>
<td>3.69</td>
<td>0.48</td>
<td>0.355**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>3.64</td>
<td>0.63</td>
<td>0.218*</td>
<td>0.404**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extraversion</td>
<td>3.62</td>
<td>0.60</td>
<td>0.324**</td>
<td>0.366 <strong>0.335</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agreeableness</td>
<td>3.94</td>
<td>0.55</td>
<td>0.045</td>
<td>0.264<em>0.378**0.186</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neuroticism</td>
<td>2.6</td>
<td>0.74</td>
<td>-0.186*</td>
<td>-0.108</td>
<td>-0.286*</td>
<td>-0.223*</td>
<td>-0.23*</td>
</tr>
</tbody>
</table>

**Note:** ** correlation is significant at 0.01 level (two tailed)
*correlation is significant at 0.05 level (two tailed)

**Table 3: Regression Analysis Results.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Beta</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>0.797</td>
<td></td>
</tr>
<tr>
<td>Openness to experience</td>
<td>0.279*</td>
<td>0.007</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>0.045</td>
<td>0.672</td>
</tr>
<tr>
<td>Extraversion</td>
<td>0.2*</td>
<td>0.046</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>-0.111</td>
<td>0.256</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>-0.124</td>
<td>0.192</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Entrepreneurial intention

*denotes 0.05 level of significance (two tailed hypothesis)

**Discussion And Conclusion**

The study attempted to identify the influence of big five personality dimensions on entrepreneurial intention among technical employees who are at the early stages of their career. The overall model was found to be statistically significant. Among the predictor variables, openness to experience and extraversion were found to be the most
significant predictors. This is not surprising given the social behavioral aspects involved in entrepreneurship. Most of the previous studies have also identified as opened to experience as the significant predictor of entrepreneurial intention (Chen, Jing and Sung, 2012, Liang, Chia and Liang, 2015, Ismail et al., 2009, Akanbi, 2013). This result is hardly surprising as open individuals tend to be curious, imaginative, adventures and receptive to business opportunities which are important characteristics in becoming successful entrepreneurs. Similarly extraversion was also found to be strongly related to entrepreneurial intention by several other studies (Chen, Jing and Sung, 2012, Ismail et al., 2009, Akanbi, 2013). It is also interesting to note that the results of this study is in total agreement with Ismail et al. (2009) study done among undergraduate students in Malaysia. Few contradictory results were also observed. The study noted that conscientiousness is not a significant predictor of entrepreneurial intention even though bivariate correlation showed a positive correlation. However several other studies had identified conscientiousness as a significant predictor of entrepreneurial intention (Chen, Jing and Sung, 2012, Liang, Chia and Liang, 2015, Akanbi, 2013). Hence, this result is to be interpreted cautiously. The present study proved that agreeableness and neuroticism does not predict entrepreneurial intention which is in agreement with Zhao and Seibert study (2006) which showed that entrepreneurs have high scores on Conscientiousness, Openness to Experience, and Extra-version, but lower scores on Agreeableness and Neuroticism.

The results of the study give valuable insights to organizations which face challenges in the form of losing employees because of their decision to become entrepreneurs. The Indian organizations functioning in the technological front employs the most number of younger populations of the country and they should be able to understand the needs and abilities of their own employees. If the employees feel a lack in meeting their psychological and intellectual needs, they are willing to go forward in search of new opportunities. Indian organizations should be able to foster the entrepreneurial abilities and activities of their employees in the near future. This will help the organizations retain their best and creative set of employees. Another perspective through which these insights could be utilized is that this information could be used for forming the recruitment strategies of the organization.

**Limitations of the study and scope for further research**

It is not only the personality traits that influence the entrepreneurial intention in an individual. There are other intrinsic (motivation, need for recognition, need for money, need for achievement, risk taking ability, creativity and innovation) and extrinsic factors (family support, family business, peer influence and lack of job autonomy and satisfaction in the current job) that affect a person's intent to entrepreneurial activity. This study can be made more meaningful and extensive if the sample consists of respondents who are already entrepreneurs. A follow up study of the same sample to see how many of them have actually become entrepreneurs would also be interesting to see. The present study focused only on relatively young employees. It would be interesting to do a comparative study between early stage entrepreneurs and late stage entrepreneurs.

**References**


