

Role of Entrepreneurial Education, Family Background, Attitude and Self Efficacy in Determining Students' Entrepreneurial Intention: The Moderation and Mediation Approach

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<https://doi.org/10.24191/ajue.v19i4.24624>

Received: 31 May 2023

Accepted: 24 October 2023

Date Published Online: 11 November 2023

Published: 11 November 2023

Abstract: Entrepreneurship has been given thoughtful attention due to its importance in economic growth and job creation. Developing countries like Malaysia have encouraged students to be involved in entrepreneurship as their career choice to reduce the graduate unemployment level in the country. As a part of this effort, entrepreneurship subjects were made compulsory for all university students regardless of their field of study. Hence, understanding the factors that influence the engagement of these young minds in entrepreneurial endeavors holds significant importance. Thus, the main focus of this study is to explore how entrepreneurial education, family background, self-efficacy, and attitude influence the entrepreneurial intentions of undergraduate students. The sample consists of 429 UiTM students who have taken the entrepreneurship course. The data was analyzed using SPSS and Smart PLS 4.0. The findings revealed a significant relationship between students' entrepreneurial education, family background, and attitude toward students' entrepreneurial intentions. However, self-efficacy does not have a significant relationship with entrepreneurial intentions. The results also extracted that entrepreneurial attitudes moderate the relationship between entrepreneurial education, family background, and entrepreneurial intention. Nevertheless, no significant mediating effect was found between entrepreneurial education, family background, and self-efficacy concerning entrepreneurial intentions.

Keywords: Entrepreneurial Intention, Entrepreneurial Education, Family Background, Self-Efficacy, Attitude.

1. Introduction

Entrepreneurship has been recognized as the engine driving the economy of most countries. The importance of entrepreneurship is on the rise worldwide, and entrepreneurial activity has emerged as a key driver for boosting employment rates in nearly every nation (Ismail, Khalid, Othman, Jusoff, Rahman, Kassim, & Zain (2009). The entrepreneurial economy is expected to play a critical role in the prosperity of economies. Over the last few years, many research studies have established the significant impact of universities on entrepreneurial development. Consequently, there has been a significant emphasis on promoting entrepreneurship through entrepreneurial education (Agrawal &

Ting, 2022). In Malaysia, to nurture and sustain entrepreneurial engagement among young minds, the Malaysian government has initiated the Entrepreneurship Action Plan of Higher Education Institutions (2016-2020) to promote entrepreneurship education and development in institutions of higher learning (Sani, 2018). The initiatives contributed to the establishment of formal entrepreneurial education at the local higher education institutions (HEIs) in Malaysia. Apparently, all graduate students at institutions of higher learning are required to take entrepreneurship courses as a compulsory subject. Entrepreneurship education is considered one of the approaches to training students with relevant entrepreneurial skills and inspiring them to become self-employed rather than to compete for jobs in public or private organizations (Maluda and Alias, 2022). Entrepreneurial education is expected to help in reducing graduate unemployment levels in the country, as it is expected to generate more job opportunities, enhance economic growth and promote innovativeness (Maluda and Alias, 2022). Yet, the question remains, what are the factors that can lead to a greater intention among students to become an entrepreneur? As such, this research aims to determine the factors that affect the entrepreneurial intentions of UiTM graduating students. It also aims to fill the gap by evaluating the mediating effect of self-efficacy towards entrepreneurial intention and the moderation effect of attitude towards entrepreneurial intention.

2. Literature Review

2.1 Entrepreneurial Intention

Entrepreneurial intention can be defined as the process of forming and making decisions to create new business ideas (Setiawan and Lestari, 2021). Entrepreneurial intention is a vital factor in the entrepreneurship process. It is developed based on the characteristics, needs, values, habits, and beliefs of an entrepreneur (Lestari, 2019). According to Drucker (1985), the entrepreneurial character is a discipline that can be learned and has nothing to do with genes, mysteries, or magic. However, although entrepreneurship can be learned but Jones and English (2004, p. 417) insisted that ‘no amount of education could provide business success for those who lack the “entrepreneurial spirit’’. This is supported by Ajzen (1991) who claims that entrepreneurship is a planned behavior where it can be predicted by the intention of the behavior which is influenced by the subjective attitude of the potential entrepreneurs. The higher the intention, the higher the entrepreneurial behavior (Kong, Zhao, Tsai; 2020). The Behavioral theory was further developed by Fishbein (2000) who proposed the Integrated Behavioral Model with the addition of self-efficacy towards the behavior. This study attempts to integrate both the variables of attitude and self-efficacy together with two additional constructs namely entrepreneurship education and family background in determining the entrepreneurial intention.

2.2 Attitude

Attitude refers to “the degree of a person’s favorable and unfavorable evaluation or appraisal of the behavior in question”. Attitude plays an important role in predicting and explaining human behavior (Ajzen, 1991). A study on the entrepreneurial intention of university students in Spanish universities, it was found that attitude has a significant positive relationship towards the entrepreneurial intention of university students (Sanchez, Aranda & Gonzalez, 2022). Similarly, another study among Spanish university students also revealed a positive significant relationship between attitude and entrepreneurial intention (Amofah & Saladrigues, 2022). Further, Attitude was also found to be significantly related to entrepreneurship intention among final-year management students at three universities in different states in Malaysia (Bazkiaei, Heng, Khan, Saufi & Kasim; 2020). Equally, another study on entrepreneurship intention among university students at Multimedia University in Malaysia also found a significant positive relationship between attitude and entrepreneurial intention in encouraging entrepreneurial intention among youngsters (Hassan, Sade, Rahman; 2020). Thus, we hypothesized that the attitude of students will positively affect the entrepreneurship intention among the under graduating students.

H1: Attitude has a significant positive relationship towards entrepreneurial intention.

2.3 Self-Efficacy

Self-efficacy refers “to an individual's belief in his or her capacity to execute behaviors necessary to produce specific performance attainments” (Bandura, 1977). Garaika and Margahana (2019) stated that self-efficacy significantly affects the entrepreneurial intention of young entrepreneurs in developing countries. Further, self-efficacy was also found to be significantly related to entrepreneurship intention among Management students at Mercu Buana University Indonesia. The study reveals that the higher student's confidence in their ability, the higher their interest in entrepreneurship (Sandi & Nurhayati, 2019). Similarly, studies conducted among Malaysian students also revealed a positive significant relationship between self-efficacy and entrepreneurial intention (Alshebamia, Al-Jubarib, Alyoussef & Razad, 2020; Saraih, Aris, Mutalib, Ahmad, Abdullah & Amlus (2018). Thus, we hypothesized that the self-efficacy of students will positively affect the entrepreneurship intention among the under graduating students.

H2: Self Efficacy has a significant positive relationship towards entrepreneurial intention.

2.4 Entrepreneurial Education (EE)

Entrepreneurship Action Plan (2016-2020) which was introduced by the Ministry of Higher Education in Malaysia, aims to prepare students to be more independent by earning an income through entrepreneurship while studying and eventually the efforts to be expanded once the students graduated. It is expected that entrepreneurial education with solid theory and practical experiences will better prepare the students to face real entrepreneurship challenges (Hassan, Sade & Rahman, 2020). Studies have found that EE significantly influences the entrepreneurial intention, attitude and self-efficacy of entrepreneurs. Bazkiaei et. al. (2020) discovered that EE is significantly related to Entrepreneurship intention and Attitude among Malaysian final-year management students at three public research-intensive universities in Malaysia namely University Malaya, Universiti Teknologi Malaysia, and University Sains Malaysia. Additionally, in a study on the Community College of Abqaiq students' entrepreneurial intention, it was found that EE has a significant effect on the student's attitude and self-efficacy toward the intention. The study recommended that more emphasis should be given to entrepreneurial education in changing the attitude and improving the self-efficacy of students towards entrepreneurship (Alshebami et. al., 2020) Thus, we hypothesized that entrepreneurship education will positively affect the attitude, self-efficacy, and entrepreneurship intention among the under graduating students.

H3: Entrepreneurship Education has a significant positive relationship towards entrepreneurship intention.

H4: Entrepreneurship Education has a significant positive relationship towards attitude.

H5: Entrepreneurship Education has a significant positive relationship towards self-efficacy.

2.5 Family Business Background (BUSBG)

Business Background or family environment refers to family members particularly parents who are involved in entrepreneurship. Studies found that students from families who have business backgrounds can play an important role as a guide for the future of their children. They can indirectly influence the interest and perception of the children towards entrepreneurship (Mahmood, Zahari, Ibrahim, Nik Jaffar & Yaacob, 2021; Sandi & Nurhayati, 2019; Farrukh, Khan, Khan, Ramzani, & Soladoye, 2017). A study by Hutasuhut (2018) on the effect of family environment towards entrepreneurial intention finds that students with a family business background have a greater degree of entrepreneurial intention compared to non-business background students. Similarly, the study also

found that students with family members who are entrepreneurs have very high chances to become entrepreneurs in the future (Fragoso, Rocha-Junior & Xavier, 2020). On the effect of family environment on attitude and self-efficacy, studies found that having a self-employed father will give students more exposure to the knowledge of entrepreneurship at an early age, which in turn will affect their attitude and self-efficacy towards entrepreneurship (Llamazares, Luis-Rico, Torre-Cruz, Herrero, Jiménez, Cámara & Eguizábal, 2019; Krueger, Reilly & Carsrud, 2000). Also, the family environment was found to be significantly related to students' entrepreneurial attitude in a study among the undergraduate students enrolled in the Small Business Institute (SBI) program at multiple universities in the USA. The study reveals that these students have a greater sense of achievement, innovation, and personal control (Harris & Gibson, 2008). Thus, we hypothesized that a business background will positively affect the attitude, self-efficacy and entrepreneurship intention among the under graduating students.

H6: Business Background has a significant positive relationship towards entrepreneurship intention.

H7: Business Background has a significant positive relationship towards attitude.

H8: Business Background has a significant positive relationship towards self-efficacy

2.6 Mediation Role of Self-Efficacy

Many previous studies have confirmed that self-efficacy is one of the strongest predictors of entrepreneurial intention (Kumar & Shukla, 2022; Anwar, Jamal, Saleem & Thoudam, 2021; Elnadi & Gheith, 2021; Koe, Krishnan & Alias, 2021). Other studies also have analytically testified and confirmed that self-efficacy also mediates relationships between different variables and entrepreneurial intention (Elnadi & Gheith, 2021; BarNir, Watson & Hutchins (2011). A study by Setiawan and Lestari (2021) reveals that self-efficacy plays a significant role in the relationship between entrepreneurship education and intention. Similarly, a study conducted to determine the role of entrepreneurship education in shaping the entrepreneurial intention of Indian University students revealed that self-efficacy plays a vital mediating role and strengthens the effect of the relationship. Another study was conducted among vocational school students in Jember which examines the relationship between entrepreneurship education, family environment, self-efficacy, and entrepreneurial intentions, and finds that self-efficacy significantly mediates the relationship between entrepreneurship education and family environment towards entrepreneurial intention (Rastiti, Widjaja & Handayati, 2021). Similarly, another recent study conducted among undergraduate students who are currently taking entrepreneurship courses in East Java discloses that self-efficacy mediates the relationship between entrepreneurship education and family environment towards interest in entrepreneurship (Putra & Sari, 2022). Thus, we hypothesized that self-efficacy will mediate the relationship between Entrepreneurship education and Business Background toward Entrepreneurial Intention among undergraduate students.

H9: Self-Efficacy positively mediates the relationship between entrepreneurship education and entrepreneurial intention.

H10: Self-Efficacy positively mediates the relationship between business background and entrepreneurial intention.

2.7 Moderating Role of Attitude

In this study also, authors have proposed to investigate the moderating role of attitude on the relationship between entrepreneurial education, family environment, and entrepreneurial intention.

Hansemark (1998) states that entrepreneurship education is seen as a model for changing entrepreneurs' attitudes and motives. An important prerequisite for success in a new business is the desire or ability to do so. As such, entrepreneurial attitudes are clearly required not only in classical entrepreneur careers but also in high-demand independent employment relationships (Frank, Korunka, Lueger, & Mugler, 2005). Previous researchers have found that the direct effect of entrepreneurial education on entrepreneurial intention depends on the level of one's entrepreneurial attitude (Anwar, Saleem, Thoudam, Islam & Khan, 2020; Roy, Akhtar & Dass, 2017). However, researchers have clarified that the concept of attitude does not refer to any specific act or response of an individual but it is a quality of dealing with ideas rather than events (Fazio, 2007). As the behavioural attitude of an individual is prone to changes depending on situations, thus it is subject to moderation by the level of entrepreneurial attitude (Hassan, Saleem, Anwar & Hussain, 2020). Thus, we hypothesized that attitude will moderate the relationship between Entrepreneurship education and Family Environment towards Entrepreneurial Intention among under graduate students.

H11: Attitude positively moderates the relationship between entrepreneurship education and entrepreneurial intention.

H12: Attitude positively moderates the relationship between business background and entrepreneurial intention.

3. Research Methodology

3.1 Data Collection and Sample

This study uses data collected from an online Google survey form from Universiti Teknologi MARA undergraduate students who have taken the entrepreneurship subject during the semester of March to July 2020. The online questionnaires were distributed by the lecturers in charge of entrepreneurship subjects at UiTM at the end of the semester in August 2020. A total of 429 questionnaires were successfully completed and returned from 11 branch campuses. The sample was made up of science and technology students namely (87%) and non-Science and Technology students (13%). The questionnaire was divided into two main sections. Section I consisted of questions on the background of the respondents which includes ages, gender, campus, program, level of study, whether they are from a B40 family (Household income less than RM4000), family with a business background, and the location of their residence. Section II, a five-point Likert scale was used where the respondents were required to state the extent to which they agreed or disagreed with the statements in the questionnaire. The items developed include the aspects of students' intention to be an entrepreneur, their attitude towards entrepreneurship, self-efficacy, and entrepreneurship education experience.

3.2 Statistical Tools and Methods

To perform the analysis, SPSS software and Smart PLS 4.0 were used. SPSS was used to analyze the demographic profile and the usage of Smart PLS, on the other hand, was for a more complex relationship involving regression, moderating, and mediating effects analysis. Partial Least Squared method was used to test the study model. This technique simultaneously assesses the measurement model and the structural model by minimizing the error variance. Smart PLS version 4 was used to analyze the relationship among the variables. Bootstrapping function with 5000 resamples was employed to assess the significance level of the paths.

4. Findings

4.1 Descriptive Statistics

There were 429 completed questionnaires returned through online submission. It is about 4% percent of the population who have taken the subject. Krejcie and Morgan (in Sekaran, 2016) provided a sample size decision table with a 95% confidence level and a total population of up to one million, a sample size of 384 is desired. Generally, a sample of 30 to 500 is deemed appropriate for most of the social science research. Since our sample size is more than 384 and it met the requirement to be analyzed using Smart PLS, we proceed with the analysis. Table 1 shows the descriptive statistics of the demographic profile of the respondents. The majority of the respondents were females, and more than 50 percent of the respondents were from the B40 family where their household income was below the average of the population or the bottom 40 percent. The majority of the respondents' families did not have business backgrounds. Most of them live in suburban areas with a quarter of the sample being from the rural area. Generally, the exposure of the students to entrepreneurship or business environments was low.

Table 1. Descriptive Statistics of the Background of The Respondents

		Frequency	Percent
Gender	Female	290	67.6
	Male	139	32.4
	Total	429	100.0
B40 family	No	184	42.9
	Yes	245	57.1
	Total	429	100.0
Family with Business Background	No	343	80.0
	Yes	85	19.8
	Total	428	99.8
Residential Area	Rural	107	24.9
	Sub-urban	180	42.0
	Urban	140	32.6
	Total	427	99.5

Table 2 shows the descriptive statistics of the constructs or the variables used for further analysis. The four variables identified namely Entrepreneurship Intention (ENT INT), Attitude, Entrepreneurship Education (ENT EDU) have high mean values. However, Self-Efficacy was relatively lower.

Table 2. Descriptive Statistics of the Constructs

	N	Minimum	Maximum	Mean	Std. Deviation
ENT INTENTION	429	1.20	5	3.594	0.793
ATTITUDE	429	2.57	5	3.916	0.570
SELF EFFICACY	429	1.00	5	3.326	0.757
ENT EDU	429	1.33	5	3.978	0.721
Valid N (listwise)	429				

4.2 Data Analysis PLS

Variance-based Structural Equation Modelling (SEM) which is Smart PLS was used in analyzing the hypotheses developed. PLS is used as it is known for its ability to handle both reflective and formative measures, and it places a minimal restriction on the sample size (Chin, 1998). In

analyzing the data, the two-step analytical procedure by Anderson and Gerbing (1988) was adopted whereby the measurement model was evaluated first and then the structural model. The bootstrapping method (5000 resample) was performed to determine the significant level of loadings, weights and path coefficients (Chin, 1998). Figure 1 shows the Research Model.

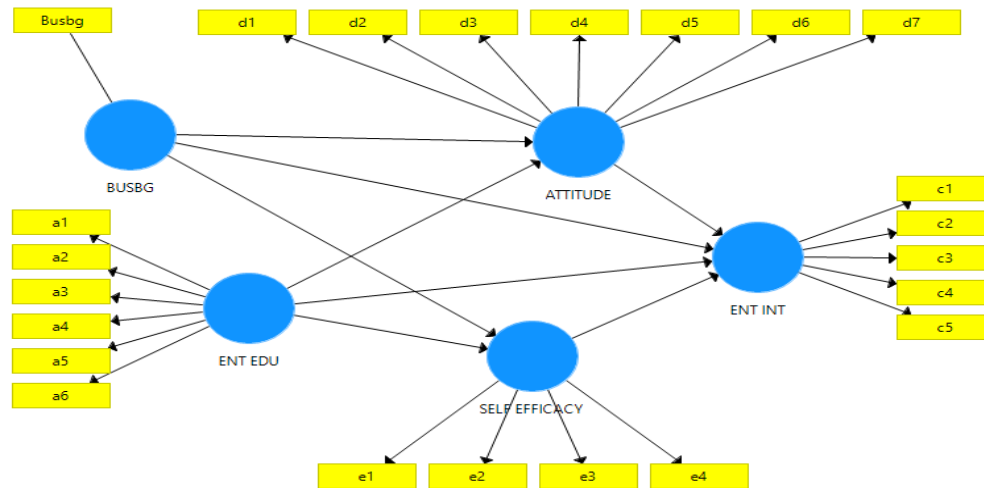


Fig. 1 Research Model

4.3 Measurement Model

Convergent validity is the extent to which a measure correlates positively with alternative measures of the same constructs. Therefore, the items that are indicators of a specific construct should converge or share a high proportion of variance (Hair, Black, Babin, and Anderson, 2010). In establishing convergent validity, outer loadings and Average Variance Extracted (AVE) of more than 0.5 and Composite Reliability (CR) of 0.7 or above are considered to be adequate. As a result, the item for Self-Efficacy (E2) and Attitude (D7) which has a loading of -0.332 and 0.491 respectively were deleted. The analysis was re-run, and the new loadings and cross-loadings were obtained. Based on Table 3, all loadings and AVE are above 0.5 and the composite reliability values are more than 0.7. Thus, it can be determined that convergent validity has been established.

4.4 Discriminant Validity

Discriminant Validity will be examined next. Discriminant validity which is the degree to which a construct is truly different from other constructs (Hair et al., 2010). This can be established by the low correlations between all the measures of the variables of interest and the measures of other constructs. To address discriminant validity, the square root of the AVE is compared against the correlations of the other constructs. If it is greater than its correlations with all the other constructs then discriminant validity has been established (Fornell & Larcker, 1981). The result can be referred in Table 4.

Table 3. Result of the Measurement Model

Convergent Validity					
Construct	Item	Factor Loading	AVE	Composite Reliability	R ²
Attitude (ATT)	d1	0.737	0.587	0.895	
	d2	0.843			
	d3	0.836			
	d4	0.725			
	d5	0.69			
	d6	0.753			
Self Efficacy (SE)	e1	0.685	0.573	0.8	
	e3	0.818			
	e4	0.762			
Enterprenuership Education (EE)	a1	0.877	0.76	0.95	
	a2	0.849			
	a3	0.859			
	a4	0.898			
	a5	0.862			
	a6	0.886			
Entrepreneurship Intention (EI)	c1	0.843	0.726	0.93	0.475
	c2	0.851			
	c3	0.855			
	c4	0.857			
	c5	0.854			
Business Baground (BusBg)		1	1	1	

Table 4. Discriminant Validity of Constructs

	ATT	BUSBG	EE	EI	SE
ATTITUDE	0.766				
BUSBG	-0.178	1			
ENT EDU	0.58	-0.102	0.872		
ENT INTENTION	0.632	-0.205	0.577	0.852	
SELF EFFICACY	0.062	0.062	-0.089	-0.009	0.757

Note: Diagonal represents the square root of Average Variance Extracted (AVE) while the other entries represent squared correlations

Henseler, Ringer, and Sarstedt (2015) reports that the Fornell Larcker criterion and cross-loadings do not reliably detect the discriminant validity in a survey-based study. They proposed a new technique based on the multitrait-multimethod matrix (HTMT) ratio to address the issue of discriminant validity. The HTMT test involves the calculation of a ratio of the average correlations between constructs to the geometric mean of the average correlations within items of the same constructs (Voorhees, Brady, Calantone & Ramirez, 2016). In order to obtain the HTMT results, this study runs the bootstrapping routine. Henseler et al. (2015) suggested a cut-off point of 0.85 and 0.90 for establishing discriminant validity between two reflective constructs, whereas HTMT 0.85 is the most conservative criterion. If the HTMT ratio is below 0.85, then discriminant validity between the two constructs is established. As per the result in Table 5, the results reveal that all HTMT ratios are less than 0.85, indicating no discriminant validity problem in this study. Therefore, based on the previous tests and results of the HTMT test, it is concluded that discriminant validity is established in this study.

Table 5. HTMT Results

	ATT	BUSBG	EE	EI	SE
ATTITUDE					
BUSBG	0.192				
ENT EDU	0.642	0.105			
ENT INTENTION	0.703	0.215	0.621		
SELF EFFICACY	0.114	0.066	0.107	0.083	

4.5 Structural Model

The structural model represents the connection between constructs that were hypothesized in the research framework. The goodness of the theoretical model is recognized by the variance explained (R^2) of the endogenous constructs and the significance of all path estimates (Chin, 2010). The R^2 and the path coefficients results will specify how well the data supports the hypothesized model (Chin, 1998). The results of the structural model from the PLS output can be seen from Figure 3 and Table 6. Attitude, Entrepreneurship Education and Business Background (Family environment) was found to be significantly related to Entrepreneurship Intention ($\beta = 0.432$, $p < 0.01$; $\beta = 0.316$, $p < 0.01$; $\beta = -0.241$, $p < 0.01$ respectively), thus supporting H1, H3 and H6 of this study. However, Self-Efficacy was found to be insignificantly related to Entrepreneurship Intention ($\beta = 0.003$) thus rejecting H3 of this study. A closer look on the findings reveals that Attitude, Entrepreneurship Education and Business Background can explain 47.5% of the variation in Entrepreneurship Intention.

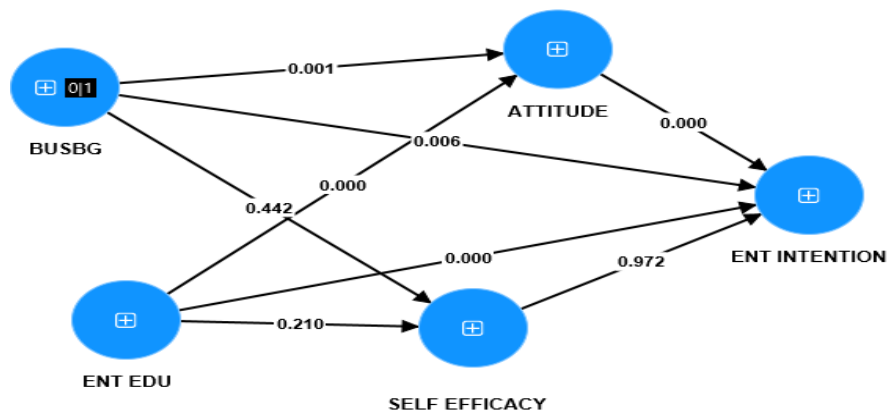


Fig. 3 The Structural Model

Table 6. Hypotheses Testing (Direct and Indirect Effects)

Hypotheses	Path Coefficient	Standard error	t value	Result	
<i>Direct Effect</i>					
ATT -> ENT INT	H1	0.432	0.053	8.121***	Supported
SE-> ENT INT	H2	-0.003	0.046	0.035	Not Supported
EE -> ENT INT	H3	0.316	0.051	6.206***	Supported
EE -> ATT	H4	0.57	0.034	16.673***	Supported
EE-> SE	H5	-0.085	0.067	1.253	Not Supported
BUSBG -> ENT INT	H6	-0.241	0.088	2.726**	Supported
BUSBG -> ATT	H7	-0.303	0.092	3.262***	Supported
BUSBG -> SE	H8	0.139	0.173	0.769	Not Supported
<i>Indirect Effect</i>					
<i>Mediating Effect</i>					
SE -> EE -> ENT INT	H9	0.001	0.004	0.031	Not Supported
SE -> BUSBG -> ENT INT	H10	0.001	0.01	0.021	Not Supported
<i>Moderating Effect</i>					
ATT -> EE -> ENT INT	H11	0.076	0.041	1.84**	Supported
ATT -> BUSBG -> ENT INT	H12	-0.127	0.102	1.243	Not Supported

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Together with it, “PLS Predict” procedure was also done to determine the predictive relevance (Q^2) of the model fit. The Q^2 “represents a measure of how well-observed values are reconstructed by the model and its parameter estimates” (Chin, 1998). Models with Q^2 greater than zero imply that the model has predictive relevance. Therefore, the blindfolding analysis result in Table 7 shows that $Q^2 = 0.304, 0.291, \text{ and } 0.029$ and these values meet the Q^2 criteria of $Q^2 > 0$. Such value proves that the built model has a predictive relevance. An omission distance of 7 was utilized as Chin (1998) indicates that values between 5 and 10 are feasible.

Table 7. Predictive Relevance
 Q^2 predict

ATTITUDE	0.304
ENT INTENTION	0.291
SELF EFFICACY	0.029

4.6 Mediation Effect

As for the mediation effect, the study tested the mediation effect of self-efficacy between business background, entrepreneurship education, and entrepreneurship intention. To test the mediation effect, a bootstrapping technique with 5000 resampling was used. The result is presented in Table 5. The indirect effect of entrepreneurship education on entrepreneurship intention is statistically not significant ($\beta = 0.001, t = 0.031$). Therefore, self-efficacy does not have the role of mediator on the relationship between entrepreneurship education and entrepreneurship intention, thus H9 is rejected. The direct effect of entrepreneurship education towards entrepreneurship intention was found to be statistically significant ($\beta = 0.316, t = 6.206, p < 0.01$), thus the indirect effect is statistically not significant but the direct effect is significant and has the same sign, we may conclude that there is a direct, non-mediating effect is present (Cepeda Carrión, Nitzl., & Roldán, 2017). Similarly, in examining the indirect effect of family business background on entrepreneurship intention, it was found to be statistically not significant ($\beta = 0.001, t = 0.021, p < 0.01$). Therefore, self-

efficacy does not have the role of mediator on the relationship between family business background and entrepreneurship intention, thus H10 is rejected. The direct effect of family business background towards entrepreneurship intention was found to be statistically significant ($\beta = 0.241$, $t = 2.726$, $p < 0.01$), thus the indirect effect is statistically not significant but the direct effect is significant and has the same sign, we may conclude that there is a direct, non-mediating effect is present (Cepeda et. al., 2017).

4.7 Moderating Effect

The study assessed the moderating role of attitude on the relationship between entrepreneurial education, family business background, and entrepreneurial intention with a bootstrapping measure at 5000 setting a significance level of 5%, i.e., $p < 0.05$. Without the inclusion of the moderating effect, the R square for Entrepreneurial Intention was 0.470. This shows that 47.0% of changes in Entrepreneurial Intention are accounted for by Entrepreneurial Education, Family Business Background, and Attitude. With the inclusion of the interaction term, the R square increased to 48%. This shows an increase of 1% in the variance explained in the dependent variable Entrepreneurship Intention. Results from the analysis unveiled that entrepreneurial attitude positively and significantly moderates the relationships between entrepreneurial education and entrepreneurial intention with standardized coefficients at 0.076 and t value at 1.84; hence hypotheses H11 were accepted. However, for the moderating effect of entrepreneurial attitude on the family business background to entrepreneurial intention, the result revealed a negative and non-significant moderating effect with standardized coefficients at -0.127 and t value at 1.243. Thus, hypothesis H12 was rejected. The moderation analysis summary is presented in Table 5.

Further, slope analysis is presented to understand better the nature of the moderating effects. As shown in Figure 4, the moderating effect of attitude on the relationship between entrepreneurship education and entrepreneurial intention.

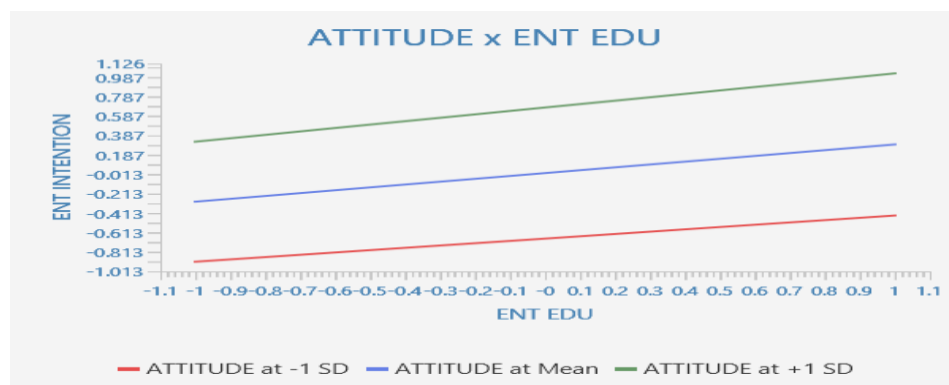


Fig. 4 Moderation effect of Attitude towards the relationship between Entrepreneurship Education and Entrepreneurship Intention

The graph represents the relationship between Entrepreneurship Education (EE) and Entrepreneurship Intention (EI). The middle line represents the moderator Attitude (ATT). The other two lines represent the relationship between EE and EI for higher (mean value of ATT plus 1 standard deviation) and lower (mean value of ATT minus 1 standard deviation) levels of moderator level of Attitude. The gradient of the slope, the line labelled as high ATT has a steeper gradient compared to lower ATT, indicating that the positive relationship is stronger when ATT is high. Thus, the hypothesis is supported.

Similarly, for the moderating effect of attitude on the relationship between family business background and entrepreneurial intention, as can be seen from Figure 5, the higher family business

background creates a negative impact, the graph slowing down. Whereas for the lower family business background, it is almost no effect as it is flattened. Thus, our hypothesis is rejected.

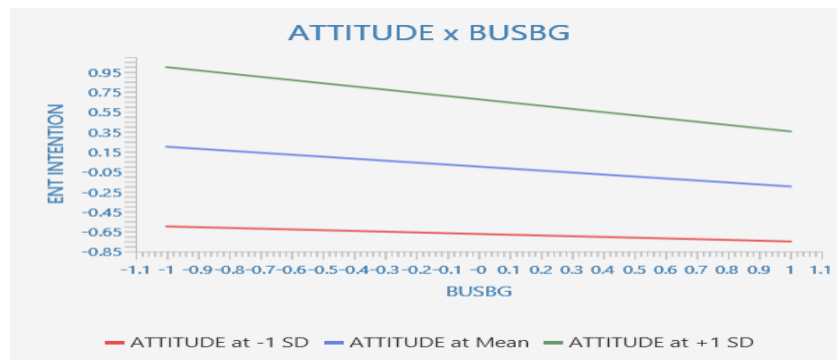


Fig. 5 Moderation effect of Attitude towards the relationship between Family Business Background and Entrepreneurship Intention

5. Discussion and Conclusion

Many previous studies have been conducted and unravelled the concept of entrepreneurial intention in various forms. In this study, authors have deduced a conceptual model measuring entrepreneurial intention with entrepreneurial education and family business background through the mediating effect of self-efficacy (H9 and H10). Also, the authors have tried to identify the moderating effect of attitude on the relationship between entrepreneur intention with entrepreneur education and family business background (H11 and H12). Authors have proposed that entrepreneurial education and exposure to the family business background to students, can enhance their self-efficacy to boost their entrepreneurial intention to a higher level, as such it was proposed that the self-efficacy will play a vital mediating role and strengthen the effect. However, the result as seen in Table 6 unravelled contradicting outcomes. It was found that self-efficacy does not mediate the relationship between Entrepreneurial Education, Family Business Background, and Entrepreneurial Intention. This could be due to the reason that although Entrepreneurial Education and Family Business Background improve a person's self-efficacy but they may be other dominant factors that might influence their intention further such as personal interest and attitudes (Zhu & Zhou, 2022). Another possible explanation that could be given is as explained by Sandi and Nurhayati (2019), that entrepreneurship education could not change the students' view and interest towards the world of entrepreneurship even with their family business background. This could be a challenging task that needs to be addressed at the societal level itself to increase the level of participation (Sandi & Nurhayati, 2019). Furthermore, in this study, the majority of the students are engineering students who may view becoming professional employees as a more respected and preferred job.

Another major area of this study is the recommendation to analyze the moderating effect of Attitude on the relationship between Entrepreneurial Education, Family Business Background, and Entrepreneurship Intention. There were 2 types of results achieved; the result extracted that attitude does positively moderate the relationship between entrepreneurship education and entrepreneurship intention ($\beta = 0.076$, $t = 1.84$, $p < 0.01$), thereby meaning that although entrepreneurship education is important to enhance the entrepreneurship intention but a greater degree of favourable attitude must be instilled together to the individuals to further enhance the relationship. This result corroborates with many previous studies (Anwar, Thoudam & Salem, 2022; Setiawan & Lestari (2021); Hassan, et al., 2020). Nevertheless, the study found that attitude does not moderate the relationship between family business background and entrepreneurial intention. This could be due to the fact that individuals who are closely exposed to the challenges and opportunities in entrepreneurship in their early life may play a major role in shaping their beliefs, personalities, attitude, and intention. This experience could change their attitude toward entrepreneurship intention (Zellweger, Sieger & Halter, 2010).

Further, for the direct effects of attitude and entrepreneurship education towards entrepreneurship intention and entrepreneurship towards attitude (H1, H3, H4) were found to be significantly related. This is in line with many previous studies (Hassan et al., 2020; Bazhiaei et al. 2020; Sanchez et al., 2021). Unfortunately, self-efficacy was found to be insignificantly related to entrepreneurship intention (H2), entrepreneurship education (H5), and family business background (H8). This could be due to the respondents in this study who have a low self-efficacy as shown in the lowest mean value in Table 2 from the statistical analysis performed using SPSS. This is consistent with Kamaruddin, Fuza, Ghani, Nawawi, Hamid and Daud (2023)'s study which found that self-efficacy is not essential in influencing the entrepreneurial intention among Malaysian hospitality students. Also study by Wang, Kim, Bai, and Hu (2014) found that low self-efficacy in entrepreneurial decision-making will hinder their career exploration and the development of career decision-making skills.

In addition to it the effect of family business background towards entrepreneurship intention and attitude (H6, H7), although the relationship is statistically significant, however, the relationship was found to be negatively reversed. As such, it was concluded to be an insignificant relationship, thus the hypotheses were rejected. As excavated by the previous studies, this could be due to the fact that early life exposure to entrepreneurship may shape their attitude and intention differently based on their role models (Zellweger et. al., 2010).

The implication of the findings can be divided into two; theoretical and practical. Theoretically, this study adds to the growing body of literature that focuses on the factors that have the potential to influence entrepreneurial intention, particularly among undergraduate students. It also contributes to the evidence in support of the mediating effect of self-efficacy towards entrepreneurial education, family business background, and entrepreneurial intention.

Further, this study also contributes to the moderating effect of attitudes towards entrepreneurial education, family business background, and entrepreneurship intention. This model of mediation and moderation has not been previously addressed in Malaysian studies. Thus, this study will provide a solid ground for future research to establish a deeper mediation and moderation model tested in this study. Practically, this paper emphasizes the importance of entrepreneurial education, family business background, attitude, and self-efficacy in cultivating entrepreneurial intention among graduating students. The relevant authority should take this into consideration and understands the need to improve further and strengthen the policy of entrepreneurial education among students, particularly in higher learning institutions.

6. Co-Authors Contribution

The authors report there are no competing interests to declare. Author 1 carried out the field work, prepared the literature review, wrote the research methodology and carried out the analysis of the whole article. Authors 2, 3 and 4 overlooked the writeup, interpreted the findings and presented the recommendations.

7. Acknowledgements

We would like to thank the anonymous referees for their helpful comments and suggestions. Financial support from the management of Universiti Teknologi MARA, Cawangan Pulau Pinang is also gratefully acknowledged

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