ANALYZING THE MODERATING EFFECT OF ENTREPRENEURSHIP EDUCATION ON THE ANTECEDENTS OF ENTREPRENEURIAL INTENTION

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ABSTRACT

In the past years, the entrepreneurial undertaking has witnessed fabulous growth across the Indian economy. To further fuel this entrepreneurship wave, many researchers advocate the potential of mass awareness and entrepreneurial education programs among the youth. Past studies done in the context have primarily focused on the antecedents of entrepreneurial intention and behaviour as their primary research objectives. Notably, in many empirical researches, subjective norms were observed to be affecting the attitude towards entrepreneurial conduct and the perceived control over that behaviour. However, few studies have attempted to recognise the position of entrepreneurial training in boosting the entrepreneurial conduct from a cognitive perspective. Within the domain of a cognitive framework, i.e., the theory of planned behaviour, the paper examines how the interaction between entrepreneurship education and subjective norm shapes the perception and attitude towards entrepreneurship. Thus, based on a cognitive approach to explaining behaviour, this study aims to test the moderating role of entrepreneurship education on the relationship between subjective norm and antecedents of entrepreneurial intention mainly entrepreneurial attitude and perceived control behaviour to explain the entrepreneurial behaviour. Also, to explain the existing gap in entrepreneurial growth, gender’s influence on subjective norms has been studied with the moderating effect of entrepreneurial education. For analysis, data from a sample of 350 final year MBA graduates is extracted using multi-sample analysis, which is then subjected to structural equation modelling. Results exhibit that entrepreneurship education plays a significant moderating role, by weakening the linkage between subjective norms and perceived behaviour control and reinforcement the connection between subjective norms and entrepreneurial attitude. Results also have necessary implication for the women entrepreneurship.

Keywords: Entrepreneurship, Entrepreneurial Intention, Entrepreneurship Education, Subjective Norms.

INTRODUCTION

Entrepreneurship has been at the heart of the nation’s strong economic growth these years. A number of forces have been found to be responsible for carrying this self-growing essence to the fore such as LPG, Gen Y mind-set, the internet, etc. However, a question of significant interest to the researchers is how to sustain and further fuel this entrepreneurial drive for the economic growth and development of the country. Hence, the need to study entrepreneurial behaviour and to foster it among masses has become critical to entrepreneurship research. To meet this far-reaching cry, the concept of intention and its antecedents has received growing attention in the recent years for its usefulness in predicting entrepreneurial behaviour.
The theory of planned behaviour (Ajzen, 2002) is undoubtedly one of the most extensive used models of intention. According to this theory, attitudes, subjective norms and perceived control behaviour are the variables that shape intention and in turn behaviour. These variables may be inclined towards the existence of entrepreneurship education intended at producing a more suitable climate for entrepreneurship. To infuse entrepreneurial behaviour among youth, entrepreneurship education (EE) may serve as a vehicle to present information about norms and values in entrepreneurship. (Morris et al., 2013). Moreover, it may also be a vital source of relevant knowledge of entrepreneurship (i.e., awareness of available institutional support mechanism) (Dohse & Walter, 2012). Thus, it may help in creating a conducive entrepreneurial climate by shaping young mind’s attitudes and control behaviour towards entrepreneurship.

Not only this, but entrepreneurship education may also play a significant moderating role in shaping gender oriented subjective norms regarding entrepreneurship. Thus, subjective norms moderated by EE can also assist women to conquer gender stereotypes, which classify entrepreneurship as an extra masculine carrier alternative (Bhat, 2017; Gupta et al., 2009). In this way, entrepreneurship education may help in linking the long-standing masculinity gap recognised in entrepreneurship.

These potential interactive or moderating effects of EE on the antecedents of entrepreneurial intention have not been studied. Therefore, to explain entrepreneurial behaviour in the light of entrepreneurial education, this study attempts to analyse how entrepreneurial education moderates the relationship between SN and the antecedent of EI. Also the study aims to test the potential of entrepreneurial education in bridging the existing gender gap by examining its moderating influence on gender-specific subjective norms.

As a result, the study offers two particular contributions. First, it carries out an integrative and complicated intention based model that considers moderation effects (Fayolle & Linan, 2014). This paper also reacts to the concept and studies on entrepreneurship as a gendered method (Powell & Eddleston 2013; Bhat, 2017) via inspecting whether or not entrepreneurial training can play a vital role by providing constructing experiences to change the student's attitude and perceptions, lessening the weight of gender stereotypes.

**THEORY OF PLANNED BEHAVIOUR**

The theory gives coherent theoretical framework with preferred applicability, which permits one to understand intentions taking social as well as personal elements under consideration. According to TPB, intentions have three independent constructs (Antecedents of intentions), i.e., subjective norms (SN), attitude towards behaviour (ATB) and perceived behaviour control (PCB) (Ajzen, 1991 & 2002). SN measures the perception that somebody has the backing of family, friends and other noteworthy people when carrying out specific behaviour. It refers to the perception that these reference persons may or may not agree with the decision to adopt behaviour. The attitude towards behaviour which is the second element refers to the appeal of such behaviour or the degree to which the individual holds a positive or negative personal assessment of it. Finally, PCB echoes the perceived ease or difficulty in managing the behaviour (Karimi et al., 2014).

Mostly used in the retailing context, this theory is used to explain the buying behaviour of individuals regarding their purchase intention. The intention to purchase a product depends on the three antecedents proposed by the theory; subjective norms, purchase attitude and perceived behavioural control over purchase (Ajzen, 1991 & 2002).
Similarly, in context of entrepreneurship, the attitude towards entrepreneurship behaviour is a crucial factor that affects the perception of entrepreneurship desirability and in turn, influences entrepreneurial intention (Ajzen, 2002). Perceived behaviour control is also an important variable as it reflects the perception the individual has on his or her ability to control entrepreneurship behaviour, which favors entrepreneurial intention (Fayolle et al., 2014; Jayawarna et al., 2015). Finally, subjective norms regarding entrepreneurship behaviour come from the perceived family and friends support and may play a significant role in creating a conducive, facilitating and friendly environment for entrepreneurship to prosper. Favorable and encouraging subjective norms regarding entrepreneurship may provide the appropriate climate leading to positive entrepreneurial attitude and greater control over entrepreneurial behaviour, thus fostering the formation of positive entrepreneurial intention (Santos et al., 2014).

Thus, the hypothesis outlined are:

\[ H1a: \text{Subjective norms are significantly linked to the attitude towards entrepreneurship.} \]

\[ H1b: \text{Subjective norms are positively related to the perceived behaviour control.} \]

**THE MODERATING ROLE OF ENTREPRENEURSHIP EDUCATION**

Entrepreneurship education can shape entrepreneurial attitude in a number of ways. It can garner people’s attitude closer to entrepreneurship through inspiring and stressing the rewards of entrepreneurial behaviour (Entrialgo & Iglesias, 2016; Bae et al., 2014; Souitaris et al., 2007). The environment within the university can become an influential factor in the formation of the entrepreneurial ecosystem (Morris, Shirokova & Tsukanova, 2017). Based on this concept the universities can develop the environment for entrepreneurship by encouraging various entrepreneurial initiatives (Nabi, Walmsley & Holden, 2015; Iserberg, 2014). The improvement in EE provided by the university system indirectly leads to the emergence of EI (Vanevenhoven & Liguori, 2013). Entrepreneurial Education and subjective norms may positively interact with each other, in such a way that their combined effect would be greater than the sum of their individual effects (Fayolle & Gailly, 2015; Karimi et al., 2016). For instance, a favourable family environment on interaction with entrepreneurial education results in better attitude towards entrepreneurship. As put by Eagly & Chaiken (1993), affect and cognition most usually operate jointly, to produce results which can be higher on account of their combination rather than alone (p. 423). The contributions (mainly of a cognitive nature) of entrepreneurial education will interact with the contributions (cognition and affects) provided by the closest environment, to create an attitudinal gestalt towards entrepreneurship (Piperopoulos & Dimov, 2015). It is therefore proposed:

\[ H2a: \text{The association between subjective norms and entrepreneurial attitude is moderated by entrepreneurship education. So with entrepreneurship education, this connection will be dominant.} \]

It is also anticipated that the perception of control over entrepreneurship behaviour can be changed by modifying people’s beliefs and manipulating their subjective norms about entrepreneurship (Entrialgo & Iglesias, 2016). This can be accomplished by providing knowledge about accessing resources and dispelling spurious experiences of infeasibility through entrepreneurship education (Van Gederen et al., 2008). Moreover, entrepreneurial education can increase perceived behavioural control by enhancing belief about the ability to engage in the
entrepreneurial behaviour, for example by means of contributing to mastering experiences in entrepreneurship-related tasks (Fayolle & Gailly, 2015; Kuehn, 2008). In short, entrepreneurial education may render subjective norms from family and friends no longer critical for individuals in generating behavioural control because there is other, more objective source that provide them with entrepreneurship knowledge and information and that may affect their perception of entrepreneurship control (Chilikias, 2014). For those who have entrepreneurial education, their perception of what close influential people think may become less relevant in generating perceived control behaviour. It is thus proposed:

**H2b: The relationship between subjective norms and perceived behaviour control is moderated by entrepreneurship education. With the presence of entrepreneurial education, this association will be weaker.**

### GENDER-SPECIFIC SUBJECTIVE NORMS

As reported by the 2014 document of Global Entrepreneurship Monitor (GEM, 2015), women participation in entrepreneurship varies across economies, however anywhere, it is nearly always much less than that of men. There is nevertheless a massive gap between the males and females level of participation and this gap appears to be consistent across cultures and economies (Thebaud, 2015). Several studies attribute this current gender gap to the presence of gender stereotype in the society (Chilikias, 2014; Gupta et al., 2014; Shinnar et al., 2012). As gender is an influential aspect of self-perception of the person, therefore, it plays a significant role in the orientation towards entrepreneurship (Goktan & Gupta, 2015).

There is cross-national empirical evidence that shows that gender matters in how individuals perceive lack of support and bring forth the conclusion that this barrier is significantly more critical for women than for men (Javalgi & Grossman, 2016; Shinnar et al., 2012). Gender stereotypes are one of the significant elements denoting the behaviour norm that dictates how men and women should conduct themselves (Bae et al., 2014). The role of the male is to be independent and autonomous and role of the female is to give more importance to interpersonal relations (Eagly & Wood, 2018). This gender stereotype make the entrepreneur intention difficult for women. Bird & Brush (2002) also suggested that decision making by women is often intertwined with the management of a family. So, women perceive their family’s option and support towards entrepreneurship to be more critical as compared to men. In other words, it can be proposed that women give more weight to subjective norms than men while deciding on their entrepreneurship behaviour. Consequently, the hypothesis framed is:

**H3a: Subjective norms regarding entrepreneurship that comes from near circle of the relative environment have extra weight for women.**

Usually, entrepreneurship education transmits the signal that entrepreneurship is socially desirable, regardless of gender. Courses in entrepreneurship education programs demonstrate the social approval of entrepreneurship (Walter et al., 2013; Bhat, 2017). Apart from this, they increase the awareness that entrepreneurship is a legitimate career for both men and women, reducing the perceived importance of SN in case of females (Karimi et al., 2016). Due to EE, females consider themselves more capable and less dependent on family approval (Bae et al., 2014). Thus, the controlling effect of EE may be having a higher effect on them. In the same vein, Entrialgo & Iglesias (2016) concluded that EE helps women to ease the dependency on SN.
EE is connected to the formation of competencies in identifying new business opportunities and in dealing with ambiguity decision making (Martin et al., 2015) therefore, students receiving EE will increase their entrepreneurial skills and this will reduce the effect of gender stereotype. Thus, EE may be instrumental in diffusing gender stereotype regarding entrepreneurship (Bae et al., 2014). Henceforth, it can be postulated that entrepreneurial education will be especially helpful for women in strengthening their entrepreneurial skills and furthering their entrepreneurial intentions. Thus, by making women less dependent on subjective norms, entrepreneurial education may reduce the existing gap between men and women regarding the relevancy of family support for entrepreneurial activities. In this sense, Wilson et al. (2007) refers entrepreneurial education as an “equalizer”. It is therefore proposed:

\[ H3b: \text{With entrepreneurship education, there will be fewer differences between men and women concerning the weight of subjective norms in establishing entrepreneurial intentions.} \]

**RESEARCH METHODOLOGY**

This empirical study has been conducted at a university, with a sample consisting of final-year MBA graduates. The convinience sampling technique is very often used in entrepreneurship research (Fayolle & Gailly, 2015). In particular, Global Report of GEM (GEM 2015) has found that fresh university graduates (25-34 years) demonstrated the uppermost tendency in the direction of starting up a firm. All the information for this research was attained from an entire population of university students in the final year of their degrees for the period of the academic year. Questionnaires had been directed optionally through a class session of final year students enrolled in Business Management, Commerce and Marketing and Tourism degrees. The response rate was very high, 82% of enrolled students. Only a slight number of questionnaires were unfinished or had a deficiency in consistency so were consequently rejected. The final sample consisted of 350 functioning questionnaires. The key features of the sample are summarized in Table 1.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Whole sample</th>
<th>Without EE</th>
<th>With EE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>28%</td>
<td>24%</td>
<td>36%</td>
</tr>
<tr>
<td>Female</td>
<td>72%</td>
<td>76%</td>
<td>64%</td>
</tr>
<tr>
<td>Age (years)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>23.95</td>
<td>23.6</td>
<td>24.85</td>
</tr>
<tr>
<td>Degree Studied</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Management</td>
<td>22%</td>
<td>23%</td>
<td>20.00%</td>
</tr>
<tr>
<td>Commerce</td>
<td>34%</td>
<td>32%</td>
<td>37%</td>
</tr>
<tr>
<td>Tourism</td>
<td>44%</td>
<td>45%</td>
<td>43%</td>
</tr>
<tr>
<td>Entrepreneurship Education (EE)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>39%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>61%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Behavioural Control (PBC)</td>
<td>Mean (SD)</td>
<td>3.26 (0.56)</td>
<td>3.23 (0.55)</td>
</tr>
<tr>
<td>Subjective Norms (SN)</td>
<td>Mean (SD)</td>
<td>3.38 (2.74)</td>
<td>3.25 (2.67)</td>
</tr>
<tr>
<td>Entrepreneurial Attitude</td>
<td>Mean (SD)</td>
<td>0.35 (0.58)</td>
<td>0.29 (0.55)</td>
</tr>
<tr>
<td>Sample size</td>
<td>350</td>
<td>245</td>
<td>105</td>
</tr>
</tbody>
</table>
MEASURES

The majority of constructs taken into consideration has been measured using Likert scales, tailored from previous studies. For entrepreneurial attitude, we adopted a measure proposed by Kolvereid (1996), which includes five reasons in the desire of organizational employment and six reasons in opting for self-employment, complemented with indexes for each of the 11 employment picks. Our data confirmed the reliability and validity of the scales. For subjective norms regarding entrepreneurship, a three-item indicator was adopted from Kolvereid (1996). For perceived behavioural control, we used adopted measure from Kolvereid (1996). The reliability of the scale was confirmed with the collected data.

RELIABILITY AND VALIDITY ANALYSIS

Before developing the proposed conceptual model, it is vital to test the reliability and validity of the scales. For that purpose, the first-order confirmatory factor analysis was performed. Once the model has been estimated we evaluated the overall fit of the model. To this end, we examined the statistics related to the model’s goodness-of-fit. All the values derived were significant.

To check the validity of the scale, we analysed content validity, convergent validity and discriminant validity. In this case, each dimension was considered to possess content validity since the scale was constructed taking as referents items that had been used in other scales already validated for the measurement of these concepts.

All the standardized lambda coefficients between observed and latent variables were found to be significant at a 0.01 level of significance and that they surpassed the value of 0.5. They thus satisfied the weak and strong convergence condition proposed by Steenkamp and Van Trijp (1991).

DATA ANALYSIS

Once the scales representing the theoretical constructs used in the present study had been validated, the next step was to test the relationships that exist between them. To check the hypotheses, structural equation modelling was employed.

The following table gives the factor loadings for the different constructs. As can be seen, Hypotheses 1a and 1b are supported. SN has a significant positive relationship with attitude toward entrepreneurial behaviour and with perceived control over that behaviour. These fallouts are in line with those attained by Linan et al. (2011).

<table>
<thead>
<tr>
<th>Causal relationship</th>
<th>Standardized loadings</th>
<th>t-Value</th>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>SN-attitude</td>
<td>0.203</td>
<td>3.670**</td>
<td>Supported</td>
</tr>
<tr>
<td>SN-PBC</td>
<td>0.235</td>
<td>3.515**</td>
<td>Supported</td>
</tr>
<tr>
<td>Gender-SN</td>
<td>-0.124</td>
<td>-2.246*</td>
<td>Supported</td>
</tr>
<tr>
<td>Gender-attitude</td>
<td>-0.025</td>
<td>-2.090*</td>
<td>Supported</td>
</tr>
<tr>
<td>Gender-PBC</td>
<td>-0.029</td>
<td>-2.085*</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Table 2

PARAMETER ESTIMATES

Chi-square test: 25.76(0.07); BBNN=0.934; CFI=0.969; IFI=0.971; RMSEA=0.04; *p<0.05; **p<0.01
One also sees from Table 2 that Hypotheses 3a is supported. SN concerning entrepreneurship that comes from the family and the closest environment carry greater weight with women than with men (Table 3).

We examined whether there were significant differences in the relationships between gender and SN, between the SN and entrepreneurial attitude and between SN and PBC, depending on whether the students had received EE or not. The results are presented in the following table (Table 3).

With respect to Hypothesis 2b, even though in the subgroup that received no EE the SN had a unique relationship with the PBC, this was not the case in the subgroup that did receive such EE, for whom the SN was not significantly with PBC. The variances between the two subgroups were noteworthy, which offers support to Hypothesis 2b. EE moderates the association between SN and PBC.

### Table 3

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Without EE</th>
<th>Entrepreneurial Education</th>
<th>Diff. Chi-square</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SN–attitude</td>
<td>0.028 (1.967*)</td>
<td>0.062 (3.430**)</td>
<td>5.905</td>
<td>0.015</td>
</tr>
<tr>
<td>SN–PBC</td>
<td>0.080 (4.572**)</td>
<td>0.004</td>
<td>6.379</td>
<td>0.012</td>
</tr>
<tr>
<td>Gender–SN</td>
<td>-0.89 (-2.126*)</td>
<td>-0.686 n.s</td>
<td></td>
<td>n.s.</td>
</tr>
</tbody>
</table>

Chi-square Satorra-Bentler: 35.14 (0.10); BBNN=0.977; CFI=0.992; IFI=0.992; RMSEA=0.04; *p<0.05; **p<0.01

With respect to Hypothesis 2a, the SN had a greater relationship with entrepreneurship in the subgroup of students who received EE and the differences between the two subgroups were significant. Hypothesis 2a can therefore be supported. EE reinforces the relationship between SN and an entrepreneurial attitude.

However, the same was not the case for Hypothesis 3b. There doesn’t exist a significant difference between the subgroups of students who had received EE and those who had not, in terms of the relationship between gender and the perception of SN. Therefore, Hypothesis 3b has to be rejected. EE does not moderate the relationship between gender and SN.

**DISCUSSION**

The outcome of the study shows the relationship between subjective norms (SN) and the antecedents of entrepreneurial intentions. The potential entrepreneurs’ perception of approval along with the support from their families and closest environments are linked to a more positive entrepreneurial attitude and to a perception of greater control over entrepreneurial behaviour. These fallouts are in line with those obtained by Linan & Chen (2009) and Linan et al. (2011).

Second, SN carries more considerable weight in the formation of entrepreneurial intentions in women than in men. For women, support from family and friends is more important and they recognize the value of their social environment’s approval of their decision making for entrepreneurship. For males, family backing conveys less weight and, in a broad sense, they are more impartial about the approval of their decision. These fallouts are in line with those achieved by Bagheri & Pihie (2014) and Diaz Garcia & Jimenez Moreno (2010).
Also, we observed the vital role of entrepreneurial education (EE) in the formation of entrepreneurial intentions. In contrast with prior research, we focused on the moderating effects of this variable on the process of generating intentions. We observed that EE has a significant moderating effect on several analyzed relationships. On the one side, the relationship between SN and PBC is weaker for individuals with EE than for those without it. Regarding this, the knowledge, competencies and contacts generated by the EE act as a substitute for family approval and support. Those who have received EE seem to become less dependent on the approval and support of their families in the perception of control over entrepreneurial behaviour. In the subsample of students with EE, the difference in the level of PBC between students with positive and negative SN (above and below the mean for this variable) is not very illustrious. On the other side, EE also moderates the relationship between SN and attitude toward entrepreneurship, even if it does so in the opposite sense to the previous case. Then affiliation between SN and attitudes toward start-up is dominant among those with EE than among those without EE. EE, therefore, does not act as a substitute for family approval in the development of positive attitudes toward start-up, but it intensifies the relevance of the perceived family support.

Finally, EE does not moderate the relationship between gender and SN. The fact of receiving EE is not associated with a lower perception of relevancy of SN (related to entrepreneurship). This result can be explained because women may feel that EE provides them with formal support (tangible and instrumental), but EE does not provide emotional support (so essential for them too) (Fielden and Hunt, 2011). Nevertheless, as we have mentioned above, it can moderate the relationship between these perceptions and the antecedents of entrepreneurship intentions.

**CONCLUSION AND IMPLICATIONS**

The principal conclusion of this work is that EE acts together with SN (from the closest environment) in the generation of entrepreneurship intentions. However, the nature of the effects of these interfaces is not the same reliant on the variable to be affected. On the other hand, EE seems to have a switching effect with SN in the generation of PBC. The case of students who did not pursue EE, family support is very pertinent in creating PBC, but in the case where EE was provided, the role of SN in generating PBC is not significant.

EE seems like to have a multiplicative effect with SN in the establishment of positive attitudes toward entrepreneurship. There is a synergy effect between two variables which is greater than the sum of individual effects. Therefore, the two variables seem to leverage each other in creating attitudes. These findings have implications for research in various fields. For research in the field of EE, the results confirm the moderating influence of this variable on the relationship between SN and entrepreneurial attitude and between the former and the PBC. The moderating effect of gender was also taken into consideration. In relation to the research of women entrepreneurs, the investigation makes relative contributions because the outcomes show that women do not reduce their reliance on EE through SN; even after education, approval from their immediate environment is very crucial. On the one hand, EE helps reduce the role of SN in generating a higher perception of behavioural control. On the other hand, although EE is not an option to provide values and norms for family and friends, but collaboration with SN to strengthen the positive attitude towards entrepreneurship (Entrialgo & Iglesias, 2016).

The study has practical implications also. Mechanisms should also be established to provide adequate EE programs to encourage entrepreneurship activities. The result of EE’s
significant influence in the generation of entrepreneurship intentions, it also means that due to the availability of EE at a young age. It is essential to refrain from rejecting the entrepreneurship career. At least for the students to experience the support of the family and increase their attractiveness in the field of entrepreneurship. Therefore, an adequate EE program can enable students to recognize an entrepreneur career more seriously by playing an imperative role in the establishment of their entrepreneurial intention.

REFERENCES


