Entrepreneurial Education and Entrepreneurial Intention: The Mediating Role of Creativity Disposition among University Students in Thailand

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The main objective of the current study is to examine the impact of entrepreneurial education and creativity disposition on entrepreneurial intention among university students in Thailand. Additionally, the study has examined the mediating role of creativity disposition in the relationship between entrepreneurial education and entrepreneurial intention. This study employed components based on SEM (PLS-SEM), or the PLS path modelling, to carry out confirmatory research based on the responses obtained from 595 observations. The findings of the study revealed that entrepreneurship intention is higher among the students who have studied entrepreneurship education as compared with students who have not studied these courses. It was also found that the ability of an individual to become an entrepreneur is based on their level of creative thinking and identification of opportunities to develop new products or services. This research identified that there is need for university support in improving the intention of young graduates to start-up businesses. The findings of the study have given a way forward for future studies as well. It has been identified that there is need for an advancement of training programs which influence the skills, behaviour and characteristics required for entrepreneurs. This study has contributed to existing literature in terms of practice, methodology, and theory. The use of SEE and TPB has been extended by this research for drawing useful information about entrepreneurship intention and entrepreneurship education.
Key words: Entrepreneurial education, creativity disposition, entrepreneurial intention among the university students in Thailand.

Introduction

Entrepreneurship is synonymous to surviving the current economic trend in various countries. It has, therefore, become an issue of worldwide concern (Ariff, Husna, Bidin, Sharif, & Ahmad, 2010). Entrepreneurship contribution to economic performance is realized through job creation, innovation, and creativity advancement (Rowley et al., 2011; Shane & Venkataraman, 2000). The importance of entrepreneurial activities is not limited to an economic but includes societal context benefits by elevating the standard of living of individuals and the society as a whole. Thus, the need for entrepreneurial development is felt everywhere, especially in developing countries where socioeconomic misfortune, such as fast raises in food and fuel prices (Ploenhad, Laoprawatchai, Thongravad, & Jermsittiparsert, 2019), poses severe danger to social peace and security (Levenburg & Schwarz, 2008; Chienwattanasook, & Jermsittiparsert, 2019; Mohajan, 2016). In other words, entrepreneurship is responsible for social adjustment of economies in developing nations (Yusof, Sandhu, & Jain, 2007) and it is an incubator of technological innovation (Turker & Sonmez Selçuk, 2009; Ali, 2013; Tripopsakul, 2018).

Scholarly discussions have occurred on the relevance of entrepreneurship education in impacting students’ intentions to become entrepreneurs (Hynes & Richardson, 2007; Souitaris, Zerbinati, & Al-Laham, 2007). Entrepreneurship education refers to education that develops entrepreneurial attitudes and skills (Bae, Qian, Miao, & Fiet, 2014; Setaminit, 2018), that are necessary to succeed in business (Wilson, Kickul, & Marlino, 2007). According to Segal, Borgia, & Schoenefeld (2005), an effective entrepreneurship education should offer opportunities for individuals to learn and acquire experiences through creative and innovative activities, develop business plans, learn from successful role models, create social networks, and run simulated or real small businesses in schools. However, previous studies are yet to determine the value and the effect of entrepreneurship education, especially in relation to entrepreneurial intention (Chienwattanasook, & Jermsittiparsert, 2019). Consequently, the study argues that evaluating the effectiveness of entrepreneurship education through the perception of the direct beneficiaries would provide better and more valid assessment than the previous methods of evaluations. Thus, this study followed the recommendation which states that requires future studies are required to investigate the relationships between students' entrepreneurial learning, the development of their entrepreneurial competences and entrepreneurial intentions in educational settings (Jabarullah and Hussain, 2019).
Similarly, despite studies on entrepreneurship and innovation in relation to creativity, creativity been given limited concern in intention models (Prakash, Jain, & Chauhan, 2015; Ali, 2017). Creativity is the human ability to think, modify, discover and create something. However, the author suggests that creativity has significant positive effect on entrepreneurial intentions. However, this study deviated from previous studies by focusing on entrepreneurial students’ perceived creativity disposition, supposing that the potential entrepreneurs could only perceive the possession of individual traits that reflect creativity (Brown, Mawson, & Mason, 2017). In addition, it is important for individual students to be able to perceive the possibility of producing new and practical ideas or products out of their own creativity. This is because creative thinking is an important skill for university graduates. Moreover, self-assessment of individual creativity disposition is supported in previous studies (Batey & Furnham, 2008; Nobanee, 2018).

**Literature Review**

**Entrepreneur Education and Entrepreneur Intention**

Jones and English (2004) defined entrepreneurship education as the process of developing the ability among individuals to identify and avail the opportunities of business. This process also involves developing business skills, knowledge, and self-esteem for the creation of new business. The definition given by the researchers is based on the type of knowledge, which is based on action, and stimulates problem solving, practical learning, creativity, and evaluation by peers. Moreover, this process of learning provides skills for entrepreneurial behaviour that are required for the establishment and management of new businesses. A framework was developed by Politis (2005), which identified three crucial ways of learning entrepreneurial skills: career experience, entrepreneurial knowledge, and process of transformation. These three ways are considered effective for identifying the opportunities of entrepreneurship.

The effectiveness of entrepreneurship education is important. Effective entrepreneurship education has been conceptualized as drawing the attention of individuals toward practical learning, skill development, self-confidence and knowledge of business for the creation of new ventures (Wilson et al., 2007). Effective entrepreneurship perception is based on the acquisition of knowledge regarding entrepreneurship (Souitaris et al., 2007). Liñán, Rodríguez-Cohard, and Rueda-Cantuche (2011), highlighted that the training on entrepreneurship should include development of ventures after their creation in addition. This aspect can be attained through an increase in general awareness, identification of opportunities, motivation for creation, and knowledge of business environments.

The study conducted by Souitaris et al. (2007) revealed that attitudes towards entrepreneurial intentions have been increased through entrepreneurship programs. The most important advantage of the programs is inspiration. For effective results, the findings of the study
highlighted the teaching practices of entrepreneurship and suggested the provision of courses with relevant modules. Such courses must bring out a sense of creativity among students for designing effective business plans based on a suitable ideas.

Researchers have stressed the need for education related to entrepreneurship as a key for promoting economic activities. A study conducted by Lange, Marram, Jawahar, Yong, and Bygrave (2011), identified that entrepreneurial behaviour, and intentions of students, are influenced through writing a business plan. Entrepreneurial intention among students can be promoted through effective entrepreneurship education (Lekoko, Rankhumise, & Ras, 2012; Ali, 2018).

Entrepreneurship intention is higher among students who have studied entrepreneurship education as compared with those students who have not. Du Toit and Muofhe (2011) indicated that entrepreneurial intention is more common among the entrepreneurship students as compared to non-entrepreneurship students. This researcher also found a significant association between entrepreneurial intentions and entrepreneurship education. In a similar vein, the results found by the authors revealed that graduates studying an entrepreneurship course as a major are more influenced to establish a new business and have higher entrepreneurial intentions in comparison to others.

It was believed that specialization in entrepreneurship results in improved self-efficacy, intention for self-employment, and increased value for employability. In this research, entrepreneurship education has been specifically targeted towards a particular group for the achievement of desired results. The previous research studies conducted on entrepreneurship programs have just directed others to study the effectiveness of such programs in employing suitable practices to provide education on entrepreneurship.

Very few studies have found the association of entrepreneurial intentions and entrepreneurship education in developing countries (Nabi & Liñán, 2011). A major concern for the stakeholders such as university authorities, trainers and policy makers, has been effective entrepreneurship. Therefore, there is need for evaluation of these programs by researchers, and the government, to find effectiveness for development. There is need for future studies to identify the association between entrepreneurial intention and effective entrepreneurship education. In this research, the association between the entrepreneurial intention of students’ and perceived effective entrepreneurship education has been hypothesized.

H1: Entrepreneurship education has a significant impact on Entrepreneurship intention
Entrepreneurship Education and Creativity disposition

Creation of something innovation, useful and creative is referred as Creativity. It has been conceptually accepted by this research that creativity can be improved through knowledge acquisition. Using acquired knowledge through a flexible approach, innovative ideas can arise. According to scholars, creativity is considered as a continuous process with reinvention of different ideas and business activities. It has been suggested that individuals should be set free to imagine innovative ideas through fun and playfulness. This research considered innovation to be a significant aspect for transforming ideas into products, which can be beneficial for the society (Sutduean, Harakan, & Jermsittiparsert, 2019). The basis of innovation, and the key to organizational growth, is creativity (Almog-Bareket, 2011; Ambrose, Etim, & Enagu, 2016). For long-term business success, innovation and creativity are the key factors.

From a historical perspective, it can be seen that educational process design seeks to improve individuals’ capabilities by involvement in innovative activities. Education has been explained as the provision of analytical tools to future entrepreneurs to engage in creative activities as motivation for the development of new ideas. Most researchers have agreed that the learning of creative skills can be taught through relevant tasks, activities and encouragement. Past studies have shown the need for education to focus on creative development and that this can be influenced by different training programs. The involvement of teachers in school training programs significantly enhances creativity among students (Benjamin et al., 1984).

Tepper and Kuh (2011) believe that training can improve students’ creativity skill with time. Therefore, enterprise skills should be developed through effective enterprise/entrepreneurship education. Creative thing is a basic skill for entrepreneurship. Development of creativity among students studying business courses is a major concern for the management authorities. In their description of creativity in higher education, scholars emphasised that such type of education should fully develop creative ability among students. It was further explained that process-based learning strategies are effective in prompting students’ creativity. Moreover, a process-rich curriculum ensures more facilitated and collaborative models of teaching and learning that nurture and enhance students’ creativity. It has also been suggested that creativity skills in fostering innovation should be included in schools’ curriculums to enable students to practice and develop them.

Studies have shown that certain educational approaches could foster creativity more than others. For example, the Montessori education, as reported by the author, is indeed effective in developing life-long creative skills. He believes that self-expression, as encouraged in a Montessori education, is important in improving human authenticity and spirit. Therefore,
there is a shift from a traditionally based entrepreneurship education, to a more action-oriented approach, which emphasizes learning by doing. Meanwhile, other studies have claimed that entrepreneurship education should also give attention to individuals instead of concentrating on only the technical aspects of entrepreneurship. The study carried out by Zampetakis and Moustakis (2007) indicated that proactivity and creativity development programmes are useful in increasing students’ entrepreneurial desirability. Hence, there is valid support for exposing students to entrepreneurship education, as an additional mechanism for increasing the desirability and the feasibility of business creation (Peterman & Kennedy, 2003).

From these theories, it can be recognized that education plays a significant role in the development of self-efficacy among individuals. Excellence in experience, social persuasion modelling, and one’s psychological state are referred to as the ability of self-confidence. Entrepreneurship education plays a significant role in the development of self-efficacy among individuals through the provision of opportunities to develop business plans, feasibility studies, and running a real businesses. Moreover, the use of case studies and guest speakers (role models) in education programs on entrepreneurship, can improve self-efficacy levels (Wilson et al., 2007). Previous research studies emphasize the importance of education for increasing creativity. This research study has formulated the following hypothesis considering program effectiveness.

H2: Entrepreneurship education has a significant impact on creativity disposition.

**Entrepreneurial Intention and Creativity**

Creativity is closely related with innovation and it is considered in different works of entrepreneurship due to its’ impact on economies (Fritsch & Sorgner, 2014; Anowor, & Nwanji, 2018). In 1970, imagination and creativity were introduced by Shackle and he related them with the process of entrepreneurship. He claims that every entrepreneur makes use of their imagination in uncertain situations to make the best possible decision. The importance of imagination and creativity has been emphasized by research on the process of decision making in business and avoiding the risk of uncertainty (Lourenço & Jayawarna, 2011).

The ability of an individual to become an entrepreneur is based on their level of creative thinking and identification of opportunities to develop new products or services. Innovative ideas for a new business are aimed at gaining profits for successful entrepreneurship. Entrepreneurship can be considered as a good way for achieving individual success (Batchelor & Burch, 2012). Usefulness and novelty are included in creativity, which are crucial for entrepreneurship. Therefore, entrepreneurship behaviour is developed more commonly among creative individuals.
Social cognitive theory was used by Hamidi, Wennberg, and Berglund (2008) to show the need to consider creativity in intention based models of entrepreneurship. The researchers believed that through creativity, one can develop greater confidence, which can result in self-employment. Zampetakis, Gotsi, Andriopoulos, and Moustakis (2011) conducted a related study in which it was found that the level of creativity among the students is linked with greater entrepreneurial intentions. Similarly, it was identified that creativity acts as a stimulus for graduating students in South Africa in improving entrepreneurial intention. This research study has determined the association between entrepreneurial intention and creativity disposition among students that was not considered by the intention based models (Hamidi et al., 2008). The following hypothesis has been proposed in this regard.

H3: Creativity disposition has a significant impact on the Entrepreneurship intention.

**Role of Perceived Creativity Disposition as a Mediator**

It has been argued in this study that creativity acts as a mediator in the relationship of entrepreneurial intention and effective entrepreneurship education. According to scholars, for the reinvention of business, there is a need for creativity. Moreover, it was suggested that people can bring out creative ideas through fun and playfulness.

From a historical perspective, it can be seen that educational process design seeks to improve individuals’ capabilities by involvement in innovative activities. Education has been explained as the provision of analytical tools to future entrepreneurs to engage in creative activities as motivation for the development of new ideas. Most researchers have agreed that the learning of creative skills can be taught through relevant tasks, activities and encouragement. It has been revealed through literature that continuous generation of knowledge and its practical implication can result in improved innovation and creativity.

The study by (Zampetakis & Moustakis, 2007; Ariani, 2017) indicated that proactivity and creativity development programmes are useful in increasing entrepreneurial desirability among students. Consequently, the intention-based models support the inclusion of entrepreneurial desirability as a way of influencing the intention to create a business. Moreover, Peterman and Kennedy (2003) gave support for exposing students to entrepreneurship education as an additional mechanism for increasing the desirability and the feasibility of business creation. Here, the authors showed that artful learning opportunities increased an individual’s ability to be mindful of the creativity they and others possessed. Hence, creativity occupies a central position in the process of entrepreneurship.
Entrepreneurship is regarded as a good way to individual success (Batchelor & Burch, 2012). The important factors for entrepreneurship, usefulness and novelty, are involved in creativity. Therefore, entrepreneurship behaviour is likely to be exhibited by creative individuals. According to Hamidi et al. (2008), entrepreneurship intention can be predicted by creativity. There is a need for considering creativity in the intention-based models of entrepreneurship. It was suggested by Zampetakis et al. (2011) that entrepreneurial intentions are higher among students who are more creative. The influence of individual creativity on entrepreneurial intention was mediated through entrepreneurship course in the study.

It was suggested by Lekoko et al. (2012) that students are provided with entrepreneurial skills and capabilities through effective entrepreneurship education that motivates the entrepreneurial intention. TPB was employed by Karimi, Biemans, Lans, Mulder, and Chizari (2012) to identify the influence of entrepreneurship education programs (EEPs). It was found that control, behavioural and subjective norms are significantly influenced by EEPs. Moreover, the specialized programs of entrepreneurship were studied. It was identified that self-efficacy for entrepreneurship is improved through specialized entrepreneurship education. Similarly, it improves the intention of individuals for self-employment and increases their employability value.

In the similar way, a study was conducted by Byabashaija and Katono (2011) in which changes in students intentions’ and attitudes’ were attributed to their enrolment in an entrepreneurship course. Attitude plays the significant role of mediator and can overcome changes as well. The researcher highlighted the need for policy makers to identify the effectiveness of entrepreneurship education and the way in which it can influence entrepreneurial intention.

This research is based on analysing the role of creativity as a mediator in the relationship of entrepreneurial intention among the university students and perceived effectiveness of entrepreneurship education. The following research hypothesis has been developed:

H4: Creativity disposition mediates the relationship between entrepreneurship education and the entrepreneurship intention

Data collection and Response rate

Survey research was employed, whereby questionnaires were administered to elicit relevant information concerning the variables of the study. This was necessary in order to answer the research questions, as well as to achieve the objectives of this study. The survey was conducted in order to measure the variables, test the hypotheses, and to infer questions about individual experiences and characteristics (Neuman, 2007). This study employed the
components based on SEM (PLS-SEM), or the PLS path modelling, to carry out a confirmatory research based on the responses obtained from 595 respondents. The study applied PLS 2.0 (Ringle, Wende, & Will, 2005) to estimate the parameters of the model based on path weighting scheme (Henseler, 2012). Moreover, the study applied the non-parametric bootstrapping on the 595 samples and the no sign changes option in order to assess the significance of the path coefficients (Hair Jr, Claudia, Pieper, & Baldauf, 2013; Aregbeyen, & Fasanyan, 2017). A total of 750 questionnaires were administered to students who embarked on entrepreneurship. Out of these questionnaires, 704 were returned, resulting in a 94% of response rate. The study received a high number of response rate because most of the questionnaires were administered during examinations and lecture periods of the students with the assistance of the entrepreneurship coordinators and lecturers.

**Measurement**

The study employed the use of proportionate stratified random sampling. In a stratified random sampling a population is divided into subgroups, or strata, and random samples are taken, in proportion to the population, from each of the strata created. The participants in each of the stratum formed have similar attributes and characteristics. The choice of stratification is important because of its efficiency in sampling design and as a good choice when different information is expected from the various strata within a population.

In this research, the perception of students on the level of increase in their understanding of entrepreneurs’ actions, requirements and processes etc., through entrepreneurship education, have been perceived as effective entrepreneurship education. In line with Souitaris et al., (2007), five measuring items have been used in this study for perception of the effectiveness of entrepreneurship education

This study operationalised perceived creativity disposition as the individual student perception of their ability to come up with creative and innovative ideas to solve problems and increase performance. The perception of creativity disposition was measured using 8 adapted items.

Entrepreneurial intention in this study indicates the amount of effort that an individual student is prepared to make in order to carry out future entrepreneurial behaviour. The 6 items that measured entrepreneurial intention were obtained from Liñán and Chen (2009).
Results

In this section, the use of structural and measurement models have been shown through use of the PLS-SEM approach (PLS-SEM). There are several advantages of using the PLS-SEM method. According to Hair, Sarstedt, Hopkins, and G. Kuppelwieser (2014), a smaller number of samples can be used in PLS-SEM and there is no need of assumptions regarding the underlying data. The use of this method is relatively easier and it can measure data through reflective as well as formative items. This method can deal with single-item constructs and does not identify any issues. This method is considered effective in estimating parameters and has higher statistical power than CB-SEM (Hair et al., 2014). These characteristics of PLS-SEM make it a suitable approach for the researchers to employ in the current research situation.

For assessing the findings, a two-step method has been used (Hair et al., 2014). Initially, the estimation of measurement model (outer model) is done in which composite reliability (internal consistency), discriminate validity, and convergent validity are measured (Hair et al., 2014; Henseler, Ringle, & Sinkovics, 2009). There is no need to measure construct validity and reliability concepts in the formative measurement models because of their irrelevancy with the requirement of measuring assessment quality for the formative measurement model. There is a specific criterion for their assessment in the formative models. These have been determined by considering the convergent validity, the collinearity significance among the variables and their outer weight (Hair et al., 2014). The determination of measurement model is not required for the single-item constructs (Hair et al., 2014).

Figure 1. Measurement Model
In this section, the findings of validity and reliability have been depicted as measured through SmartPLS 2.0 software package (Ringle et al., 2005). For all the latent variables, composite reliability values are greater than the standard value of 0.70 (Hair et al., 2014; Henseler et al., 2009). The range of the values of reflective multiple-items latent variables is 0.859 - 0.941 as shown in Table 2. The values reflect that the reliability level is high.

**Table 2: Reliability**

<table>
<thead>
<tr>
<th></th>
<th>Cronbach's Alpha</th>
<th>rho_A</th>
<th>Composite Reliability</th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE</td>
<td>0.926</td>
<td>0.928</td>
<td>0.944</td>
<td>0.773</td>
</tr>
<tr>
<td>EI</td>
<td>0.933</td>
<td>0.934</td>
<td>0.949</td>
<td>0.789</td>
</tr>
<tr>
<td>OPC</td>
<td>0.958</td>
<td>0.959</td>
<td>0.965</td>
<td>0.775</td>
</tr>
</tbody>
</table>

**Table 3: Discriminant Validity**

<table>
<thead>
<tr>
<th></th>
<th>EE</th>
<th>EI</th>
<th>OPC</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE</td>
<td>0.879</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EI</td>
<td>0.696</td>
<td>0.888</td>
<td></td>
</tr>
<tr>
<td>OPC</td>
<td>0.926</td>
<td>0.690</td>
<td>0.880</td>
</tr>
</tbody>
</table>

Loadings were analyzed for the reliability of indicators. The results revealed that the value for outer loadings was greater than the standard value of 0.70 (Hair et al., 2014; Henseler et al., 2009). The values of all loadings were in the range of 0.705 to 0.913. This shows that the indicators are statistically significant and there is much similarity among the captured indicators (Hair et al., 2014). According to the suggestion of Hair et al. (2014), the square values of standardized outer loadings were equal or greater to 0.5. The square value of the standardized outer loading indicator reflects the amount of variation in every item because of its’ construct. According to the rule of thumb, this value should be equal to or greater than 0.50 (Hair et al., 2014). The assumption has been made regarding the indicators’ reliability in this research (Hair et al., 2014).
Table 4 – Outer Loadings

<table>
<thead>
<tr>
<th></th>
<th>EE</th>
<th>EI</th>
<th>OPC</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE1</td>
<td>0.877</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EE2</td>
<td></td>
<td>0.837</td>
<td></td>
</tr>
<tr>
<td>EE3</td>
<td></td>
<td></td>
<td>0.902</td>
</tr>
<tr>
<td>EE4</td>
<td></td>
<td></td>
<td>0.909</td>
</tr>
<tr>
<td>EE5</td>
<td></td>
<td></td>
<td>0.869</td>
</tr>
<tr>
<td>EI1</td>
<td></td>
<td></td>
<td>0.926</td>
</tr>
<tr>
<td>EI2</td>
<td></td>
<td></td>
<td>0.897</td>
</tr>
<tr>
<td>EI3</td>
<td></td>
<td></td>
<td>0.881</td>
</tr>
<tr>
<td>EI4</td>
<td></td>
<td></td>
<td>0.894</td>
</tr>
<tr>
<td>EI5</td>
<td></td>
<td></td>
<td>0.840</td>
</tr>
<tr>
<td>OPC2</td>
<td></td>
<td></td>
<td>0.880</td>
</tr>
<tr>
<td>OPC3</td>
<td></td>
<td></td>
<td>0.894</td>
</tr>
<tr>
<td>OPC4</td>
<td></td>
<td></td>
<td>0.871</td>
</tr>
<tr>
<td>OPC5</td>
<td></td>
<td></td>
<td>0.903</td>
</tr>
<tr>
<td>OPC6</td>
<td></td>
<td></td>
<td>0.879</td>
</tr>
<tr>
<td>OPC7</td>
<td></td>
<td></td>
<td>0.885</td>
</tr>
<tr>
<td>OPC8</td>
<td></td>
<td></td>
<td>0.843</td>
</tr>
<tr>
<td>OPC1</td>
<td></td>
<td></td>
<td>0.886</td>
</tr>
</tbody>
</table>

The estimation of path coefficients has been done through the bootstrapping process by SmartPLS 2.0 (Ringle et al., 2005). According to Hair et al. (2014), the subsamples for bootstrapping were set to be 5000 and bootstrap cases were 595 with no change signs in the date set. The estimation of parameters was done through path-weighting scheme. The bootstrapping process was conducted to estimate standard errors in determining the hypothesized relations and coefficient significance (Hair et al., 2014).
Table 5: Direct relations

<table>
<thead>
<tr>
<th></th>
<th>(O)</th>
<th>(M)</th>
<th>(STDEV)</th>
<th>T Statistics</th>
<th>P Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE -&gt; EI</td>
<td>0.696</td>
<td>0.698</td>
<td>0.069</td>
<td>10.110</td>
<td>0.000</td>
</tr>
<tr>
<td>EE -&gt; OPC</td>
<td>0.926</td>
<td>0.926</td>
<td>0.013</td>
<td>68.721</td>
<td>0.000</td>
</tr>
<tr>
<td>OPC -&gt; EI</td>
<td>0.317</td>
<td>0.318</td>
<td>0.143</td>
<td>2.210</td>
<td>0.027</td>
</tr>
</tbody>
</table>

Table 6: Indirect relations

<table>
<thead>
<tr>
<th></th>
<th>(O)</th>
<th>(M)</th>
<th>(STDEV)</th>
<th>T Statistics</th>
<th>P Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE -&gt; OPC -&gt; EI</td>
<td>0.293</td>
<td>0.295</td>
<td>0.133</td>
<td>2.200</td>
<td>0.028</td>
</tr>
</tbody>
</table>

The criterion of Stone-Geisser $Q^2$ value was used for measuring the predictive relevance through use of a blindfolding process (Hair et al., 2014; Henseler et al., 2009). This is a process in which every data point is excluded at a certain distance and the process is continued until re-estimation is done (Hair et al., 2014). According to Hair et al. (2014), the distance for omission should be in the range of 5-10 dividing by cases number used. This value must not be an integer. The determination of predictive relevance in PLS-SEM reflects that the prediction is accurately done for the data points of indicators in reflective measurement models (for endogenous single-item constructs and endogenous constructs) (Hair et al., 2014). In formative endogenous constructs, this process is not applied (Hair et al., 2014). When the value of $Q^2$ is greater than zero for specific reflective endogenous latent...
variable in a structural model, it shows the predictive relevance of the path model for the particular construct.

**Figure 3. Predictive Relevance (Q²)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Q² (=1-SSE/SSO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EI</td>
<td>0.369</td>
</tr>
<tr>
<td>OPC</td>
<td>0.626</td>
</tr>
</tbody>
</table>

**Table 7: Predictive Relevance (Q²)**

**Discussion and Conclusion**

Several important contributions have been made by this study. This research enables one to understand the factors contributing to the entrepreneurial intentions among the students of Thai universities. This will give a clear picture to the stakeholders responsible for the development of entrepreneurship about the formation EI, perceptions of initiators, and their influence on the intention to establish a business. The study has identified the role of entrepreneurship education in improving an individual’s personality and promoting entrepreneurial intention with program effectiveness. The policy makers and the government can consider the importance of entrepreneurship and incorporate resources to increase entrepreneurial intentions among adults. This will improve entrepreneurial behaviour among students. Entrepreneurship training can be supported by the knowledge of the factors
determining entrepreneurial intention and moulding these to enhance the consequential behaviour for initiating new business.

This research has identified that there is need for university support in improving the intention among young graduates to start-up businesses. Some researchers have signalled that there are challenges for graduates in the developing world of entrepreneurship, such as a suitable environment and support for entrepreneurs. It has been confirmed by various studies that entrepreneurship can significantly contribute to economic development if a supportive environment is available for the entrepreneurs.

The findings of this study have given a way forward for future studies as well. It has been identified that there is a need for advancement in training programs that influence the skills, behaviour and characteristics required for entrepreneurs. Moreover, there is a need to increase creativity, which can make the entire process fun and interesting. Another important direction of future research is to introduce useful learning information with a practical approach. Learning can influence the entrepreneurial intention of students through the development of creative ability.

This study has contributed to existing literature in terms of practice, methodology, and theory. The use of SEE and TPB has been extended by this research for drawing useful information about entrepreneurship intention and entrepreneurship education. The use of hierarchical modelling, in which the PLS approach has been used, has been done to interpret the association among the variables. A better understanding of the formation of EI and the impact of perceptions on EI for starting new business can be recognized by the stakeholders. The policy makers and the government can identify the resource need for young graduates, so as to engage them in entrepreneurial activities by influencing their entrepreneurial intentions and ultimately lead to the creation of new business.

The use of SEE and TPB framework has also been extended in this research to give effective information on entrepreneurial intention and entrepreneurship education. It was suggested that TPB can facilitate educators to assess training programs. The existing theories of intention related to entrepreneurship have been extended by this research by focusing on the perception of creativity by the students. The creativity assessment is done in two ways, passion for founding and inventing. Moreover, the research adds the concept of novelty to the theories by structuring the association between the two constructs (passion for founding and investing) and effective entrepreneurship education. These aspects have not been considered in previous researches related to entrepreneurship education.

The study has a typical limitation for its methodology, especially concerning data collection under the cross-sectional design. In other words, the findings were confined to a single point.
of time. A longitudinal study could bring out a deeper understanding. Thus, future studies should conduct longitudinal studies to investigate students while still in school and to extend the studies to the years after graduation. This will assess the realization of the stated intention while in school. In other words, studies can confirm the translation of entrepreneurial intention into actual entrepreneurial behaviour after graduation.

REFERENCES


