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### **MODELING OF ENTREPRENEURIAL INTENTION AMONG PUBLIC UNIVERSITY STUDENTS IN MALAYSIA USING PARTIAL LEAST SQUARE-STRUCTURAL EQUATION MODELLING (PLS-SEM)**

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#### **ABSTRACT**

This study provides a comprehensive analysis of the factors influencing entrepreneurial intentions among undergraduate accounting students in public universities, specifically emphasizing the role of higher education. Grounded in the Decomposed Theory of Planned Behavior (DTPB), the research explores the psychological dimensions of entrepreneurial intention, aiming to uncover the key constructs shaping entrepreneurial behavior. A survey of 520 final-year accounting students was conducted using a structured questionnaire comprising eight items that assessed attitudes toward entrepreneurship, subjective norms, and perceived behavioral control. The study examined the impact of these constructs on students' intentions to pursue entrepreneurship. The analysis employed the PLS-SEM technique, supplemented by the bootstrapping method, to test the research models and validate the relationships between the constructs. Both the measurement (outer) model and the structural (inner) model of the latent constructs were thoroughly evaluated. The findings strongly supported all seven hypotheses, demonstrating significant relationships between the variables under investigation. These results provide critical insights for stakeholders and policymakers, emphasizing the importance of fostering entrepreneurial attitudes, supportive social norms, and perceptions of behavioral control to nurture entrepreneurial aspirations among students. The study's outcomes offer valuable contributions to the development of a robust entrepreneurial ecosystem that can drive national economic growth. By elucidating the psychological and behavioral mechanisms underpinning entrepreneurship, this research enhances our understanding of the factors that motivate entrepreneurial behavior, offering a foundation for targeted interventions and strategies to cultivate entrepreneurial talent in higher education institutions.

Keywords: Decomposed Theory of Planned Behavior, Entrepreneurial Intention, Public University, PLS-SEM

## INTRODUCTION

Entrepreneurship plays an essential role in fostering economic growth and national development, contributing to job creation, innovation, and overall societal progress (Roslan, Misnan, & Musa, 2020). Scholars and educators have increasingly recognized its significance in enhancing economic well-being and national advancement (Do & Dung, 2020). This growing interest has fueled extensive research into entrepreneurship's transformative potential on global economies (Piperopoulos & Dimov, 2015; Israr & Hashim, 2015).

Entrepreneurship is widely regarded as a key driver of economic growth and societal advancement, functioning as both an economic catalyst and a vehicle for social transformation (Dickson, Solomon, & Weaver, 2008; Nasip, Amirul, Jr., & Tanakinjal, 2017). Numerous studies underscore its contributions to reducing unemployment and achieving substantial economic milestones (Ambad & Damit, 2016; Taha, Ramalan, & Noor, 2017). Entrepreneurs are instrumental in driving export growth, enhancing competitiveness, and fostering economic stability (Valliere, 2013; Permatasari & Agustina, 2018; Ibrahim & Yaacob, 2018).

Universities have emerged as critical platforms for cultivating entrepreneurial capabilities, equipping students with the skills and mindset necessary to succeed in dynamic markets (Gerba, 2012; Sata, 2013). Higher education institutions play a pivotal role in fostering entrepreneurial intentions among students, representing the next generation of innovators and economic contributors (Lucky & Ibrahim, 2014). Research indicates that students exposed to entrepreneurship education exhibit stronger entrepreneurial intentions and capabilities (Pihie, 2009).

Given the critical role of entrepreneurship in addressing challenges such as unemployment and underemployment, understanding the factors that shape entrepreneurial intentions is essential. This study aims to identify these factors and propose an integrative conceptual model to explain the antecedents of entrepreneurial intentions. The findings will provide valuable insights for policymakers, educators, and students, highlighting the pathways for nurturing entrepreneurial talent and fostering sustainable economic growth.

Accounting is an indispensable discipline for effective financial management, resource allocation, and institutional advancement. Despite its importance, the entrepreneurial engagement of accounting graduates remains alarmingly low. Local accountants own only 6% of audit and taxation firms in Malaysia, with foreign conglomerates dominating the market (Mohd Noh Jidin, personal communication, 2015). The establishment of the Committee to Strengthen the Accountancy Profession (CSAP) in 2013 by the Malaysian government aims to increase the number of accountants yet progress remains slow (Malaysian Institute of Accountants, 2012, 2014).

The advent of the Fourth Industrial Revolution (IR 4.0) introduces challenges that require accounting graduates to adopt innovative and adaptable mindsets. With advancements in automation, artificial intelligence (AI), and data analytics, traditional accounting roles face the risk of obsolescence (Ali & Ibrahim, 2018). Estimates suggest that 80% of accounting jobs could be replaced by AI, raising concerns about the relevance of accounting graduates in the IR 4.0 era (Ramli, Mustapha, & Rahman, 2018). Developing entrepreneurial skills among accounting students is therefore critical to ensuring their long-term employability and economic contribution.

This study addresses the gap in understanding the entrepreneurial aspirations of accounting graduates, exploring the factors that influence their intentions to establish accounting-related businesses. By

examining these factors, the research aims to provide actionable insights for educators, policymakers, and industry stakeholders to enhance the entrepreneurial potential of accounting graduates in a rapidly evolving economic landscape.

## **LITERATURE REVIEW**

### **Entrepreneurial Intention (EI)**

Entrepreneurial intention remains a cornerstone of understanding entrepreneurial behavior. As defined by Ajzen (1991), intention reflects an individual's readiness to perform a behavior, serving as a predictor of entrepreneurial action. Recent research reaffirms that entrepreneurial intentions are influenced by a combination of personal attitudes, subjective norms, and perceived behavioral control (Arokiasamy, 2022). The Theory of Planned Behavior (TPB) continues to be a dominant framework for analyzing these factors. Studies also highlight the growing importance of creativity and its role in entrepreneurial intention. Shi, Sun, and Liu (2020) found that creativity not only impacts entrepreneurial intention but also mediates the effects of perceived behavioral control and subjective norms. This underscores the value of fostering creative thinking in entrepreneurship education.

### **Description of Attitudes Towards Entrepreneurial Intentions**

Recent findings strengthen the argument that attitudes towards entrepreneurship significantly influence entrepreneurial intentions. Studies have confirmed that a positive attitude towards entrepreneurship, change, money, and competition correlates strongly with entrepreneurial intention (Schwarz et al., 2009; Karimi et al., 2013). Arokiasamy (2022) further identified that environmental and contextual factors play a vital role in shaping these attitudes, emphasizing the need for supportive ecosystems.

Additionally, Shamsudin et al. (2017) observed that government proactive measures in fostering an entrepreneurial ecosystem are critical in shaping positive student attitudes. This aligns with global trends in entrepreneurship education and policy-making.

### **Attitude towards entrepreneurship**

Attitude towards entrepreneurship is a domain-specific attitude in explaining entrepreneurial intentions. Attitude towards entrepreneurship also acts as the main determinant of students' willingness to work on their own (Nagarathanam & Buang, 2016). This factor refers to the individual's perception of personal incentives to perform a behavior, i.e. the creation of a new business or business and corresponding to the attitude towards the act (Fishbein and Ajzen, 1975; Krueger et al., 2000). The more students value an entrepreneurial career, the stronger their interest in starting a business (Zampetakis et al., 2009).

Some empirical studies suggest a positive relationship between attitudes towards entrepreneurship and the goals of entrepreneurship, such as Ariff et al. (2010), Mokhtar and Zainuddin (2008), and Badaruddin et al. (2012). A study conducted by students in Latin America showed that attitudes towards entrepreneurship can positively affect entrepreneurship (Alfonso & Cuevas, 2012). Wu and Wu (2008) and Nagarathanam and Buang (2016) found that attitude is significant and has a positive relationship with entrepreneurial intentions. These results are also in line with the study conducted by Karimi et al. (2013) towards college students in Iran whose attitudes have a positive influence on entrepreneurial intentions. A study conducted by Sihombing (2012) to identify differences in attitudes between business students and non-business students found that students' attitudes toward business are stronger to venture into business and vice versa.

Many studies in Malaysia use attitude approaches, such as Noor and Shariff (2009), who research the differences in attitudes between graduate students minoring in entrepreneurship and those without minoring in entrepreneurship. They found substantial differences between the two groups of students.

*H1: Attitude towards entrepreneurship has a positive and significant relationship to the entrepreneurial intention*

### **Attitudes toward change**

Attitude toward change refers to an individual who has a positive attitude toward change and is characterized primarily by a tendency to view something as interesting rather than as a threat, drastic or uncertain change (Shane, Locke, & Collins, 2003). Schwarz et al. (2009) found that attitudes toward significant change had a positive relationship with entrepreneurial intentions. Therefore, the following hypothesis is formed.

*H2: Attitude towards change has a positive and significant relationship to the entrepreneurial intention*

### **Attitude towards money**

Attitude towards money refers to individuals who see high income as a symbol of success (achievement) and as a recommendation to achieve autonomy, freedom, and power (Lim and Teo, 2003). Engle et al. (2010) found that wealth is the most influential factor in the entrepreneurial intentions of students in Russia compared to students in other countries. Most undergraduate students in the UK, especially those taking enterprise courses, see entrepreneurs as a money-creating activity (Henderson & Robertson, 2006). Furthermore, Schwarz et al. (2009) found that attitudes towards money have a significant and positive relationship with entrepreneurial intentions. Therefore, individuals with a positive attitude towards money may be more likely to want to work independently. Accordingly, the hypothesis below is formed.

*H3: Attitude towards money has a positive and significant relationship to the entrepreneurial intention*

### **Attitude towards competition**

Attitude towards competition is related to readiness to succeed or win (Schwarz et al., 2009). Such desires are usually not noticed by young people who work in organizations or earn a living. Thus, individuals may tend to fulfill their desire to succeed by founding a firm. Thus, competitiveness is seen as a positive factor influencing entrepreneurial motivation (Autio et al., 2001). However, Schwarz et al. (2009) found that attitudes towards competition did not significantly influence entrepreneurial intentions. This study expects, however, that attitudes towards competition influence the entrepreneurial behavioral intentions of students. Therefore, the hypothesis below is formed.

*H4: Attitude towards competition has a positive and significant relationship to the entrepreneurial intention*

### **Subjective Norms and Entrepreneurial Intentions**

Subjective norms relate to a person's perception of the views of the closest person to do something or not. They refer to individual perceptions of the opinions of others concerning specific behaviors (Alfonso & Cuevas, 2012). A person's tendency to do something increases if subjective norms are high. Subjective norms also involve the pressure the person feels from other individuals or groups in society for certain behaviors (Ajzen, 1991).

Perceived pressure from others that he thinks is important to him will influence his decision to engage in certain behavior. Taylor and Todd (1995a) suggest that the decomposition of normative belief structures

into their reference sources is due to differences that may exist for opinions among its reference sources. They categorize the subjective norms into two groups: friends (other students) and superiors (professors).

The socialization entrepreneurial model developed by Star and Fondas (1992) explains the role of mentors in helping entrepreneurs. According to Jacobs and Fuller (1973), the four main socializing agents are family members, peers, the mass media, and the educational environment. This shows that the process of socialization has a close relationship with the educational process, which is a process to develop the potential of individuals, both formally and informally.

Subjective norms, representing the perceived social pressure to engage in entrepreneurial activities, continue to be a significant predictor of entrepreneurial intention (Engle et al., 2010). Recent studies have provided deeper insights into the influence of mentors, peers, and family members on entrepreneurial intentions (Karimi et al., 2013; Turker & Selcuk, 2009).

The role of peers as motivators has gained renewed emphasis, with Nanda and Sorensen (2020) suggesting that peer influence is a critical component of entrepreneurial ecosystems in higher education. Lecturers also remain pivotal in shaping students' entrepreneurial mindsets, with studies reinforcing their role as facilitators and mentors (Mamman et al., 2018).

Universities have increasingly emerged as incubators of entrepreneurial talent. Recent research stresses the integration of innovative teaching methodologies and experiential learning opportunities to enhance entrepreneurial capabilities (Shi et al., 2020). Universities that adopt creative and interdisciplinary approaches to entrepreneurship education are more likely to foster stronger entrepreneurial intentions among students.

Arokiasamy (2022) emphasized that higher education institutions must align their curricula with the demands of the Fourth Industrial Revolution (IR 4.0) to address challenges posed by automation and artificial intelligence. By equipping students with relevant skills and fostering entrepreneurial intentions, universities can help future-proof their graduates in rapidly changing economic landscapes.

Recent literature has highlighted the influence of global challenges, such as the COVID-19 pandemic, on entrepreneurship. The pandemic has accelerated the adoption of digital tools and remote working environments, necessitating a shift in entrepreneurial strategies and education (Shi et al., 2020). These developments underscore the importance of adaptability and resilience in entrepreneurial training. The following hypotheses are proposed.

*H5: The influence of parents positively and significantly affects the intention of entrepreneurial behavior.*

*H6: The influence of friends positively and significantly affects the intention of entrepreneurial behavior.*

*H7: The influence of lectures positively and significantly affects the intention of entrepreneurial behavior.*

*H8: The influence of a career counsellor positively and significantly affects the intention of entrepreneurial behavior.*

## METHODOLOGY

### Data Collection

This study employs a quantitative research methodology to analyze the factors influencing entrepreneurial intentions among final-year undergraduate accounting students in Malaysian public universities. Data were collected from a sample of 520 final-year accounting students using self-administered questionnaires. The respondents represent a cross-section of final-year accounting students from selected public universities across Malaysia, ensuring diversity and relevance to the study's focus.

To ensure a representative sample, a stratified random sampling method was employed. This method was chosen to account for the variations among students across different public universities, ensuring that the sample adequately represents the population of final-year accounting students in Malaysia. The strata were based on university clusters, such as research universities, comprehensive universities, and focused universities, as defined by the Ministry of Higher Education Malaysia. The unit of analysis in this study is individual, focusing on the perceptions and intentions of each student regarding entrepreneurial activities.

### Data Analysis

The collected data were analyzed using Structural Equation Modeling (SEM) with the Smart PLS (Partial Least Square) software. SEM was chosen for its ability to test complex relationships between latent variables. The analysis involved two primary models:

1. **Outer Model (Measurement Model):** Assesses the validity and reliability of the constructs by evaluating the relationships between observed variables (indicators) and their underlying latent constructs.
2. **Inner Model (Structural Model):** Examines the hypothesized relationships between latent constructs, providing insights into the direct and indirect effects among variables.

Both models underwent rigorous testing to ensure the reliability, validity, and robustness of the results. This methodological approach provides a comprehensive understanding of the factors influencing entrepreneurial intentions among accounting students in Malaysia.

## RESULT

### Profile of Respondents

The study analyzed data from a final sample of 317 students, selected after excluding incomplete responses from the original collection of 354 questionnaires. The respondents were final-year accounting students from public universities in Malaysia. A detailed demographic profile of the respondents was recorded, including gender, ethnicity, age, cumulative grade point average (CGPA), parental job background, household income, and exposure to entrepreneurship-related courses or training. Table 1 provides an overview of the descriptive statistics.

**Table 1**

*Descriptive Statistics for Respondent Frequency Distribution (N=234)*

Demographic	Category	Frequency	Percentage(%)
Gender	: Male	52	22.2
	Female	182	77.8
Ethnic	: Melayu	131	56.0
	Cina	71	30.3
	India	13	5.6
	Others	19	8.1
Age (Year)	: 21-25	218	93.2
	26-30	13	5.6
	31-35	0	0.0
	36 and above	3	1.3
Cumulative grade average (CGPA)	: 2. 00 and below	1	0.4
	2.01 – 2.50	6	2.6
	2.51 – 3.00	39	16.7
	3.01 – 3.50	112	47.9
	3.51 and above	76	32.5
Job background of the respondent's father	: Government sector	56	23.9
	Private sector	72	30.8
	Self-employed/business	73	31.2
	Others	33	14.1
Job background of the respondent's mother	: Government sector	52	22.2
	Private sector	35	15.0
	Self-employed/business	58	24.8
	Others	89	38.0
Household income	: RM 2000 and below	109	46.6
	RM 2001 – RM 4000	66	28.2
	RM 4001 – RM 6000	35	15.0
	RM 6001 – and above	24	10.3
Immediate family members other than parents who run the business	: Yes	148	63.2
	No	86	36.8

Entrepreneurship courses/training ever attended	:	Yes	149	63.7
		No	85	36.3
Work experience	:	Yes	193	82.5
		No	41	17.5

The study employed Structural Equation Modeling (SEM) using SmartPLS software to test the research hypotheses and model. The analysis included two primary components: the measurement (outer) model and the structural (inner) model. The results are presented in Appendix 1. The SEM is found to have a good fit with the sample, and no statistical evidences of violation of SEM assumptions. This study tests the proposed hypothesis by studying the significant levels of path coefficients (path coefficients) and bootstrapping. The results of SEM on the hypothesis tests are presented in Table 2.

**Table 2**

*Hypothesis Test Results*

Hyphotesis	Relationship	Coefficient path	T value	P value	BC LL 5%	BC UL 95%	Supported /Rejected
<b>H<sub>1</sub></b>	ENT -> EI	0.526	7.678	0.000	0.412	0.637	Supported
<b>H<sub>2</sub></b>	CHANGE -> EI	0.235	3.786	0.000	0.126	0.332	Supported
<b>H<sub>3</sub></b>	MONEY -> EI	0.010	0.247	0.403	-0.061	0.078	Rejected
<b>H<sub>4</sub></b>	COMPT -> EI	0.028	0.434	0.332	-0.086	0.128	Rejected
<b>H<sub>5</sub></b>	PARENTS -> EI	0.160	2.098	0.018	0.032	0.286	Supported
<b>H<sub>6</sub></b>	FRIENDS -> EI	0.013	0.181	0.428	-0.106	0.136	Rejected
<b>H<sub>7</sub></b>	LECTURER -> EI	-0.039	0.551	0.291	-0.142	0.086	Rejected
<b>H<sub>8</sub></b>	COUNSELOR -> EI	0.160	2.337	0.010	0.037	0.260	Supported

Note. The t-value is significant at the 95% confidence level.

Table shows that four variables have significant links with students' entrepreneurial intentions, namely attitude towards entrepreneurship ( $\beta = 0.526$ ;  $t = 7.678$ ;  $p > 0.05$ ), attitude towards change ( $\beta = 0.235$ ;  $t = 3.786$ ;  $p > 0.05$ ), parents ( $\beta = 0.160$ ;  $t = 2.098$ ;  $p > 0.05$ ) and career counselor ( $\beta = 0.160$ ;  $t = 2.337$ ;  $p > 0.05$ ). These findings mean that the hypotheses  $H_3, H_4, H_6$ , and  $H_7$  are rejected in this study.

The analysis revealed that attitudes toward entrepreneurship and change and subjective norms from parents and career counselors significantly influence entrepreneurial intentions among students. However, factors like attitudes toward money, competition, and subjective norms from friends and lecturers were not significant predictors. These findings highlight the importance of fostering positive attitudes and supportive environments to enhance entrepreneurial intentions among accounting students.

## DISCUSSION, IMPLICATION AND RECOMMENDATION

The first hypothesis ( $H_1$ ) shows a positive and significant relationship between attitudes towards entrepreneurship and entrepreneurial intentions of students in the field of accounting. This

indicates that attitudes towards entrepreneurship play a dominant role in influencing students' intentions to pursue an entrepreneurial career. The importance of attitude towards entrepreneurship was evident in encouraging accounting students at UA to engage in business ventures. These findings align with previous studies conducted by Schwarz et al. (2009), Ariff et al. (2010), Othman and Ishak (2011), Sesen (2013), Mustapha et al. (2016), Roy, Akhtar, and Das (2017), Fragoso, Rocha-Junior, and Xavier (2019) and Hong et al. (2020) attitudes towards entrepreneurship are very important in determining entrepreneurial career choice.

The result also supports the second hypothesis (H2), indicating a positive and significant relationship between attitudes towards change and entrepreneurial intentions among accounting students. Involvement in entrepreneurship allows students to explore their interests and generate lucrative returns. Additionally, entrepreneurship is recognized as a driver of change and economic growth. In light of current economic challenges, students are seeking alternatives to increase their income, making attitudes towards change influential in shaping their entrepreneurial intentions.

The finding also confirms the fifth hypothesis (H5), which found a positive and significant relationship between parental influence and students' entrepreneurial intentions in accounting. The result aligns with Engle et al. (2010), who demonstrated that parental role models (particularly parents working as entrepreneurs) contribute to the formation of students' entrepreneurial intentions. Similarly, Gurel et al. (2010) found that parents and their businesses have the potential to influence their children's entrepreneurial intentions. Fatoki (2014) conducted a study at the University of South Africa among final-year students in the Faculty of Business Management. He revealed that students with entrepreneurial parents have higher levels of entrepreneurial intentions compared to those whose parents are not involved in business. These findings are further supported by Kristiansen and Indarti (2004), who demonstrated the influence of family background and experiences on entrepreneurial tendencies. In a different study, the employment background of entrepreneurs' parents and the role of the family are essential in promoting entrepreneurship as a credible career choice (Rasid & Buang, 2019).

The result further validates the seventh hypothesis (H7), indicating a positive and significant relationship between attitudes towards change and entrepreneurial intentions among accounting students. Previous studies have noted that lecturers' expectations of students to become entrepreneurs do not significantly influence their career decisions (Zainuddin & Rejab, 2010; Zainuddin et al., 2012). According to Zainuddin et al. (2012), specific teaching methods, such as field training and experiential learning, are more effective than others in preparing students for entrepreneurial careers. Therefore, if entrepreneurial educators lack pedagogical knowledge and skills, it may impact the quality of students' learning experiences. Educators who lack academic qualifications, expertise, and entrepreneurial experience may not be adequately equipped to provide students with career advice. Moreover, research on university students exposed to information communication technology (ICT) applications has shown that educators do not influence students' career choices. Wahid, Hashim, and Ibrahim (2017) indicated that the role of lecturers is less influential for students attending entrepreneurship classes at UUM.

Several strategic recommendations are proposed to enhance entrepreneurial intentions among accounting students, address the gaps, and leverage key influencing factors. First, universities should revamp their entrepreneurship education curriculum to be more dynamic and experiential. This includes integrating practical entrepreneurial projects, hackathons, and start-up challenges into accounting programs. Emphasis should be placed on problem-solving, creative thinking, and real-world business simulations, enabling students to develop critical entrepreneurial competencies. Additionally, introducing interdisciplinary courses that blend accounting, technology, and business innovation will prepare students for entrepreneurial ventures in modern markets. Universities should also foster entrepreneurial ecosystems by establishing dedicated entrepreneurship hubs and incubators that provide access to resources, mentorship, and collaborative spaces. Partnerships with industry stakeholders, financial institutions, and successful entrepreneurs can offer invaluable guidance, networking, and seed funding for student-led start-ups. These hubs should organize pitching sessions, funding competitions, and innovation summits to create a vibrant entrepreneurial culture.

Given the importance of adaptability and resilience, universities should host workshops, boot camps, and seminars focusing on overcoming challenges, embracing change, and leveraging uncertainties as opportunities. Guest speakers with firsthand entrepreneurial experiences can inspire students and help them adopt a proactive mindset toward change. Recognizing the significant influence of parents on students' entrepreneurial aspirations, universities should implement parental engagement programs. These initiatives can include parent-student entrepreneurship days, seminars educating parents about the benefits of entrepreneurial careers, and collaborative family business projects. Creating a supportive familial environment will empower students to pursue entrepreneurial ambitions confidently.

Educators also play a pivotal role in shaping entrepreneurial mindsets, and universities should provide specialized training for lecturers in experiential and field-based teaching methods. Encouraging educators to participate in entrepreneurial projects, industry partnerships, and business ventures will equip them with practical insights to mentor students effectively. Rewarding entrepreneurial mentorship among faculty can further motivate educators to prioritize entrepreneurship in their teaching. Furthermore, leveraging technology and digital tools in entrepreneurship education is essential. Business simulation software, AI-driven financial analysis tools, and e-commerce platforms can give students hands-on experience running virtual businesses. Facilitating global entrepreneurial networks and virtual mentorship programs will broaden students' horizons and connect them to international opportunities.

Universities should establish peer mentorship programs and student-run entrepreneurship clubs for students without entrepreneurial role models to provide collaboration opportunities and knowledge sharing. Scholarships and grants targeted at students from non-entrepreneurial backgrounds can encourage wider participation and level the playing field. Family-oriented entrepreneurship initiatives should also be introduced to promote collaboration between students and their families when starting small-scale businesses, emphasizing the value of leveraging familial resources and networks. Highlighting community-driven entrepreneurship can further inspire students to address local economic and social challenges.

Policymakers must collaborate with universities to strengthen national entrepreneurship frameworks. These frameworks should include tax incentives for student entrepreneurs, grants for innovative start-ups, and entrepreneurship-specific student loans. Policies fostering collaboration between public universities and private enterprises can expand the entrepreneurial ecosystem and offer practical exposure to students. Finally, universities should promote a holistic entrepreneurial culture by organizing campus-wide entrepreneurship festivals, innovation hackathons, and networking events. Encouraging participation in international entrepreneurship competitions and cross-border collaborations will further broaden students' ambitions. By implementing these strategies, universities, educators, policymakers, and families can collectively nurture entrepreneurial intentions, equipping students with the knowledge, skills, and mindset necessary for successful entrepreneurial careers and contributing to Malaysia's economic growth and innovation.

## REFERENCES

Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, 50, 179-211.

Akhsan, E. M., & Othman, N. (2019). Hubungan antara Kemahiran Keusahawanan dengan Tekad Keusahawanan dalam Kalangan Pelajar Sekolah Menengah Kebangsaan Agama (SMKA). *International Journal of Education, Psychology and Counseling*, 4(31), 305-317.

Altinay, L., Madanoglu, M., Daniele, R., & Lashley, C. (2012). The influence of family tradition and psychological traits on entrepreneurial intention. *International Journal of Hospitality Management*, 31(2), 489-499.

Amir, A. R., Mohamad, A., & Abdullah, S. (2013). Factors that influence UiTM's undergraduates towards entrepreneurial intentions. *International Journal of Education and Research*, 1(11), 1-8.

Ariff, A. H. M., Bidin, Z., Sharif, Z., & Ahmad, A. (2010). Predicting entrepreneurship intention among Malay university accounting students in Malaysia. *UNITAR e-Journal*, 6(1), 1-10.

Arokiasamy, A. R. A. (2022). Factors influencing entrepreneurial intentions: A systematic review and thematic analysis. *Journal of Global Entrepreneurship Research*, 12(4), 897-912. DOI: 10.1007/s11301-022-00289-2

Astuti, R. D., & Martdianty, F. (2012). Students' Perception and Intention toward Entrepreneurship: Development of Planned Behavior Entrepreneurial Model on Six State Universities in Indonesia. In *International Conference on Enterprise Marketing and Globalization (EMG). Proceedings* (p. 131). Global Science and Technology Forum.

Awang, A., Ibrahim, I. I., & Ayub, S. A. (2014). Determinants of entrepreneurial career: Experience of polytechnic students. *Journal of Entrepreneurship, Business and Economics*, 2(1), 21-40.

Badaruddin, M. N. B. A., Arokiasamy, L., Nordin, N. M., Yusof, H., & Zakaria, T. (2012, June). Cyber-entrepreneurial intention among business undergraduates in institutions of higher learning in Malaysia. In *Proceeding of 2nd International Conference on Management* (pp. 869-881).

Bagozzi, R. P., Lee, K. H., & Van Loo, M. F. (2001). Decisions to donate bone marrow: The role of attitudes and subjective norms across cultures. *Psychology and Health*, 16(1), 29-56.

Bilgiseven, E. B. (2019). Analysis of factors leading to entrepreneurial intention. *Procedia Computer Science*, 158, 885-890.

Chienwattanasook, K., & Jermitsuparsert, K. (2019). Impact of entrepreneur education on entrepreneurial self-employment: a study from Thailand. *Polish Journal of Management Studies*, 19.

Wynne, C. W. (1998). Issues and opinion on structural equation modelling. *Management Information Systems quarterly*, 22(1), 1-8.

Din, B. H., Anuar, A. R., & Usman, M. (2016). The effectiveness of the entrepreneurship education program in upgrading entrepreneurial skills among public university students. *Procedia-Social and Behavioral Sciences*, 224, 117-123.

Dinis, A., do Paco, A., Ferreira, J., Raposo, M., & Gouveia Rodrigues, R. (2013). Psychological characteristics and entrepreneurial intentions among secondary students. *Education+Training*, 55(8/9), 763-780.

Do, Q., & Dung, P. (2020). Exploring entrepreneurial intention of full-time students at transport universities in Vietnam. *Management Science Letters*, 10(7), 1409-1416.

Engle, R. L., Dimitriadi, N., Gavidia, J. V., Schlaegel, C., Delanoe, S., Alvarado, I., ... & Wolff, B. (2010). Entrepreneurial intent: A twelve-country evaluation of Ajzen's model of planned behavior. *International Journal of Entrepreneurial Behavior & Research*, 16(1), 35-57.

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior*. New York: Addison-Wesley Publishing Company. Inc.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 18(1), 39-50.

Fragoso, R., Rocha-Junior, W., & Xavier, A. (2020). Determinant factors of entrepreneurial intention among university students in Brazil and Portugal. *Journal of Small Business & Entrepreneurship*, 32(1), 33-57.

Gefen, D., & Straub, D. (2005). A practical guide to factorial validity using PLS-Graph: Tutorial and annotated example. *Communications of the Association for Information systems*, 16(1), 5.

George, D. (2011). *SPSS for windows step by step: A simple study guide and reference, 17.0 update, 10/e*. Pearson Education India.

Tessema Gerba, D. (2012). Impact of entrepreneurship education on entrepreneurial intentions of business and engineering students in Ethiopia. *African Journal of Economic and Management Studies*, 3(2), 258-277.

Gurel, E., Altinay, L., & Daniele, R. (2010). Tourism students' entrepreneurial intentions. *Annals of tourism research*, 37(3), 646-669.

Gürol, Y., & Atsan, N. (2006). Entrepreneurial characteristics amongst university students: Some insights for entrepreneurship education and training in Turkey. *Education+training*, 48(1), 25-38.

Hagger, M. S., & Chatzisarantis, N. L. (2005). First-and higher-order models of attitudes, normative influence, and perceived behavioural control in the theory of planned behaviour. *British journal of social psychology*, 44(4), 513-535.

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, 19:2, 139-152.

Hair Jr, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European business review*, 26(2), 106-121.

Hassan, R. A., & Wafa, S. A. (2012). Predictors towards entrepreneurial intention: a Malaysian case study. *Asian Journal of Business and Management Sciences*, 1(11), 1-10.

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modelling. . *Journal of the Academy of Marketing Science*, 43(1), , 115-135.

Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing,. *Advances in International Marketing* 20, , 277-320.

Hong, L. M., Sha'ari, M. A. A. H., Zulkiffl, W. F. W., Aziz, R. C., & Ismail, M. (2020). Determinant factors that influence entrepreneurial intention among students in Malaysia. *Jurnal Manajemen dan Kewirausahaan*, 22(1), 80-86.

Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: a review of four recent studies. *Strategic Management Journal*, 20, 195–204.

Ishar, M. I. M., & Jabor, M. K. (2018). Elemen keusahawanan dalam bidang kulinari. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 3(1), 100-133.

Ismail, A. Z. B. H., Zain, M. F. B. M., & Ahmed, E. M. (2006). A study of motivation in business start-ups among Malay entrepreneurs. *International Business and Economics Research Journal*, 5(2), 103.

Israr, A., & Hashim, N. (2015). Research on entrepreneurial intention: an academic literature review and classification. *Paradigms*, 9(1), 9-28.

Kadir, S. A., & Merican, R. M. (2017). Factors Influencing Entrepreneurial Intention Among Malaysia Youth. *International Journal of Accounting, Finance and Business*, 2(5), 33-48.

Kautonena, T., Gelderen, M. v., & Tornikoski, E. T. (2013). Predicting entrepreneurial behaviour: a test of the theory of planned behaviour. *Applied Economics*, 45(6), 607-707.

Koh, H. C. (1996). Testing hypotheses of entrepreneurial characteristics: A study of Hong Kong MBA students. *Journal of managerial Psychology*, 11(3), 12-25.

Krueger, N. F., & Carsrud, A. L. (1993). Entrepreneurial intentions: Applying the theory of planned behaviour. *Entrepreneurship & Regional Development*, 5(4), 315–330.

Küttim, M., Kallastea, M., Venesaara, U., & Kiis, A. (2014). Entrepreneurship education at university level and students' entrepreneurial intentions. *Procedia - Social and Behavioral Sciences* 110, 658 – 668.

Lim, Y. M., Lee, T. H., & Cheng, B. L. (2012). Entrepreneurial inclination among business students: A Malaysian study. *The South East Asian Journal of Management*, 6(2), 2.

Looi, K. H., & Khoo-Lattimore, C. (2015). Undergraduate students' entrepreneurial intention: born or made?. *International Journal of Entrepreneurship and Small Business*, 26(1), 1-20.

Luca, M. R., & Cazan, A. M. (2011). Involvement in entrepreneurial training and personality. *Procedia-Social and behavioral sciences*, 30, 1251-1256.

Luca, M. R., Cazan, A. M., & Tomulescu, D. (2013). Entrepreneurial personality in higher education. *Procedia-Social and Behavioral Sciences*, 84, 1045-1049.

Mamman, A., Olaoye, I. K., Abdulrahaman, A. M., Shagari, J. N., & Lekan, O. K. (2018). The influence of entrepreneurship education on the entrepreneurial intentions of university

students in Katsina State, Nigeria. *Acta Universitatis Sapientiae, Economics and Business*, 6(1), 21-42.

Marques, C. S., Ferreira, J. J., Gomes, D. N., & Gouveia Rodrigues, R. (2012). Entrepreneurship education: How psychological, demographic and behavioural factors predict the entrepreneurial intention. *Education+ training*, 54(8/9), 657-672.

Mat, S. C., Maat, S. M., & Mohd, N. (2015). Identifying factors that affecting the entrepreneurial intention among engineering technology students. *Procedia-Social and Behavioral Sciences*, 211, 1016-1022.

Mustapha, Z., Ahmad, A. H., Kob, C. G. C., & Zairon, I. Y. (2017). Peranan kolej komuniti sebagai pembimbing dalam memantapkan niat keusahawanan pelajar. *Politeknik & Kolej Komuniti Journal of Social Sciences and Humanities*, 2(1), 209-216.

Mustapha, Z., Tawang, M. Y., & Ahmad, A. H. (2016). Faktor yang mempengaruhi niat keusahawanan dalam kalangan pelajar Kolej Komuniti Malaysia. *Politeknik & Kolej Komuniti Journal of Social Sciences and Humanities*, 1(1).

Mwange, A. (2018). A Critical Review of Antecedents of Entrepreneurship Intention. *EPH-International Journal of Business & Management Science*, 4(3), 25-35.

Nabi, G., & Linan, F. (2011). Graduate entrepreneurship in the developing world: Intentions, education, and development. *Education + Training*, 53(5), 325–334.

Nagarathanam, R., & Buang, N. A. (2016). The relationship between attitude, intention, and entrepreneurship career choice among Malaysian Indian undergraduates. *Akademika*, 86(2), 43–52.

Nunnally, J. C., & Bernstein, I. H. (1994). The assessment of reliability. In *Psychometric theory* (3rd ed., pp. 248–292). McGraw-Hill.

Nwaigburu, K., & Eneogwe, V. (2013). Impact of accounting skills on entrepreneurship education for self-reliance and sustainable development: A study of selected small scale businesses in Owerri Municipal, Imo State. *Mediterranean Journal of Social Sciences*, 4(16), 81–88.

Othman, N. H., & Ishak, S. (2011). Kecenderungan terhadap pemilihan kerjaya keusahawanan mengikut persepsi skim usahawan siswa. *Jurnal Teknologi*, 56, 47–63.

Othman, N., & Othman, N. H. (2015). Relationship between entrepreneurial intentions and entrepreneurial career choice behavior among university students. *Journal of Business and Economics*, 6(1), 179–186.

Ozaralli, N., & Rivenburgh, N. K. (2016). Entrepreneurial intention: Antecedents to entrepreneurial behavior in the U.S.A. and Turkey. *Journal of Global Entrepreneurship Research*, 6(3), 1–32.

Permatasari, A., & Agustina, A. (2018). Entrepreneurial behavior among undergraduate business, social, and engineering students: A case study of a private Indonesian university. *Jurnal Manajemen Indonesia*, 18(2), 94–104.

Popescu, C. C., Bostan, I., Robu, I.-B., Maxim, A., & Diaconu, L. (2016). An analysis of the determinants of entrepreneurial intentions among students: A Romanian case study. *Sustainability*, 8(771), 1–22.

Quan, X. (2012). Prior experience, social network, and levels of entrepreneurial intentions. *Management Research Review*, 35(10), 945–957.

Rahimi, F., & Buang, N. A. (2017). Perbandingan tahap sikap keusahawan, sumber dorongan, dan efikasi kendiri dengan tahap aspirasi keusahawanan mahasiswa jurusan ekonomi, UKM,

UPM, dan USIM. *Journal of Global Business and Social Entrepreneurship (GBSE)*, 1(1), 29–38.

Ramayah, T., Ahmad, N. H., & Fei, T. H. (2012). Entrepreneur education: Does prior experience matter? *Journal of Entrepreneurship Education*, 15, 65–81.

Roslan, R., Misnan, N. I., & Musa, D. (2020). The influence of higher learning environment and role model towards entrepreneurial intention among TVET students. *Jurnal Intelek*, 15(1), 133–142.

Roy, R., Akhtar, F., & Das, N. (2017). Entrepreneurial intention among science & technology students in India: Extending the theory of planned behavior. *International Entrepreneurship and Management Journal*, 13(4), 1013–1041.

Saengchai, S., & Sutduean, J. (2019). How the perception of effective entrepreneur education affects entrepreneurial intention among students of the leading business schools in Thailand: The moderating role of university support. *International Journal of Innovation, Creativity and Change*, 6(10), 172–192.

Sandhu, M. S., Sidiq, S. F., & Riaz, S. (2011). Entrepreneurship barriers and entrepreneurial inclination among Malaysian postgraduate students. *International Journal of Entrepreneurial Behaviour & Research*, 17(4), 428–449.

Schwarz, E. J., Wdowiak, M. A., Almer-Jarz, D. A., & Breitenecker, R. J. (2009). The effects of attitudes and perceived environmental conditions on students' entrepreneurial intent: An Austrian perspective. *Education & Training*, 51(4), 271–291.

Sekaran, U., & Bougie, R. (2010). *Research methods for business: A skill building approach* (6th ed.). John Wiley & Sons Ltd.

Sequeira, J., Mueller, S. L., & McGee, J. E. (2007). The influence of social ties and self-efficacy in forming entrepreneurial intentions and motivating nascent behavior. *Journal of Developmental Entrepreneurship*, 12(3), 275–293.

Sesen, H. (2013). Personality or environment? A comprehensive study on the entrepreneurial intentions of university students. *Education + Training*, 55(7), 624–640.

Shah, N., & Soomro, B. A. (2017). Investigating entrepreneurial intention among public sector university students of Pakistan. *Education + Training*, 59(7/8), 841–855.

Shamsudin, M. F., Rahman, S. A., Wahab, S. A., & Al Mamun, A. (2017). Proactive approach in fostering an entrepreneurial ecosystem: Insights from Malaysia. *Asian Academy of Management Journal*, 22(3), 123–145.

Shi, X., Sun, P., & Liu, X. (2020). Creativity's impact on entrepreneurial intention: The mediating role of perceived behavioral control and subjective norms. *Frontiers in Psychology*, 11, 1209.

Sivarajah, K., & Achchuthan, S. (2013). Entrepreneurial intention among undergraduates: Review of literature. *European Journal of Business and Management*, 5(5), 72–86.

Solesvik, M. Z. (2013). Entrepreneurial motivations and intentions: Investigating the role of education major. *Education + Training*, 55(3), 253–271.

Solesvik, M. Z., Westhead, P., Kolvereid, L., & Matlay, H. (2012). Student intentions to become self-employed: The Ukrainian context. *Journal of Small Business and Enterprise Development*, 19(3), 441–460.

Soomro, B. A., & Shah, N. (2015). Developing attitudes and intentions among potential entrepreneurs. *Journal of Enterprise Information Management*, 28(2), 304–322.

Taormina, R. J., & Lao, S. K. M. (2007). Measuring Chinese entrepreneurial motivation: Personality and environmental influences. *International Journal of Entrepreneurial Behavior & Research*, 13(4), 200-221.

Taylor, S., & Todd, P. (1995). Decomposition and crossover effects in the theory of planned behavior: A study of consumer adoption intentions. *International Journal of Research in Marketing*, 12(2), 137-155.

Tunggak, B., Salamon, H., & Abu, B. (2011). Keperluan latihan dan pendidikan berterusan ke arah pembangunan usahawan Muslim berteraskan nilai Islam di Malaysia. *Jurnal teknologi*, 121â-144.

Turker, D., & Selcuk, S. S. (2009). Which factors affect entrepreneurial intention of university students?. *Journal of European industrial training*, 33(2), 142-159.

Urbach, N., Smolnik, S., & Riempp, G. (2010). An empirical investigation of employee portal success. *The Journal of Strategic Information Systems*, 19(3), 184-206.

Yaghmaei, O., & Ghasemi, I. (2015). Effects of influential factors on entrepreneurial intention of postgraduate students in Malaysia. *International Letters of Social and Humanistic Sciences*, 51, 115-124.

Yusof, M., Sandhu, M. S., & Jain, K. K. (2007). Relationship between psychological characteristics and entrepreneurial inclination: A case study of students at UNITAR. *Journal of Asia Entrepreneurship and Sustainability* 3(2), 1-16.

Zain, Z. M., Akram, A. M., & Ghani, E. K. (2010). Entrepreneurship intention among malaysian business students/l'esprit d'entreprise chez les etudiants en commerce Malaisiens. *Canadian social science*, 6(3), 34.

Zampetakis, L. A., Kafetsios, K., Bouranta, N., Dewett, T., & Moustakis, V. S. (2009). On the relationship between emotional intelligence and entrepreneurial attitudes and intentions. *International Journal of Entrepreneurial Behavior & Research*, 15(6), 595-618.

Zhang, P., & Cain, K. W. (2017). Reassessing the link between risk aversion and entrepreneurial intention: The mediating role of the determinants of planned behavior. *International Journal of Entrepreneurial Behavior & Research*, 23(5), 793-811.

Zhang, P., Wang, D. D., & Owen, C. L. (2015). A study of entrepreneurial intention of university students. *Entrepreneurship Research Journal*, 5(1), 61-82.

## APPENDIX 1 MODEL ASSESSMENTS

### Assessment of Measurement (Outer) Model

Based on previous studies, the reliability and validity of the reflective measurement model are assessed through four analyzes, namely, 1) indicator reliability; 2) internal consistency; 3) convergent validity; and 4) discriminant validity (Henseler, Ringleand & Sinkovics, 2009; Hair et al., 2014).

#### a) Indicator reliability

Table A1 shows that the factor indicator for all constructs is above 0.70 except for some items that do not reach the value of 0.70. All two items were dropped, namely item TOLERANCE 1 (factor loading = 0.4739) and item CHANGE 1 (factor loading = 0.6382). All 18 constructs in this study model are entrepreneurial behavior, attitude towards entrepreneurship, attitude towards change, attitude towards money, attitude towards competition, parental factors, peer factors, lecturer factors, career counselor factors, need for achievement, locus control internal, risk-taking, tolerance to ambiguity, self-confidence, innovation, university environment and access to capital are measures of each construct based on statistically significant estimator parameter values suggested by Hair et al. (2014).

**Table A1**

*Factor loading (after dropped items)*

Construct	Item	Factor loading	Standard Error	T-value	P-value
Entrepreneurial Intention (EI)	EI1	0.889	0.018	49.090	0.000
	EI 2_1	0.916	0.013	70.573	0.000
	EI 3	0.919	0.014	65.596	0.000
	EI 4	0.917	0.012	75.582	0.000
	EI 5	0.916	0.014	64.185	0.000
	EI 6	0.908	0.016	55.620	0.000
Attitude towards entrepreneurship(ENT)	ENT1	0.888	0.019	47.115	0.000
	ENT2	0.913	0.016	58.453	0.000
	ENT3_1	0.885	0.019	46.749	0.000
	ENT4_1	0.893	0.014	62.176	0.000
Attitude towards change (CHANGE)	CHANGE2	0.855	0.029	29.995	0.000
	CHANGE3	0.869	0.020	43.782	0.000
	CHANGE4	0.791	0.037	21.239	0.000
	CHANGE5_	0.759	0.053	14.424	0.000
1					
Attitude towards money (MONEY)	MONEY1	0.852	0.022	39.023	0.000

	MONEY2	0.891	0.025	35.898	0.000
	MONEY3	0.730	0.058	12.498	0.000
	MONEY4	0.837	0.038	22.138	0.000
	MONEY5	0.851	0.027	31.023	0.000
Attitude towards competition(COMPT)	COMPT1	0.839	0.042	20.154	0.000
	COMPT2_1	0.866	0.016	52.591	0.000
	COMPT3	0.892	0.023	38.948	0.000
	COMPT4	0.909	0.018	51.687	0.000
	COMPT5	0.855	0.026	32.541	0.000
Subjective norm (Parents)	NORMP1	0.917	0.016	55.644	0.000
	NORMP2	0.909	0.017	53.946	0.000
	NORMP3	0.937	0.010	91.535	0.000
Subjective norm (Friend)	NORMF1	0.909	0.022	41.119	0.000
	NORMF2	0.936	0.011	85.346	0.000
	NORMF3_1	0.931	0.011	87.630	0.000
	NORMF4	0.888	0.026	34.318	0.000
Subjective norm (Lectures)	NORML1_1	0.921	0.012	74.000	0.000
	NORML2	0.926	0.013	72.171	0.000
	NORML3_1	0.921	0.014	66.105	0.000
	NORML4	0.921	0.015	62.806	0.000
Subjective norm (Counselor of career)	NORMCC1	0.941	0.010	92.327	0.000
	NORMCC2	0.947	0.012	80.926	0.000
	NORMCC3	0.942	0.013	70.769	0.000
	NORMCC4	0.948	0.011	87.760	0.000

Note: Factor loading is considered significant at the 95% confidence level if the statistic  $t > 1.96$  ( $p < .05$ ) factor loading is considered significant at the 99% confidence level if the statistic  $t > 2.58$  ( $p < .01$ )

### b) Internal consistency and Convergent validity

The findings of the study report that the measurement model for internal consistency is satisfactory when the Cronbach alpha value records a value between 0.7962 to 0.9598 and the CR value for all constructs is between 0.8673 to 0.9707 (Refer to Table A2). It can, therefore, be concluded that all the constructs of this study have high internal consistency values (Nunnally & Bernstein, 1994; Chua, 2006; Henseler et al., 2015). Table A2 shows that the AVE values for each construct range from 0.5315 to 0.8923. This indicates that the AVE value for each construct in this study is above 0.50 and the concentration validity for this study is also satisfactory (Mitra et al., 2011; Fornell & Larcker, 1981). Therefore, the test results show that the construct of this study is valid for use.

**Table A2**

*Convergent validity analysis*

Construct	Items	Factor loadings	Cronbach alpha	CR	AVE
Entrepreneurial Intention (EI)	EI1	0.889			
	EI 2_1	0.916			
	EI 3	0.919	0.959	0.967	0.830
	EI 4	0.917			
	EI 5	0.916			
	EI 6	0.908			
Attitude towards entrepreneurship(ENT)	ENT1	0.888			
	ENT2	0.913			
	ENT3_1	0.885	0.917	0.941	0.801
	ENT4_1	0.893			
Attitude towards change (CHANGE)	CHANGE2	0.855			
	CHANGE3	0.869	0.837	0.891	0.672
	CHANGE4	0.791			
	CHANGE5_1	0.759			
Attitude towards money (MONEY)	MONEY1	0.852			
	MONEY2	0.891			
	MONEY3	0.730	0.894	0.919	0.696
	MONEY4	0.837			
	MONEY5	0.851			
Attitude towards competition (COMPT)	COMPT1	0.839			
	COMPT2_1	0.866			
	COMPT3	0.892	0.922	0.941	0.762
	COMPT4	0.909			
	COMPT5	0.855			
Subjective norm (Parents)	NORMP1	0.917			
	NORMP2	0.909	0.910	0.944	0.848
	NORMP3	0.937			
Subjective norm (Friend)	NORMF1	0.909			
	NORMF2	0.936	0.936	0.954	0.839
	NORMF3_1	0.931			
	NORMF4	0.888			
Subjective norm (Lecturer)	NORML_1	0.921			
	NORML2	0.926	0.941	0.958	0.851
	NORML3_1	0.921			
	NORML4	0.921			
Subjective norm (Counselor of career)	NORMCC1	0.941			
	NORMCC2	0.947	0.960	0.971	0.892
	NORMCC3	0.942			
	NORMCC4	0.948			

**c) Discriminant validity**

**Table A3**

*Analysis of Fornell & Larcker*

	INO	LOC	CAP	EI	P	CC	L	F
INO	0.854							
LOC	0.652	0.830						
CAP	0.492	0.409	0.887					
EI	0.739	0.550	0.413	0.911				
NORMP	0.640	0.482	0.283	0.688	0.921			
NORMCC	0.595	0.456	0.348	0.642	0.694	0.945		
NORML	0.579	0.476	0.340	0.590	0.666	0.847	0.922	
NORMF	0.699	0.516	0.357	0.685	0.820	0.729	0.732	0.916

**Table A4**

*Heterotrait-Monotrait (HTMT) Ratio*

	INO	LOC	CAP	EI	P	CC	L	F
INO								
LOC	0.725							
CAP	0.532	0.441						
EI	0.790	0.591	0.432					
NORMP	0.705	0.533	0.304	0.736				
NORMCC	0.638	0.488	0.366	0.668	0.742			
NORML	0.628	0.512	0.358	0.620	0.718	0.891		
NORMF	0.757	0.566	0.380	0.721	0.886	0.769	0.780	
ACH	0.606	0.795	0.456	0.518	0.537	0.485	0.545	0.558

Table shows that the value of square root AVE (thick number) for each variable is above the correlation value and this shows that all constructs in this study have satisfactory discriminatory validity. This study also uses the approach as suggested by Henseler et al. (2015) that is the value of HTMT. If the HTMT value is greater than 0.85 (Hair et al., 2014) or the HTMT value > 0.90 (Gold, Malhotra, & Segars, 2001), then there is a problem of discriminatory validity. In this study, the HTMT value for each construct is less than the required critical value of 0.85 (Hair et al., 2014) (see Table A4). Thus, the legitimacy of discrimination is in a satisfactory position.

In conclusion, based on all reliability and validity tests performed (after removing five items based on indicator values), the evaluation of model measurements was found to be satisfactory. This test also indicates that all items are valid and suitable for use to make estimates for the parameters in the structured model.

**Assessment of Structural (Inner) Model**

Once the measurement model is validated, the next step involves the use of PLS-SEM analysis to study the structural model through internal model analysis. For this, the researchers followed the requirements set by previous studies (Chin, 2010; Hair et al., 2013; Hair et al., 2011; Valerie, 2012), were looking at variance changes through the value of coefficient determination ( $R^2$ ), effect size ( $f^2$ ) and the relevance of a model using the value of  $Q^2$ .

### Variance Inflation Factor –VIF

Table A5 shows the results of the multicollinearity test for each variable. The variance inflation factor test between the exogenous variable and the endogenous variable displays lower than 5.0. This means that the data of this study are free from serious multicollinearity problems (Hair et al., 2014). Overall, the results of the construct analysis confirm that the constructs of this study achieve the set standards of validity and reliability.

**Table A5**

*VIF value*

<b>Exogenous Variable</b>	<b>VIF</b>
Attitude towards entrepreneurship(ENT)	3.058
Attitude towards change (CHANGE)	2.736
Attitude towards money (MONEY)	1.632
Attitude towards competition (COMPT)	3.307
Subjective norm (Parents)	3.850
Subjective norm (Friend)	4.512
Subjective norm (Lecturer)	4.302
Subjective norm (Counselor of career)	4.322

Note: VIF value <0.5

### Coefficient of Determination ( $R^2$ )

Table A shows the  $R^2$  for the student entrepreneurship intention variable of 78.7 percent (0.787). This indicates that the  $R^2$  value obtained for this student entrepreneurial intention variable is included in the strong category (Wynne, 1998).

**Table A6**

*R<sup>2</sup> Value*

<b>Construct</b>	<b>R<sup>2</sup></b>	<b>Description</b>
Entrepreneurial Intention	0.787	Strong

### Effect Size

Based on Table A7, the findings of the analysis show that the endogenous constructs of entrepreneurial intention are explained by seventeen exogenous constructs that have a size effect between 0 to 0.427. The highest impact sizes were attitudes towards entrepreneurship, while attitudes towards change, subjective norms (parents, lecturers and career counselors), recorded small size effects. In addition, attitudes toward money, attitudes toward competition, tolerance to ambiguity, self-confidence and access to capital do not show any effect of size on these endogenous variables.

**Table A7**

*Size of Impact on Entrepreneurial Intent (Endogenous Variables)*

Endogen	Exogen	R incl	R excl	f	Size Impact
<b>Entrepreneurial intention</b>	Attitude towards entrepreneurship (ENT)	0.821	0.698	0.687	Large
	Attitude towards change (CHANGE)		0.803	0.101	Small
	Attitude towards money (MONEY)		0.821	0	No
	Attitude towards competition (COMPT)		0.821	0	No
	Subjective norm (Parents)		0.814	0.039	Small
	Subjective norm (Friend)		0.82	0.006	Small
	Subjective norm (Lecturer)		0.82	0.006	Small
	Subjective norm (Counselor of career)		0.817	0.022	Small

### Predictive Relevance Model ( $Q^2$ )

Hair et al. (2013) asserted that if  $Q^2 > 0$ , the study model is said to have predictive ability while if  $Q^2 < 0$ , the model does not have predictive ability. Table A8 shows the  $Q^2$  value for entrepreneurial intention (EI) is 0.640. This indicates that this study model has a relevance forecast where the value of  $Q^2$  is found to be greater than 0.

**Table A8**

*Construct Cross Validated Redundancy*

Total	SSO	SSE	1-SSE/SSO
Entrepreneurial Intention	1284.0000	461.846	0.640

Note :  $Q^2 > 0$