

## MEDIATION ANALYSIS OF PERSONAL ATTITUDE ON RELATIONSHIP BETWEEN SELF EFFICACY AND STUDENTS' ENTREPRENEURIAL INTENTION

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**Abstract** *The purpose of this paper is to determine the significant influence between self-efficacy and entrepreneurial intention and assess the mediating role of personal attitude on the relationship between self-efficacy and entrepreneurial intention. The questionnaire was distributed to students who have taken entrepreneurial subject such as Fundamental of Entrepreneurship (ENT300), Technology Entrepreneurship (ENT 600) and Principles of Entrepreneurship (ENT 530). These students come from several faculties such as Faculty of Business & Management, Faculty of Accountancy, Faculty of Computer & Mathematical Science, and Faculty of Information Management and Art & Design. A total of 314 of response were collected and usable for the final analysis using the structural equation model partial least square (SEM-PLS 3.0). The findings revealed that self-efficacy have significant influence on entrepreneurial intention. Moreover, this study also found that personal attitude mediates the relationship between self-efficacy and entrepreneurial intention. Implications of these findings for entrepreneurship research and education are discussed.*

**Keywords:** *Self efficacy, personal attitude and entrepreneurial intention*

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## Introduction

The Malaysian government encourages higher educational institutions (HEIs) to develop more competitive and innovative graduates for the economy so that Malaysia achieves high-income nation status by 2025. Entrepreneurship Action Plan of Higher Education Institutions (2016-2020) was rolled out by the Ministry of Higher Education (MOHE) two years ago, the idea behind it was to promote entrepreneurship education and entrepreneurship development in institutions and instill entrepreneurial mindsets and behaviors into all students as well as those seeking to become graduate entrepreneurs. In EAP-HEIs 2016-2020, the Job Creator Framework (JCF) was developed to provide a roadmap for entrepreneurship education at HEIs. The JCF consisted of three (3) primary themes. The first is the Acculturation of Entrepreneurship to inculcate entrepreneurship attributes during the early part of the students' study. The second theme is establishing programmes for strengthening entrepreneurship and providing wide opportunities for entrepreneurship learning and skills to students. The third theme is to enhance entrepreneurship support programmes and support systems for student businesses on campus. The JCF has enhanced the role of entrepreneurship education in the development of graduates at HEIs. To intensify the effort, EAP-HEIs 2021-2025 has introduced several shifts as depicted in Figure 1.

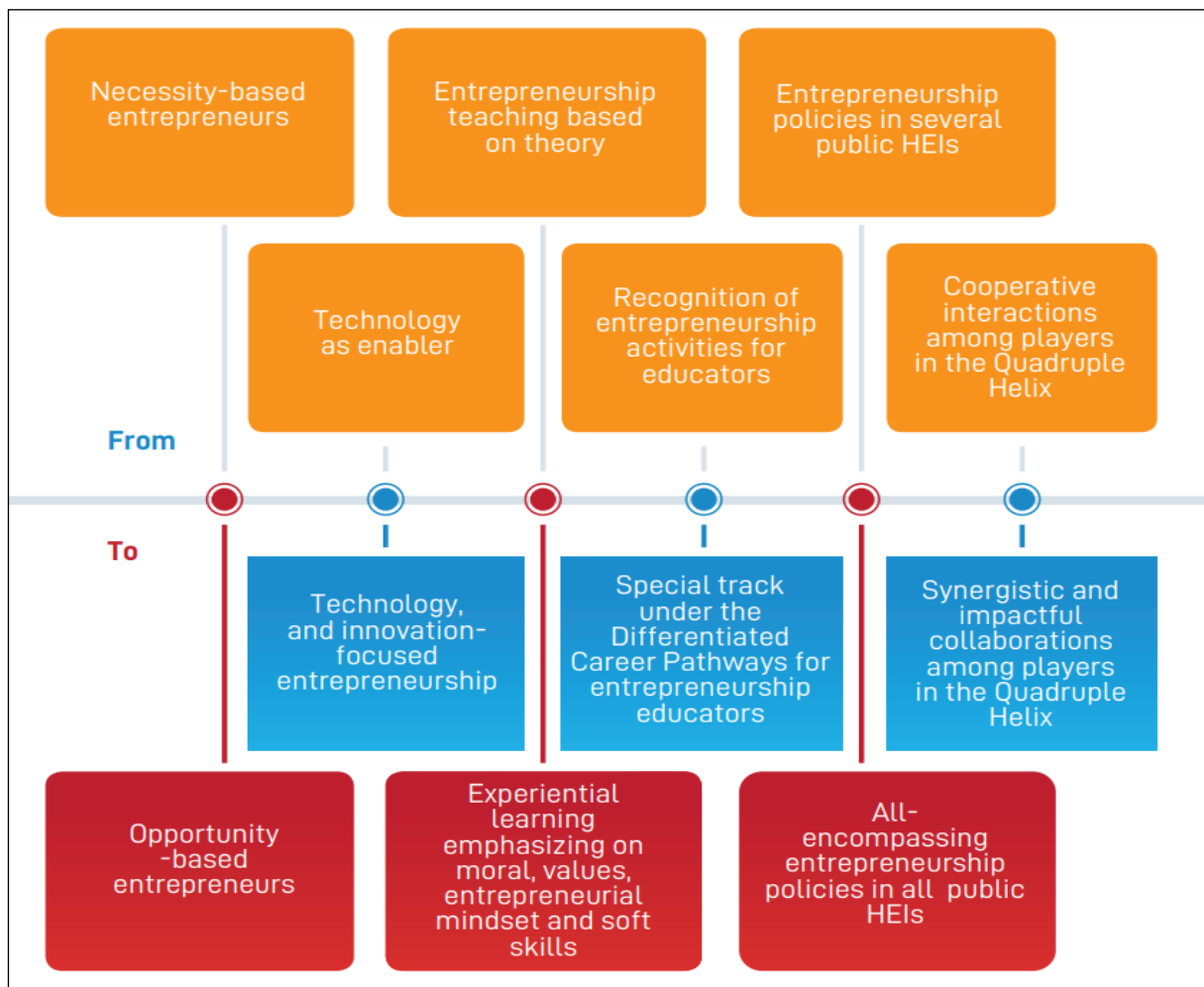


Figure 1: New shift for the Job Creator Framework (JCF)

Together with the JCF, these shifts will provide the necessary trajectory for entrepreneurship education in HEIs to soar further. The JCF and the shifts will provide the direction in the implementation of the Strategies and Initiatives and will ensure that the goal of producing entrepreneurial graduates and sustainable, competitive graduate entrepreneurs will become a reality. The action plan has four initiatives based on two strategies under Shift 1 of the Malaysia Education Blue Print 2015-2020 (Higher Education), focusing on the development of students and system aspirations to produce holistic, balanced and entrepreneurial graduates. The four initiatives include high impact education practices, a job creator framework, improving the student entrepreneur development support ecosystem and strengthening the entrepreneur teaching force competency. The action plan also encourages students to become job creators instead of job seekers with a target of at least 15 per cent of students involved in entrepreneurship activities and at least five per cent of graduates choosing entrepreneurship as their career of choice by 2020.

Entrepreneurship is important to economic advancement, employment as well as a solution to the excessive number of university graduates and social problems. Unemployment and entrepreneurial interest are closely related. In addition, the interest in entrepreneurship can also help reduce the unemployment rate in a country, because entrepreneurship can open new jobs that can be filled by people who previously did not have a job (Hestiningtyas et al, 2023). The Government will intensify its effort to ensure that Malaysia continues to grow sustainably through an impartial economic distribution. This effort will narrow the economic gap while increasing income and participation in the supply chain. The focus will be placed upon the Bumiputera, indigenous communities, households in the low-income bracket (B40) and special focus groups such as youths, women and senior citizens to ensure that the country's wealth can be enjoyed by all. In 2022, Malaysia's Total early-stage Entrepreneurial Activity (TEA) rate was 7.7% and indicates Malaysians' higher propensity for starting businesses. The entrepreneurial intention rate in Malaysia was 43% in 2022, exceeding Southeast Asia's 37% and developing countries 33%. This strong inclination among Malaysians to pursue entrepreneurship is evident. However, the graduate statistics as reported by the Department of Statistics Malaysia (DOSM) revealed the highest percentage of unemployed graduates in 2020, to 4.4% (202,400 graduates unemployed) against 2019 when the rate of unemployment stood at 3.9% (165,200) and based Centre for Future Labour Market Studies (EU-ERA) statistics in 2023, approximately 90,000 graduates in Malaysia are facing unemployment. Despite the expected drop in unemployment rate in 2023 from 3.7% to 3.5%, the economic report by the finance ministry discloses that the forecast only reflects a small-margin reduction, with more attention from the government needed to ease the problem of graduate unemployment.

Thus, this paper aim to determine the relationship between self-efficacy on entrepreneurial intention. The second research objective is to study personal attitude mediates between self-efficacy and entrepreneurial intention. Later, this study fills the knowledge gap on entrepreneurship, since extant literature shows a severe lack of studies focusing on the mediation effect of personal attitude between self-efficacy and entrepreneur intention. Consequently, this study intends to broaden the scope of entrepreneurship discourse in developing country contexts, such as Malaysia specifically in Kelantan state.

## Literature Review

### Theory of Planned Behaviour (TPB)

The Theory of Planned Behavior (TPB) is a well-known theory that has been applied to explain entrepreneurial intention among students. The TPB was proposed by Ajzen in 1991, and it posits that an individual's behavior is influenced by their intention to perform that behavior, which is in turn influenced by their attitude, subjective norms, and perceived behavioral control (Al Halbusi 2023; Lihua, 2022).

As noted above, this study drew on the TPB (Ajzen, 1991). This theory argues that behaviour is the function of intention, which is the cognitive process and is affected by the subjective norms and perceptions of the feasibility of the behaviour. The theory further postulates that an individual's positive or negative behaviour can be framed and influenced by the background factors they are experiencing, which serve as a stimulant that forces them to develop attitudes and, ultimately, behaviours. Behaviour is shaped by specific attitudes, which are cognitive in nature, along with subjective norms and perceived behavioural controls (Ajzen, 1991).

Numerous studies have applied the TPB to explain entrepreneurial intention among students. For example, A recent systematic review by Maheshwari, G et al. (2022) synthesized the factors that impact the entrepreneurial intentions of students at the tertiary level. The study found that the TPB is a useful framework for understanding the antecedents of entrepreneurial intention among students. Agolla et al. (2019) examined the antecedents of entrepreneurial intentions among business students in a tertiary institution. The study confirmed that the TPB theory could be applied when studying entrepreneurial intentions among students. Martínez-González et al. (2019) investigated the institutional perspective on entrepreneurial intentions of students. The study found that university context matters and that the TPB is a useful framework for understanding the antecedents of entrepreneurial intention among students.

Liñán and Fayolle (2015) suggested that the TPB is a useful framework for understanding the antecedents of entrepreneurial intention among students. Engle et al. (2010) evaluated Ajzen's model of planned behavior in twelve countries and found that the model is robust in predicting entrepreneurial intention. TPB theory has been extensively applied by previous researchers. However, we contribute to this theory via empirical data that are collected from Malaysia. The study model covers the support of TPB in the context of developing country and make contributions to the existing body of knowledge, which enhance our understanding of the entrepreneurial practices of potential entrepreneurs. This broad framework aids in our understanding of the process by which psychological traits reflect themselves in action. For example, for this study, self-efficacy serves as predictors of behaviour for entrepreneurship intention. Building on the current model, we included personal attitude serves as a mediator.

### Self-Efficacy

Self-efficacy is one of most important EI predictor. Self-efficacy is an individual's confidence in their capabilities to undertake tasks. Individuals with high levels of self-efficacy are more confident about their capabilities and less worried about their personal weaknesses (Niles et al., 2022). They are motivated to take on these challenges because they anticipate success, and they feel more at ease with such attempts when they are certain of the favorable results (Krueger et al., 2000). The term self-efficacy was derived from Bandura's social-cognitive career theory to describe individuals' belief in their capability to perform a particular action, "ability expectancy," and the expectation that this action will produce the desired result, "outcome

expectancy” (Bandura, 1986). Individuals choose self-employment as a career option because they have high ESE (Zhao et al., 2005). According to Hechavarria et al. (2012), individuals with high ESE work harder to meet their obligations, and they attribute failure to internal reasons under their control rather than the external environment (Bandura, 1982). Li et al. (2020) state that individuals with higher ESE prefer challenging tasks and show greater creativity, resilience, and optimism when establishing a successful business intention. Uysal et al. (2022) believe that high ESE is a prerequisite for entrepreneurial motivation.

The most widely studied outcome of ESE is entrepreneurial intention, defined as the intention of an individual to start a new business. Most researchers have drawn on Ajzen's (1991) theory of planned behavior to explain the influence of ESE on entrepreneurial intentions. They argue ESE captures an individuals' perceptions that they are able to handle given situations (perceived behavioral control). In line with the theory of planned behavior, researchers have found a significant positive link between ESE and the entrepreneurial intentions of students at undergraduate students (Al-Qadasi et al, 2023; Maheshwari, 2022; Nowiński et al., 2019; Utami (2017); Guzmán-Alfonso and Guzmán-Cuevas (2012). For example, Al Qadasi et al (2023) revealed that personality traits of the need for achievement (nAch) and locus of control (LoC) positively correlate with entrepreneurial self-efficacy (ESE) and entrepreneurial intention.

A comprehensive study by Maheshwari, (2022) integrated the social learning theory (entrepreneurial self-efficacy (ESE)) with the theory of planned behaviour (personal attitudes (PA), subjective norms (SN), perceived behavioural control (PBC)) and motivation theory (need for power (nPow)). The study aims to determine the integrated effect of these different theories on students' entrepreneurial intentions and in particular how self-efficacy has the mediation and serial-mediation effect on entrepreneurial intentions of students. The data for this study was collected using an online survey from 394 students studying in the undergraduate and postgraduate programs in the universities in Vietnam. The study results emphasized that in addition to the direct effect of ESE on TPB components and nPow, ESE also has an indirect effect on EI mediated through SN, PBC, nPow, which is further mediated by PA According to Nowiński et al (2019) the results show several differences with regard to the impact of education and entrepreneurial self-efficacy (ESE) on entrepreneurial intentions in Visegrád countries (Czech Republic, Hungary, Poland and Slovakia). Using a multi-construct approach to ESE, the research proves that ESEs related to searching, planning and marshalling activities mediate the impact of entrepreneurial education on intentions, although these effects differ across the studied countries.

The aim of research by Guzmán-Alfonso & Guzmán-Cuevas (2012) is to test if the three factors attitudes, perceived social value, and perceived self-efficacy, as defined by Ajzen determine entrepreneurial intentions in Latin America. By using panel data from Global Entrepreneurship Monitor Global Report for the years 2008, 2009 and 2010, referring to Latin America, the study employed two linear regression models to examine determinants of entrepreneurial intentions. The finding confirmed perceived self-efficacy had a positive relationship with entrepreneurship intention.

Meanwhile, a study by Utami (2017) aimed to determine the influence of the factors in the theory of planned behavior; which are attitude, Subjective Norms and Perceived Control Behavior, towards the entrepreneurial intention of University's students at East Java. The population used in this study is University's students from 2012 to 2015 school years. The sampling technique is proportional stratified sampling with the total sample of 1237



respondents. Questionnaire is used as data collection method, while multiple linear regression analysis is used as analysis technique. Research results show that Attitude, Subjective Norms, and Perceived Control Behavior, Entrepreneurship education and Self Efficacy affect Entrepreneurial intention. Therefore, Indonesian University are expected to be a driving force in improving student's attitudes, Subjective Norms, Perceived Control Behavior, Entrepreneurship education and Self efficacy in order to increase their entrepreneurial intention.

Similarly, Elnadi and Gheith (2021), in the context of Saudi Arabia, found that PSE contributes directly to EI. A recent study conducted by Neneh (2022) also found that PSE plays an essential role in EI. Based on these arguments the following hypothesis is developed:

H1: Self Efficacy has positive effect on Entrepreneurial Intention (EI)

### **Personal Attitude as Mediator**

Personal attitudes play a significant role in shaping entrepreneurial intention among students. Attitude toward a behavior refers to "the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question" (Ajzen, 1991). In the entrepreneurship context, attitude toward self-employment has been defined as "the difference between perceptions of personal desirability in becoming self-employed and organizationally employed" (Souitaris, Zerbinati, & Al-Laham, 2007). For Liñán and Chen (2009), "attitude toward start-up is the degree to which the individual holds a positive or negative personal valuation about being an entrepreneur."

Zhang et al. (2015) also stated that short-term risk-taking preference and factors of psychological well-being positively influence the intentions towards entrepreneurship of an individual with the existence of TPB antecedents, namely personal attitudes, social norms and perceived behavioral control.

In research by Wu and Wu (2008), personal attitude is the critical influence of entrepreneurial intentions, regardless of the educational backgrounds of students. The study of Mustafa et al. (2016) found that entrepreneurial intentions are positively impacted by a proactive personality and the perceived university support of Malaysian students. Among the two drivers, proactive personalities have a stronger influence on intentions towards self-employment than from the perceived concept of student development support from students. Karimi et al. (2017) stated that personality factors, including the need for achievement, risk taking and locus of control, indirectly affect the intentions towards entrepreneurship of Iranian students through the entrepreneurial attitudes and PBC.

The literature highlights numerous factors that are responsible for developing entrepreneurial attitude. The risk-taking propensity, locus of control and the need for achievement are essential antecedents of attitudes. Vuorio et al. (2018) found that sustainability-oriented EI is enhanced by perceived entrepreneurial desirability and attitude towards sustainability. According to Fitzsimmons and Douglas (2005), in regions such as Australia, Thailand, China and India, attitudes to income are predicted by independence, ownership and risk tolerance. Likewise, EI is influenced by attitude towards independence (Douglas and Fitzsimmons, 2008). Omani students were found to have a positive entrepreneurial attitude (Segumpan and Zahari, 2012). In Iranian students, researchers found a positive and significant relationship between students' entrepreneurial attitudes and creativity (Farahbod et al., 2013). Packham et al. (2010) found attitudes towards entrepreneurship and experience of enterprise education to be positively

related. Aloulou (2016) conducted a study in Saudi Arabia and found a positive and significant relationship between attitude, innovation, EI and achievement; nevertheless, there is a moderate correlation between personal control and self-esteem. In Pakistan, EI was found to be developed by attitudes towards behaviour and subjective norms, although not by perceived behavioural control (Shah and Soomro, 2017).

Recently, Mahmood et al. (2020) found the need for achievement, innovativeness, proactive personality and internal locus of control has a statistically significant and positive effect on the attitude of Asnaf millennials towards entrepreneurship. Asnaf millennials are the children of the needy and poor households or families who are more deprived during the childbearing stage and unemployment of the parents. Successful entrepreneurship education has positively affected students' entrepreneurial attitudes, and intentions could lead to students paying more attention to the social benefits of entrepreneurship (i.e. creating new jobs) than to financial ones (i.e. earning a high income) (Boldureanu et al., 2020).

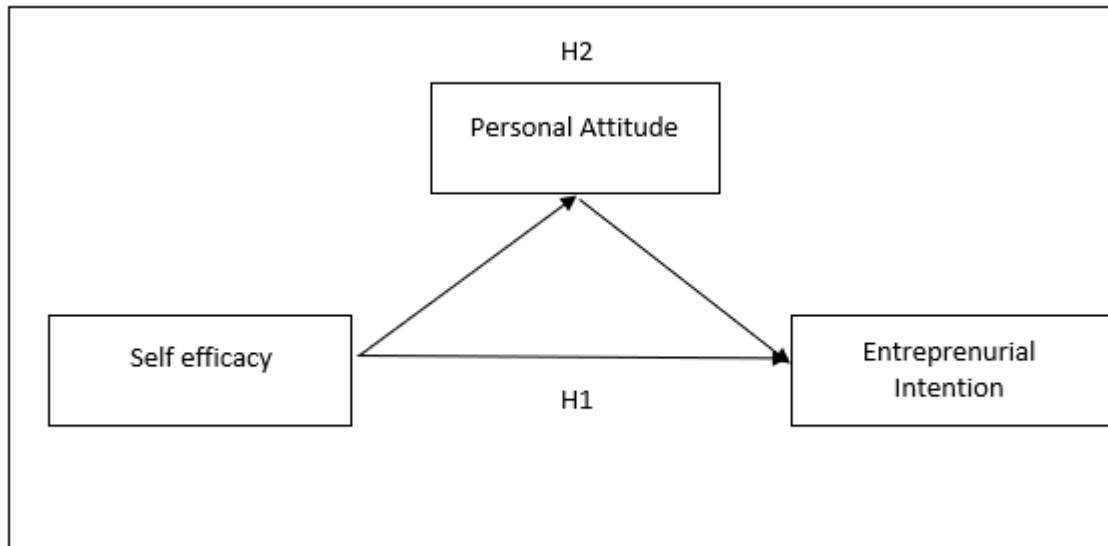
A comparative study conducted by Soomro et al. (2018) collected 385 questionnaires from Pakistan and 392 questionnaires from Thailand. The results suggest the theory of planned behaviour (TPB) factors (personal attitude, subjective norms and perceived behavioural control) are the strongest predictors of EI in both countries, and that personality is not a significant factor in the intention to engage in eBusiness. In a Thailand university, Niljinda et al. (2019) found correlation between the attitude towards entrepreneurship and entrepreneurial intention. In Bangkok University (Thailand), students were happier to consider becoming entrepreneurs and tended to be more successful at it. Moreover, the students were aware from the beginning of their responsibility to succeed, innovate and ultimately enlarge and grow their family businesses (Sachayansrisakul, 2018).

Lavelle (2021) conducted a study is the first to examine the impact of entrepreneurship education (EE) on entrepreneurial intention (EI) among vocational college students in China. Using the Theory of Planned Behavior and the EI Questionnaire the study investigates the relationships between EI, its antecedents and EE. The data were collected by surveying 383 vocational college students in Wuxi, Jiangsu, in the People's Republic of China. The researcher used Least-Squares Regression modeling to find significant positive relationships between personal attitude, perceived behavioral control, and EE with EI. Mediation analysis found personal attitude to partially mediate the EE–EI relationship.

Moreover, the study by Kusmintarti et al (2014) aimed to analyze the role of entrepreneurial attitude as a mediator of entrepreneurial characteristics influence on entrepreneurial intention. The population of this research are students of semester one to the last semester of State Polytechnic of Malang and Brawijaya University who have learned an entrepreneurial education. Judgment sampling is used to choose the sample. The data collection was done through questionnaires. The data were collected from 206 respondents. The collected data were analyzed by using descriptive statistical analysis and path analysis. The result revealed that entrepreneurial attitude acts as a partial mediation of entrepreneurial characteristics influence on entrepreneurial intention. Based on the discussions, the hypotheses regarding the mediating role of entrepreneurial self-efficacy is formulated as follows:

H2: Personal attitude mediate the relationship between self efficacy and Entrepreneurial Intention (EI)

The research model that includes all hypotheses of this study is shown in Figure 2 as follows.



**Figure 2: The Proposed Research Framework**

### Methodology

The primary data for independent and dependent variables were collected through google survey form using a structured questionnaire. The questionnaires were addressed to 741 students UiTM Cawangan Kelantan in various faculty such as Faculty of Business & Management, Faculty of Accountancy, Faculty of Computer & Mathematical Science, and Faculty of Information Management and Art & Design. The questionnaires were distributed by the lecturers-in-charge of entrepreneurship subjects such as Principles of Entrepreneurship (ENT530), Technology Entrepreneurship (ENT600) and Fundamental of Entrepreneurship (ENT300). A total of 314 useable responses, resulting 42.4% response rate. The data were analyzed used SEM-PLS 3.0. In addition, the study was cross-sectional since the data on the constructs of interest were only collected at a single point in time (Zikmund et al., 2017). The questionnaires were adopted and adapted from a few selected questionnaires and measured with 5-point Likert-scale ranging from strongly disagree to strongly agree. Entrepreneurial intention, is measured from study by Kolvereid 1996). Personal attitude section included five questions based on Liñán and Chen (2009) and self-efficacy The measure of entrepreneurial self-efficacy is from Begley and Tan (2001) research which includes 7 items asking the respondents of their confidence in implementing 7 entrepreneurship tasks.

### Result and Discussion

#### Normality Result

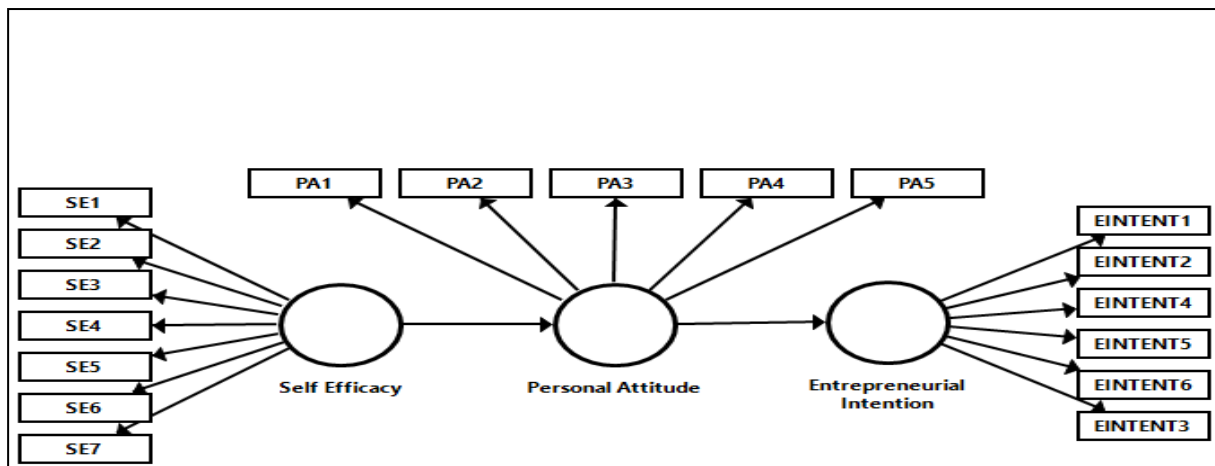
Frequency analysis was run to analyse the normality of this data. Based on the Tables 2, for self-efficacy, skewness value is -0.128 and kurtosis value is 1.783. Skewness and kurtosis value for personal attitude are 0.146 and 0.188 respectively. And lastly, skewness and kurtosis value for entrepreneurial intention are -0.231 and 1.230 respectively. According to George and Mallery (2016), the skewness and kurtosis value that are acceptable is between -1 to +2. For this study, it can be concluded that the data is normal.



**Table 1: Normality Result**

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Self-efficacy	314	3.1679	.58660	-.128	.138	1.783	.274
Personal Attitude	314	3.5006	.54480	.146	.138	.188	.274
Entrepreneurial Intention	314	3.5536	.68197	-.231	.138	1.230	.274

For further analysis, software package Smart PLS version 3.0 was used. Figure 1 shows the original study model consisting of eighteen (18) reflective measurement items for three (3) variables.



**Figure 3: Research Model**

### Construct Validity and Reliability

Hair, Ringle and Sarstedt (2022) claimed the quality of the measurement model was assessed by examining convergent validity includes factor loading, average variance extracted (AVE) and composite reliability (CR). According to Hair, Black, Babin & Anderson (2009), indicator loading must exceed the recommended value of 0.5. Figure 2 shows that item PA4 (0.081) did not meet the criteria. However, the item was deleted. PLS algorithm was performed again and result of indicator loading for PA5 (0.270) shows that the item did not meet the minimum value as shown in Figure 3. The item then was deleted. After the third run, all items show that the result meet the minimum criteria as shown in figure 4. The model can further analyse for structural model.

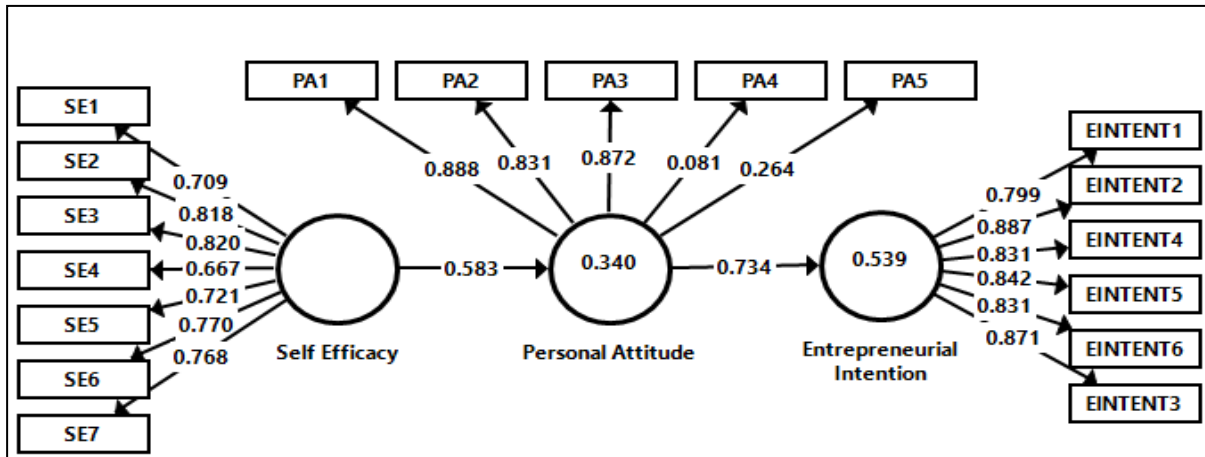


Figure 4: PLS Algorithm 1

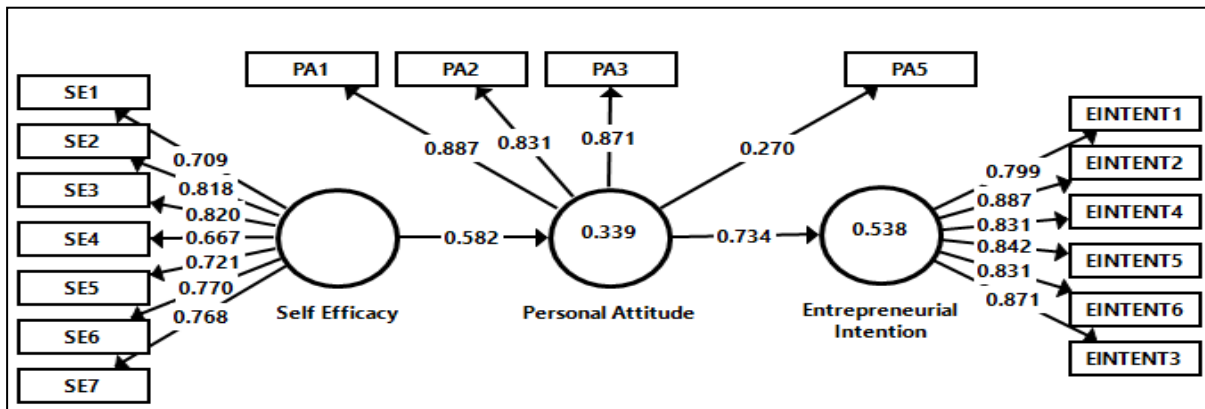


Figure 5: PLS Algorithm 2

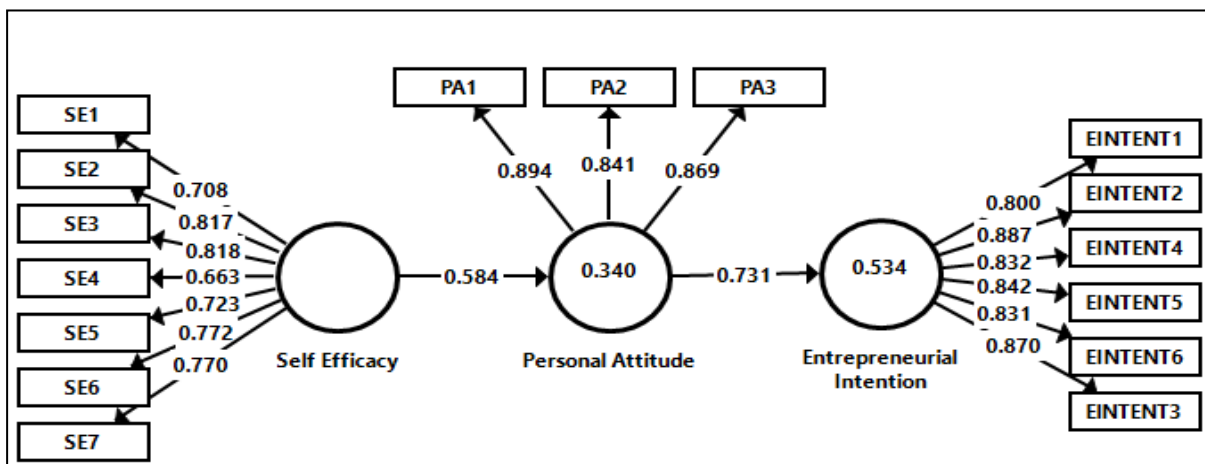


Figure 6: PLS Algorithm 3

Table 2 below shown that AVE were in the range of 0.570 to 0.753, which is above the recommended value of 0.5, and CR ranged from 0.902 to 0.937 which exceeded recommended value of 0.7 (Hair et al., 2009).

**Table 2: Construct validity and Reliability**

Constructs	Items	Loadings	AVE	CR
Entrepreneurial Intention	EINTENT1	0.800	0.713	0.937
	EINTENT2	0.887		
	EINTENT3	0.870		
	EINTENT4	0.832		
	EINTENT5	0.842		
	EINTENT6	0.831		
Personal Attitude	PA1	0.894	0.753	0.902
	PA2	0.841		
	PA3	0.869		
Self-Efficacy	SE1	0.708	0.570	0.902
	SE2	0.817		
	SE3	0.818		
	SE4	0.663		
	SE5	0.723		
	SE6	0.772		
	SE7	0.770		

AVE: Average Variance extracted; CR: Composite Reliability

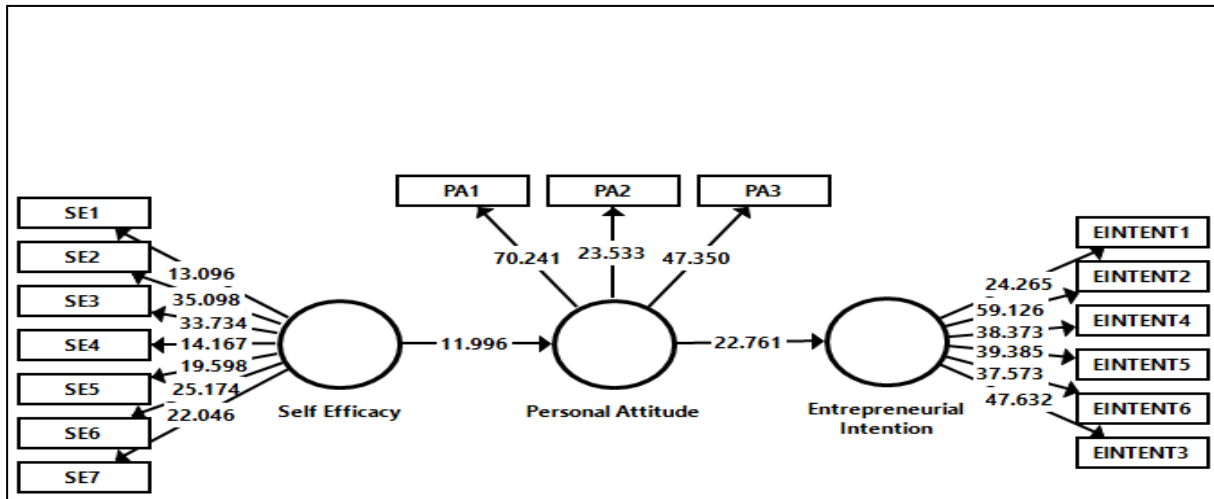
Henseler et al. (2015), suggested the multitrait-multimethod matrix, to assess discriminant validity, the heterotrait-monotrait (HTMT) ratio of correlations as a more rigorous method of achieving discriminant validity. HTMT as a criterion involves comparing it to a predefined threshold. Clark and Watson, (1995), and Kline (2011), suggest a threshold of 0.85, whereas Gold, Malhotra and Segars, (2001) propose a value of 0.90 can claimed that there is a lack of discriminant validity. Hence, the result show that discriminant validity is fulfilled the threshold (table 3).

**Table 3: Heterotrait-Monotrait Ratio**

	Entrepreneurial Intention	Personal Attitude	Self-Efficacy
Entrepreneurial Intention			
Personal Attitude	0.826		
Self-Efficacy	0.677	0.670	

### Hypotheses

Path analysis was performed to evaluate the structural model as shown in Figure 5. Based on Hair et al; (2022), the primary evaluation criteria for structural model are  $R^2$  values and the level of significance of the path coefficients.



**Figure 7: Structural Model**

Based on Cohen (1988) for a good model, the value of  $R^2$  of endogenous latent variable should be more than 0.26. According to figure 4, the  $R^2$  was found 0.534, indicating that self-efficacy and personal attitude can account for 53.4% percent of the variance in entrepreneurial intention, which represent a substantial range.

**Table 4: Hypotheses Result**

Hypothesis	beta	t-value	p-value	LL	UL	Result
H1: Self Efficacy – Entrepreneurial Intention	0.427	9.067	0.000	0.350	0.506	Supported
H2: Self Efficacy – PA – Entrepreneurial Intention	0.427	8.258	0.000	0.336	0.496	Supported

PA: Personal Attitude

For H1, the result indicates that self-efficacy ( $\beta = 0.427$ ,  $t\text{-values}=9.067$ ) has a significant relationship with entrepreneurial intention. For H2, the result indicates that personal attitude ( $\beta = 0.427$ ,  $t\text{-values}=8.258$ ) mediates the relationship between self-efficacy and entrepreneurial intention. Hence H1 and H2 were supported. Furthermore, this result also supported with the values of Boot CI: [LL, UL] that does not straddle between 0 value.

### Conclusion and Recommendation.

This study substantially expands the understanding of how significant self-efficacy drives the intention of university students to become an entrepreneur. This study has successfully provided the required empirical evidence in proving the relationships between self-efficacy and entrepreneurial intention among Malaysian university's students. The research outcomes have also provided support for the key theoretical propositions in this study. What is more important is, this study has successfully answered the research question despite some of the limitations. The study outcomes also have some verified practical implications especially in terms of entrepreneurial education management aspect. Several directions for future study have been drawn clearly based on the limitations of the study that were noted after the completion of this study.

Establishing a new business venture among young university graduates is very crucial in shaping future Malaysian economy. These university graduates need to be equipped with proper

skills, knowledge and attitude that are very significant in preparing them with these entrepreneurial challenges. Accordingly, numerous studies have been conducted globally in recent years in entrepreneur intention among university students, the factors influencing it, entrepreneur education and attitude. The current study aimed at examining the significant influence of self-efficacy in influencing entrepreneur intention among Malaysian university students and to inspect the role of personal attitude in mediating this relationship.

The study showed that self-efficacy is significantly influencing the entrepreneurial intention among university students and personal attitude mediates this relationship. In this light, such positive and significant relationship between self-efficacy and entrepreneurial intention clearly shows that student's entrepreneurial intention will increase when self-efficacy increases. These findings contribute to the development of Theory of Planned Behavior (TPB) and entrepreneurship theories and specifically suggested that self-efficacy can effectively inspire university students' entrepreneurial intention. In addition, student's personal attitude plays a critical role in stimulating university students' entrepreneurial intention.

The finding showed that the need to learn business and entrepreneurship through education are essential to ensure university students have the ability to possess all the pertinent ingredients to equip themselves with entrepreneurial efficacy. This finding concurs with Lussier and Pfeifer (2001) findings, where entrepreneur with higher education level, industrial and managerial experience, and business exposure have greater chance of succeeding in their business. The basic skill necessary to meet this challenge is the ability to recognize a market needs and the ability to develop a product or service appropriate to satisfy these needs. In this sense, entrepreneurial self-efficacy is the strong personal belief in skills and abilities to start-up a business and leading it to success. Accordingly, those who are higher on entrepreneurial efficacy are more interested to be involved in entrepreneurial events and feel more confident in embracing the challenges and removing the hurdles in the development of venture creation (Chen, Greene, & Crick, 1998) and lead the venture to success and growth. Additionally, Pihie and Baghari (2013), Trevelyan (2011), and Chen et al. (1998) have revealed that entrepreneurial self-efficacy highly influences individuals' intention and competence to be involve in entrepreneurship, the extent of effort they dedicate to create a new business, their persistence in facing the changes and challenges of a new venture creation process, and their accomplishment in performing entrepreneurial roles and tasks.

Concerning management practices, these findings suggest that self-efficacy of university's students can effectively inspire their entrepreneurial intention. Entrepreneurship has become an important economic activity in Malaysia especially at post Covid -19 recovery phase. Entrepreneurship success requires management, and the provision of entrepreneurial education in the form of self-learning, taught courses, and practical training. University students should be able to acquire the knowledge, skills, and practical experience required for the entrepreneurial process which can then improve their entrepreneurial intention. The stronger the perceived entrepreneurial self-efficacy, the more effective will university students exert their innate entrepreneurial abilities, reinforce their entrepreneurial potential, and stimulate their entrepreneurial confidence and passion. These conclusions suggest that universities and other relevant educational institutions should pay more attention to the combination of self-learning and external training in entrepreneurship, as well as the perception of entrepreneurial self-efficacy, so as to enhance the implication of entrepreneurship education and increase its effectiveness. Furthermore, the image of entrepreneurship should be improved as a possible career option which could influence students' intentions towards entrepreneurship. The



universities should encourage entrepreneurship through highlighting successful entrepreneur and business role models to draw a positive image of entrepreneurship in the campus and to encourage students to pursue their projects. It is important to facilitate interaction between experienced entrepreneurs and the students. This study uses self-efficacy as independent variables, and personal attitude as a mediator, to construct an influencing mechanism model to determine university students' entrepreneurial intention. It further tested and supplemented the Theory of Planned Behavior from the perspective of learning and self-efficacy. The findings offer empirical evidence to support existing theories, and will also assist as a valuable reference for follow-up studies.

### **Limitation and Future Studies**

This study has shown a few directions to be referred to on the future research. Based on the research results and discussions, this study has successfully suggested with several directions to be conducted in future. First of all, the study sample could be extended to a larger population, such as to the different universities in all states of Malaysia. This may appear to be more meaningful to grasp the understanding and knowledge in terms of the empirical association of all variables of interest highlighted in this study.

Second, this study only determines the influence of students' self-efficacy on entrepreneurial intention. Future research should consider the influence of educational background on entrepreneurial intention. Previous research have found that major and entrepreneurship courses are essential contextual factors in educational system, which might affect students' thinking about their future careers and career options, and effect in different attitude and intention (Misoska et al., 2016). Furthermore, Maresch et al. (2016) revealed some comparative analysis that showed subjective norms have different influence on entrepreneurial intention in separate categories of students, who have different educational background. Therefore, future research can analyze the effect of entrepreneurial education on attitude and intention in different educational background, which might helpful in designing entrepreneurial educational system in curriculum and developing policy provision.

Third, significant technological advancements in business activities should be considered as factors in influencing entrepreneurial intention among the students. The millennial students are more interested to be involved in business activities related to e-commerce (Burke & Ng, 2006). They have demonstrated strong interest in creating and tapping into new business models and platforms in today's digitized global economy, including new ventures that capitalize on the growth of the sharing economy, the gig economy, and e-commerce. These millennial entrepreneurs succeed mainly in the information technology industry, especially related to the internet. Future research should look into these technological advancements as variables that can affect students' intention toward entrepreneurship.

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## References

- Adu I. N., Boakye K. O., Suleman A.-R., Bingab B. B. B. (2020). Exploring the factors that mediate the relationship between entrepreneurial education and entrepreneurial intentions among undergraduate students in Ghana. *Asia Pacific Journal of Innovation and Entrepreneurship*, 14(2), 215–228. <https://doi.org/10.1108/APJIE-07-2019-0052>
- Agolla, J. E., Monametsi, G. L., & Phera, P. (2019). Antecedents of entrepreneurial intentions amongst business students in a tertiary institution. *Asia Pacific Journal of Innovation and Entrepreneurship*, 13(2), 138-152.
- Ajzen I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Aloulou, W.J. (2016), “Predicting entrepreneurial intentions of freshmen students from EAO modeling and personal background: a Saudi perspective”, *Journal of Entrepreneurship in Emerging Economies*, Vol. 8 No. 2, pp. 180-203.
- Al-Qadasi, N., Zhang, G., Al-Awlaqi, M. A., Alshebami, A. S., & Aamer, A. (2023). Factors influencing entrepreneurial intention of university students in Yemen: The mediating role of entrepreneurial self-efficacy. *Frontiers in Psychology*, 14, 1111934.
- Bandura, A. (1986). *Social Foundations of Thought and Action*. Prentice-Hall: Englewood Cliffs, NJ.
- Begley, T. M., & Tan, W. L. (2001). The socio-cultural environment for entrepreneurship: A comparison between East Asian and Anglo-Saxon countries. *Journal of International Business Studies*, 32(3), 537-553.
- Boonroungrut C., Huang F. (2021). Reforming theory of planned behavior to measure money management intention: A validation study among student debtors. *RAUSP Management Journal*, 56(1), 24–37. <https://doi.org/10.1108/RAUSP-02-2019-0029>
- Burke, R. J., & Ng, E. (2006). The changing nature of work and organizations: Implications for human resource management. *Human Resource Management Review*, 16 (2), 86-94.
- Chen, C. C., Greene, P. G., & Crick, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing*, 13(4), 295-316.
- Clark, L.A., & Watson, D. (1995). Constructing Validity: Basic Issues in Objective Scale Development. *Psychological Assessment*, 7(3), 309– 319.
- Douglas, E. and Fitzsimmons, J. (2008), “Individual intentions towards entrepreneurship vs. intrapreneurship”, in Gillin, L. and Murray (Eds), 5th AGSE International Entrepreneurship Research Exchange, 5-8, Melbourne.
- Elnadi, M. and Gheith, M.H. (2021), “Entrepreneurial ecosystem, entrepreneurial self-efficacy, and entrepreneurial intention in higher education: evidence from Saudi Arabia”, *The International Journal of Management Education*, Vol. 19 No. 1, p. 100458.
- Entrepreneurship action plan Higher Education Institutions 2021-2025. Ministry of Higher Education, Malaysia, Putrajaya, Malaysia. ISBN 978-967-0888-61-3
- Farahbod, F., Azadehdel, M., Mofidi, M.K., Shahabi, S., Khoshamooz, H., Pazhouh, L.D., Ghorbaninejad, N. and Shadkam, F. (2013), “The relationship between trait emotional intelligence and entrepreneurship attitudes and intentions”, *Journal of Public Administration and Policy Research*, Vol. 5 No. 3, pp. 79-85.
- Farrukh M., Alzubi Y., Shahzad I. A., Waheed A., Kanwal N. (2018). Entrepreneurial intentions: The role of personality traits in perspective of theory of planned behaviour. *Asia Pacific Journal of Innovation and Entrepreneurship*, 12(3), 399–414. <https://doi.org/10.1108/APJIE-01-2018-0004>
- Fitzsimmons, J.R. and Douglas, E.J. (2005), *Entrepreneurial Attitudes and Entrepreneurial Intentions*, a Cross-Cultural Study of Potential Entrepreneurs in India, China, Thailand

- and Australia, Babson-Kauffman Entrepreneurial Research Conference, Wellesley, MA, June 2005.
- George, D., & Mallery, P. (2016). The one-way ANOVA procedure. In *IBM SPSS Statistics 23 Step by Step* (pp. 173-182). Routledge.
- Gold, A.H., Malhotra, A., & Segars, A.H. (2001). Knowledge Management: An Organizational Capabilities Perspective. *Journal of Management Information Systems*, 18(1), 185–214.
- Guzmán-Alfonso, C., & Guzmán-Cuevas, J. (2012). Entrepreneurial intention models as applied to Latin America. *Journal of Organizational Change Management*, 25(5), 721-735.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2009). *Análise multivariada de dados*. Bookman editora.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., and Sarstedt, M. (2022). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, 3rd Edn. Thousand Oaks: Sage.
- Hechavarria, D. M., Renko, M., and Matthews, C. H. (2012). The nascent entrepreneurship hub: goals, entrepreneurial self-efficacy and start-up outcomes. *Small Bus. Econ.* 39, 685–701. doi: 10.1007/s11187-011-9355-2
- Hestingtyas, Widya & Sunyono, Sunyono & Haenilah, Een & Hariri, Hasan & Wardani, Wardani & Nurzafira, Istiqomah & Maris, Hakima. (2023). How To Fostering Students' Entrepreneurial Intention? A Systematic Review based On Entrepreneurship Education. *Wseas Transactions on Environment And Development*. 19, 551-557. 10.37394/232015.2023.19.53.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the academy of marketing science*, 43, 115-135.
- Karimi S, Biemans HJA, Naderi Mahdei K, et al. Testing the relationship between personality characteristics, contextual factors and entrepreneurial intentions in a developing country. *Int J Psychol*. 2017 doi: 10.1002/ijop.12209.
- Kolvereid, L. 1996. Organisational employment versus self employment: Reasons for career choice intentions. *Entrepreneurship Theory and Practice* 20 (3): 23-31.
- Krueger, N.F., Jr, Reilly, M.D. and Carsrud, A.L. (2000), "Competing models of entrepreneurial intentions", *Journal of Business Venturing*, Vol. 15 Nos 5/6, pp. 411-432.
- Kumar, R., & Shukla, S. (2022). Creativity, proactive personality and entrepreneurial intentions: examining the mediating role of entrepreneurial self-efficacy. *Global Business Review*, 23(1), 101-118.
- Kusmintarti, A., Thoyib, A., Ashar, K., & Maskie, G. (2014). The relationships among entrepreneurial characteristics, entrepreneurial attitude, and entrepreneurial intention. *IOSR Journal of Business and Management*, 16(6), 25-32.
- Lavelle, B. A. (2021). Entrepreneurship education's impact on entrepreneurial intention using the theory of planned behavior: Evidence from Chinese vocational college students. *Entrepreneurship Education and Pedagogy*, 4(1), 30-51.
- Li, C., Murad, M., Shahzad, F., Khan, M. A. S., Ashraf, S. F., and Dogbe, C. S. K. (2020). Entrepreneurial passion to entrepreneurial behavior: role of entrepreneurial alertness, entrepreneurial self-efficacy and proactive personality. *Front. Psychol.* 11:1611. doi: 10.3389/fpsyg.2020.01611
- Lihua, D. (2022). An extended model of the theory of planned behavior: an empirical study of entrepreneurial intention and entrepreneurial behavior in college students. *Frontiers in Psychology*, 12, 627818.

- Liñán, F., & Chen, Y.-W. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship: Theory and Practice*, 33(3), 593–617. <https://doi.org/10.1111/j.1540-6520.2009.00318.x>.
- Liñán, F., and Fayolle, A. (2015). A systematic literature review on entrepreneurial intentions: citation, thematic analyses, and research agenda. *Int. Entrepreneur. Manage. J.* 4, 907–909. doi: 10.1007/s11365-015-0356-5
- Lussier, R. N., & Pfeifer, S. (2001). A cross-national prediction model for business success. *Journal of Small Business Management* 39(3), 228 – 239.
- Maheshwari, G. (2022). Entrepreneurial intentions of university students in Vietnam: Integrated model of social learning, human motivation, and TPB. *The International Journal of Management Education*, 20(3), 100714.
- Maheshwari, G., Kha, K. L., & Arokiasamy, A. R. A. (2022). Factors affecting students' entrepreneurial intentions: a systematic review (2005–2022) for future directions in theory and practice. *Management Review Quarterly*, 1-68.
- Mahmood, T., Mamun, A. and Ibrahim, M. (2020), "Attitude towards entrepreneurship: a study among Asnaf Millennials in Malaysia", *Asia Pacific Journal of Innovation and Entrepreneurship*. doi: 10.1108/APJIE-06-2019-0044.
- Maresch, D., Harms, R., Kailer, N., & Wimmer-Wurm, B. (2016). The impact of entrepreneurship education on the entrepreneurial intention of students in science and engineering versus business studies university programs. *Technological Forecasting and Social Change*, 104, 172-179. DOI:10.1016/j.techfore.2015.11.006
- Martínez-González, J. A., Kobylinska, U., García-Rodríguez, F. J., & Nazarko, L. (2019). Antecedents of entrepreneurial intention among young people: Model and regional evidence. *Sustainability*, 11(24), 6993.
- Misoska, A. T., Dimitrova, M., & Mrsik, J. (2016). Drivers of entrepreneurial intentions among business students in Macedonia. *Ekonomiska Istraživanja / Economic Research*, 29(1), 1062-1074 DOI:10.1080/1331677X.2016.1211956
- Mustafa MJ, Hernandez E, Mahon C, Chee LK. Entrepreneurial intentions of university students in an emerging economy: the influence of university support and proactive personality on students' entrepreneurial intention. *J Entrep Emerg Econ*. 2016 doi: 10.1108/JEEE-10-2015-0058.
- Neneh, B.N. (2022), "Entrepreneurial passion and entrepreneurial intention: the role of social support and entrepreneurial self-efficacy", *Studies in Higher Education*, Vol. 47 No. 3, pp. 587-603.
- Niles, J.K., Gutierrez, D., Dukes, A.T., Mullen, P.R. and Goode, C.D. (2022), "Understanding the relationships between personal growth initiative, hope, and abstinence self-efficacy", *Journal of Addictions and Offender Counseling*, Vol. 43 No. 1, pp. 15-25.
- Nowiński, W., Haddoud, M. Y., Lančarič, D., Egerová, D., & Czeglédi, C. (2019). The impact of entrepreneurship education, entrepreneurial self-efficacy and gender on entrepreneurial intentions of university students in the Visegrad countries. *Studies in Higher Education*, 44(2), 361-379.
- Packham, G., Jones, P., Miller, C., Pickernell, D. and Thomas, B. (2010), "Attitudes towards entrepreneurship education: a comparative analysis", *Education and Training*, Vol. 52 Nos 8/9, pp. 568-586
- Pihie, Z.A.L., Bagheri, A. Self-efficacy and entrepreneurial intention: The mediation effect of self-regulation. *Vocations and Learning* 6, 385–401 (2013). <https://doi.org/10.1007/s12186-013-9101-9>

- Ridha R. N., Burhanuddin Wahyu B. P. (2017). Entrepreneurship intention in agricultural sector of young generation in Indonesia. *Asia Pacific Journal of Innovation and Entrepreneurship*, 11(1), 76–89. <https://doi.org/10.1108/APJIE-04-2017-022>
- Segumpan, R.G. and Zahari, J.S.A. (2012), “Attitude towards entrepreneurship among Omani college students trained in business”, *International Journal of Business and Behavioral Sciences*, Vol. 2 No. 4, pp. 61-72.
- Shah, N. and Soomro, B. (2017), “Investigating entrepreneurial intention among public sector university students of Pakistan”, *Education þ Training*, Vol. 59 Nos 7/8, pp. 841-855.
- Souitaris, V., Zerbinati, S., & 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*, 22(4), 566–591. <https://doi.org/10.1016/j.jbusvent.2006.05.002>.
- Svotwa, T. D., Jaiyeoba, O., Roberts-Lombard, M., & Makanyeza, C. (2022). Perceived Access to Finance, Entrepreneurial Self-Efficacy, Attitude Toward Entrepreneurship, Entrepreneurial Ability, and Entrepreneurial Intentions: A Botswana Youth Perspective. *SAGE Open*, 12(2), 21582440221096437.
- Trevelyan, R. (2011). Self-efficacy and effort in new venture development. *Journal of Management & Organization* 17(01), 2-16. DOI:10.1017/S1833367200001681
- Utami CW (2017) Attitude, subjective norms, perceived behavior, entrepreneurship education and self-efficacy toward entrepreneurial intention university student in Indonesia. *Eur Res Stud J* 20
- Uysal, Ş. K., Karadağ, H., Tuncer, B., and Şahin, F. (2022). Locus of control, need for achievement, and entrepreneurial intention: a moderated mediation model. *Int. J. Manag. Educ.* 20:100560. doi: 10.1016/j.ijme.2021.100560
- Vuorio, A.M., Puumalainen, K. and Fellnhofer, K. (2018), “Drivers of entrepreneurial intentions in sustainable entrepreneurship”, *International Journal of Entrepreneurial Behavior and Research*, Vol. 24 No. 2, pp. 359-381.
- Wu S, Wu L. The impact of higher education on entrepreneurial intentions of university students in China. *J Small Bus Enterp Dev.* 2008 doi: 10.1108/14626000810917843.
- Zhang P, Wang DD, Owen CL. A study of entrepreneurial intention of university students. *Entrep Res J.* 2015 doi: 10.1515/erj-2014-0004.
- Zhao, H., Hills, G. E., and Seibert, S. E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *J. Appl. Psychol.* 90, 1265–1272. doi: 10.1037/0021-9010.90.6.1265
- Zikmund W. G., D’Alessandro S., Lowe B., Winzar H., Babin B. J. (2017). *Marketing research* (4th Asia-Pacific ed.). Cengage Learning.