

An integration of S-O-B-A paradigm to explore university students' entrepreneurial attitude, intention and action: do university and family support matter?

An integration
of S-O-B-A
paradigm

427

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Abstract

Purpose – The primary purpose of this study is to integrate the stimulus-organism-behavior-accomplishment (S-O-B-A) paradigm to investigate the chain effect of university students' perceived university and family support on their entrepreneurial action (EA) with a serial mediation of their attitude and intention.

Design/methodology/approach – This study introduces stratified random sample to choose respondents and a cross-sectional research design, partial least square-structural equation modeling (PLS-SEM) has applied to thoroughly investigate the behavioral intention concerned with students' entrepreneurship action.

Findings – The findings explored that perceived university support and family supports positively impact students' entrepreneurship attitude, where perceived family support creates statistically more powerful

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implications than university support. Students' attitude toward entrepreneurship positively affects their entrepreneurial intent, and finally, the entrepreneurial pursuit has an affirmative impact on students' EA.

Originality/value – This study incorporates the S-O-B-A paradigm for the very first time to investigate the effects of students' environmental support on their EA with double mediation by their attitude and intention.

Keywords Entrepreneurship, Intention, Student, Attitude, Supports

Paper type Research paper

1. Introduction

Starting a new venture during the academic period or having the intention to create a unique experience in the future after the accomplishment of the intellectual life of a university student is now a major considering issue. Since entrepreneurs equipped with theoretical knowledge and technical skills have a more successful business profile than others. In this competitive business era, entrepreneurship has drawn much attention from national leaders and policymakers because of its ability to foster innovation, ensure economic growth, open new job opportunities and make a quantum change in different social dimensions (Arrighetti, Caricati, Landini, & Monacelli, 2016; Liñán, Rodríguez-Cohard, & Rueda-Cantuche, 2011).

Galvão, Marques, and Marques (2018) and Belitski and Desai (2016) agreed that entrepreneurship promotes local investment and economic growth with social development. According to Al-Qudah, Al-Okaily, and Alqudah (2022), entrepreneurship plays a vital role to emphasize on the sustainable development and to foster the economic growth. Meanwhile, sustainable development is regarded as cornerstone of a nation's industrial revolution and overall progress. That's why entrepreneurship is now considered the most crucial issue for local, national and international politicians. Smallbone, Friederike, and Jovo (2014) signified that the feasible outcomes from entrepreneurship have an extraordinary impact on an emerging economic context where young entrepreneurs face the crisis of adequate resources and support. Formal entrepreneurship education and various supports for the students to be influential entrepreneurs along with their entrepreneurship attitude, intention and action have not identified utilizing the stimulus-organism-behavior-accomplishment (S-O-B-A) model in the prior empirical research (Saeed, Yousafzai, Yani-De-Soriano, & Muffatto, 2015). Meanwhile, literature in this area stated that students' participation in the entrepreneurship program rather than being equipped with only formal education might be much more helpful in instigating their intention to be an entrepreneur (Peterman & Kennedy, 2003).

Furthermore, Bangladesh university students possess many opportunities to be successful entrepreneurs. Huq, Huque, and Rana (2017) noted that students' entrepreneurial intention (EI) in Bangladesh largely depends on the significant role played by their University from where they have received their formal entrepreneurship education. According to the maintained statistics of the University Grant Commission of Bangladesh, admitted students at different universities in Bangladesh receive multiple supports from their university which promotes entrepreneurship (Uddin & Bose, 2012; Kabir, Haque, & Sarwar, 2017). That situation reduces unemployment by converting the dense population from a burden to a resource (Barba-Sánchez & Atienza-Sahuquillo, 2018).

This study integrates the S-O-B-A model that hasn't utilized in prior studies in this domain for the first time. It connects students' environmental situations (e.g. university and family support for being an entrepreneur) with their future entrepreneurship actions mediated by their attitude and intention toward entrepreneurship. Specifically, this study examines the impact of students' family and university support on their entrepreneurial activity mediated by their attitude and purpose, which has not investigated in prior studies. Furthermore, no investigation was conducted in Bangladesh that applied the S-O-B-A model to examine the effect of students' perceived university and family support on their entrepreneurial attitude, intention and action. To be very specific, it is urgent to link students' EI to their entrepreneurial action (EA) since

sometimes individual's desire to proceed forward might be deviated to some extent with the wave of time. That's why this study looks for investigating the direct impact of university students' EI on their EA, and it seems one of the major research gaps in this study. To the best of the author's searching over the existing literature, there is an unaddressed paradox in this domain especially with S-O-B-A model. This study undertakes the following objectives to fill up the literature gap:

- (1) To investigate students' attitude toward entrepreneurship (AE), entrepreneurship intention and action as a result of their environmental situations, such as university and family supports
- (2) To integrate the S-O-B-A model as a completely new behavioral paradigm in this domain

Authors expect that the findings of this study will help university authority and family members of students to create a favorable environment and to provide proper supports for ensuring positive entrepreneurial attitude as well as for growing up EI among university students. Moreover, the study findings will hopefully contribute to keep control on unemployment pressure for an emerging economy based country like Bangladesh.

2. Background study and theoretical underpinning

2.1 S-O-B-A model

The behavioral paradigm was developed and redesigned with psychological and social considerations to study human and animal behavior. Stimulus-organism-response (S-O-R) model (Thorndike, 1898; Woodworth, 1918; Mehrabian and Russell, 1974) and antecedent-behavior-consequence (A-B-C) model (Surratt, Ulrich, & Hawkins, 1969) was the very preliminary behavioral paradigms to suggest a theoretical research framework for investigating human behavior in different domains. Focusing on behavioral science, Davis and Luthans (1980) developed the S-O-B-C (stimulus-organism-behavior-response) and S-O-B-A model on the modification of S-O-R and A-B-C model to inquire human behavior.

This study integrates S-O-B-A model where students' university supports and their family supports are considered as stimulus (S) that explores their entrepreneurship attitude as an organism (O) of this framework, which then proceeds to the result of behavioral (B) science or their entrepreneurship intention and finally, this behavioral response accelerates students' accomplishment (A) toward entrepreneurship action of proposed theoretical research framework (Dhir, Talwar, Sadiq, Sakashita, & Kaur, 2021). This revised theoretical model explains how entrepreneurial support from homes and an entrepreneurial mindset play critical roles in encouraging university students' EI and behavior while university assistance is insufficient. Earlier models of entrepreneurial behavior focused on how an individual's natural qualities, education level, family business experience, job expectation prediction and other factors influenced their desire to start their own business. This study constructs an influencing mechanism model to analyze university students' entrepreneurial motivation and behavior as empirical confirmation for concepts that have occurred. Furthermore, due to this chain reaction, the total number of entrepreneurs will be high across the country, favorably impacting the unemployment rate, raising GDP, increasing per capita income and reducing inequity.

2.2 Students perceived university supports and perceived family supports

Students' perception of the support they have from their university for entrepreneurship has a dominant effect on their AE. Ambad and Damit (2016) noted that universities must play a noteworthy role in uplifting entrepreneurial efforts among young adults to survive in the competitive business era. Prior studies on this domain (Turner & Gianiodis, 2018; Fayolle, 2013; Fretschner & Weber, 2013) have found mixed category results, including the significantly positive, negative

or insignificant association between students' perceived university education and their future EI (Basic-Sontic, Czap, & Fuerst, 2017). Lu, Song, and Pan (2021) inquired the direct association among students' perceived university support, their entrepreneurial attitude and EI. They supported the established results which explored a statistically positive impact of students' perceived university support on their entrepreneurial attitude. A few recent works in a similar field diverted this well-accepted path testing from knowing the impact of entrepreneurship education on EI to reveal the effect of students' perceived university support on EI (Anjum, Farrukh, Heidler, & Díaz Tautiva, 2020; Choi, Park, Cho, & Chu, 2018; Eather *et al.*, 2018). Perceived university supports such as technological support (Mas-Verdú, Ribeiro-Soriano, & Roig-Tierno, 2015; Zhang, Duysters, & Cloodt, 2014), information and communication technology based supports, financial funding and consultant-based support (Munari, Pasquini, & Toschi, 2015; Maresch, Harms, Kailer, & Wimmer-Wurm, 2016) from university have a significant positive impact on their EI. Information and Communication Technology refers the integration and adoption of computer networking, applications, and technologies with people which confirms the digitalized interaction within workplace as well as in lifestyle so. Surprisingly, a recent study based on review of existing literature overruled the path between entrepreneurial education and intention where authors proved that learning focused on practical experiences shape their education toward entrepreneurship (Motta and Galina, 2023).

Meanwhile, another newly identified dominant of students' EI is their family support. Limited recent studies have revealed the impact of perceived family supports (PFS) on entrepreneurial purpose (Krichen & Chaabouni, 2021; Osorio, Settles and Shen, 2017; Carr & Sequeira, 2007; Arrighetti *et al.*, 2016). Most studies revealed that students' EI positively influences by their perceived family support.

To the best of the author's knowledge, no study has conducted earlier to explore the impact of university students' perceived university support and family support on their AE. But, we think that it will make a noteworthy contribution to justify the S-O-B-A model in this study and be helpful to policymakers in this domain to uplift students' movement to start a new venture as part of their career. Students' AE is one of the most significant dominant predictors of their EI and action (Schwarz, Wdowiak, Almer-Jarz, & Breiteneker, 2009; do Paço, Ferreira, Raposo, Rodrigues, & Dinis, 2011; Engle *et al.*, 2010). Furthermore, Fishbein and Ajzen (1975) signified that an individual's attitude significantly impacts future behavior concerning a particular domain of action. To fill-up this specific research gap, this study develops two hypotheses based on the literature as mentioned earlier, and the hypotheses are as follows:

H1a. Students perceived university support as a significant positive connection with their AE.

H1b. Students perceived family support has a significant positive connection with their AE.

2.3 Attitude toward entrepreneurship

From the perspective of behavioral science, attitude is nothing but an individual's positive or negative feelings toward a human being, an event or a situation. Fishbein and Ajzen (1975) stated that attitude results from an individual's beliefs on which their behavior will explore specific dimensions. Attitude is something that drives human being to behave positively or negatively in response to inner feelings; sometimes it might be detrimental or not to the individual (Setiawan, Kasim, & Ardyan, 2022). Meanwhile, the attitude has three significant components to incorporate such as cognitive, affective and behavioral (Breckler, 1984). Many studies conducted earlier to investigate the impact of students' attitudes on their future choice of starting a career as an entrepreneur (Youssef, Boubaker, Dedaj, & Carabregu-Vokshi, 2021; Nabi and Liñán, 2013; Soria-Barreto, Honores-Marin, Gutiérrez-Zepeda, & Gutiérrez-Rodríguez, 2017). Anjum *et al.* (2020) added an irregular construct like student's creativity along with their AE to predict students'

entrepreneurial intent and revealed the positive influences of these two constructs on students' EI. An empirical study showed that students' positive or negative feelings toward starting a new venture affect their future EI (Alkhalaf, Durrah, Almohammad, & Ahmed, 2022; Youssef *et al.*, 2021; Mumtaz, Munirah, & Halimahton, 2012; Maes, Leroy, & Sels, 2014). Ayalew and Zeleke (2018) found from their study that students' belief and feeling about entrepreneurship can successfully predict their future intention to start their working life as an entrepreneur. They recognized a significant positive association between entrepreneurial attitude and sense. According to Fragoso, Rocha-Junior, and Xavier (2020), students' entrepreneurial attitude is one of the strongest predictor toward their EI among other constructs such as personality traits, self-efficacy, social recognition and entrepreneurial mindset which could successfully predict their intention to start a new business. Recently, another study conducted to unveil the effect of entrepreneurial education and attitude on EI stated that university student's entrepreneurial education influences their entrepreneurial attitude which then stimulates their EI (Liao, Nguyen, Chi, & Nguyen, 2022; Darwish, Kassim, & Bayat, 2022). Liu, Lin, Zhao, and Zhao (2019) identified that EI creates a mediating role rather than a direct one in the relationship between students' attitudes and EA. In shifting the scholar's focus on gender role in determining students' EI, entrepreneurial attitude is stronger for female rather than male to predict their intent to start a new start-up (Amofah and Saladrigrues, 2022). Though several significant studies in this domain previously examined the impact of students' entrepreneurial attitude on their EI but there are still anomalies and unaddressed paradox in association between these two constructs. Focusing on the above literature, the authors propose the hypothesis as follows:

- H2. The impact of students' attitudes toward entrepreneurship on their EI is positive and statistically significant.

2.4 Entrepreneurship intention

EI indicates the individual's wishes or desire that guides or instructs the action of taking the initiative to start up a new venture (Hattab, 2014). Anjum, Amoozegar, Farrukh, and Heidler (2022) depict an interesting view regarding EI as an individual's mindset to explore behavioral desire, demand, expectation and willingness to start a new start-up. Existing literature on discovering the link between students' EI and action is very limited. Baluku, Kikooma, Otto, König, and Bajwa (2020) conducted a study on illuminating the double mediating effect of entrepreneurial activity at African University, which demonstrated that an individual EI would pressurize their EA with the mediating result of implementation action and moderating effect of perceived family support. A report by Sieger, Raemy, Zellweger, Fueglistaller, & Hatak, 2021 demonstrates that EIs have linked university education and family support with intentions. It also explores the links between perceived support, education and attitudes as part of the theory of planned behavior. The findings of this report tried to make a link between the aspects of theory of planned behavior (TPB) and family environment, entrepreneurial education and attitudes. However, another study by Misoska *et al.* (2016) in the context of Macedonia explores the drivers of EIs among business students, which resonance what TPB suggested. It found significant impact of entrepreneurship education, support systems and a favorable business climate on EIs. Theory of Planned Behavior (TPB), originally developed by Fishbein and Ajzen (1975), denotes that human's behavioral intention and action are shaped by their belief systems such as subjective norms, perceived behavioral control and attitude.

To the best of my knowledge, there are no significant studies on checking out the direct or mediating influence of students' entrepreneurial wishes on their action or behavior in starting a new venture. Hence, this is another critical point where this paper has a solid opportunity to contribute managerially or theoretically in this domain. Therefore, the hypothesis is as follows:

- H3. Students' entrepreneurship intention positively affects entrepreneurship action.

3. Methodology

3.1 Sampling frame and survey instrument

This study used stratified random sampling (Zahid, Shabbir, & Alamri, 2022) and a structured questionnaire-based cross-sectional survey (Alam et al., 2022a) to investigate the proposed theoretical framework built with the S-O-B-A behavioral paradigm. This empirical study’s endogenous and exogenous variables are measured using a five-point Likert-type scale.

The students’ perceived university support scale was measured by 13 items incorporating three sub-categories such as perceived education support and perceived concept development supports adopted from Kraaijenbrink, Bos, and Groen (2009), and perceived business development helps drawn from Turker and Selcuk (2009). Another independent variable of this study is students’ perceived family support to start their new business, which measured with five item-scale adopted from Osorio, Settles and Shen (2017). Students’ attitudes and EI as mediating variables of this empirical study adopted from one of the most contributing studies (Lechuga Sancho, Martín-Navarro, & Ramos-Rodríguez, 2020). In this domain, five item-scale used to measure students’ attitudes, and six item-scale was deployed to measure their EI toward future wishes to start their career as an entrepreneur. The dependent variable of this study measured with eight item-scale adopted from two prior established literature conducted by Valliere (2015) and Baluku et al. (2020).

With the help of a stratified random sampling technique, Rajshahi University has selected as the study area. The rationale for choosing this University is that it is the second largest public University in Bangladesh, where a total of 9 faculties and 54 departments are now actively working with more than 35 thousand students (Saha and Awal, 2021).

The respondents were sent the link to the virtually structured questionnaire for students’ perceived university support, family support, AE and EI, distributed between March 10th and May 10th, 2021, via email and social networking sites. As part of the justification of the collected responses from the students by considering the nature of the dependent variable, the questionnaire on students’ EA distributed using the same procedure between January 5th and February 5th, 2022. A total of 280 pupils responded to the questionnaire that was

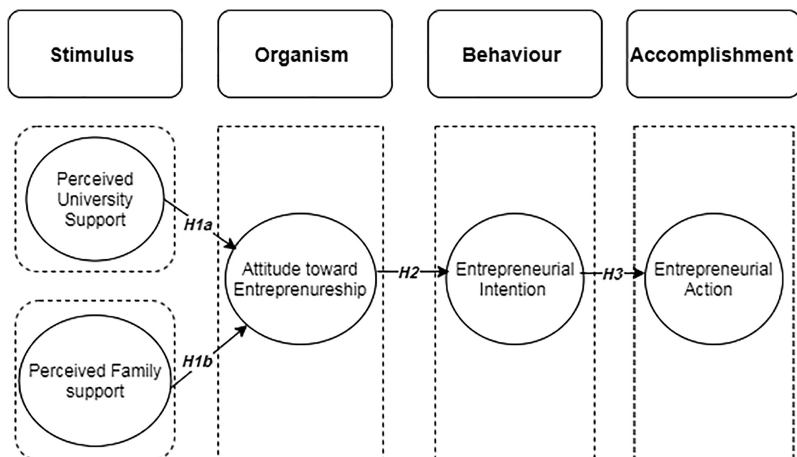


Figure 1.
Theoretical
research model

delivered. Nine responses discarded after being inspected for unengaged and partial outliers, leaving 271 answers to test the hypotheses.

3.2 Common method bias test

The study result shows that the variance of the extraction sum of square loading is 29.54% which is less than the maximum limit (50%). Based on this finding, the data set of this study is entirely bias-free with only 29.54% variation and is useable to run for further analysis (Ahmad et al., 2021; Khattak, Saeed, Rehman, & Fayaz, 2021; Arrivillaga, Rey, & Extremera, 2022).

Since this study used a self-administered questionnaire to obtain data on exogenous and endogenous variables from the same respondents, Harman’s single factor test for common method bias (CMB) used to clarify the business of the dataset (Alam et al., 2022b; Dahal, 2022; Podsakoff & Organ, 1986).

3.3 Respondents’ profile

The analytical results for respondents’ characteristics concerning their gender, marital status and educational level displayed in Table 1. This analysis completed through statistical package for social science (v22).

Table 1 shows that 150 students (55.35%) are male and 121 students (44.65%) are female out of 271 collected responses. According to the marital status construct, 253 respondents are single, accounting for 93.36% of all responses, whereas just 18 are married, accounting for 6.64% of all responses.

Data processing output divides respondents into two tiers based on their educational level: 85.98% (233) are working on their honors level, while 14.02% (38) are working on their master’s level.

4. Analysis

The partial least square-structural equation modeling (PLS-SEM) technique was applied to examine this study’s measurement and structural models. SmartPLS (partial least square) version 3.3 is chosen and used to perform the task of PLS-SEM.

4.1 Analysis of measurement model, ensuring reliability and validity

4.1.1 The goodness of fit measurement. Table 2 shows that the data set has complete goodness of fit measure to examine the structural and measurement model with the PLS-SEM

Constructs	Characteristics	Frequency	Percent	Valid percent
Gender	Male	150	55.35	55.35
	Female	121	44.65	44.65
Marital status of participants	Unmarried	253	93.36	96.36
	Married	18	6.64	6.64
Educational level	Honor’s	233	85.98	85.98
	Masters	38	14.02	14.02

Table 1. University students’ profile

	Saturated model	Estimated model
SRMR	0.062	0.075
d_ULS	1.423	1.957
d_G	0.431	0.446
Chi-Square	665.436	681.416
NFI	0.763	0.853

Table 2. Goodness of fit index

method. The study results explore that the standardized root mean square residual (SRMR) of the estimated model is 0.075, which is lower than the threshold value (SRMR < 0.08) and which confirmed that the model's goodness of fit measure (Forte, Favieri, Tedeschi, & Casagrande, 2021; Schubert, Rademaker, & Henseler, 2022; Ly & Ly, 2022; Hu & Bentler, 1999). The study findings reveal a perfect fitness of measurement model to PLS-SEM application as the normed fit index (0.853) of the estimated model is closer to 1 (Lohmöller, 1989; Al-Marouf, Alfaisal, & Salloum, 2021; Rasool *et al.*, 2022).

4.1.2 Convergent validity, internal consistency and multicollinearity. Table 3 shows the measurement model's convergent validity and composite reliability results. Bagozzi and Yi's (1988) threshold for removing items developing exogenous and endogenous variables of the conceptual model which helps to ensure a data set's reliability and validity existed between 0.60 and 0.94, which is supported by several significant previous studies (Kacmar and Carlson, 1997; Khan, Khan, & Gul, 2019). The minimum outer loading in the measurement model is 0.606, and the maximum loading is 0.909.

All the latent variables explore higher values than the threshold value (CA/CR > 0.70) with structural equation modeling based analysis against Cronbach's alpha and composite reliability that ensured the internal consistency of the measurement model (Purwanto, & Sudargini, 2021; Nunnally, 1978; Hair, Black, Babin, & Anderson, 2010; Mehtaa, Garg, & Gharib, 2022). Cronbach's alpha and composite reliability for all the constructs are respectively presenting here perceived university supports (PUS): $\alpha = 0.732$, CR = 0.824; (PFS): $\alpha = 0.797$, CR = 0.861; (AE): $\alpha = 0.848$, CR = 0.891; (EI): $\alpha = 0.847$, CR = 0.908; (EA): $\alpha = 0.738$, CR = 0.822.

On the other hand, this study demonstrated that it possesses convergent validity. Table 3 shows that the average variance extracted (AVE) for all research variables may be easily verified; variables including PUS = 0.502; PFS = 0.557; AE = 0.622; EI = 0.666; EA = 0.540, which perfectly satisfy the threshold value supported by the literature (Hair, Ringle, & Sarstedt, 2013; Magalhães, & Limpo, 2022; Torres, Augusto, & Neves, 2022). When the AVE reveals a value between 0.55 and 0.65, the scholars in this domain claim that the measurement model's convergent validity is validated.

4.1.3 Discriminant validity. The results of discriminant validity presents in Table 4. The discriminant validity of the measurement model assesses using Fornell and Larcker's (1981) criterion. Any study using latent variables must evaluate the discriminant validity to avoid multicollinearity problems, and the Fornell and Larcker's criterion is the most used technique for doing so (Ab Hamid, Sami, & Mohamad Sidek, 2017). The obtained result revealed that the square roots of AVE for all latent variables are bigger than their correlation with each other. The square roots of AVE (AE = 0.789; EA = 0.735; EI = 0.816; PFS = 0.746; PUS = 0.698) are higher than the r value between AE and EA; EI and AE; PFS and AE; PUS and AE, according to the PLS results. Consequently, the conceptual model's discriminant validity validates in Table 4, supported by Fornell and Larcker (1981).

4.2 Hypotheses testing through analyzing structural model

SmartPLS 3.3 is used to examine the structural model with the help of PLS-SEM. This study employs bootstrapping calculations in conjunction with the bias-corrected accelerated (BCa) bootstrap confidence interval method, a two-tailed test type, and a 5% significant threshold, all with the help of PLS-SEM. The bootstrap-based hypotheses are tested using the 5,000 subsamples. The outer model reveals the loading of variable items and various constructs of this model that display the AVE. Figure 2 shows the structural model of this study, which publishes co-efficient beta along with the level of significance of each path. The outer model reveals the loading of variable items and various constructs of this model that display the AVE.

Table 5 shows the results concerning hypotheses testing with beta co-efficient and p -value. The study findings show that the perceived university support has a positive

Latent variable and sources	Items	Factor loading	Composite reliability	Average variance extracted	Cronbach alpha (α)
Perceived university supports (Kraajjenbrink <i>et al.</i> , 2009; Shi, Yao, and Wu, 2019)	<i>Perceived Education Supports</i>		0.824	0.502	0.732
	PSU3. My University offers internship focusing on entrepreneurship	0.662			
	PSU4. My University offers a bachelor's or master's course on entrepreneurship	0.642			
	PSU5. My University arranges conferences/workshops on entrepreneurship	0.836			
	<i>Perceived Concept Development Supports</i>				
	PSU8. My University motivates students to start a new business	0.606			
	PSU10. My University provides students with the knowledge required to start a new business	0.722			
	PFS1. My family members will approve my actions	0.818			
	PFS2. My family members will encourage me to start my business	0.768			
	PFS3. If necessary, my family members will loan me money to help me start my own business	0.726			
Perceived family supports (Osorio, Settles and Shen, 2017)	PFS4. If necessary, my family members will provide me materials and equipment to help me start my own business	0.791			
	PFS5. My family members will give me advice to start my own business	0.610			
	AE1. A career as entrepreneur is attractive for me	0.770			
	AE2. Being an entrepreneur implies more advantages than disadvantages to me	0.793			
	AE3. Among various options, I would rather become an entrepreneur	0.729			
Attitude toward entrepreneurship (Lechuga Sancho <i>et al.</i> , 2020)	AE4. If I had the opportunity and resources, I would become an entrepreneur	0.815			
	AE5. Being an entrepreneur would entail great satisfactions for me	0.833			
	EI1. I am determined to create a business in the future	0.839			
	EI2. I am ready to do anything to be an entrepreneur	0.909			
	EI4. I will make every effort to start and run my own business	0.776			
	EI5. I have the strong intention to start a business someday	0.758			
Entrepreneurial intention (Lechuga Sancho <i>et al.</i> , 2020)	EI6. My professional goal is to become an entrepreneur	0.787			
			0.908	0.666	0.847

(continued)

Table 3. Convergent validity and reliability

Latent variable and sources	Items	Factor loading	Composite reliability	Average variance extracted	Cronbach alpha (α)
Entrepreneurial action (Valliere, 2015; Baluku <i>et al.</i> , 2020)	EA1. I have developed a business plan with an intention of implementing it	0.841	0.822	0.540	0.738
	EA2. I have obtained valuable inputs for the business (e.g. land, business premises/space, raw materials, etc.)	0.660			
	EA6. I have registered the business or in the process of registering the business with the relevant authorities	0.624			
	EA7. I have taken effort to harness/solicit for the required resources to start the business (e.g. start-up capital)	0.792			
Note(s): PUS-Perceived University Supports; PFS-Perceived Family Supports; AE-Attitude toward Entrepreneurship; EI- Entrepreneurial Intention; EA-Entrepreneurial Action					

association with students' entrepreneurship attitude though the impact is statistically insignificant (β : 0.089; $p > 0.05$), and student's family support also has a positive and statistically significant impact on their AE (β : 0.695; $p < 0.05$). So, as a result of this, the results regarding hypotheses testing support **hypotheses 1a** and **1b**. Meanwhile, the findings of this study reveal that students' AE has an affirmative and statistically significant effect on their entrepreneurial intent (β : 0.575; $p < 0.05$), and finally, the results explore that university students' EI has a strong positive impact on their future action toward entrepreneurship (β : 0.839; $p < 0.05$). Therefore, in this point of analysis, **hypothesis 2** and **hypothesis 3** are also supported by the findings of this study.

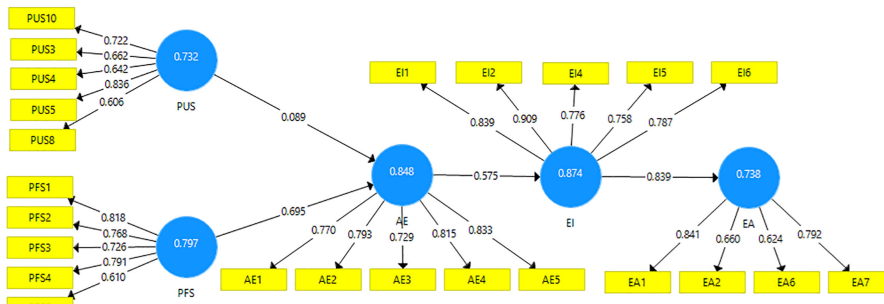
5. Discussion and implication

The main aim of this quantitative study was to determine the effect of students' environmental supports (university and family supports) on their entrepreneurial attitude,

	AE	EA	EI	PFS	PUS
AE	0.789				
EA	0.677	0.735			
EI	0.575	0.739	0.816		
PFS	0.743	0.609	0.561	0.746	
PUS	0.472	0.549	0.582	0.552	0.698

Note(s): PUS-Perceived University Supports; PFS-Perceived Family Supports; AE-Attitude toward Entrepreneurship; EI- Entrepreneurial Intention; EA- Entrepreneurial Action

Table 4. Discriminant validity



Note(s): PUS-Perceived University Supports; PFS-Perceived Family Supports; AE-Attitude toward Entrepreneurship; EI-Entrepreneurial Intention; EA-Entrepreneurial Action

Figure 2. Structural equation model

Hypotheses	Relationship	Std. Beta	p values	Decision
H1a	PUS → AE	0.089	0.08	Accepted
H1b	PFS → AE	0.695	0.02	Accepted
H2	AE → EI	0.575	0.01	Accepted
H3	EI → EA	0.839	0.00	Accepted

Note(s): PUS-Perceived University Supports; PFS-Perceived Family Supports; AE-Attitude toward Entrepreneurship; EI- Entrepreneurial Intention; EA- Entrepreneurial Action

Table 5. Hypotheses testing: Bootstrapping direct effect result

intention and future action on the ground of the stimulus-organism-behavior-response research paradigm. To the best of the researcher's knowledge of the literature in this domain, there is no published work with the same theoretical framework, which is based S-O-B-A paradigm. The S-O-B-A model is an updated and somewhat revised form of the S-O-R and A-B-C model that usually uses to explore and predict human behavior in a social setting.

This study examined a total of four hypotheses. The findings of this paper regarding [H1a](#) and [H1b](#) denoted that perceived family support than university support has a more substantial impact on students' AE, and both have a positive effect on their entrepreneurial attitude. And this finding was supported by several limited significant studies since the literature is not vast enough. [Osorio et al. \(2017\)](#) found that students' perceived university support is not significantly related to their entrepreneurial attitude and intention. Still, students' family support is significantly and positively associated with their attitude and sense toward entrepreneurship. As a result, university authorities and policymakers should emphasize enhancing students' family support rather than university supports to foster students' positive attitude and intention toward entrepreneurship.

On the other hand, the hypothesis testing results on [H2](#) specify that students' positive or negative attitudes create a considerable and statistically significant impact on their EI. The development is currently supported and matched up with a few published works. [Jena \(2020\)](#) stated that students' positive thinking or feeling toward entrepreneurship has an eye-catching impact on their future on their intent to be an entrepreneur. At the same time, [Vamvaka, Stoforos, Palaskas, and Botsaris \(2020\)](#) indicated in their paper that students' affective AE pressurizes their positive intention for being an entrepreneur. From PLS-SEM based generated results of this study and other related literature, it emphasizes that university students' positive attitude is mandatory to instill them into entrepreneurs. So policymakers must take this fact into their consideration.

Finally, [hypothesis 3](#) examines as the predecessor. The findings of this study show that students' EI is positively associated with their EA, and the relationship has statistical significance. The literature on exploring the relationship between students' entrepreneurial intent and effort is too limited. In our best knowledge, no single study conducted to examine the direct relationship between students' EI and action. But, for the very first time with the application of the S-O-B-A paradigm, this study did that and explored a positive relationship between these two closely related and dependent variables. Therefore, the results suggest that university authorities, government and policymakers must take care of students' EI to become successful entrepreneurs, which will be the source of employment and higher GDP.

5.1 Theoretical implications

As mentioned earlier, the S-O-B-A model is the revised form of previously developed two renowned models, including S-O-R and A-B-C. This research paradigm is also helpful in analyzing and predicting human behavior in various social and organizational settings, like another behavioral model. The S-O-B-A model is used to develop and support the theoretical framework of this study. The unique thing is that, to the best of my knowledge of existing literature in this domain, this is the first study to explore the chain effect of students' environmental support on their entrepreneurial attitude, intention and action where the S-O-B-A model is applied. Furthermore, the student's university and family support stimulate their AE as an organism, where their attitude generates positive or negative behavior which has a positive impact on their EA. So, the S-O-B-A model has a perfect explanation and justification for linking up this study's exogenous and endogenous variables.

Therefore, this study has undoubtedly made a theoretical contribution in this domain since it matches with and justifies the result. It introduced the S-O-B-A model in this domain.

5.2 Managerial implications

University authorities, policymakers and government might get something helpful from the findings of this study. For the first time, this study successfully explores the positive impact of students' university and family support on their entrepreneurial attitude. It reveals that the students' family support is a stronger predictor of their attitude than university support. Therefore, policymakers and government should emphasize creating awareness among the students' families to give their children the necessary support and remove obstacles on the path to becoming an entrepreneur. The study results also show that students' attitude has a positive and statistically significant impact on their intent to be an entrepreneur, which also affects their EA. Therefore, government and policymakers must take serious steps to uplift students' positive entrepreneurial attitude that generates their EI and action. As a result of this chain effect, the total number of entrepreneurs will be high across the country, which positively affects minimizing the unemployment rate, increasing GDP, increasing gross national product which indicates to actual money value of total production of goods and services obtained by a nation within one year of time duration, and enhancing per capita income. On the other hand, the scenario won't be optimistic enough if governments and policymakers fail to keep track of this chain.

5.3 Limitation and opportunity for future researchers

Like other studies, this paper has limitations connected to time, budget and other phenomena. Moreover, it was impossible to conduct the data collection survey on all universities in Bangladesh for time and budgetary limitations. The researchers may consider this gap in their future research to contribute to the existing literature in this domain. This paper only uses the S-O-B-A model to give theoretical support to the hypothetically developed framework. The future researcher can apply other models like the theory of planned behavior and S-O-B-A to conduct rigorous analysis. Interested authors may consider students' self-efficacy and governmental support for the entrepreneur as stimuli along with their family and university support to achieve an impactful study in this domain with the same model.

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