

# WJEMSD



## World Journal of **ENTREPRENEURSHIP, MANAGEMENT AND SUSTAINABLE DEVELOPMENT**

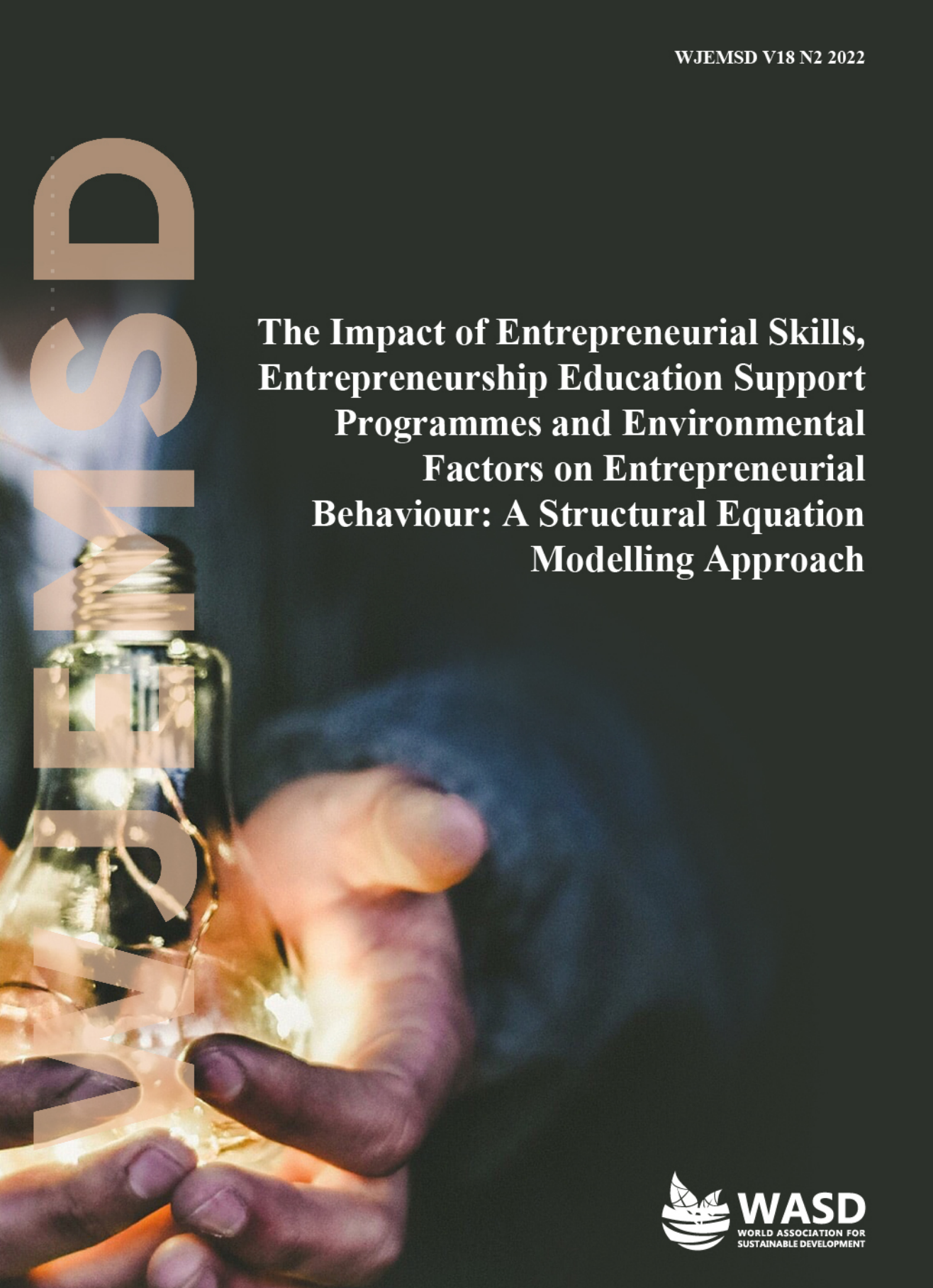
VOLUME 18 • NUMBER 2 • 2022

WJEMSD is published by the World Association for Sustainable Development (WASD) in the United Kingdom (4 Issues per year)  
WJEMSD is abstracted and indexed by: Scopus; Thomson Reuters Emerging Sources Citation Index; INSPEC; ReadCube Discover; ABI/Inform (ProQuest); Cabell's Directory of Publishing Opportunities; British Library; and Crossref and is ranked by the Australian Business Deans Council (ABDC) and the Norwegian Centre for Research Data (NSD).



**WASD**  
WORLD ASSOCIATION FOR  
SUSTAINABLE DEVELOPMENT

[www.wasd.org.uk](http://www.wasd.org.uk)



# **The Impact of Entrepreneurial Skills, Entrepreneurship Education Support Programmes and Environmental Factors on Entrepreneurial Behaviour: A Structural Equation Modelling Approach**

**RESEARCH PAPER**

# The Impact of Entrepreneurial Skills, Entrepreneurship Education Support Programmes and Environmental Factors on Entrepreneurial Behaviour: A Structural Equation Modelling Approach

**Beauty Akter***Department of Innovation and Entrepreneurship**Daffodil International University, Bangladesh*

Email: beauty.de@diu.edu.bd

ORCID URL: <https://orcid.org/0000-0002-4717-4855>**Md. Asif Iqbal***Department of Innovation and Entrepreneurship**Daffodil International University, Bangladesh*

Email: asif.de@diu.edu.bd

ORCID URL: <https://orcid.org/0000-0002-9157-2148>**ABSTRACT**

**PURPOSE:** Entrepreneurial behaviour is influenced by various determinants. However, not many factors have been identified to determine an individual's entrepreneurial intention and behaviour. The aim of this study is to investigate the role of environmental factors, entrepreneurship education support programmes, and entrepreneurial skills in determining entrepreneurial behaviour of individuals. Using the Theory of Planned Behaviour (TPB), this study tests the influence of environmental factors, entrepreneurship education support programmes, and entrepreneurial skills, together with existing TPB constructs, i.e., attitude, subjective norms, perceived behavioural control and entrepreneurial intention.

**DESIGN/METHODOLOGY/APPROACH:** Through a questionnaire, data were collected from 327 respondents of a private university in Bangladesh using simple random sampling. The hypotheses and conceptual model were tested using partial least squares (PLS) analysis.

**CITATION:** Akter, B. and Md. Iqbal, A. (2022): The Impact of Entrepreneurial Skills, Entrepreneurship Education Support Programs and Environmental Factors on Entrepreneurial Behavior: A Structural Equation Modelling Approach. *World Journal of Entrepreneurship, Management and Sustainable Development*, Vol. 18, No. 2, pp. 275–304.

**RECEIVED:** 30 March 2021 / **REVISED:** 31 May 2021 / **ACCEPTED:** 4 June 2021 / **PUBLISHED:** 15 December 2021

**COPYRIGHT:** © 2022 by all the authors of the article above. The article is published as an open access article by WASD under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

**FINDINGS:** The results of the study validate the research model. Moreover, the findings reveal the significance of environmental factors, entrepreneurship education support programmes, and entrepreneurial skills in determining entrepreneurial behaviour on the entrepreneurial intuition of individuals. However, a non-significant relationship was found between subjective norms to attitude towards entrepreneurship and entrepreneurial intention.

**ORIGINALITY/VALUE:** The outcomes are unique to this study and will be helpful to policy-makers and academicians to understand the entrepreneurial behaviour and role of various factors, i.e., environmental factors, entrepreneurship education support programmes, and entrepreneurial skills. This creates a new knowledge of theoretical implications and TPB by analysing the three new variables using PLS-SEM.

**KEYWORDS:** *Environmental factors; Entrepreneurship education support programmes; and Entrepreneurial skills; Theory of Planned Behaviour; PLS-SEM*

---

## INTRODUCTION

Entrepreneurship is recognised as being the driving force of the economy and is also widely recognised as a critical factor of economic development. Therefore, the economic progress of a country largely depends on the availability or growth of the number of entrepreneurs or people with entrepreneurial skills (Ray, 1988). According to Hytti and O’Gorman (2004), these entrepreneurial skills are now considered as a nation’s competitive advantage over others. Moreover, entrepreneurship education is expected to play an important role in changing the mindsets of graduates in higher education from job seekers to job creators. On this note, Cox *et al.* (2002) found that students with entrepreneurship education have higher self-efficacy than those without entrepreneurship education.

In order to increase the efficiency of an individual’s entrepreneurial behaviour, a society’s culture also has an impact on entrepreneurial behaviour. Burger-Helmchen (2012) suggested that, similar to the external environment, an individual’s personal attributes may also affect entrepreneurial intention. The entrepreneurial skills of an individual would be supportive to the entrepreneurial behaviour if the individual is more inclined towards entrepreneurship.

As a developing country, Bangladesh has seen a boom in entrepreneurship in recent years. The country plans to transition towards a middle-income country by 2021, focusing on an innovation centred economy. Latest data by the Bangladesh Bureau of Statistics shows that the rate of unemployment among youths aged between 15 and 29 years that have graduated from universities is 11.2% (New Age Bangladesh, 2018). Therefore, to create more employment opportunities, the country has taken various initiatives. To bring this change not only in the society but also the nation as a whole, the government is focusing on student entrepreneurship. For this, both public and private sectors have taken measures for Entrepreneurship Development (ED) in the country.

Keeping the critical role of entrepreneurship in mind and to uplift the standard of living of its people, Bangladesh has paid attention to the development of entrepreneurship in the country. Academic courses on ‘entrepreneurship’ have been introduced and entrepreneurship training programmes have been designed and offered through different public, private, and development institutions or organisations in Bangladesh. It is believed that entrepreneurship education and support programmes can help in developing the attitudes, knowledge and skills associated with

the practice of entrepreneurship in Bangladesh. Various universities have also introduced courses to develop an individual's entrepreneurial skills and provide support services, meaning a complete environment to become an entrepreneur.

It is important to know the impact of the entrepreneurship support programmes and environment at the universities on entrepreneurial behaviour. The majority of previous studies have found that education in entrepreneurship encourages graduates to start their own businesses; this means that students develop entrepreneurial intention if they receive entrepreneurship education (Blesia *et al.*, 2021; Dhar and Farzana, 2018; Gangi, 2017; Karali, 2013). Even educational support programmes may have an impact on entrepreneurial intention. Unfortunately, earlier studies did not shed light on the significance of entrepreneurial educational support programmes on the behaviour and attitude towards entrepreneurship of Bangladeshi university students. Many studies looked at entrepreneurial behaviour as a human behaviour (Farooq *et al.*, 2018b). This paper will therefore explore the significance of entrepreneurial education support programmes, environmental factors, and entrepreneurial skills on the entrepreneurial intention and behaviour of individual Bangladeshi university students.

The purpose of this paper is to contribute to the Theory of Planned Behaviour (TPB) and find the linkage between entrepreneurial education support programmes, environmental factors, and entrepreneurial skills on the entrepreneurial intention and behaviour of individuals. It will provide an answer to the various scholars of entrepreneurship (e.g., Brink and Madsen, 2015; Bruni and Perrotta, 2014; Farooq, 2016; Gorman *et al.*, 1997; Martin *et al.*, 2013; Weaver *et al.*, 2006; Zhao, 2012). It also opens a broader view to theoretical and empirical research designs.

## LITERATURE REVIEW

### Theory of Planned Behaviour

Many studies (such as Bansal and Taylor, 2002; Heuer and Kolvereid, 2014; Kolvereid, 1996a; Krueger *et al.*, 2000; Franke and Lüthje, 2004; Souitaris *et al.*, 2007; Van Gelderen *et al.*, 2008) have used TPB in their research. In addition, entrepreneurship education (e.g., Bae *et al.*, 2014; Colombelli, 2015; Deakins *et al.*, 2016; Farooq, 2016; Farooq *et al.*, 2018b; Liñán and Rodríguez-Cohard, 2015; Schlaegel and Koenig, 2014) also used TPB in the field of entrepreneurship. To become an entrepreneur, intentions are seen to be the best predictor of behaviour (Fishbein and Ajzen, 1975); the higher the intention, the higher the probability of the behaviour (Ajzen, 1991). Therefore, exogenous factors (such as traits, demographics, skills and social, cultural and financial support) indirectly influence intention and behaviour (Karali, 2013). In TPB, perceived behavioural control plays a pivotal part; together with the intention towards the behaviour, it can be used directly to predict behavioural achievement. Krueger *et al.* (2000) tested each variable of TPB individually and reported a non-significant relationship between subjective norms and intention to become an entrepreneur. Despite the non-significant relationship, there are several studies that reported a positive relationship between subjective norms and entrepreneurial intention (e.g., Farooq *et al.*, 2018b; Van Gelderen *et al.*, 2008).



Krueger and Carsrud (1993) applied TPB to the study of entrepreneurial intention. Based on their study of Krueger and Carsrud (1993) of planned behaviour on entrepreneurial intention, other researchers deployed models designed to understand the development of entrepreneurial intention between students (Kolvereid, 1996a; Autio *et al.*, 1997; Tkachev and Kolvereid, 1999). On this note, further investigation into the role of additional constructs that might be added to enhance the predictive power of TPB has been called by Conner and Armitage (1998). Even Ajzen (1991) himself notes that:

“The theory of planned behaviour is, in principle, open to inclusion of additional predictors if it can be shown that they capture a significant proportion of the variance in intention or behaviour; after the theory’s current variables have been taken account” (p.199).

Therefore, this study contributes to providing the theoretical description and role of additional variables, i.e., environmental factors, entrepreneurial education support programmes, and entrepreneurial skills in the context of entrepreneurial behaviour.

## Environmental Factors

Many scholars have explored internal and external factors regarding entrepreneurial intention and behaviour as the key factors. The act of entrepreneurship is something that culture and society promotes. Internal factors, such as psychological traits, personal characteristics, and the cognition of entrepreneurs, have been analysed regarding the development mechanism of entrepreneurial intention (Shapero and Sokol, 1982; Scott, 1991; Kickul and Krueger, 2004). Unfortunately, the impact of external environmental factors on entrepreneurial intention has been ignored in these studies. As with previous studies, environmental factors are included in macro-level factors that mainly include social cultures and norms, policy environment, economic level, personal social network, family background, and entrepreneurial education (Garavan and O’Cinneide, 1994). Indeed, there are a variety of social, economic and educational contextual variables that may influence people’s willingness to become an entrepreneur (e.g., image of entrepreneurs in society, availability of funds). According to Franke and Lüthje (2004) “Environmental factors have an important role in entrepreneurial intention”. In this connection, Nguyen (2020) claims that “environments’ support-factors including perceived financial and non-financial supports, and social supports are significantly related to perceived entrepreneurship self-efficacy of students”. Therefore, it is plausible that there is a strong relationship between environmental factors and entrepreneurial behaviour.

## Entrepreneurship Education Support Programmes

Entrepreneurial education can help entrepreneurs in various ways. By participating in entrepreneurial courses and activities, an individual may show an entrepreneurial ability. Cox *et al.* (2002) suggested that students with entrepreneurship education have higher self-efficacy than those without entrepreneurship education. Entrepreneurship education can be through university education or

local and global programmes. Franke and Lüthje (2004) found that university business courses have an effect on entrepreneurial intention, although not significant. In turn, several studies show that education in entrepreneurship encourages graduates to start their own businesses. Moreover, it is evident in the study of Karali (2013) that education programmes are positively and significantly correlated with entrepreneurial intention ( $r = 0.09$ ,  $p < 0.000$ ). Kent (1990) suggested that through entrepreneurship supported seminars, local entrepreneurs become encouraged and intend to become an entrepreneur. Gorman *et al.* (1997) highlight the necessity for further investigation in the relationship between entrepreneurship education and entrepreneurial attitudes. Moreover, the notion of developing entrepreneurship in an educational context not only encourages students to start businesses but also equips them to be more creative, opportunity-based, proactive and innovative in creating value for others through entrepreneurial activities (Aldianto *et al.*, 2018). From the above discussion, it is assumed that there is a link between entrepreneurship support programmes and entrepreneurial intention as well as attitudes towards entrepreneurship.

## Entrepreneurial Skills

Farooq (2016) identifies entrepreneurial skills as “the perception that indicates the self-confidence of respondents about certain skills which are critical for being an entrepreneur”. Entrepreneurial skills are required for founding a new business (Liñán, 2008). According to Liñán (2008), the perception towards entrepreneurial skills indicates that respondents are very confident about their possession of entrepreneurial skills. Several studies have investigated the relationship between entrepreneurial skills with other variables of TPB and behaviour (e.g., Boyd and Vozikis, 1994; Chen *et al.*, 1998; Delmar and Davidsson, 2000; Denoble *et al.*, 1999; Liñán, 2008). Entrepreneurial skills might increase individuals’ confidence level (Denoble *et al.*, 1999). Additionally, Salam *et al.* (2017) and Scherer *et al.* (1991) assert that having possession of entrepreneurial skills gives internal motivation and desire to excel; as a result, perceived chances of success as an entrepreneur become higher for those who possess entrepreneurial skills. Even Farooq *et al.* (2018b) and Carsrud (1992) mentioned that individuals’ attitude is affected by entrepreneurial skills. Therefore, it leads a person towards entrepreneurial behaviour in future. Farooq (2018) found a significance between entrepreneurial skills towards attitude, perceived behavioural control, and entrepreneurial behaviour. These studies give us a view that there might be a relationship between entrepreneurial skills towards attitude, perceived behavioural control, and entrepreneurial behaviour.

## Previous Works and Gaps

Over the last two decades, researchers have sought to determine the relationship between entrepreneurship education support programmes and entrepreneurial behaviour. Dehghanpour Farashah (2013) mentioned that the completion of one course on entrepreneurship increases the chances of entrepreneurial intention by 1.3 times.

Research into the effectiveness of entrepreneurship education and training programmes has been carried out in the context of Qatar. The research found that there was no tangible improvement in Qatar’s

ranking in the Knowledge Economy Index (KEI) during the early years of its introduction (Gangi, 2017). In the case of Singapore University (Wang and Wong, 2004; Reyes, 2016), many students showed entrepreneurial behaviour; however, their attempts were hindered by inadequate preparation, including insufficient entrepreneurship knowledge. After studying the impact of entrepreneurship education in the BBA and MBA programmes of a tertiary level university in Bangladesh, Dhar and Farzana (2018) claim that institutional support is lacking significantly in the case of Bangladesh. They identified the necessity of having entrepreneurial education programmes at the academic level that might change the behaviour of individuals. On the other hand, Azim and Akbar (2010) observed that the entrepreneurship courses in different universities in Bangladesh as a whole operate with a medium level of effectiveness.

Turker and Selçuk (2009) accentuate the importance of a supportive university environment as a significant predictor of students' entrepreneurial intentions. Blesia *et al.* (2021) undertook a study on the undergraduate students of Papua and found that in order to develop young entrepreneurs, the key elements are educational support through adequate lectures, training and apprenticeships, combined with continuous evaluation and monitoring (Hytti and O'Gorman, 2004; Turker and Selçuk, 2009; Zhang *et al.*, 2014; Mustafa *et al.*, 2016; Gelaidan and Abdullateef, 2017). In terms of entrepreneurial skill, through literature, it is understood that there is a strong connection between the environment and attitude towards entrepreneurship and entrepreneurial intention. Similarly, there is a strong connection between entrepreneurial skills and perceived behavioural control towards entrepreneurship (Farooq *et al.*, 2018b). To start a new venture, an individual should have a strong grip on entrepreneurial skills (Farooq *et al.*, 2018b). Karali (2013) mentioned in their study that educational support programmes have a strong relationship with the entrepreneurial intention.

The extensive literature has shown that there are many studies on the impact of entrepreneurial education support programmes, environment and entrepreneurial skills in the context of various countries other than Bangladesh. Although research has been undertaken, it mostly relies on business graduate students and is focused mainly on the curriculum rather than impact. At present, in Bangladesh, several academic institutions have designed entrepreneurial support programmes and are providing the necessary skills and environment to the students to grow as an entrepreneur. However, the question is how effective these are and the impact of these activities on individuals to show entrepreneurial behaviour. This study will analyse this gap by collecting data from university going students.

## RELATIONSHIP BETWEEN CONSTRUCTS AND HYPOTHESIS DEVELOPMENT

### Environmental Factors

"Entrepreneurship is a social activity which requires much frequent interaction with the social environment" (Davidson and Honig, 2003). Similarly, Kristiansen and Indarti (2004) find that a socially supportive environment not only boosts entrepreneurial intention but also paves the way towards entrepreneurial behaviour for budding entrepreneurs. In addition, environmental factors have an important role in entrepreneurial intention (Franke and L  thje, 2004). Moreover, if



there is no support from the public or private sectors from the environment, it is unlikely that someone would be encouraged to behave as an entrepreneur although they have entrepreneurial intentions. Therefore, a socially supportive environment has a great impact on the attitude towards entrepreneurship. On the basis of the literature review, therefore, this study hypothesises that:

H1a: Environmental factors positively affect attitude towards entrepreneurship;

H1b: Environmental factors positively affect entrepreneurial intention.

## Entrepreneurship Education Support Programmes

Entrepreneurship means solving a problem in society. Entrepreneurship programmes should support individuals over group activities, be quite unstructured, and give a novel solution to problems under unstable conditions and risk (Sexton and Upton, 1984). In their study on medium-sized American universities that had an introductory entrepreneurship course, Clark *et al.* (1984) found that 76% of respondents stated that the entrepreneurship course had a strong or very strong effect on their decision to found a new business. Fleming (1994) examined Irish students who participated in a student business plan competition, indicating that the initiative had a “very important” impact on their subsequent career choices. Vesper and McMullan (1997) show that entrepreneurship courses help alumni make better decisions in the start-up process.

Although there is an increase in entrepreneurship education programmes, there is little uniformity in the programmes offered, especially if one considers the relative similarity of other business programmes (Gorman *et al.*, 1997). It is mentioned in the study of Peterman and Kennedy (2003), Fayolle *et al.* (2006), and Souitaris *et al.* (2007) that entrepreneurship education programmes have a positive impact. The study of Von Graevenitz *et al.* (2010) also suggested that the impact of a compulsory entrepreneurship class has significant positive effects on participants’ self-assessed entrepreneurial skills, but entrepreneurial intentions decrease after the end of the course. The TPB model confirms that there is an evident relationship between entrepreneurship education and entrepreneurial intention that is influenced by attitudes (Schlaegel and Koenig, 2014; Souitaris *et al.*, 2007, Zhang *et al.*, 2014), although the major studies argue that more evidence is still needed. Therefore, it is hypothesised that:

H2a: Entrepreneurship education support programmes positively affect attitude towards entrepreneurship;

H2b: Entrepreneurship education support programmes positively affect entrepreneurial intention.

## Entrepreneurial Skills

There are a few factors that influence entrepreneurial behaviour when starting a new venture. An individual should have confidence in themselves to show an entrepreneurial attitude: without having self-confidence, it is not possible to become an entrepreneur. In this regard, Denoble *et al.* (1999) argue that the possession of these entrepreneurial skills could increase individuals’

confidence level and make them feel more able to start their own business. Having certain skills would be required for founding a new business (Liñán, 2008) and can be regarded as entrepreneurial skills (Farooq *et al.*, 2018a, b). Entrepreneurial skills are adapted from numerous previous studies (e.g., Boyd and Vozikis, 1994; Chen *et al.*, 1998; Delmar and Davidsson, 2000; Denoble *et al.*, 1999; Liñán, 2008). In his study, Liñán (2008) argues that entrepreneurial skills have a positive relationship with personal attraction towards entrepreneurship. Therefore, according to the literature review of Boyd and Vozikis (1994), Carsrud (1992), Liñán (2008), Scherer *et al.* (1991), it seems that entrepreneurial skills have a relationship with entrepreneurial attitude, perceived behavioural control and entrepreneurial intention. Therefore, this study hypothesises that:

H3a: Entrepreneurial skills positively affect attitude towards entrepreneurship;

H3b: Entrepreneurial skills positively affect perceived behavioural control;

H3c: Entrepreneurial skills positively affect entrepreneurial intention;

H3d: Entrepreneurial skills positively affect entrepreneurial behaviour.

## Attitude

Ajzen and Fishbein (1977) defined attitudes as an evaluative statement about an object that can be positive or negative (valence; e.g., Fazio *et al.*, 2004), weak or strong (strength; e.g., Holland *et al.*, 2002), and explicit or implicit (awareness; e.g., Hofmann *et al.*, 2005). Attitude is an individual's tendency or disposition to respond with some degree of a favourable or an unfavourable evaluation of objects or phenomena (Ajzen, 1991; Fishbein and Ajzen, 2009). Several meta-analytic findings have shown that attitudes predict intentions (e.g., Kim and Hunter, 1993) and behaviour (Glasman and Albarracín, 2006; Kraus, 1995). A positive attitude will bring a positive outcome and will impact on the entrepreneurial intention (Krueger *et al.*, 2000). If there is a strong relationship between attitudes towards entrepreneurship, a desirable entrepreneurial behaviour will be seen by the individuals (Chen and Lai, 2010). Therefore, it is hypothesised that:

H4a: Attitude towards entrepreneurship positively affects entrepreneurial intention;

H4b: Attitude towards entrepreneurship positively affects entrepreneurial behaviour.

## Subjective Norms

Subjective normative beliefs are defined by Ajzen and Fishbein (1980) as one's impression that a behaviour is (or is not) acceptable to others (e.g., parents, peers, society). Ajzen (1991) mentioned that the subjective norm is the individuals' perceived social appropriateness to engage or not engage in a specific behaviour. This is the variable that can be influenced by the attitudes of particular individuals, groups and networks that are important to the person, such as family, friends, peers and significant others. There is a dilemma in the findings that this variable only has a small influence on behavioural intention (Iakovleva *et al.*, 2011; Kautonen *et al.*, 2013; Solesvik, 2013) while there are

a few studies where it is identified that in some cases it is not a significant predictor (Almobaireek and Manolova, 2012; Solesvik *et al.*, 2012; Shook and Bratianu, 2010; Turker and Selcuk, 2009). Becoming an entrepreneur requires support from the environment that might be in the forms of relatives, families and friends. Therefore, it is hypothesised that:

- H5a. Subjective norms positively affect attitude towards entrepreneurship;
- H5b. Subjective norms positively affect perceived behavioural control;
- H5c. Subjective norms positively affect entrepreneurial intention.

### **Perceived Behavioural Control (PBC)**

Ajzen (2002) noted that PBC is the result of control belief strength and control belief power. He also suggested that PBC denotes the “subjective degree of control over performance of the behaviour”. Simply, it shows one’s ability to perform certain behaviour and have control in doing so. According to Ajzen *et al.* (2011), TPB gives better predictions when there is full information on the situation. PBC implies two facets: how much a person has control over the behaviour and how confident a person feels about being able to perform or not perform the behaviour. Therefore, if there is an ease or difficulty attached with a behaviour, it will influence intention to perform it. Previous studies on entrepreneurial intention (e.g., Kolvereid, 1996a; Krueger *et al.*, 2000; Van Gelderen *et al.*, 2008; Wilson *et al.*, 2007) also reported empirical evidence of the relationship between perceived behavioural control and entrepreneurial intention. Therefore, it is hypothesised that:

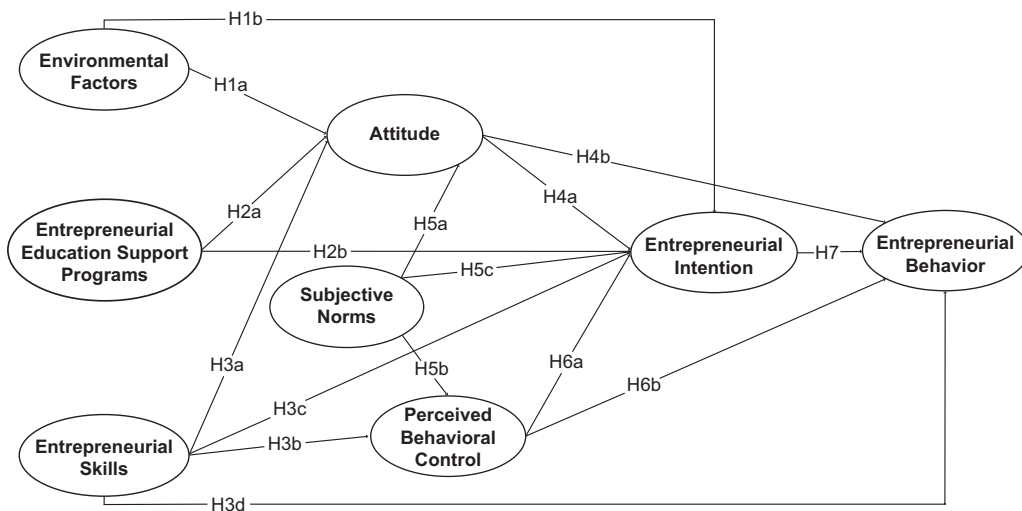
- H6a. Perceived behavioural control positively affects entrepreneurial intention;
- H6b. Perceived behavioural control positively affects entrepreneurial behaviour.

### **Entrepreneurial Intention**

Krueger and Carsrud (1993) mentioned that “intentions fully mediate the influence of attitudes on behaviour”. Moreover, they argue that intentions are the best predictors of entrepreneurial behaviour. Intention acts like a motivational factor to a planned behaviour. Briefly, therefore, it can be said that it is the main and immediate antecedent of any planned behaviour (Ajzen, 1991; Fishbein and Ajzen, 2009; Kolvereid, 1996b). Karali (2013) suggests that entrepreneurship is an intentionally planned behaviour that justifies that becoming an entrepreneur requires conscious efforts that might stem from high entrepreneurial intention. On the basis of the above discussion, it can therefore be expected that this positive relationship between intentions and planned behaviour could also be true for entrepreneurial behaviour. Therefore, it is hypothesised that:

- H7: Entrepreneurial intention positively affects entrepreneurial behaviour.

The proposed conceptual model for this study is presented in Figure 1.



**Figure 1: Conceptual Framework for Research Model**

Source: Constructed by authors

## RESEARCH METHODOLOGY

### Sample Size and Data Collection

To collect the data, we chose a private university that is considered to be one of the best entrepreneurial universities in Bangladesh. This university was chosen based on the entrepreneurial environment they are providing. They have venture capital, co-working space, entrepreneurship development funds, mentoring services, incubation programmes, accelerator programmes, access to the international market, and so on. In addition, an ‘entrepreneurship’ course has been introduced to all programmes, including the business and engineering departments. Similarly, the university provides the necessary entrepreneurial skills to the students so that they show entrepreneurial behaviour. Most likely, students in the business department will show entrepreneurial behaviour and have been the target group of several studies. In our study, however, we adopted a new group, engineering students. In today’s world, we can see that digital start-ups are established by the students from engineering departments and have therefore taken this as a sample.

After determining our sample group, data were collected from 327 respondents through a self-administered questionnaire. To calculate the minimum sample size, Gpower software was used with a predictive power 0.95 by following the research of Mahmud *et al.* (2017) and Alzahrani *et al.* (2019). The model had a maximum of four predictors; we set the effect size medium (0.15) and power needed as 0.95. A sample of 302 was required for this study. A total of 350 questionnaires were distributed to students currently enrolled in the engineering programmes. The participants did not get any incentives to complete the questionnaire, rather they did it voluntarily. It is to be noted that the authors have a good connection with the participants as well as the university, therefore,

the university allowed them to conduct this research. Additionally, the personal information of the participants was kept confidential. Out of 350 questionnaires, 327 were returned with complete information and were therefore used in our study.

Considering the purpose of the study, the identified respondents were students on entrepreneurial education programmes, the majority being undergraduates. This particular segment was selected to understand the impact of entrepreneurial skills, entrepreneurship educational support programmes, and environmental factors. The questionnaire consists of two sections. We asked respondents about their gender, age, level of education in the first section, and questions related to our model in the second section. The students were not forced to complete the questionnaire and their names were not requested in the questionnaire: their identity was kept confidential in doing this research. The questionnaire was in English and students did not face any problem understanding the language as they have good command of the English language.

From the demographic data in Table 1, it can be seen that 64.8% of the respondents were male and 35.2% were female. About 31.2% of the respondents were aged between 18-20 years, 60.2% were between 21-23 years, and 8.6% were between 24-26 years or older. It is also shown that the majority of the respondents were undergraduates.

**Table 1: Demographic Data**

	Frequency	Percentage
<b>Gender</b>		
Male	212	64.8
Female	115	35.2
<b>Age</b>		
18-20	102	31.2
21-23	197	60.2
24-26+	28	8.6
<b>Level of Education</b>		
Undergraduate	294	89.9
Postgraduate	33	10.1

Source: Constructed by authors from research data

## Data Analysis

The list of measurement scales used in this study were selected from authentic sources and previously published studies, such as Alsos and Kolvereid (1998), Kolvereid (1996b), Liñán (2008), Liñán and Chen (2009), Oosterbeek *et al.* (2010), and Franke and Lüthje (2004). There is a complete list of measurement scales used in this study in the Appendix, together with their respective sources. We adopted these measurement scales due to their wide acceptance in the body of the literature.

## RESEARCH FINDINGS AND RESULTS

At first, as suggested by Kock and Lynn (2012), we ran the full collinearity test resulting in VIF values as follows (see Table 2). All the results show lower than 3.3, suggesting CMV is not a serious issue in this study.

**Table 2: Collinearity Test (Inner VIF Values)**

	ATT	EB	EESP	EF	EI	ES	PBC	SN
ATT		1.767			1.458			
EB								
EESP	1.439				1.618			
EF	2.202				2.288			
EI		2.032						
ES	1.512	1.311			1.569		1.120	
PBC		1.593			2.275			
SN	1.576				2.116		1.120	

Source: Constructed by authors from research data

To assess the research model, this study incorporated a variance-based partial least-squares (PLS) technique using SmartPLS-3.3 (Ringle *et al.*, 2017). This method was adopted due to the high popularity of PLS in social sciences. According to Chin and Newsted (1999), this choice is made due to its user-friendly-interface, availability of resources, back-up support, nature of study, level of measurement, sample size, etc. A bootstrapping method (re-sample of 5,000) was used (Hair *et al.*, 2019) to test the significance of the path coefficients and the loadings.

### Assessment of Measurement Models

Two types of validity were examined: first, convergent validity and then discriminant validity. By examining the loadings, the convergent validity of the measurement is usually ascertained, and the average variance with the composite reliability is extracted (Hair *et al.*, 2019). The loadings were all higher than 0.7, the composite reliabilities were all higher than 0.7, and the average variances extracted were also higher than 0.5 (see Table 3); these are in accordance with the suggestion of Hair *et al.* (2019). According to the suggestion of Hair *et al.* (2017), we used Fornell-Larcker's (1981) criterion for evaluating the discriminant validity (the degree to which items differentiate among constructs or measure distinct concepts) of constructs that have reflective measurement models. The discriminant validity involves the comparison of the square root of average communality score (AVE) values with the correlation values of other latent variables (Table 4).



**Table 3: Measurement Model**

Construct	Cronbach's Alpha	Item	Composite Reliability	Average Variance Extracted (AVE)
ATT	0.758	0.601051	0.838	0.513
		0.720126		
		0.632567		
		0.829184		
		0.772434		
EB	0.72	0.803797	0.842	0.64
		0.857903		
		0.733357		
EESP	0.88	0.767447	0.91	0.63
		0.851357		
		0.810239		
		0.817346		
		0.89337		
		0.587581		
EF	0.911	0.751699	0.924	0.551
		0.654705		
		0.78891		
		0.751214		
		0.770268		
		0.772355		
		0.818951		
		0.682226		
		0.719529		
		0.694349		
EI	0.889	0.746603	0.916	0.645
		0.818664		
		0.802942		
		0.824565		
		0.836386		
		0.784641		
ES	0.832	0.762114	0.876	0.542
		0.753041		
		0.699617		
		0.702454		
		0.805776		
		0.714859		

(continued)

**Table 3: Measurement Model** (continued)

Construct	Cronbach's Alpha	Item	Composite Reliability	Average Variance Extracted (AVE)
PBC	0.834	0.787233	0.879	0.552
		0.693766		
		0.834082		
		0.801875		
		0.82483		
		0.683789		
SN	0.818	0.49297	0.861	0.52
		0.56288		
		0.625079		
		0.869515		
		0.849529		
		0.830103		

Source: Constructed by authors from research data

**Table 4: Discriminant Validity**

	ATT	EB	EESP	EF	EI	ES	PBC	SN
ATT	0.716							
EB	0.340	0.800						
EESP	0.493	0.416	0.794					
EF	0.429	0.471	0.523	0.742				
EI	0.641	0.549	0.632	0.408	0.803			
ES	0.369	0.584	0.413	0.565	0.364	0.736		
PBC	0.423	0.520	0.451	0.599	0.551	0.442	0.743	
SN	0.306	0.468	0.397	0.596	0.419	0.328	0.682	0.721

Source: Constructed by authors from research data

A lot more criticism is available for the criterion of Fornell and Larcker (1981) regarding reliable detection of the lack of discriminant validity in common research situations (Henseler *et al.*, 2015). Therefore, the heterotrait–monotrait (HTMT) correlation method was adopted to demonstrate the superior performance of this method by means of a Monte Carlo simulation study. There are two ways of using the HTMT to assess discriminant validity: as a criterion or as a statistical test. First, there is a problem of discriminant validity if the HTMT value is greater than the  $HTMT_{0.85}$  value of 0.85 (Kline, 2015) or the  $HTMT_{0.90}$  value of 0.90 (Gold *et al.*, 2001). Second, we can test the null hypothesis according to Henseler *et al.* (2015). All our values, as shown in Table 5, passed the  $HTMT_{0.90}$  (Gold *et al.*, 2001) and the  $HTMT_{0.85}$  (Kline, 2015), and the  $HTMT_{Inference}$ . Therefore, this indicates that discriminant validity has been ascertained.

**Table 5: Heterotrait-Monotrait Ratio (HTMT)**

	ATT	EB	EESP	EF	EI	ES	PBC	SN
ATT								
EB	0.423							
EESP	0.579	0.491						
EF	0.481	0.595	0.586					
EI	0.775	0.649	0.687	0.410				
ES	0.421	0.754	0.473	0.643	0.397			
PBC	0.547	0.651	0.517	0.654	0.646	0.497		
SN	0.392	0.597	0.429	0.693	0.442	0.395	0.754	

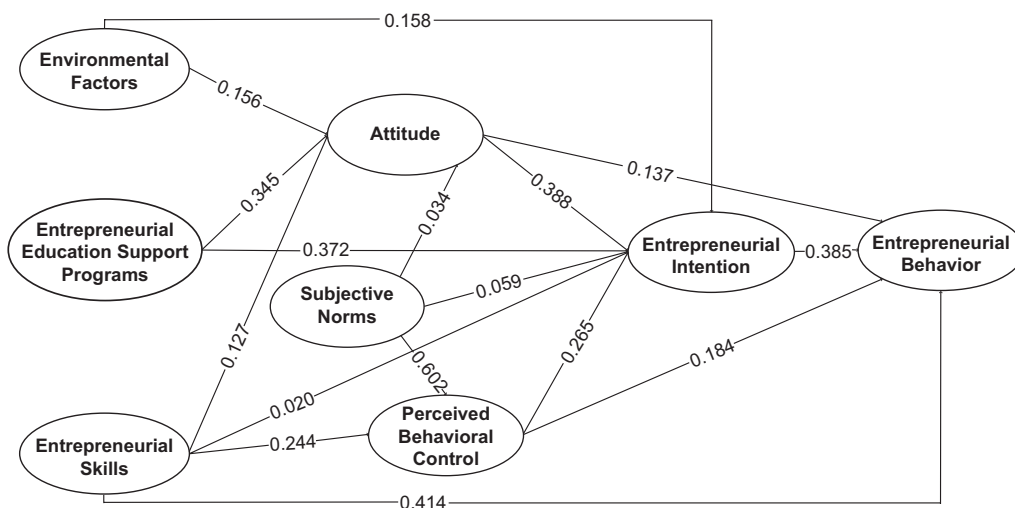
Source: Constructed by authors from research data

## Structural Model

This section will evaluate the structural model, also known as the inner model. We evaluated the structural model with path coefficient values as guided by Hair *et al.* (2017). The final research model with the result is proposed in Figure 2.

As suggested by Hair *et al.* (2019), to assess the structural model, we need to look at the  $R^2$ , the  $\beta$  and the corresponding t-values via a bootstrapping procedure with a resample of 5,000. We should also look at the report of predictive relevance ( $Q^2$ ) and the effect sizes ( $f^2$ ). In our study, the highest path coefficient values are between entrepreneurial skills to entrepreneurial behaviour ( $\beta = 0.414$ ), attitude towards entrepreneurship to entrepreneurial intention ( $\beta = 0.388$ ), and entrepreneurial intention to entrepreneurial behaviour ( $\beta = 0.385$ ). The lowest path coefficient values are between entrepreneurial skills to entrepreneurial intention ( $\beta = 0.020$ ), and subjective norms to attitude towards entrepreneurship ( $\beta = 0.034$ ). It is found that all the path coefficient values are positive. This study observes the rule of t-value  $> 1.96$  and  $p < 0.05$  for analysing the significance level of path coefficients. In this study, the value of  $R^2$  ranges from 0.286 to 0.590; all are significant at  $p < 0.05$ , depicting an adequate fit of the model to the data. The values of  $R^2$  indicate that the proposed conceptual model has an adequate explanatory significance.

As suggested by Hair *et al.* (2019), we need to look at  $Q^2$  values for the predictive relevance of our study. Using the blindfolding method, the  $Q^2$  values are evaluated. According to the rule of thumb, if a  $Q^2$  value is larger than zero, it suggests that latent exogenous constructs involved in the structural model possess predictive relevance for latent endogenous constructs (Chin, 2010; Hair *et al.*, 2017). In our study, the highest  $Q^2$  value is 0.377 for entrepreneurial intention. The lowest  $Q^2$  value of 0.142 is achieved by attitude. Therefore, it supports the underlying assumption that all latent underlying endogenous constructs involved in this study have strong predictive relevance.



**Figure 2: Final Research Model with Results**

Source: Constructed by authors from research data

### Goodness of Fit (GoF) and Absolute Model Fit Indices

This section looks at the GoF and absolute model fit indices. Henseler *et al.* (2016) identify that PLS-SEM do not generate overall GoF indices, and  $R^2$  value is considered as the primary way to evaluate the explanatory power of the model. In this regard, Tenenhaus *et al.* (2005) presented a diagnostic tool as the GoF index for PLS-SEM. This study used this tool to assess the model fit. By using the geometric mean of the average communality score (AVE value) and the average  $R^2$  values (for endogenous constructs), and calculated using the following equation ( $\text{GoF} = \sqrt{\text{AVE} \times R^2}$ ), GoF is measured. The cut-off values were not mentioned by Tenenhaus *et al.* (2005). However, Wetzels *et al.* (2009) reported the following cut-off values for assessing the results of the GoF analysis:  $\text{GoF}_{\text{small}} = 0.1$ ;  $\text{GoF}_{\text{medium}} = 0.25$ ;  $\text{GoF}_{\text{large}} = 0.36$ . On the contrary, Cho *et al.* (2020) state that, when  $N > 100$ , researchers may choose a GFI cut-off value of 0.93 and an SRMR cut-off value of 0.08. The researchers have calculated the GoF index for the model involved in this study (presented in Table 6) using the guidelines of Tenenhaus *et al.* (2005) and Henseler *et al.* (2016). This study yielded a GoF index value of 0.5240, and the standardised SRMR value is 0.109. Therefore, it can be concluded that the model involved in this study has a very good fit.

**Table 6: Calculation of Goodness-of-Fit (GoF) Index**

	AVE	R <sup>2</sup>
ATT	0.513	0.295
EB	0.640	0.502
EESP	0.630	-
EF	0.551	-
EI	0.645	0.598
ES	0.542	-
PBC	0.552	0.518
SN	0.520	-
Average scores	0.5741	0.4783
AVE × R <sup>2</sup>	0.2746	
GoF = $\sqrt{(AVE \times R^2)}$	0.5240	

Source: Constructed by authors from research data

## DISCUSSION

Various aspects of entrepreneurial intention and behaviour have been found in this study (see Table 7). First, the results of this study have revealed various important aspects of the significance of environmental factors, entrepreneurship education support programmes, and entrepreneurial skills on entrepreneurial intention and behaviour. This study takes environmental factors as a variable, including market, government policy, economic level, personal social network, family background, and entrepreneurial education. Notable findings are in line with environmental factors and attitude towards entrepreneurship. The analysis of the data also reveals the relationship, and supports the hypotheses that also support the study of Franke and Lüthje (2004). The favourable environment has an influence on attitude towards entrepreneurship. It also supports the significant relationship between environmental factors and entrepreneurial intention. More specifically, environmental factors influence attitude towards entrepreneurship, entrepreneurial intention and entrepreneurial behaviour. This provides insight for policy-makers on the relative importance of government policy on entrepreneurs. To conclude, environmental factors play a significant role in the formation of entrepreneurial intention; this is strongly influenced in the presence of environmental factors.

Second, remarkable findings have been found regarding the relationship between entrepreneurship education support programmes and entrepreneurial intention. These justify the recommendation of the importance of entrepreneurship education by Blesia *et al.* (2021), Dhar and Farzana (2018), Gangi (2017), Karali (2013), and Franke and Lüthje (2004). It implies that an individual's entrepreneurial intention is influenced by education support programmes. To be precise, people's intentions to become an entrepreneur are changed when they are involved in any education support programmes, for example, training, accelerator, certificate programmes and so on. Furthermore, results have proven that attitude towards entrepreneurship is largely

influenced by entrepreneurship education support programmes. It supports the idea of Peterman and Kennedy (2003), Fayolle *et al.* (2006), and Souitaris *et al.* (2007) that there is a positive impact of entrepreneurship education programmes. Among other variables, entrepreneurship education support programmes have been found as one of the best predictors for entrepreneurial intention. This study will be helpful for the educationalists and policy-makers to design entrepreneurship support programmes accordingly.

Third, this study found that entrepreneurial skills have a significant effect on the attitude towards entrepreneurship and perceived behavioural control of individuals. Findings reveal a positive and significant relevance that is also suggested by Farooq *et al.* (2018a, b). This also supports the notion of Farooq *et al.* (2018a, b), and Liñán (2008). However, opposing Farooq *et al.* (2018a, b), it does not find any significant relevance between entrepreneurial skills and entrepreneurial intention. Moreover, the study conflicts with previous studies that subjective norms influence the attitude towards entrepreneurship and entrepreneurial intention.

**Table 7: Hypotheses Testing**

		Std $\beta$	t Value	P Values $p < 0.05$	Decision
H1a	EF $\rightarrow$ ATT	0.156	2.050	<b>0.04</b>	<b>Supported</b>
H1b	EF $\rightarrow$ EI	0.158	2.557	<b>0.01</b>	<b>Supported</b>
H2a	EESP $\rightarrow$ ATT	0.345	7.106	<b>0.00</b>	<b>Supported</b>
H2b	EESP $\rightarrow$ EI	0.372	6.452	<b>0.00</b>	<b>Supported</b>
H3a	ES $\rightarrow$ ATT	0.127	2.082	<b>0.03</b>	<b>Supported</b>
H3b	ES $\rightarrow$ PBC	0.244	5.544	<b>0.00</b>	<b>Supported</b>
H3c	ES $\rightarrow$ EI	0.020	0.436	<b>0.66</b>	<b>Not Supported</b>
H3d	ES $\rightarrow$ EB	0.414	7.744	<b>0.00</b>	<b>Supported</b>
H4a	ATT $\rightarrow$ EI	0.388	10.152	<b>0.00</b>	<b>Supported</b>
H4b	ATT $\rightarrow$ EB	0.137	2.475	<b>0.01</b>	<b>Supported</b>
H5a	SN $\rightarrow$ ATT	0.034	0.621	<b>0.53</b>	<b>Not Supported</b>
H5b	SN $\rightarrow$ PBC	0.602	15.677	<b>0.00</b>	<b>Supported</b>
H5c	SN $\rightarrow$ EI	0.059	1.079	<b>0.28</b>	<b>Not Supported</b>
H6a	PBC $\rightarrow$ EI	0.265	4.494	<b>0.00</b>	<b>Supported</b>
H6b	PBC $\rightarrow$ EB	0.184	3.334	<b>0.00</b>	<b>Supported</b>
H7	EI $\rightarrow$ EB	0.385	6.182	<b>0.00</b>	<b>Supported</b>

Source: Constructed by authors from research data

## PRACTICAL IMPLICATIONS

The findings of this study offer a few practical implications and prove that the variables influencing entrepreneurial intention and entrepreneurial behaviour are largely influenced by entrepreneurship support programmes and environmental factors. These are comparable across cultures.



These disclosures set up the explanation behind making methodologies for improving the business venture improvement programmes in Bangladesh. In addition, policy-makers can take this finding into consideration for knowing the entrepreneurial intention of university students, also recommended by Dhar and Farzana (2018), by studying students attending university. According to Ireland *et al.* (2003) “the successful future strategists will exploit an entrepreneurial mindset... the ability to rapidly sense, act, and mobilise, even under uncertain conditions”. Therefore, by knowing the intention, policy-makers can take necessary steps such as providing mentorship programmes, organising tech competitions, and so on. Finally, although this research did not find any significant relationship between the subjective norms and entrepreneurial intention, it does not imply that this variable is not significant. Some measures can be taken to improve the efficacy of the students. Further examination from scholarly researchers and analysts are warranted to validate the discoveries drawn from this research.

## LIMITATIONS AND FUTURE RESEARCH

This study has several limitations and potential for future research. Shook *et al.* (2003) mentioned that “Future work on entrepreneurial intentions should attempt to integrate and reduce the number of alternative intention models”. First, the study was only carried out in the context of only one private university and the students were from engineering departments. This may influence the perceived behavioural control as they are already enrolled in entrepreneurship educational programmes. Second, this study was conducted in Bangladesh, a developing country. The findings of environmental factors may change in the context of developed countries. Third, this research did not consider age as a factor of entrepreneurial intention. It might be taken into consideration in future investigations. Finally, this examination utilised the information from a small sample, even though the sample size was acceptable for PLS-SEM. A larger sample size may give a more suitable outcome.

However, this research opens the door for future research in a different culture and in various universities using longitudinal studies. The influence of environmental factors can also be examined in future research. Further exploration may ask undergraduates to comprehend which definite components of business courses influence enterprising expectation; finding out about business. This investigation has discovered that entrepreneurial skills do not support entrepreneurial intention; this is different from Farooq (2018). More examination ought to be embraced to investigate this measurement.

## CONCLUSIONS

The outcomes of this study are insightful and investigated the variables (i.e., environmental factors, entrepreneurship education support programmes, and entrepreneurial skills) explaining entrepreneurial behaviour and entrepreneurial intention by extending the Theory of Planned Behaviour (TPB). This helped to develop a theory by proposing a conceptual framework that was tested and found to have predictive relevance. The framework that was used in this study

has a good fit for the GoF index. The findings are helpful in understanding the influence of environmental factors on entrepreneurial intention. Therefore, this study sheds light on the field of entrepreneurship literature and entrepreneurial behaviour. The new determinants would be helpful for future researchers to explore empirically. Although this research found some positive significant relevance among the variables, it also found negative aspects regarding subjective norms, which is contradictory to Souitaris *et al.* (2007).

To summarise, the findings of this study supported the idea of the researchers for high predictive supremacy of environmental factors, entrepreneurship education support programmes, and entrepreneurial skills towards entrepreneurial behaviour. It can be concluded that, without support from the environment and educational institutions, it would be quite difficult to show entrepreneurial behaviour. Market strategies, government policies, investment readiness, training programmes, and so on, should be designed in such a way that individuals become inspired and act like an entrepreneur. Therefore, this study covers the elusive and disparate strands of various disciplines to bridge the literature gap, while making a significant contribution to the field of entrepreneurship.

## REFERENCES

- Ajzen, I. (1991): The theory of planned behaviour. *Organizational Behavior and Human Decision Processes*, Vol. 50, No. 2, pp.179-211.
- Ajzen, I. (2002): Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of Applied Social Psychology*, Vol. 32, No. 4, pp.665-683. <https://doi.org/10.1111/j.1559-1816.2002.tb00236.x>.
- Ajzen, I. and Fishbein, M. (1977): Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, Vol. 84, No. 5, pp.888-918. <https://doi.org/10.1037/0033-2909.84.5.888>.
- Ajzen, I. and Fishbein, M. (1980): Understanding attitudes and predicting social behavior. Englewood Cliffs, NJ: Prentice-Hall.
- Ajzen, I., Joyce, N., Sheikh, S. and Cote, N.G. (2011): Knowledge and the prediction of behavior: The role of information accuracy in the theory of planned behavior. *Basic and Applied Social Psychology*, Vol. 33, No. 2, pp.101-117. <https://doi.org/10.1080/01973533.2011.568834>.
- Aldianto, L., Anggadwita, G. and Umbara, A. (2018): Entrepreneurship education program as value creation: Empirical findings of universities in Bandung, Indonesia. *Journal of Science and Technology Policy Management*, Vol. 9, No. 3. pp.296-309. [10.1108/JSTPM-03-2018-0024](https://doi.org/10.1108/JSTPM-03-2018-0024).
- Almobaireek, W.N. and Manolova, T.S. (2012): Who wants to be an entrepreneur? Entrepreneurial intentions among Saudi university students. *African Journal of Business Management*, Vol. 6, No. 11, pp.4029-4040.
- Alsos, G.A. and Kolvereid, L. (1998): The business gestation process of novice, serial, and parallel business founders. *Entrepreneurship Theory and Practice*, Vol. 22, No. 4, pp.101-114.
- Alzahrani, A.I., Mahmud, I., Ramayah, T., Alfarrarj, O. and Alalwan, N. (2019): Modelling digital library success using the DeLone and McLean information system success model. *Journal of Librarianship and Information Science*, Vol. 51, No. 2, pp.291-306.

- Autio, E., Keeley, R.H., Klofsten, M. and Ulfstedt, T. (1997): Entrepreneurial intent among students: Testing an intent model in Asia, Scandinavia and USA. In *Proceedings of Frontiers of Entrepreneurship Research Annual Conference*, Babson College, Massachusetts, USA. Available at: <http://www.babson.edu/entrep/fer>.
- Azim, M.T. and Akbar, M.M. (2010): Entrepreneurship education in Bangladesh: A study based on program inputs. *South Asian Journal of Management*, Vol. 17, No. 4, pp.21-36.
- Bae, T.J., Qian, S., Miao, C. and Fiet, J.O. (2014): The relationship between entrepreneurship education and entrepreneurial intentions: A meta-analytic review. *Entrepreneurship Theory and Practice*, Vol. 38, No. 2, pp.217-254.
- Bansal, H.S. and Taylor, S.F. (2002): Investigating interactive effects in the theory of planned behaviour in a service-provider switching context. *Psychology & Marketing*, Vol. 19, No. 5, pp.407-425.
- Blesia, J.U., Iek, M., Ratang, W. and Hutajulu, H. (2021): Developing an entrepreneurship model to increase students' entrepreneurial skills: An action research project in a higher education institution in Indonesia. *Systemic Practice and Action Research*, Vol. 34, No. 1, pp.53-70. <https://doi.org/10.1007/s11213-019-09506-8>.
- Boyd, N.G. and Vozikis, G.S. (1994): The influence of self-efficacy on the development of entrepreneurial intentions and actions. *Entrepreneurship Theory and Practice*, Vol. 18, No. 4, pp.63-77.
- Brink, T. and Madsen, S.O. (2015): Entrepreneurial learning requires action on the meaning generated. *International Journal of Entrepreneurial Behavior & Research*, Vol. 21, No. 5, pp.650-672.
- Bruni, A. and Perrotta, M. (2014): Entrepreneurship together: His and her stories. *International Journal of Entrepreneurial Behavior & Research*, Vol. 20, No. 2, pp.108-127.
- Burger-Helmchen, T. (Ed.) (2012): *Entrepreneurship – born, made and educated*. New York, NY: InTech.
- Carsrud, A.L. (1992): *The psychology of entrepreneurship*. University of Stirling. Scotland.
- Chen, C.C., Greene, P.G. and Crick, A. (1998): Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing*, Vol. 13, No. 4, pp.295-316. [https://doi.org/10.1016/s0883-9026\(97\)00029-3](https://doi.org/10.1016/s0883-9026(97)00029-3).
- Chen, Y.F. and Lai, M.C. (2010): Factors influencing the entrepreneurial attitude of Taiwanese tertiary-level business students. *Social Behavior and Personality: An International Journal*, Vol. 38 No. 1, pp.1-12.
- Chin, W.W. (2010): How to write up and report PLS analyses, in Vinzi, V.E., Chin, W.W., Henseler, J. and Wang, H. (Eds), *Handbook of Partial Least Squares: Concepts, Methods and Applications in Marketing and Related Fields*, (pp.655-690), Vol. II, Springer, Berlin Heidelberg.
- Chin, W.W. and Newsted, P.R. (1999): Structural equation modeling analysis with small samples using partial least squares. In Hoyle, R.H. (Ed.), *Statistical strategies for small sample research* (pp.307-341). Thousand Oaks: CA: Sage Publications.
- Cho, G., Hwang, H., Sarstedt, M. and Ringle, C.M. (2020): Cutoff criteria for overall model fit indexes in generalized structured component analysis. *Journal of Marketing Analytics*, Vol. 8, No. 4, pp.189-202. <https://doi.org/10.1057/s41270-020-00089-1>.
- Clark, B.W., Davis, C.H. and Harnish, V.C. (1984): Do courses in entrepreneurship aid new venture creation? *Journal of Small Business Management*, Vol. 22, No. 2, pp.26-31.

- Colombelli, A. (2015): Top management team characteristics and firm growth: Evidence from a sample of listed companies. *International Journal of Entrepreneurial Behavior & Research*, Vol. 21, No. 1, pp.107-127.
- Conner, M. and Armitage, C.J. (1998): Extending the theory of planned behavior: A review and avenues for further research. *Journal of Applied Social Psychology*, Vol. 28, No. 15, pp.1429-1464.
- Cox, L.W., Mueller, S. and Moss, S.E. (2002): The impact of entrepreneurship education on entrepreneurial self-efficacy. *International Journal of Entrepreneurship Education*, Vol. 1, No. 2, pp.229-247.
- Davidson, P. and Honig, B. (2003): The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, Vol. 18, No. 3, pp.301-331.
- Deakins, D., Bensemann, J. and Battisti, M. (2016): Entrepreneurial skill and regulation: Evidence from primary sector rural entrepreneurs. *International Journal of Entrepreneurial Behavior & Research*, Vol. 22, No. 2, pp.234-259.
- Dehghanpour Farashah, A. (2013): The process of impact of entrepreneurship education and training on entrepreneurship perception and intention: Study of educational system of Iran. *Education + Training*, Vol. 55, Nos 8/9, pp.868-885.
- Delmar, F. and Davidsson, P. (2000): Where do they come from? Prevalence and characteristics of nascent entrepreneurs. *Entrepreneurship & Regional Development*, Vol. 12, No. 1, pp.1-23.
- Denoble, A.F., Jung, K. and Ehrlich, S.B. (1999): Entrepreneurial self-efficacy: The development of a measure and its relationship to entrepreneurial action. In: Reynolds, P., Bygrave, W., Manigart, S., Mason, C., Meyer, G.D., Sapienza, H.J. and Shaver, K.G. (Eds): *Frontiers of Entrepreneurship Research*, (pp.73-87). Babson College, Wellesley, MA.
- Dhar, S. and Farzana, T. (2018): Entrepreneurship education at tertiary level in Bangladesh. *Journal of Economics and Business Research*, Vol. 24, No. 2, pp.97-124.
- Farooq, M.S. (2016): Social support and entrepreneurial skills as antecedents of entrepreneurial behaviour. PhD thesis, Universiti Malaysia Sarawak (UNIMAS), Sarawak. Available at: <https://ir.unimas.my/19807/>. Accessed 17 March 2018.
- Farooq, M.S. (2018): Modelling the significance of social support and entrepreneurial skills for determining entrepreneurial behaviour of individuals: A structural equation modelling approach. *World Journal of Entrepreneurship, Management and Sustainable Development*, Vol. 14, No. 3, pp.242-266. <https://doi.org/10.1108/WJEMSD-12-2017-0096>.
- Farooq, M.S., Salam, M., Fayolle, A., Jaafar, N. and Ayupp, K. (2018a): Impact of service quality on customer satisfaction in Malaysia airlines: A PLS-SEM approach. *Journal of Air Transport Management*, Vol. 67, pp.169-180.
- Farooq, M.S., Salam, M., Ur Rehman, S., Fayolle, A., Jaafar, N. and Ayupp, K. (2018b): Impact of support from social network on entrepreneurial intention of fresh business graduates: A structural equation modeling approach. *Education + Training*, Vol. 60, No. 4, pp.335-353.
- Fayolle, A., Gailly, B. and Lassas-Clerc, N. (2006): Assessing the impact of entrepreneurship education programmes: A new methodology. *Journal of European Industrial Training*, Vol. 30, No. 9, pp.701-720.

- Fazio, R.H., Eiser, J.R. and Shook, N.J. (2004): Attitude formation through exploration: Valence asymmetries. *Journal of Personality and Social Psychology*, Vol. 87, No. 3, pp.293-311. <https://doi.org/10.1037/0022-3514.87.3.293>.
- Fishbein, M., and Ajzen, I. (1975): *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Fishbein, M. and Ajzen, I. (2009): *Predicting and changing behavior: The reasoned action approach*. Psychology Press.
- Fleming, P. (1994): The role of structured interventions in shaping graduate entrepreneurship. *Irish Business and Administrative Research*, Vol. 15, pp.146-157.
- Fornell, C. and Larcker, D.F. (1981): Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, Vol. 18, No. 1, pp.39-50. <https://doi.org/10.2307/3151312>.
- Franke, N. and L  thje, C. (2004): Entrepreneurial intentions of business students—A benchmarking study. *International Journal of Innovation and Technology Management (IJITM)*, Vol. 1, No. 3, pp.269-288.
- Gangi, Y. (2017): The role of entrepreneurship education and training on creation of the knowledge economy: Qatar leap to the future. *World Journal of Entrepreneurship, Management and Sustainable Development*. Vol. 13, No. 4, pp.375-388. [10.1108/WJEMSD-06-2017-0032](https://doi.org/10.1108/WJEMSD-06-2017-0032).
- Garavan, T.N. and O’Cinneide, B. (1994): Entrepreneurship education and training programmes: A review and evaluation - Part 2. *Journal of European Industrial Training*, Vol. 18, No. 11, pp.13-22.
- Gelaidan, H. and Abdullateef, A.O. (2017): Entrepreneurial intentions of business students in Malaysia: The role of self-confidence, educational and relation support. *Journal of Small Business and Enterprise Development*, Vol. 24, No. 1, pp.54-67.
- Glasman, L.R. and Albarrac  n, D. (2006): Forming attitudes that predict future behavior: A meta-analysis of the attitude-behavior relation. *Psychological Bulletin*, Vol. 132, No. 5, pp.778-822.
- Gold, A.H., Malhotra, A. and Segars, A.H. (2001): Knowledge management: An organizational capabilities perspective. *Journal of Management Information Systems*, Vol. 18, No. 1, pp.185-214.
- Gorman, G., Hanlon, D. and King, W. (1997): Some research perspectives on entrepreneurship education, enterprise education and education for small business management: A ten-year literature review. *International Small Business Journal*, Vol. 15, No. 3, pp.56-57.
- Hair, J.F., Hult, G.T.M., Ringle, C. and Sarstedt, M. (2017): *A primer on partial least squares structural equation modeling (PLS-SEM)*, 2nd ed. London and Thousand Oaks, CA: Sage Publications Limited Inc.
- Hair, J.F., Risher, J.J., Sarstedt, M. and Ringle, C.M. (2019): When to use and how to report the results of PLS-SEM. *European Business Review*, Vol. 31, No. 1, pp.2-24.
- Henseler, J., Hubona, G. and Ray, P.A. (2016): Using PLS path modeling in new technology research: Updated guidelines. *Industrial Management & Data Systems*, Vol. 116, No. 1, pp.2-20.
- Henseler, J., Ringle, C.M. and Sarstedt, M. (2015): A new criterion for assessing discriminant validity in variance-based structural equation modelling. *Journal of the Academy of Marketing Science*, Vol. 43, No. 1, pp.115-135.

- Heuer, A. and Kolvereid, L. (2014): Education in entrepreneurship and the theory of planned behaviour. *European Journal of Training and Development*, Vol. 38, No. 6, pp.506-523.
- Hofmann, W., Gawronski, B., Gschwendner, T., Le, H. and Schmitt, M. (2005): A meta-analysis on the correlation between the implicit association test and explicit self-report measures. *Personality and Social Psychology Bulletin*, Vol. 31 No. 10, pp.1369-1385. <https://doi.org/10.1177/0146167205275613>.
- Holland, R.W., Verplanken, B. and van Knippenberg, A. (2002): On the nature of attitude-behavior relations: The strong guide, the weak follow. *European Journal of Social Psychology*, Vol. 32, No. 6, pp.869-876.
- Hytti, U. and O’Gorman, C. (2004): What is “enterprise education”? An analysis of the objectives and methods of enterprise education programmes in four European countries. *Education + Training*, Vol. 46, No. 1, pp.11-23.
- Iakovleva, T., Kolvereid, L. and Stephan, U. (2011): Entrepreneurial intentions in developing and developed countries. *Education + Training*, Vol. 53, No. 5, pp.353-370.
- Ireland, R. (2003): A model of strategic entrepreneurship: The construct and its dimensions. *Journal of Management*, Vol. 29, No. 6, pp.963-989. [https://doi.org/10.1016/s0149-2063\(03\)00086-2](https://doi.org/10.1016/s0149-2063(03)00086-2).
- Karali, S. (2013): *The impact of entrepreneurship (sic) education on entrepreneurial intentions: An application of the theory of planned behavior*. Master’s thesis, Erasmus School of Economics. Available at: <http://hdl.handle.net/2105/13460>.
- Kautonen, T., Van Gelderen, M. and Tornikoski, E. (2013): Predicting entrepreneurial behaviour: A test of the theory of planned behaviour. *Applied Economics*, Vol. 45, No. 6, pp.697-707. [10.1080/00036846.2011.610750](https://doi.org/10.1080/00036846.2011.610750).
- Kent, C.A. (1990): Entrepreneurship education at the collegiate level: A synopsis and evaluation in Entrepreneurship Education. In Kent, C.A. (Ed.): *Entrepreneurship education: Current developments, future directions* (pp.111-122). Quorum Books; Greenwood Publishing Group: Westport, CT, USA.
- Kickul, J. and Krueger, N. (2004): A cognitive processing model of entrepreneurial self-efficacy and intentionality. In proceedings of *Frontiers of Entrepreneurship Research Annual Conference* (pp.607-617), Babson College, Massachusetts, USA. Available at: [http://www.babson.edu/entrep/fer/FER\\_2004/web-content/Section%20XXII/P3/XXII-P3.html](http://www.babson.edu/entrep/fer/FER_2004/web-content/Section%20XXII/P3/XXII-P3.html).
- Kim, M.-S. and Hunter, J.E. (1993): Attitude-behavior relations: A meta-analysis of attitudinal relevance and topic. *Journal of Communication*, Vol. 43, No. 1, pp.101-142. <https://doi.org/10.1111/j.1460-2466.1993.tb01251.x>.
- Kline, R.B. (2015): *Principles and practice of structural equation modeling*. Guilford, NY: Guilford Publications.
- Kock, N. and Lynn, G.S. (2012): Lateral collinearity and misleading results in variance-based SEM: An illustration and recommendations. *Journal of the Association for Information Systems*, Vol. 13, No. 7, pp.33-49.
- Kolvereid, L. (1996a): Organizational employment versus self-employment: Reasons for career choice intentions. *Entrepreneurship Theory and Practice*, Vol. 20, No. 3, pp.23-31.
- Kolvereid, L. (1996b): Prediction of employment status choice intentions. *Entrepreneurship Theory and Practice*, Vol. 21, No. 1, pp.47-57.



- Kraus, S.J. (1995): Attitudes and the prediction of behavior: A meta-analysis of the empirical literature. *Personality and Social Psychology Bulletin*, Vol. 21, No. 1, pp.58-75. <https://doi.org/10.1177/0146167295211007>.
- Kristiansen, S. and Indarti, N. (2004): Entrepreneurial intention among Indonesian and Norwegian students. *Journal of Enterprising Culture*, Vol. 12, No. 1, pp.55-78.
- Krueger, N.F. and Carsrud, A.L. (1993): Entrepreneurial intentions: Applying the theory of planned behavior. *Entrepreneurship Theory and Practice*, Vol. 5, No. 4, pp.315-330.
- Krueger, N.F., Reilly, M.D. and Carsrud, A.L. (2000): Competing models of entrepreneurial intentions. *Journal of Business Venturing*, Vol. 15, No. 5, pp.411-432.
- Liñán, F. (2008): Skill and value perceptions: How do they affect entrepreneurial intentions? *International Entrepreneurship and Management Journal*, Vol. 4, No. 3, pp.257-272.
- Liñán, F. and Chen, Y.-W. (2009): Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice*, Vol. 33, No. 3, pp.593-617.
- Liñán, F. and Rodríguez-Cohard, J.C. (2015): Assessing the stability of graduates' entrepreneurial intention and exploring its predictive capacity. *Academia Revista Latinoamericana de Administración*, Vol. 28, No. 1, pp.77-98.
- Mahmud, I., Ramayah, T. and Kurnia, S. (2017): To use or not to use: Modelling end user grumbling as user resistance in pre-implementation stage of enterprise resource planning system. *Information Systems*, Vol. 69, No. 6, pp.164-179.
- Martin, B., McNally, J. and Kay, M. (2013): Examining the formation of human capital in entrepreneurship: A meta-analysis of entrepreneurship education outcomes. *Journal of Business Venturing*, Vol. 28, No. 2, pp.211-224.
- Mustafa, N., Ismail, Z., Tasir, Z. and Mohamad Said, M.N.H. (2016): A meta-analysis on effective strategies for integrated STEM education. *Advanced Science Letters*, Vol. 22, No. 12, pp.4225-4228. <https://doi.org/10.1166/asl.2016.8111>.
- New Age Bangladesh (2018): *Unemployment among univ graduates rises*. Available at: <http://www.newagebd.net/article/37148/unemployment-among-univ-graduates-rises>.
- Nguyen, X.T. (2020): Factors affecting entrepreneurial decision of nascent entrepreneurs belonging generation Y in Vietnam. *The Journal of Asian Finance, Economics and Business*, Vol. 7, No. 8, pp.407-417. <https://doi.org/10.13106/jafeb.2020.vol7.no8.407>.
- Oosterbeek, H., Van Praag, M. and Ijsselstein, A. (2010): The impact of entrepreneurship education on entrepreneurship skills and motivation. *European Economic Review*, Vol. 54, No. 3, pp.442-454.
- Peterman, N. and Kennedy, J. (2003): Enterprise education: influencing students' perceptions of entrepreneurship. *Entrepreneurship Theory and Practice*, Vol. 28, No. 2, pp.129-144.
- Ray, D.M. (1988): Overview essay: The role of entrepreneurship in economic development. *Journal of Development Planning*, Vol. 18, pp.3-18.
- Reyes, C. (2016): Framing the entrepreneurial university: The case of the National University of Singapore. *Journal of Entrepreneurship in Emerging Economies*, Vol. 8, No. 2, pp.134-161. [10.1108/JEEE-09-2015-0046](https://doi.org/10.1108/JEEE-09-2015-0046).

- Ringle, C., Wende, S. and Becker, J.-M. (2017): SmartPLS-3, SmartPLS GmbH, Boenningstedt. Available at: [www.smartpls.com](http://www.smartpls.com), Accessed 17 March 2021.
- Salam, M., Iskandar, D.N.F.A. and Ibrahim, D.H.A. (2017): Service learning support for academic learning and skills development. *Journal of Telecommunication, Electronic and Computer Engineering*, Vol. 9, Nos 2-10, pp.111-117.
- Scherer, R.F., Brodzinski, J.D. and Wiebe, F. (1991): Examining the relationship between personality and entrepreneurial career preference. *Entrepreneurship & Regional Development*, Vol. 3, No. 2, pp.195-206.
- Schlaegel, C. and Koenig, M. (2014): Determinants of entrepreneurial intent: A meta-analytic test and integration of competing models. *Entrepreneurship: Theory and Practice*, Vol. 38, No. 2, pp.291-332. <https://doi.org/10.1111/etap.12087>.
- Scott, J.W. (1991): The evidence of experience. *Critical Inquiry*, Vol. 17, No. 4, pp.773-797.
- Sexton, D.L. and Upton, N.E. (1984): Entrepreneurship education: Suggestions for increasing effectiveness. *Journal of Small Business Management*, Vol. 22, No. 2, pp.18-25.
- Shapero, A. and Sokol, L. (1982): Social dimension of entrepreneurship. In: Kent, C., Sexton, D. and Vesper, K. (Eds): *The Encyclopaedia of Entrepreneurship*, pp.72-90. Prentice Hall, Englewood Cliffs, NJ.
- Shook, C.L. and Bratianu, C. (2010): Entrepreneurial intent in a transitional economy: An application of the theory of planned behavior to Romanian students. *International Entrepreneurship and Management Journal*, Vol. 6, No. 3, pp.231-247.
- Shook, C.L., Priem, R.L. and McGee, J.E. (2003): Venture creation and the enterprising individual: A review and synthesis. *Journal of Management*, Vol. 29, No. 3, pp.379-399. [https://doi.org/10.1016/s0149-2063\\_03\\_00016-3](https://doi.org/10.1016/s0149-2063_03_00016-3).
- Solesvik, M.Z. (2013): Entrepreneurial motivations and intentions: Investigating the role of education major. *Education + Training*, Vol. 55, No. 3, pp.253-271.
- Solesvik, M.Z., Westhead, P., Kolvereid, L. and Matlay, H. (2012): Student intentions to become self-employed: The Ukrainian context. *Journal of Small Business and Enterprise Development*, Vol. 19, No. 3, pp.441-460.
- Souitaris, V., Zerbinati, S. and Al-Laham, A. (2007): Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources. *Journal of Business Venturing*, Vol. 22, No. 4, pp.566-591.
- Tenenhaus, M., Vinzi, V.E., Chatelin, Y.-M. and Lauro, C. (2005): PLS path modeling. *Computational Statistics & Data Analysis*, Vol. 48, No. 1, pp.159-205.
- Tkachev, A. and Kolvereid, L. (1999): Self-employment intentions among Russian students. *Entrepreneurship & Regional Development*, Vol. 11, No. 3, pp.269-280.
- Turker, D. and Selcuk, S.S. (2009): Which factors affect entrepreneurial intention of university students? *Journal of European Industrial Training*, Vol. 33, No. 2, pp.142-159.
- Van Gelderen, M., Brand, M., Van Praag, M., Bodewes, W., Poutsma, E. and Van Gils, A. (2008): Explaining entrepreneurial intentions by means of the theory of planned behaviour. *Career Development International*, Vol. 13, No. 6, pp.538-559.

- Vesper, K. and McMullan, E. (1997): New venture scholarship versus practice: when entrepreneurship academics try the real thing as applied research. *Technovation*, Vol. 17, No. 7, pp.349-358.
- Von Graevenitz, G., Harhoff, D. and Weber, R. (2010): The effects of entrepreneurship education. *Journal of Economic Behavior & Organization*, Vol. 76, No. 1, pp.90-112.
- Wang, C.K. and Wong, P.K. (2004): Entrepreneurial interest of university students in Singapore. *Technovation*, Vol. 24, No. 2, pp.163-172. [https://doi.org/10.1016/s0166-4972\(02\)00016-0](https://doi.org/10.1016/s0166-4972(02)00016-0).
- Weaver, K.M., Dickson, P.H. and Solomon, G. (2006): Entrepreneurship and education: What is known and what is not known about the links between education and entrepreneurial activity. In: Moutray, C. (Ed.): *The Small Business Economy: A Report to the President*, pp.113-156. SBA Office of Advocacy, Washington, DC.
- Wetzels, M., Odekerken-Schröder, G. and Van Oppen, C. (2009): Using PLS path modeling for assessing hierarchical construct models: Guidelines and empirical illustration. *MIS Quarterly*, Vol. 33, No. 1, pp.177-195.
- Wilson, F., Kickul, J. and Marlino, D. (2007): Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education. *Entrepreneurship Theory and Practice*, Vol. 31, No. 3, pp.387-406.
- Zhang, Y., Duysters, G. and Cloudt, M. (2014): The role of entrepreneurship education as a predictor of university students' entrepreneurial intention. *Int Entrep Manag J.*, Vol. 10, No. 3, pp.623–641. <https://doi.org/10.1007/s11365-012-0246-z>
- Zhao, X. (2012): Cross-country differences in entrepreneurial activity: The role of national cultural practice and economic wealth. *Beijing Normal University*, pp.1-49.

## BIOGRAPHY



**Beauty Akter** is a member of faculty at the Department of Innovation and Entrepreneurship, Daffodil International University, Bangladesh. She is the Executive Director of the Global Entrepreneurship Research Network (GERN)- DIU, GEN. She is also a member of faculty of the World Business Angels Investment Forum (WBAF) Business School. She has been certified as an Accredited and Qualified Global Mentor for Startups by the WBAF. She became the International Partner of WBAF in 2019, where her key role is to add value to the entrepreneurial ecosystem. Her research mastery incorporates Entrepreneurship, Entrepreneurial Ecosystem, Entrepreneurship Education, Women Entrepreneurship, Strategic Entrepreneurship, Startups. She holds an MBA specialising in Entrepreneurship.



**Md. Asif Iqbal** is a member of faculty at the Department of Innovation and Entrepreneurship, Daffodil International University, Bangladesh. Specialising in Entrepreneurship, he has completed his MBA degree. His research expertise includes Entrepreneurial Ecosystem, Entrepreneurship Education, Entrepreneurship, Technology and Entrepreneurship, Strategic Entrepreneurship. Since 2018, he has been the National Director and

International Partner of the World Business Angel Investment Forum, Executive Director of Startup Huddle Dhaka, and the Director of Startup Grind-U. Moreover, he is the Country Director of the Entrepreneurship World Cup in Bangladesh. He is an Accredited Global Mentor for Startup by WBAF.

## APPENDIX

### Measures

Constructs	Statements	Adapted from
Attitude	Being an entrepreneur implies more advantages than disadvantages to me. A career as an entrepreneur is attractive for me. If I had the opportunity and resources, I would like to start a firm. Being an entrepreneur would entail great satisfaction for me. Among various options, I would rather be an entrepreneur.	Kolvereid, 1996b, pp.50-51; Liñán and Chen, 2009, p.612
Subjective norms	My closest family members think that I should not start my own business. My closest friends think that I should not start my own business. People who are important to me think that I should not start my own business. To what extent do you care about what your closest family members think when you are to decide whether or not to start your own business? To what extent do you care about what your closest friends think when you are to decide whether or not to start your own business? To what extent do you care about what people who are important to you think when you are to decide whether or not to start your own business?	Kolvereid, 1996b, p.52; Liñán and Chen, 2009, p.612
Perceived behavioural control	To start a firm and keep it working would be easy for me. I am prepared to start a viable firm. I can control the creation process of a new firm. I know the necessary practical details to start a firm. I know how to develop an entrepreneurial project. If I tried to start a firm, I would have a high probability of succeeding.	Liñán and Chen, 2009, p.612
Entrepreneurial skill	Creativity. Flexibility. Recognition of opportunity. Problem-solving skills. Leadership and communication skills. Development of new products and services. Networking skills, and making professional contacts.	Liñán, 2008, p.270; Oosterbeek <i>et al.</i> , 2010, p.446
Entrepreneurial intention	I am ready to do anything to be an entrepreneur. My professional goal is to become an entrepreneur. I will make every effort to start and run my own firm. I am determined to create a firm in the future. I have very seriously thought of starting a firm. I have the firm intention to start a firm some day.	Liñán and Chen, 2009, p.613

(continued)

Constructs	Statements	Adapted from
Entrepreneurial behaviour	<p><b>Business planning:</b></p> <p>I have prepared a business plan.</p> <p>I have organised my business start-up team.</p> <p>I know where to get initial facilities/equipment.</p> <p>I have already acquired facilities/equipment, required for my business start-up.</p> <p>I have decided about the product/service I want to deal in.</p> <p>I have conducted a market survey.</p> <p>I have devoted my full time to my business start-up.</p> <p><b>Financing the new firm:</b></p> <p>I have saved some money to invest in my business.</p> <p>I have invested some money in initiating my business.</p> <p>I have arranged a partner who is willing to invest in my business.</p> <p>I have applied for bank funding.</p> <p>I have already received funding from the bank to initiate my business.</p> <p>I have applied for government funding.</p> <p>I have already received government funding to initiate my business.</p> <p><b>Interaction with the external environment:</b></p> <p>I have applied for a license, a patent, etc.</p> <p>I have hired some employees.</p> <p>I have started sales promotion activities.</p> <p>I have registered my business with the relevant regulatory authority.</p> <p>I have found some customers.</p> <p>I have received my first payment.</p> <p>I have a positive net income from my business start-up.</p>	Alsos and Kolvereid, 1998, p.106
Entrepreneurial Education support programmes	<p><b>Initiation</b></p> <p>“The creative atmosphere inspires us to develop ideas for new businesses”</p> <p><b>Development</b></p> <p>“The courses foster the social and leadership skills needed by Entrepreneurs”</p> <p>“The courses provide students with the knowledge required to start a new company”</p> <p>“My university supports building multi-disciplinary student teams”</p> <p><b>Active support</b></p> <p>“The university actively promotes the process of founding a new company”</p> <p>“The university provides a strong network of new venture investors”</p>	Franke and Lüthje, 2004

(continued)

Constructs	Statements	Adapted from
Environmental Factor	<p><b>Market</b></p> <p>“Startups face immediately high competitive pressures”</p> <p>“It is hard to find a business idea for a business that hasn’t been realised before”</p> <p><b>Financing</b></p> <p>“It is easy to obtain venture capital”</p> <p>“Banks do not readily give credit to start up companies”</p> <p><b>Government policy</b></p> <p>“There are sufficient subsidies available for new Companies”</p> <p>“Qualified consultant and service support for new companies is available”</p> <p>“The bureaucratic procedures for founding a new company are unclear”</p> <p>“State laws (rules and regulations) are adverse to running a company”</p> <p><b>Society</b></p> <p>“Entrepreneurs have a positive image with the society”</p> <p><b>University</b></p> <p>“The course work at the . . . university prepares you well for self-employment”</p>	Franke and Lüthje, 2004, five-point scale.

