

## ENTREPRENEURIAL INTENTIONS AMONGST FEMALE STUDENTS: TEST OF A MODERATED MODEL IN AN EMERGING ECONOMY

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### ABSTRACT

The study attempted to shed light on the predictors of entrepreneurial intention among young female population. Through critical appraisal of the existing body of knowledge, the present study tested the role of entrepreneurial self-efficacy and risk-taking propensity towards enhancing entrepreneurial intention. More importantly, the study attempted to examine the moderating role of entrepreneurial education on these relationships. PLS path model results of the 318 female MBA students underlined significant positive impact of entrepreneurial self-efficacy and risk-taking propensity on female students' entrepreneurial intention. Furthermore, the study also found significant moderation of entrepreneurial education on the risk-taking propensity and entrepreneurial intention relationship. Overall, the study has forwarded healthy results to help scholars understand the theoretical and practical implications of entrepreneurial self-efficacy, risk-taking propensity and entrepreneurial education towards nurturing entrepreneurial intentions among the young female respondents.

**Keywords:** *Women Entrepreneurship, self-efficacy, entrepreneurial intention, entrepreneurial education.*

### INTRODUCTION

Women have a notable role in entrepreneurship across the globe (Wilson, Kickul & Marlino, 2007). It has been reported that around 37 percent of the global businesses are owned and operated by women (Saxena, 2016). In parallel, the Malaysian economy also has a significant contribution from its female population whereby, 21 percent of its entrepreneurial entities are owned and operated by women (GEM, 2012). Hence, these figures outline a notable contribution of women in entrepreneurship. Notably, the global entrepreneurial consortium suggests that women are striving to actively participate in the entrepreneurial activities but sadly, they lack in a variety of prospects like awareness and core entrepreneurial skills (Consortium, 2014). Similarly, for a developing economy like Malaysia, encouraging women and female participation in entrepreneurial activities is a need of time especially in the current tough economic conditions which sadly is being neglected (Usman, Buang & Usman, 2015).

Keeping this considerable gap in view, the present study aimed to understand and examine how female population in Malaysia can be harnessed to increase their intention towards entrepreneurial activities. Moreover, Malaysia accounts 48.4 percent of women population (Trading Economics, 2016), the country should ideally work on capitalizing upon this massive human capital to boost its economic wellbeing. Based on the prior literature and empirical evidence, the current study has attempted to underline the role of entrepreneurial self-efficacy and risk-taking propensity in this regard followed by the enriching contribution of entrepreneurial education amongst the young aspiring female population in Malaysia for the enhancement of their entrepreneurial intentions.

### Entrepreneurial Intention

Entrepreneurial intention is defined as how willing or interested an individual in prototypical entrepreneurial activities (Zhao, 2005). The extent and level of entrepreneurial intention explains the length to which an individual is said to be engaged in starting a business or actively partnering an existing business and/or acquiring a business entity. Entrepreneurial intention as an outcome variable has been empirically tested in several prominent studies (Ferreira et al., 2012; Mariano et al., 2012; Fini, Grimaldi, Marzocchi, & Sobrero, 2009).

Accordingly, studies have also underlined several predictors unique predictors of entrepreneurial intention amongst the young individuals and students (Kristiansen & Indarti, 2004; Turcker & Sonmez Selçuk, 2009). Therein, personal psychological resources have been marked with higher importance especially for university level students to boost their entrepreneurial willingness (Altınay, Madanoğlu, Daniele & Lashley, 2012; Krueger, 2003; Shabbir, 2009). However, limited attention has been paid on this element in connection to how it can be categorically enhanced, especially in relation to university level young female students.

### **Entrepreneurial Self-Efficacy**

Psychological resources have been marked with considerable significance amongst the learning individuals in particular (Ahmed, Umrani, Pahi, & Shah, 2017). Therein, self-efficacy beliefs have been reported as of notable significance. Self-efficacy is generally defined as individual beliefs and perceptions pertaining to their abilities and skills. In precise, the idea talks about a person's self-evaluations as to whether or not they are capable of transforming their skills and capabilities into designated meaningful outcomes (Bandura, 1989). Self-efficacy caters to individual beliefs and confidence pertaining to specific tasks and roles (Boyd & Vozikis, 1994). Notably, self-efficacy has a considerable influence on career choice (Bandura, Barbaranelli, Caprara & Pastorelli, 2001; Hackett & Betz, 1995) hence, individuals who have higher entrepreneurial self-efficacy tend to have more positive entrepreneurial intentions (Pilie & Akmaliah, 2009). These studies have reported that individuals with higher beliefs and confidence in their capabilities that they have healthy skills and ideas about setting up and/or running business tend to have more enhanced entrepreneurial intentions (Borgia, & Schoenfeld, 2002; Wilson, Kickul & Marlino, 2007).

Keeping these evidences in view, the present study aimed to establish a better understanding of entrepreneurial self-efficacy and entrepreneurial intention on gender basis to help improve the participation of women in entrepreneurship. Likewise, it is also important since there appears to have been differences in entrepreneurial self-efficacy and intention based on gender (Kickul, Wilson & Marlino, 2004) as women at times avoid pursuing for entrepreneurial activities because they think that they lack skills and needed knowledge (Chen, Greene & Crick, 1998; Wilson, Kickul & Marlino, 2007). Therefore, the present study tested the following hypothesis:

*H1: Entrepreneurial self-efficacy will be positively related with Entrepreneurial Intention.*

### **Risk Talking Propensity**

Psychological assessment of individuals in relation to their entrepreneurial prospects should ideally be done under the frame of their capability of handling risk (Palmer 1971). The amount of time, effort and money an individual spends towards any entrepreneurial entity may all go in vein in the case of failure hence, it becomes very important as to what length an individual is willing to risk all the available resources (Brockhaus, 1980). Scholars have clearly related risk-taking propensity with entrepreneurs (Zhao, Seibert & Lumpkin, 2010) whereby, it has been also reported that people with more endurance to face challenges and constraints are more successful entrepreneurs in the long run (Busenitz, 1999).

On general grounds, studies have reported significant correlation between risk-taking propensity and entrepreneurial intention (Barbosa, Gerhardt & Kickul, 2007; Johnson, 1990; Sánchez, 2013) however, there is little evidence pertaining to this relationship amongst the young female populations (Turker & Sonmez Selçuk, 2009). Hence, keeping in view the fact that risk-taking propensity is an important component of entrepreneurial orientation (Barbosa, Gerhardt & Kickul, 2007), the current study hoped that it will positively enhance entrepreneurial intentions of the young female Malaysians. Hence, the following hypothesis was tested:

*H2: Risk-taking propensity will be positively related with Entrepreneurial intention.*

### **Moderation of Entrepreneurial Education**

Several studies have been recently conducted, outlining the potential contribution of moderating variables (e.g., Ahmed, Isa, Majid, Zin, & Amin, 2017; Ahmed, Khalid, Ammar & Shah, 2017; Ahmed, Majid & Zin, 2016a; Ahmed, Majid, & Zin, 2016b; Umrani, Kura, & Ahmed, 2018).

Entrepreneurial education can significantly contribute towards harnessing individual psychological wellbeing and entrepreneurial traits (Bandura, 1992). Whilst, defining entrepreneurial education, Raposo and do Paco (2011) have said that it is process whereby, people especially young ones are transformed to be entrepreneurs and/or entrepreneurial enthusiasts who could help contribute in the economic development and strategic sustenance of the communities. Notably, scholars have reported entrepreneurial to be of considerable significance for enhancing entrepreneurial intentions (Zhang, Duysters & Cloudt, 2014) whereby, healthy knowledge and learning in this aspect can also help boost individual psychological capabilities like Self-efficacy (Piperopoulos & Dimov, 2015).

Accordingly, more informed and learned entrepreneurship can expected to be more responsive at handling risk as well (Kuratko, 2005; (Asad, Shabbir, Salman, Haider, & Ahmad, 2018; Ramli et al., 2018; Shabbir, Mohd Shariff, Kiran, Faisal, & Shahzad, 2016; Shabbir, Shariff, Salman, & Shabbir, 2017; Shabbir, Shariff, & Shahzad, 2016). This further confirms the explanations of Ronstadt (1990) that individuals with entrepreneurial education are more effective whereby, this information becomes more crucial for young aspiring entrepreneurs. Henceforth, the present study conceptualized that female students who have had the opportunity to receive entrepreneurial education during their MBA would be in a more better position to capitalize upon their self-efficacy and risk-taking prospects to further harness their entrepreneurial intentions. In other words, individuals with entrepreneurial education would be more capable of maximizing their entrepreneurial self-efficacy and risk-taking propensity to foster their entrepreneurial intentions.

*H4: Entrepreneurial education will moderate the relationship between entrepreneurial self-efficacy and entrepreneurial intention*

*H5: Entrepreneurial education will moderate the relationship between risk-taking propensity and entrepreneurial intention*

## **METHODOLOGY**

### **Sampling**

Female MBA students from the five major private universities in Kuala Lumpur, Malaysia were sampled for the present study. Reason behind selecting the final year students was that they have mainly completed courses related to basic entrepreneurship in their sophomore years. Following the convenience sampling technique, final year students in the MBA courses enrolled in these universities were targeted during May and June of 2017. Therein, a total of 450 questionnaires (75 each) were distributed through self-administered method which yield 384 questionnaires out of which, 66 were discarded. Hence, 318 were taken further for final analysis. Overall, the response rate resulted to be 70.66 which is considered adequate (Sekaran & Bougie, 2016).

### **Measures**

Entrepreneurial efficacy was assessed through 4-item scale by Gist (1987). Accordingly, moderation of entrepreneurial education was examined via four items based on the suggestions of Zhao, Seibert and Hills (2005). Therein, following the suggestions, the present study asked MBA students regarding their learning in the area of entrepreneurship. Risk taking propensity was assessed through six items and entrepreneurial intention with four items forwarded by Zhao et al. (2005).

### **Assessment of Measurement Model**

Structural equation modeling using Smart PLS 2.0 was deployed to assess internal consistency reliability and discriminant validity of the tested framework. Therein, the first stage of structural equation modelling is the examination of measurement model. In this, reliability and validity of the adapted measures is confirmed. At first, the individual item loadings were examined against the suggested cut off value of 0.70 (Hair, Hult, Ringle, & Sarstedt, 2014; 2016). Though some scholars have also suggested cut off value of 0.50 (Fornell & Larcker, 1981) however, loadings higher than 0.70 are considered more reliable (Carmines & Zeller, 1979; Leal-Rodriguez, Eldridge, Roldon, Leal-Millan, & Ortega-Gutierrez, 2015; Hair et al., 2016). Henceforth, one item from the entrepreneurial education (EE2) was omitted. Accordingly, composite reliability was examined to ensure it is higher than the suggested threshold of 0.70 (Bagozzi & Yi, 1988). All the values of the retained items resulted

between 0.88 to 0.93 hence, confirming significant composite reliability. Table1 and figure 1 provides further explanation in this aspect.

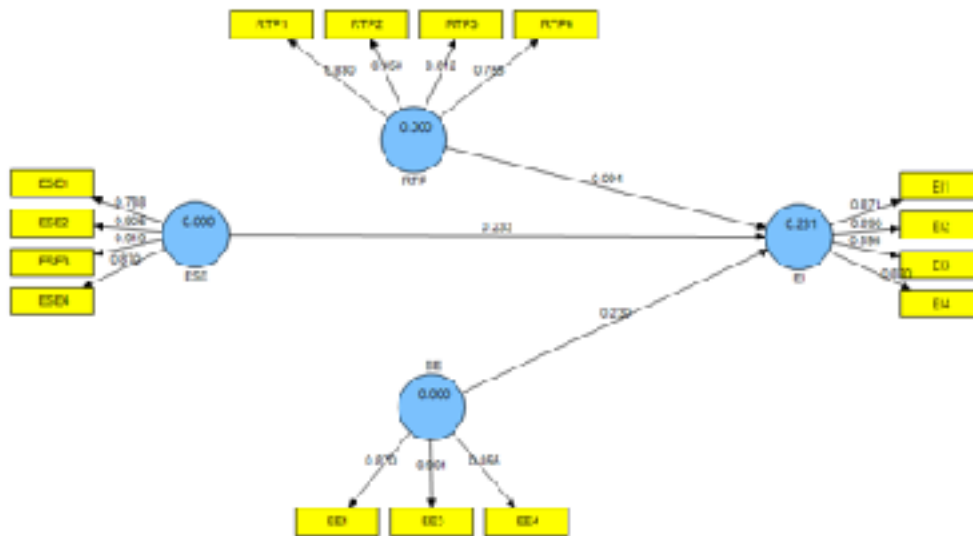


Figure 1. Measurement Model

Table 1. Individual loading, AVE and Composite Reliability

Construct	Loadings	AVE	Composite Reliability
<b>Entrepreneurial Education</b>		0.766028	0.907556
EE1	0.869		
EE3	0.900		
EE4	0.854		
<b>Entrepreneurial Intention</b>		0.779921	0.934091
EI1	0.871		
EI2	0.896		
EI3	0.894		
EI4	0.870		
<b>Entrepreneurial Self-Efficacy</b>		0.759889	0.926556
ESE1	0.787		
ESE2	0.904		
ESE3	0.918		
ESE4	0.869		
<b>Risk Taking Propensity</b>		0.663291	0.887168

<b>RTP1</b>	0.830		
<b>RTP2</b>	0.857		
<b>RTP3</b>	0.811		
<b>RTP4</b>	0.754		

Following this, discriminant validity was examined as per the recommendations of Fornell and Larcker (1981). For this, each the square root of average variance extracted (AVE) should result greater than the correlating values from other latent constructs. Table 2 confirms the recommendations and assures significant discriminant validity amongst the latent constructs of the present study.

**Table 2.** Discriminant Validity.

<b>Construct</b>	<b>EE</b>	<b>EI</b>	<b>ESE</b>	<b>RTP</b>
<b>EE</b>	0.875			
<b>EI</b>	0.433	0.883		
<b>ESE</b>	0.589	0.414	0.871	
<b>RTP</b>	0.705	0.371	0.495	0.814

Furthermore, the discriminant validity was ascertained through examining the cross loadings of the indicator loadings with cross-loadings, following the recommendations of Chin (1998). For confirming discriminant validity, Chin has suggested that the indicator loadings should result higher than the cross-loadings. Table 3 provides the comparison in this regard whereby, all the indicator loadings have resulted to be higher than the reflective cross-loadings thus, suggesting adequate discriminant validity.

**Table 3.** Cross-Loadings

	<b>EE</b>	<b>EI</b>	<b>ESE</b>	<b>RTP</b>
<b>EE1</b>	<b>0.869797</b>	0.385587	0.533791	0.651153
<b>EE3</b>	<b>0.900619</b>	0.380639	0.513064	0.646476
<b>EE4</b>	<b>0.854647</b>	0.371297	0.499828	0.55314
<b>EI1</b>	0.361965	<b>0.871207</b>	0.375857	0.327153
<b>EI2</b>	0.354237	<b>0.896152</b>	0.39757	0.260563
<b>EI3</b>	0.366087	<b>0.894617</b>	0.32692	0.325516
<b>EI4</b>	0.440237	<b>0.870203</b>	0.362843	0.39067
<b>ESE1</b>	0.521038	0.31141	<b>0.787554</b>	0.486087
<b>ESE2</b>	0.499207	0.33905	<b>0.904905</b>	0.414484
<b>ESE3</b>	0.527679	0.398142	<b>0.918584</b>	0.421528
<b>ESE4</b>	0.510799	0.387437	<b>0.869864</b>	0.417115
<b>RTP1</b>	0.704399	0.35798	0.447163	<b>0.830232</b>
<b>RTP2</b>	0.579712	0.310466	0.398006	<b>0.857751</b>
<b>RTP3</b>	0.436164	0.263207	0.361374	<b>0.81169</b>
<b>RTP4</b>	0.538153	0.260874	0.396842	<b>0.754521</b>

### Assessment of Structural Model

Upon the effective assessment of measurement model, the study examined the structural model. In this, 5000 bootstraps were applied on 261 cases to outline the significance of the path coefficients (Hair et al., 2016; 2014; Henseler et al., 2009). At first, the direct effects were examined between entrepreneurial self-efficacy, risk taking propensity and entrepreneurial intention, details of which can be obtained from figure 2 and table 4.



**Figure 2.** Structural Model- Direct Effects

At the outset, hypothesis 1 was formulated to result a significant positive relationship between entrepreneurial self-efficacy and entrepreneurial intention. Bootstrapping results from the present study have outlined significant positive relationship between the two ( $\beta= 0.3063$ ;  $t= 4.831$ ) hence accepting the hypothesis. Accordingly, hypothesis 2 was formulated to examine the relationship between risk taking propensity and entrepreneurial intention. The structural equation modeling results have also confirmed a significant positive relationship between the two ( $\beta= 0.2194$ ;  $t= 3.277$ ) thus, accepting hypothesis 2 as well.

After the assessment of direct effects between the independent and dependent variables, the present study deployed entrepreneurial education in the model to assess its moderating effect on the relationship of entrepreneurial self-efficacy and risk-taking propensity with entrepreneurial intention. Similar to direct effect, bootstrapping procedures were applied with 5000 bootstraps samples whereby, the study resulted no moderation of entrepreneurial education on the relationship between entrepreneurial self-efficacy and entrepreneurial intention ( $\beta= 0.0213$ ;  $t= 0.246$ ) henceforth, rejecting hypothesis 3. On the contrary, the structural equation modelling results reported significant moderation of entrepreneurial education on the relationship between risk taking propensity and entrepreneurial intention ( $\beta= 0.1409$ ;  $t= 1.733$ ) thus, accepting hypothesis 4. Figure 3 and table 4 provides further details in this regard.

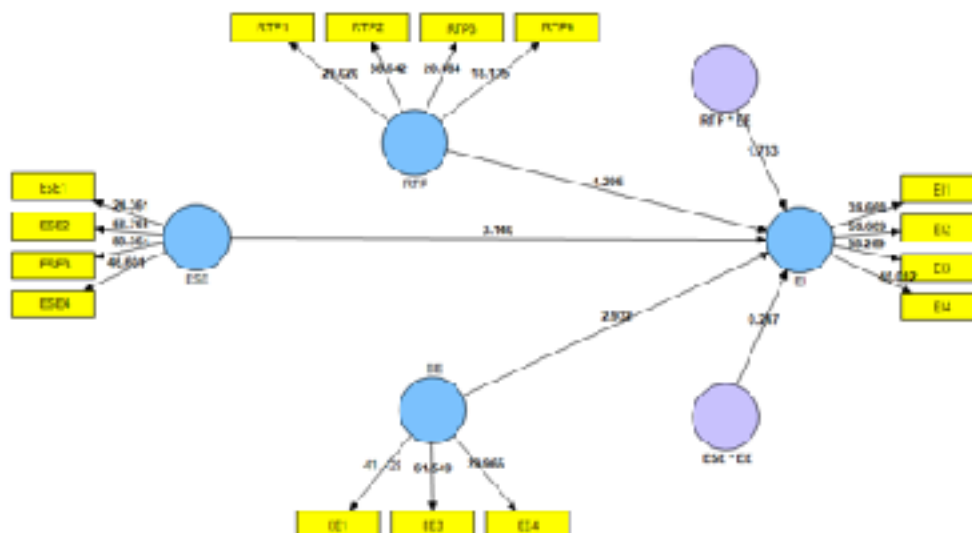


Figure 3. Moderation Effects

Table 4. Summary of Hypotheses

Hypotheses	$\beta$	Standard Deviation (STDEV)	Std Error (STERR)	T Statistics	Decision
ESE -> EI	0.3063	0.063396	0.063396	4.831673	Supported
RTP -> EI	0.2194	0.066975	0.066975	3.277074	Supported
ESE * EE -> EI	0.0213	0.086492	0.086492	0.246885	Not Supported
RTP * EE -> EI	0.1409	0.081306	0.081306	1.733474	Not Supported

## DISCUSSION

The present study attempted to examine how entrepreneurial intentions can be fostered amongst young females in Malaysia. For this, the study investigated the role of entrepreneurial self-efficacy towards entrepreneurial intention and found a significant positive relationship in this regard. The findings are in support of prior research (Borgia, & Schoenfeld, 2002; Wilson, Kickul & Marlino, 2007). The findings have suggested that, female respondents who were high in entrepreneurial self-efficacy, showcased more entrepreneurial intentions. In other words, respondents with higher self-confidence in their skills and capabilities were more include towards entrepreneurial initiatives. The finding hence, supports the idea of having belief in oneself towards becoming your own boss, which can significantly help motivate an individual to enhance its inclination towards entrepreneurial activities. The finding has also ascertained the explanations of Bandura et al. (2001) regarding the vitality of self-efficacy beliefs, particularly among the younger age groups. In the likewise manner, the present study examined the influence of risk-taking propensity and entrepreneurial intention. The study found significant positive relationship between the two suggesting that female students who were willing to take challenges on board and face risks, expressed more enhanced entrepreneurial intentions. The

finding is parallel to the empirical explanations of prior studies (Busenitz, 1999; Barbosa, Gerhardt & Kickul, 2007; Johnson, 1990; Sánchez, 2013) asserting that risk-taking tendency is a key ingredient to help individuals particularly female young female population to foster their entrepreneurial willingness and participate in relevant activities. In addition, the present study also tested the moderation of entrepreneurial education on the relationship of entrepreneurial self-efficacy and risk-taking propensity with entrepreneurial intention. Therein, the study found no moderation entrepreneurial education.

Plausible explanation could be the difference in the nature and context of the variables. Since, self-efficacy is an individual psychological component (Bandura, 1989) which is why entrepreneurial education failed to post any buffering potential towards its relationship with female students' entrepreneurial intention. In other words, the respondents did not find entrepreneurial education to be of any value to harness their entrepreneurial self-efficacy to engage in entrepreneurial intentions. In addition, it may also be noted that since, entrepreneurial self-efficacy was found to be in a highly significant direct relationship with entrepreneurial intentions of the female students ( $\beta = 0.3063$ ;  $t = 4.831$ ); there may be a possibility that due to this, they did not feel entrepreneurial education to be of any further enrichment value for them in this regard. However, on the flipside, the present study reported significant moderation of entrepreneurial education on the relationship between risk-taking propensity and entrepreneurial intention.

The finding suggests that, entrepreneurial education helped female students to foster their risk-taking capabilities to further enhance their entrepreneurial intentions. In simple, respondents with fair entrepreneurship knowledge perceived themselves to be more capable of handling entrepreneurial risks and challenges and hence keeping their positive entrepreneurial intentions intact. The findings have supported the explanations of (Kuratko, 2005; Ronstadt (1990) who suggested that entrepreneurial education can enable and enhance entrepreneurial intention prospects. Moreover, the study has also confirmed the theoretical explanations and empirical evidences suggesting that influence of different factors upon individual entrepreneurial intentions can be effectively moderated (Bae, Qian, Miao & Fiet, 2014; Zhao, Seibert & Lumpkin, 2010).

## IMPLICATIONS

The present study forwards theoretical and practical implications. Pertaining to theoretical, the study has outlined and confirmed significant role and contribution of entrepreneurial self-efficacy and risk-taking propensity towards fostering entrepreneurial intentions. The study has addressed theoretical gaps underlined by Usman, Buang and Usman (2015), highlighting that entrepreneurial self-efficacy and risk-taking propensity should be harnessed amongst young female students to motivate them to pursue business prospects in the future. Likewise, to a certain extent, the present study has attempted to address the concerns of Consortium (2014) regarding the importance of awareness and entrepreneurial education. The study has guided scholars in this area towards the potential buffering role of entrepreneurial education. The finding has outlined that since, MBA is a holistic degree whereby, individuals get to learn a variety of different business and management related subjects including entrepreneurship. This hence can help them to motivate and push themselves to capitalize upon their skills like risk-taking capabilities to further enhance their entrepreneurial intentions.

Practically, the findings of the present study suggest two faced policy whereby, there should be focus given to individual psychological development especially of the young female population to enhance their efficacy beliefs and risk-taking tendency. On the flipside, there should be focus given to entrepreneurial education for female population. Vocational institutions can potentially be capitalized to help aspiring female population to gain knowledge and understanding for responsive actioning in this regard (Arogundade, 2011). Accordingly, training interventions can also be of considerable value in this regard to help female students boost these prospects (Ahmed, Phulpoto, Umrani & Abbas, 2015). Though, the study did not confirm all the hypothesized relationships yet still; it has forwarded some understanding for us pertaining the importance of entrepreneurial education. Particularly, for emerging economies like Malaysia, the findings imply focusing on entrepreneurial education and training. Nations going through tough economic conditions need to work on these elements to result in more entrepreneurial activity. More importantly, focusing on providing entrepreneurial education to



aspiring youth population especially to females which account for 48.4 percent of the total population in Malaysia would significantly help boost the utilization of tremendous human capital for national development and strategic growth.

### LIMITATIONS AND SCOPE FOR FURTHER RESEARCH

Despite considerable theoretical and practical implications, the present study has offers some limitations. At first, the study was conducted through cross-sectional research design which limits us in making causal inferences. Henceforth, longitudinal studies may be considered for future scholars in the area. Accordingly, future studies may also focus on examining both (male and female) students simultaneously in both cross-sectional as well as longitudinal designs to underline the potential impact of entrepreneurial efficacy, risk propensity and most important entrepreneurial education towards entrepreneurial intentions. Accordingly, entrepreneurial self-efficacy, risk-taking propensity and entrepreneurial education only accounted for 23 percent of variance towards entrepreneurial intention; this underscore future avenues for research to pinpoint other similar factors that could potentially predict this construct.

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