International Journal of Tourism & Hospitality in Asia Pasific (IJTHAP)
Vol. 7 No. 3, pp. 378-395, October, 2024
E-ISSN: 2654-7945 P-ISSN: 2685-8800
https://www.ejournal.aibpmjournals.com/index.php/IJTHAP

Pioneering Digital Ventures: Investigating Proactive Personality, Education, and Opportunity in Malaysian Higher Education

Daisy Mui Hung Kee[1], Yen Jou Khor[2*], Jie Ning Khor[3], Jia Yue Han[4], Xin Lan Jiang[5], Ayushi Singh[6]
Universiti Sains Malaysia, Pulau Pinang, Malaysia[1,2,3,4,5]
IMS Engineering College, Ghaziabad, India[6]
Corresponding Author: christinajou523@gmail.com[2]
ORCID ID: http://orcid.org/0000-0002-7748-8230[2]

ARTICLE INFORMATION

Publication Information

Research Article

HOW TO CITE
Kee, D. M. H., Khor, Y. J., Khor, J. N., Han, J. Y., Jiang X. L., & Ayushi, S. (2024). Pioneering digital ventures: Investigating proactive personality, education, and opportunity in Malaysian higher education. *International Journal of Tourism & Hospitality in Asia Pasific, 7*(3), 378-395.

DOI:
https://doi.org/10.32535/ijthap.v7i3.3605

Received: 18 August 2024
Accepted: 19 September
Published: 20 October 2024

ABSTRACT

Digital entrepreneurship has become increasingly important in the context of Industry 4.0. This study explores the connections between digital entrepreneurial intention, proactive personality, entrepreneurial education, and entrepreneurial opportunity among Malaysian public university students. Additionally, it examines the mediating roles of attitudes, subjective norms, and PBC, guided by the TPB. A quantitative research design was employed, collecting data from 250 students, which was then analyzed using SPSS to test the proposed model. The findings reveal that entrepreneurial education and PBC are significant predictors of students' digital entrepreneurial intention. Moreover, proactive personality, entrepreneurship education, and entrepreneurial opportunity indirectly influence digital entrepreneurial intention via PBC. These results contribute to a more nuanced understanding of the factors driving digital entrepreneurial intention and highlight the importance of fostering educational environments that support entrepreneurship. The study provides valuable insights for educators and policymakers to develop strategies that enhance digital entrepreneurial capacities among students, promoting innovation and self-employment opportunities.

Keywords: Digital Entrepreneurial Intention; Entrepreneurial Education; PBC; Proactive Personality; TPB

INTRODUCTION

Digital entrepreneurship has emerged as one of the major factors in economic development, job creation, and wealth accumulation globally. The onset of Industry 4.0 has reshaped the business environment (Kee et al., 2023; Khin & Kee, 2022), paving the way for a new era of digital ventures. This transformation has disrupted traditional business models and democratized entrepreneurship, particularly through the use of accessible digital technologies. Digital entrepreneurship encompasses online business ventures that leverage digital platforms to sell products and services without the need for substantial physical investments, exemplified by e-commerce, online courses, blogs, and YouTube channels. This shift towards digital business has raised significant interest among stakeholders in Malaysian higher education, suggesting that self-employment could serve as a viable alternative to traditional employment (Nguyen et al., 2024). In a similar vein, Hu and Kee (2022) emphasize the importance of harmonizing education practices in global higher education during the pandemic, highlighting the need for optimized learning to enhance student outcomes.

The Malaysian government's Digital Economy Blueprint 2021, complemented by initiatives like MyDIGITAL aligned with the Shared Prosperity Vision 2030 (SPV 2030) and Twelfth Malaysia Plan 2021-2025 policies, reveals digital entrepreneurship as a cornerstone of economic growth, aiming for equitable and inclusive development (Gunaseelan et al., 2022). Within this context, higher education institutions play an important role in nurturing future entrepreneurs. Accounting students in Malaysian universities acknowledge the significance of digital entrepreneurship education in fostering critical thinking, team-building abilities, and entrepreneurial skills (Gunaseelan et al., 2022). The Department of Statistics Malaysia (DOSM) indicates that out of 5.92 million graduates in 2022, 85.4% were actively engaged in economic activities, leaving 14.6% unemployed. Digital entrepreneurship emerges as a strategic pathway to address this unemployment challenge, offering graduates opportunities to leverage emerging markets, innovate, and create products or services using new technologies (Abdullah, 2023). By embracing digital entrepreneurship, graduates can forge paths to self-employment and financial independence, potentially mitigating unemployment rates among fresh graduates.

This study aims to explore the connections between digital entrepreneurial intention, proactive personality, entrepreneurial education, and entrepreneurial opportunity. It also seeks to investigate the mediating influence of attitudes, subjective norms, and perceived behavioral control on the relationship above within Malaysian higher education, guided by the Theory of Planned Behavior (TPB).

The significance of this research lies in its potential to address critical challenges in graduate unemployment by identifying factors that foster entrepreneurial intentions and opportunities. By linking personality traits, education, and opportunities, this study offers insights that can shape future digital entrepreneurship education programs, especially in higher education.

The novelty of this research stems from its focus on the Malaysian higher education context, where digital entrepreneurship is increasingly seen as a solution to graduate unemployment. Additionally, the study's incorporation of the TPB as a framework for analyzing mediating factors presents a fresh perspective on the interplay between individual and external factors influencing entrepreneurial behavior.

This study contributes to the literature by highlighting the role of proactive personality, entrepreneurial education, and perceived opportunities in shaping digital entrepreneurial intentions. It also adds to the theoretical discourse by employing the TPB model to better

understand how attitudes, subjective norms, and perceived behavioral control mediate these relationships. Practically, the findings can inform policymakers and educational institutions in designing programs and initiatives that encourage entrepreneurship among university graduates.

LITERATURE REVIEW

Digital Entrepreneurial Intention

Various factors contribute to the increase in entrepreneurial intention, particularly entrepreneurial competencies such as knowledge, skills, and individual abilities (Sandroto et al., 2024). These competencies also extend to digital entrepreneurial intention, which pertains to the digitalization of entrepreneurship. Digital entrepreneurial intention refers to an individual's cognitive inclination to intentionally select and pursue a career in digital entrepreneurship (Aloulou et al., 2023). This mental predisposition is crucial in driving individuals to create new digital enterprises, as they recognize and seize opportunities within the digital landscape (Mohammed et al., 2023). Furthermore, Ajzen, as cited in Hamdie et al. (2022), identifies three key factors that influence the development of behavioral intentions: attitudes toward the behavior, subjective norms, and perceived behavioral control.

According to Ng et al. (2021), entrepreneurial intention is significantly influenced by perceived behavioral control (PBC) and attitudes toward entrepreneurship. Research suggests that entrepreneurial intention is a key determinant of entrepreneurial behavior, driving the creation of new ventures (Hueso et al., 2021). As a foundational concept in entrepreneurship literature, entrepreneurial intention is widely used to explain the factors that motivate individuals to pursue entrepreneurial aspirations (Vu et al., 2024). Considering the crucial role of entrepreneurship in fostering economic growth, governments must prioritize nurturing the next generation of entrepreneurs while also enhancing the capacities of current entrepreneurs to stimulate job creation and innovation (Ng et al., 2022).

This study aims to investigate the factors influencing Malaysian higher education students' intentions toward digital entrepreneurship. These factors include proactive personality, entrepreneurial opportunity, entrepreneurial education, attitudes toward entrepreneurship, subjective norms, and PBC. Furthermore, this study seeks to determine whether proactive personality, entrepreneurship education, and entrepreneurial opportunity have an effect on attitude toward entrepreneurship, subjective norms, and PBC. By examining these relationships, this research aims to provide deeper insights into how personal traits and external factors shape digital entrepreneurial intention in the context of Malaysian higher education.

In expanding the theoretical understanding of digital entrepreneurial intention, this study not only explores the direct influences of proactive personality, entrepreneurial education, and opportunities but also delves into how these factors impact attitudes, norms, and control beliefs. This deeper analysis can help identify potential strategies for promoting digital entrepreneurship, contributing to the broader efforts to develop a dynamic entrepreneurial ecosystem. This will have practical implications for educational institutions in crafting curriculum enhancements that support entrepreneurial competencies, thereby fostering a culture of innovation and digital enterprise among students.

Proactive Personality

Individuals with proactive personalities are inclined to identify opportunities, take initiative, and persist until they achieve meaningful change. Recent studies underscore the value of a proactive personality in managing challenging work environments and

maintaining psychological well-being in uncertain and demanding situations, such as during the COVID-19 pandemic (Chen et al., 2021). Research indicates that individuals with a proactive personality typically adopt a forward-thinking approach when encountering obstacles and challenges in their entrepreneurial pursuits. To enhance their social capital, these individuals actively seek support from their social networks when faced with difficulties (Sharifian et al., 2022). This proactive behavior demonstrates their determination to overcome challenges, leverage resources, and adapt to changing circumstances, all of which contribute to entrepreneurial success and are indicative of a positive attitude toward entrepreneurship.

Individuals with proactive personalities demonstrate a resilient entrepreneurial mindset, which is crucial for navigating the complexities of starting and growing a business. They actively engage with their social networks to overcome obstacles and capitalize on opportunities. In contrast, individuals without a proactive personality tend to take minimal action, miss business opportunities, passively accept their circumstances, and rely on external forces for change (Phong et al., 2020). Support and encouragement from key figures, such as friends, family, or mentors, play a critical role in reinforcing proactive behaviors. Subjective norms shape their perceptions of the social acceptability and appropriateness of their entrepreneurial actions. Proactive individuals also have a strong belief in their ability to influence outcomes through their actions, aligning with the concept of PBC in the TPB. They persist in their goals despite setbacks, exhibiting strong intentions to carry out specific actions. Their plans and actions are driven by purpose, underpinned by their proactive mindset. For instance, someone with a proactive personality may aspire to start a new business or take professional risks.

A survey conducted by Hu et al. (2023) among Chinese undergraduate students found a significant relationship between proactive personality and entrepreneurial intention. Similarly, another study reveals a significant direct relationship between proactive personality and digital entrepreneurial intention, highlighting the importance of personal traits in shaping one's desire to pursue entrepreneurship in the digital domain (Naz et al., 2020).

Based on the insights above, the following hypotheses are proposed:

H1: Proactive personality positively affects the attitudes toward entrepreneurship of public university students.
H2: Proactive personality positively affects the subjective norms of public university students.
H3: Proactive personality positively affects the PBC of public university students.
H4: Proactive personality positively affects the digital entrepreneurial intention of public university students.

Entrepreneurship Education

Entrepreneurship education is essential for building kids' self-esteem and raising their awareness of innovation. It gives students the fundamental knowledge, expertise, and thought processes needed to successfully navigate the complexity of business. Instead of being born, entrepreneurs are developed via teaching the knowledge and abilities needed to launch new companies. Through direct involvement in entrepreneurial education or observation, students' entrepreneurial abilities are shaped through a socially engaged process of acquiring and converting information resources. This method also entails changing experience and using it to create new knowledge. Students' attitudes toward entrepreneurship may alter as a result of entrepreneurship education (Galloway & Brown, 2002). The way that students view entrepreneurship education is closely related to how well they understand innovation. Thus, some

universities prioritize education in innovation and entrepreneurship to enhance students' awareness and skills, driven by their inventive personalities.

Universities need to provide an intellectual atmosphere that serves as a stimulant for high-tech entrepreneurs (Franke & Lüthje, 2004). Students are introduced to new tasks and gain information through practical experience through entrepreneurship education, which usually leads to positive personal growth. This progress facilitates the creation of a self-evaluation system and the skillful formulation of several personal objectives. As a result, their attitudes and ideas are greatly influenced. Pupils will have higher expectations of themselves and be more driven to succeed, particularly if they want to work toward becoming more self-sufficient adults (Singh & Dwivedi, 2022). Digital entrepreneurial goals are directly associated with entrepreneurship education. Entrepreneurship education offers instruction in digital skills, digital marketing, and creative thinking, all of which contribute to an awareness of the entrepreneurial landscape in the digital age. This educational method stimulates students' interest in digital entrepreneurship and increases their capacity and willingness to enter the digital domain. As a result, entrepreneurship education significantly contributes to the development of digital entrepreneurial intention. Thus, this study formed the following hypothesis:

H5: Entrepreneurship education positively affects the attitude toward entrepreneurship of public university students.
H6: Entrepreneurship education positively affects the subjective norms of public university students.
H7: Entrepreneurship education positively affects the PBC of public university students.
H8: Entrepreneurship education positively affects the digital entrepreneurial intention of public university students.

Entrepreneurial Opportunity

Opportunity recognition, generally defined as the process of identifying potential chances and utilizing them to produce new items, services, and business models, is a crucial first step in launching a business (Donbesuur et al., 2020; Yang & Meyer, 2019). This study defines an entrepreneurial opportunity as a favorable market situation that can be used to launch new businesses or develop creative solutions, an essential element of entrepreneurship (Huang & Kee, 2024). Over the past thirty years, various descriptions of opportunity recognition have emerged, underscoring its importance in the field of entrepreneurship (Donbesuur et al., 2020; Yang & Meyer, 2019). Recognizing changes is primarily a cognitive process, according to several academics (Ardichvili et al., 2003). Researchers have sought to determine why some individuals are more adept at identifying opportunities than others, as the ability to recognize opportunities creates favorable conditions that foster entrepreneurial actions. Prominent drivers for opportunity identification will categorized into six primary groups: prior knowledge, social capital, individual characteristics and cognition, attentiveness, methodical searching, and environmental conditions. Based on these insights, the following hypotheses are proposed:

H9: Entrepreneurial opportunity positively affects the attitude toward entrepreneurship of public university students.
H10: Entrepreneurial opportunity positively affects the subjective norms of public university students.
H11: Entrepreneurial opportunity positively affects the PBC of public university students.
H12: Entrepreneurial opportunity positively affects the digital entrepreneurial intention of public university students.

Attitude Toward Entrepreneurship

Ng et al. (2021) highlight a connection between attitude toward entrepreneurship and entrepreneurial intention. According to Ajzen (1991), attitude is the degree to which an individual's feeling about engaging in a particular behavior is beneficial or detrimental. A person's attitudes about entrepreneurship indicate their aspiration to become one, influencing their intention to act in specific ways and coming before their actual entrepreneurial intention. Positive attitudes towards entrepreneurship correlate with a preference for independent work (Agolla et al., 2019; Douglas & Shepherd, 2002). Attitude is seen as the result of one's opinion of their actions and their outcomes (Al-Mamary & Alraja, 2022). Alharbi et al. (2021) also identified that attitude is strongly correlated to intention. Previous research has shown that a people's attitude, which is affected by opinions, beliefs, and subjective assessments, is a major factor in influencing whether or not they have a propensity for starting their own businesses (Duong, 2021; Meoli et al., 2020).

H13: Attitude toward entrepreneurship positively affects the digital entrepreneurial intention of public university students.

Subjective Norms

Subjective norms are the individual's interpretation of the societal constraints placed on them to participate in some actions (Ardakani et al., 2020; Bagaskoro & Qastharin, 2021). Adding to this, subjective standards have two essential elements: an individual's understanding of the expectations others have of them and their inclination to conform to these expectations. As people move through and interact with those around them in social contexts, Abadi et al. (2021) state that people are affected by norms; people's propensity to act or not depends on how much pressure they receive to uphold or violate rules. The perception of social pressure to participate in or refrain from entrepreneurship can come from many places, including friends, family, teachers, and other powerful people. Encouragement from a loved one can increase confidence in pursuing digital entrepreneurship, while its absence may deter individuals. Participation in entrepreneurial projects or assisting entrepreneurs also provides students with valuable experience and motivation to become entrepreneurs by interacting with role models. Research shows that individuals with strong support have higher entrepreneurial intentions (Mensah et al., 2021). For example, Amofah et al. (2020) determined a direct correlation between subjective norms and digital entrepreneurial intention in two private universities in the Brong Ahafo region of Ghana among MBA students. Therefore, this study hypothesizes that:

H14: Subjective norms positively affect the digital entrepreneurial intention of public university students.

Perceived Behavioral Control (PBC)

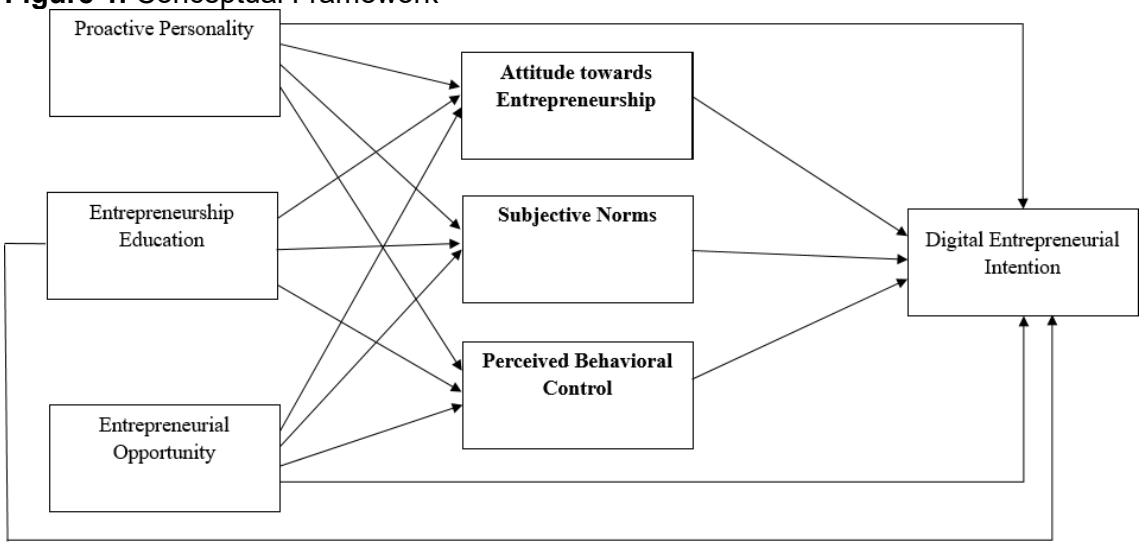
PBC evaluates an individual's self-assurance in conquering obstacles and finishing a desired job. Because motivation is significantly influenced by how easy or difficult one believes establishing a digital business to be, this idea is essential for understanding digital entrepreneurial intention (Hassan, 2020; Karimi et al., 2017). Stronger intents are associated with a greater sense of PBC, refer to Ajzen (1991). The skills, assets, and further prerequisites someone possesses to do a certain task are referred to as the behavioral control variable (Al-Mamary et al., 2020). Having more control over one's behavior enhances one's capacity to assess present behavior and forecast future actions. Research regularly demonstrates that PBC is a good measure of an enterprising attitude. People are more likely to plan to participate in digital business if they think they have the required abilities, chances, and resources, according to research by Hassan (2020) and Karimi et al. (2017). To comprehend and forecast business goals, the TPB

makes use of attitude toward entrepreneurship, subjective norms, and PBC. As a result, the following theories were developed:

H15: PBC positively affects the digital entrepreneurial intention of public university students.

All the fifteen (15) hypotheses are proposed in Figure 1.

Figure 1. Conceptual Framework



RESEARCH METHOD

Data Collection and Sampling

Data were gathered using Google Forms administered to 250 Malaysian students enrolled in public institutions. The survey aimed to explore how various factors influence digital entrepreneurial intention among Malaysian higher education students. Respondents were asked to indicate their level of agreement with different statements on a scale ranging from 1 (strongly disagree) to 7 (strongly agree). The list of all measurements is provided in Appendix 1.

Measures

In this study, an online questionnaire using Google Forms was conducted, comprising two main sections: respondent demographics and perceptions of digital entrepreneurial intention. Demographic information, encompassing gender, age, ethnicity, nationality, level of education, department/school type, current academic year, and attended public university, was collected.

Subsequently, seven variables were examined, totaling 37 items. Proactive personality was assessed using 5 items sourced from Claes et al. (2005), with sample items including “If I see something I do not like, I fix it.” Entrepreneurship education, comprising 6 items, was evaluated based on Díaz-Casero et al. (2011), including statements like “Teaching at my university provides adequate instruction in market economic principles.”

Entrepreneurial opportunity was measured through 6 items synthesized from Chandler & Jansen (1992) and Crant (1996), with examples like “I can spot good opportunities long before others can.” Attitudes toward entrepreneurship were gauged using 5 items adapted from Liñán and Chen (2009), including statements like “A career as an entrepreneur is attractive to me.”

Additionally, the subjective norm was assessed through 3 items from Leong (2008) and Leroy et al. (2009), while PBC and digital entrepreneurial intention were evaluated using 6 items each from Liñán and Chen (2009). Each item used a rating on a seven-point Likert scale, ranging from "strongly disagree" to "strongly agree."

RESULTS

Table 1. Respondent Profile's Summary (N=250)

Response	Frequency	Percentage (%)
Gender		
Female	163	65.2
Male	87	34.8
Age		
18 - 20	69	27.6
21 - 23	155	62
24 - 26	20	8
Above 26	6	2.4
Race		
Chinese	201	80.4
Malay	40	16
India	9	3.6
Nationality		
Local	155	62
International	95	38
Level of Education		
Bachelor's Degree	223	89.2
Master's Degree	13	5.2
Doctorate Degree (PhD)	14	5.6
School / Department		
Management and Accounting	180	72
Engineering	3	1.2
Computer Science and Information Technology	2	0.8
Health and Food Science	10	4
Business and Economics	22	8.8
Language and Linguistics	2	0.8
Arts	1	0.4
Communication	7	2.8
Computing and Informatics	2	0.8
Housing, Building and Planning	14	5.6
Biological	5	2
Social and Mathematical Science	2	0.8
Current Academic Year		
Year 1	122	48.8
Year 2	100	40
Year 3	23	9.2
Year 4	5	2
Public University		
USM	174	69.6
UM	32	12.8
UKM	2	0.8
UMP	2	0.8
UPM	5	2
UMPSA	5	2

UMS	3	1.2
UNIMAP	6	2.4
UNIMAS	2	0.8
UUM	17	6.8
UTeM	2	0.8

Table 1 displays a summary of the research participants' demographics. There were 87 (34.8%) males and 163 (65.2%) females in the sample. While 2.4% of respondents were aged than 26, possibly representing students who had already begun working, most of the respondents (62%) were between the ages of 21 and 23. The respondents' ethnic composition was as follows: 201 (80.4%) were Chinese, 40 (16%) were Malay, and 9 (3.6%) were Indian. According to the data, Malaysian students accounted for most responders (62%) and were followed by students outside the country (38%). Moreover, most respondents (89.25%) were now enrolled in bachelor's programs, with 13 (5.5%) in master's programs and 14 (5.6%) in doctoral programs following suit. Regarding department and school, the majority of responders (72%), followed by the school of business and economics (8.8%), were from the school of management and accounting. Aside from that, most students at the public university were enrolled in their first or second year of study. Moreover, 100 students were in their second year of academic studies (40%) and 122 were presently in their first year of study (48.8%). Conversely, USM students filled out the survey the most (69.6%), followed by UM (12.8%).

Table 2. Descriptive Analysis, Cronbach's Coefficients Alpha and Zero-Order Correlations for All Study Variables

Variables		1	2	3	4	5	6	7
1.	PP	0.911						
2.	EE	0.709**	0.957					
3.	EO	0.632**	0.689**	0.954				
4.	ATE	0.608**	0.698**	0.711**	0.939			
5.	SN	0.437**	0.615**	0.563**	0.525**	0.904		
6.	PBC	0.600**	0.624**	0.689**	0.680**	0.491**	0.949	
7.	DEI	0.566**	0.627**	0.625**	0.629**	0.500**	0.712**	0.955
No. of Item		5	6	6	5	3	6	6
Mean		5.519	5.614	5.346	5.371	4.987	5.124	5.131
Standard Deviation		1.163	1.162	1.162	1.166	1.261	1.262	1.215

Note: N = 250; **p < 0.01. The diagonal entries represent Cronbach's coefficient alpha.
PP = Proactive Personality, EE = Entrepreneurship Education, EO = Entrepreneurial Opportunity, ATE = Attitude Towards Entrepreneurship, SN = Subjective Norms, PBC = Perceived Behavioral Control, DEI = Digital Entrepreneurial Intention

It is necessary to determine the direction and degree of the correlation between the variables to ascertain the impact of proactive personality, entrepreneurship education, and entrepreneurial opportunity on the intention to pursue digital entrepreneurship. Additionally, tests should be conducted to examine the association between attitude toward entrepreneurship, subjective norms, PBC, and digital entrepreneurial intention. Table 2 presents the relationships among the study variables and their descriptive statistics. All seven variables exhibited strong reliability, as indicated by Cronbach's alphas ranging from 0.904 to 0.957.

Table 3. Regression Analysis

Variables		ATE	SN	PBC	DEI
1.	PP	0.109	-0.081	0.189**	0.066
2.	EE	0.339***	0.475***	0.185**	0.144*

3.	EO	0.409***	0.287***	0.442***	0.073
4.	ATE				0.111
5.	SN				0.078
6.	PBC				0.419***
R^2		0.594	0.419	0.533	0.580
F Value		119.832	59.066	93.671	55.885
Durbin-Watson Statistic		2.028	1.707	1.69	1.927

Note: N=250, *p<0.05, **p<0.01, ***p<0.001
PP = Proactive Personality, EE = Entrepreneurship Education, EO = Entrepreneurial Opportunity, ATE = Attitude Towards Entrepreneurship, SN = Subjective Norms, PBC = Perceived Behavioral Control, DEI = Digital Entrepreneurial Intention

The regression analysis summary, as shown in Table 3, identifies digital entrepreneurial intention as the dependent variable, while proactive personality, entrepreneurship education, entrepreneurial opportunity, attitude toward entrepreneurship, subjective norms, and PBC serve as the independent variables. The analysis reveals a strong correlation between entrepreneurship education and PBC with digital entrepreneurial intention, indicated by beta values of 0.144 and 0.419, respectively. These findings support hypotheses H8 and H15. The R^2 value of 0.580 suggests that PBC and entrepreneurship education together explain 58% of the variance in digital entrepreneurial intention, with PBC having the most significant impact, reflected by its highest beta value of 0.419.

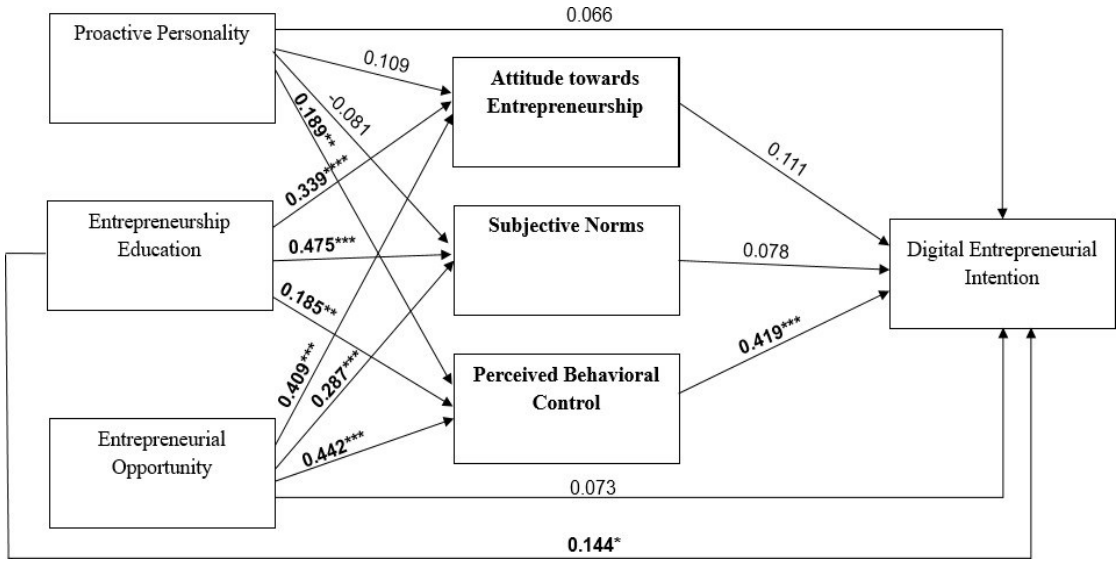
Entrepreneurship education, with a beta value of 0.144, emerged as a key factor influencing students' aspirations to pursue digital entrepreneurship in Malaysian public universities, second only to PBC. In contrast, proactive personality, entrepreneurial opportunity, attitude toward entrepreneurship, and subjective norms did not demonstrate a significant effect on digital entrepreneurial intention. Consequently, hypotheses H4, H12, H13, and H14 were not supported.

The study also examined the relationships between proactive personality, entrepreneurship education, entrepreneurial opportunity, attitude toward entrepreneurship, subjective norms, and PBC to assess their potential influence on digital entrepreneurial intention. The results highlight a positive and significant association between entrepreneurship education and entrepreneurial opportunity with attitude toward entrepreneurship, as evidenced by beta values of 0.339 and 0.409, respectively. This supports hypotheses H5 and H9.

Additionally, entrepreneurial opportunity and entrepreneurship education showed a positive correlation with subjective norms, with beta values of 0.287 and 0.475, respectively, lending support to hypotheses H6 and H10. Moreover, proactive personality, entrepreneurship education, and entrepreneurial opportunity displayed significant relationships with PBC, as reflected in beta values of 0.189, 0.185, and 0.442, respectively. As a result, hypotheses H3, H7, and H11 are supported.

The findings underscore the critical role of PBC in shaping digital entrepreneurial intention, influenced by proactive personality, entrepreneurship education, and entrepreneurial opportunity. However, a proactive personality did not have a significant impact on attitude toward entrepreneurship or subjective norms, leading to the rejection of hypotheses H1 and H2. A summary of the hypothesized model is depicted in Figure 2.

Figure 2. Hypothesized Model



Note: *p<0.05, **p<0.01, ***p<0.001

DISCUSSION

This study delves into the various variables that impact digital entrepreneurial intention, offering an exploration of the complex interrelationships between personal perception, entrepreneurial education, and entrepreneurial orientation through the lenses of attitude toward entrepreneurship, PBC, and TPB. The primary aim of this research is to enhance the theoretical understanding of how these variables interact and to examine the pivotal role that social cognition plays in shaping digital entrepreneurial journeys. In particular, this research offers a deeper insight into the conceptual frameworks surrounding the development of digital entrepreneurial intentions and the intricate mechanisms by which social cognition influences these intentions. The results from this study shed light on how these dynamics manifest among university students in Malaysia, particularly in relation to their propensity toward digital entrepreneurship.

This study's findings reveal that proactive personality, entrepreneurship education, and entrepreneurial opportunity are significant factors that influence digital entrepreneurial intention among university students in Malaysia. More specifically, entrepreneurship education emerged as a variable that directly affected digital entrepreneurial intention, showing the profound impact of education on the entrepreneurial mindset. Entrepreneurship education not only directly influences digital entrepreneurial intention but also works through PBC to further bolster entrepreneurial intention. proactive personality, entrepreneurship education, and entrepreneurial opportunity are found to impact digital entrepreneurial intention through multiple pathways, including attitude toward entrepreneurship, subjective norms, and PBC, all of which are integral components of the TPB framework. By elucidating these relationships, the study highlights the intricate ways in which different facets of cognition, education, and entrepreneurial orientation shape digital entrepreneurial intentions. In addition, the findings emphasize that entrepreneurship education and entrepreneurial opportunity also demonstrate a significant relationship with attitude toward entrepreneurship and subjective norms, suggesting that entrepreneurial education and orientation are deeply intertwined with individual attitudes and perceptions of social support in the entrepreneurial context.

The analysis of the data reveals that 9 out of the 15 hypotheses tested in this study are statistically significant. Among the factors examined, entrepreneurship education was identified as the most significant predictor of digital entrepreneurial intention among Malaysian university students. Entrepreneurship education's impact on digital

entrepreneurial intention is facilitated through attitude toward entrepreneurship, subjective norms, and PBC, all of which serve as critical mediators in the relationship between education and entrepreneurial intention. This is further supported by the findings in hypotheses H5, H6, H7, and H8, which underscore the substantial influence of entrepreneurship education on digital entrepreneurial intention. The significance of these findings is echoed in recent literature, including studies by Colombelli et al. (2024) and Wibowo et al. (2023), which corroborate the large effect that entrepreneurship education has on digital entrepreneurial intention. These studies suggest that entrepreneurial education plays an instrumental role in shaping not only the skills and knowledge associated with digital entrepreneurship but also the overall intentions and motivations of individuals pursuing entrepreneurial ventures.

The pronounced impact of entrepreneurship education on digital entrepreneurial intention can be attributed to the fact that entrepreneurship education offers both the knowledge and skills required for the growth and development of digital entrepreneurship. In particular, entrepreneurial education provides students with practical knowledge, real-world problem-solving skills, and exposure to entrepreneurial experiences, all of which are crucial for fostering entrepreneurial intentions in the digital domain. This relationship highlights the importance of equipping students with the right tools and experiences to encourage their participation in digital entrepreneurship. Furthermore, the study suggests that government bodies and universities are in a prime position to enhance the ecosystem and curriculum necessary to support student engagement in digital entrepreneurship. By integrating entrepreneurship-related courses and fostering an environment that promotes innovation and entrepreneurial thinking, educational institutions can play a pivotal role in nurturing the next generation of digital entrepreneurs.

Given the significant influence of entrepreneurship education on digital entrepreneurial intention, it is crucial for both educational institutions and policymakers to focus on strengthening the entrepreneurial ecosystem across all educational levels. Such efforts would not only bolster the development of digital entrepreneurial intention among students but would also empower them to embark on entrepreneurial ventures during or after their time in university. This is particularly important in the context of Malaysia, where unemployment among fresh graduates is on the rise. According to a recent report by The Star (2023), the increasing unemployment rate among graduates highlights the pressing need for initiatives that can help students transition from education to employment. By enhancing entrepreneurial education and creating opportunities for students to engage in entrepreneurship, universities can play a key role in mitigating the rise in unemployment and fostering a more resilient and innovative workforce.

The findings of this study have important implications for policymakers and educational institutions seeking to promote digital entrepreneurship among students. In particular, they underscore the need for a more comprehensive approach to entrepreneurial education that not only focuses on knowledge acquisition but also emphasizes the development of skills and attitudes necessary for success in the digital economy. By incorporating elements of social cognition, entrepreneurial orientation, and behavioral control into the curriculum, universities can create a more holistic learning environment that prepares students for the challenges and opportunities of digital entrepreneurship. Moreover, government bodies can support these efforts by providing funding, resources, and infrastructure to facilitate student engagement in entrepreneurship. Such initiatives could include entrepreneurship incubators, mentorship programs, and industry partnerships, all of which can provide students with the practical experience and support they need to succeed in the digital entrepreneurial landscape.

CONCLUSION

Entrepreneurship education and PBC emerge as key factors directly influencing digital entrepreneurial intention. In addition, proactive personality, entrepreneurship education, and entrepreneurial opportunity influence digital entrepreneurial intention primarily through PBC. These results emphasize the crucial role of entrepreneurship education in shaping students' intentions toward digital entrepreneurship, with PBC acting as a key mediator in this relationship. The direct effects of entrepreneurial opportunity and entrepreneurship education on attitudes toward entrepreneurship, subjective norms, and PBC further highlight the importance of exposing students to entrepreneurial opportunities and comprehensive educational programs.

In conclusion, this study adds to the growing body of literature on digital entrepreneurship by offering a deeper understanding of the factors influencing digital entrepreneurial intention among university students in Malaysia. The findings underscore the essential role of entrepreneurial education in fostering digital entrepreneurial intentions and suggest that entrepreneurship education, proactive personality, and entrepreneurial opportunity significantly impact digital entrepreneurial intention through attitude toward entrepreneurship, subjective norms, and PBC. Additionally, the study highlights the importance of social cognition in the entrepreneurial process and offers insights into how universities and government bodies can enhance the ecosystem and curriculum to support student engagement in digital entrepreneurship.

By strengthening these elements across educational institutions, policymakers and educators can empower students to pursue entrepreneurial ventures, helping to address the challenges of unemployment among recent graduates. This research makes a valuable contribution to ongoing efforts to promote digital entrepreneurship and provides a roadmap for future initiatives aimed at fostering a more innovative and entrepreneurial society. Enhancing PBC among students is identified as an essential strategy for nurturing digital entrepreneurial intention. The findings suggest that providing students with comprehensive entrepreneurship education and empowering them with the confidence and ability to take action are crucial steps in encouraging them to pursue digital entrepreneurship. By focusing on these aspects, institutions and policymakers can effectively cultivate a culture of entrepreneurial thinking and action among students, ultimately increasing interest and engagement in digital entrepreneurship initiatives.

Implications

This research adds insights to existing studies on the digital entrepreneurial intention of university students in Malaysian public universities. The implication of the findings is twofold. Firstly, educators and higher education institutions in Malaysia can significantly enhance the effectiveness of entrepreneurship education by integrating more comprehensive programs into the curriculum. By infusing practical skills, fostering digital literacy, and providing hands-on experiences that cultivate entrepreneurial mindsets, universities can empower students with the knowledge, skills, and proactive mindset essential for success in digital entrepreneurship. In addition, fostering a supportive environment that encourages start-up entrepreneurship on campus is necessary. The significance of entrepreneurship education and PBC in shaping digital entrepreneurial intention suggests the need for concerted efforts to bolster entrepreneurship education initiatives and foster an environment conducive to entrepreneurial endeavors. By prioritizing these aspects, institutions can effectively equip students with the necessary tools and mindset to thrive in digital entrepreneurship, ultimately driving innovation and economic growth.

LIMITATIONS

While this research contributes insights, it also has several limitations that warrant consideration for future studies. First, this study's focus on students from Malaysian public universities may limit its generalizability. Including samples from private universities and vocational institutions could provide a more comprehensive understanding of digital entrepreneurial intention among graduate students. Secondly, the reliance on self-reported questionnaires introduces the possibility of response biases which could potentially affect the accuracy of data regarding digital entrepreneurial intention. Future research could explore incorporating other internal factors, such as personality traits, to mitigate the impact of biases. Thirdly, the study's limited scope of variables, focusing on proactive personality, entrepreneurship education, entrepreneurial opportunity, attitude toward entrepreneurship, subjective norms, and PBC, suggests the need for additional variables such as access to capital, technological infrastructure, and mentorship programs. This broader scope could provide a more holistic understanding of the factors driving digital entrepreneurial intention. Moreover, the cross-sectional design of the study captures data at a single time point, which restricts the ability to infer the relationships between variables over time. Adopting longitudinal designs in future studies could track changes in digital entrepreneurial intention over time, offering deeper insights into how these factors influence graduate students in Malaysia. Lastly, future comparative studies could explore differences in digital entrepreneurial intention among graduate students in different countries or regions. Examining cultural, economic, and policy differences could shed light on how these factors impact digital entrepreneurial intention, informing strategies for fostering entrepreneurship in diverse contexts.

ACKNOWLEDGMENT

The authors gratefully acknowledge the contributions of informants, colleagues, and all individuals who supported this research through their insights and engagement. Their involvement greatly enriched the quality and depth of this study.

DECLARATION OF CONFLICTING INTERESTS

The authors declare that there is no conflict of interest.

REFERENCES

Abadi, B., Mahdavian, S., & Fattahi, F. (2021). The waste management of fruit and vegetable in wholesale markets: Intention and behavior analysis using path analysis. *Journal of Cleaner Production, 279*, 123802. https://doi.org/10.1016/j.jclepro.2020.123802

Abdullah, N. H. N. (2023). Digital entrepreneurship: Opportunities, barriers, key drivers. In *Handbook of Research on Designing Sustainable Strategies to Develop Entrepreneurial Intention* (pp. 103-123). IGI Global.

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. https://doi.org/10.1108/apjie-06-2018-0037

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

Al-Mamary, Y. H. S., & Alraja, M. M. (2022). Understanding entrepreneurship intention and behavior in the light of TPB model from the digital entrepreneurship perspective. *International Journal of Information Management Data Insights, 2*(2), 100106. https://doi.org/10.1016/j.jjimei.2022.100106

Al-Mamary, Y. H. S., Abdulrab, M., Alwaheeb, M. A., & Alshammari, N. G. M. (2020). Factors impacting entrepreneurial intentions among university students in Saudi

Arabia: Testing an integrated model of TPB and EO. *Education + Training, 62*(7/8), 779–803. https://doi.org/10.1108/et-04-2020-0096

Alharbi, A., Aljojo, N., Zainol, A., Alshutayri, A., Alharbi, B., Aldhahri, E., Khairullah, E. F., & Almandeel, S. (2021). Identification of critical factors affecting the students' acceptance of Learning Management System (LMS) in Saudi Arabia. *International Journal of Innovation, 9*(2), 353–388. https://doi.org/10.5585/iji.v9i2.19652

Aloulou, W., Ayadi, F., Ramadani, V., & Dana, L. (2023). Dreaming digital or chasing new real pathways? Unveiling the determinants shaping Saudi youth's digital entrepreneurial intention. *International Journal of Entrepreneurial Behaviour & Research, 30*(2/3), 709– 734. https://doi.org/10.1108/ijebr-10-2022-0942

Amofah, K., Saladrigues, R., & Akwaa-Sekyi, E. K. (2020). Entrepreneurial intentions among MBA students. *Cogent Business & Management, 7*(1), 1832401. https://doi.org/10.1080/23311975.2020.1832401

Ardakani, M. F., Salehi-Abargouei, A., Sotoudeh, A., Esmaeildokht, S., & Bahrevar, V. (2020). Do subjective norms predict the screening of cancer patients' First-Degree relatives? A systematic review and meta-analysis. *Asian Pacific Journal of Cancer Prevention, 21*(6), 1521–1530. https://doi.org/10.31557/apjcp.2020.21.6.1521

Ardichvili, A., Cardozo, R., & Ray, S. (2003). A theory of entrepreneurial opportunity identification and development. *Journal of Business Venturing, 18*(1), 105–123. https://doi.org/10.1016/s0883-9026(01)00068-4

Bagaskoro, G. Y., & Qastharin, A. R. (2021). Determining factors that influence indonesian consumers' sustainable purchase behavior. *Journal of International Conference Proceedings, 4*(2), 275-291. https://doi.org/10.32535/jicp.v4i2.1250

Chandler, G. N., & Jansen, E. (1992). The founder's self-assessed competence and venture performance. *Journal of Business Venturing, 7*(3), 223–236. https://doi.org/10.1016/0883-9026(92)90028-P

Chen, N. Y-F., Crant, J. M., Wang, N., Kou, Y., Qin, Y., Yu, J., & Sun, R. (2021). When there is a will there is a way: The role of proactive personality in combating COVID19. *The Journal of Applied Psychology, 106*(2), 199–213 https://doi.org/10.1037/apl0000865

Claes, R., Beheydt, C., & Lemmens, B. (2005). Unidimensionality of abbreviated proactive personality scales across cultures. *Applied Psychology, 54*(4), 476–489. https://doi.org/10.1111/j.1464-0597.2005.00221.x

Colombelli, A., Paolucci, E., Raguseo, E., & Elia, G. (2024). The creation of digital innovative start-ups: The role of digital knowledge spillovers and digital skill endowment. *Small Business Economics, 62*(3), 917-937. https://doi.org/10.1007/s11187-023-00789-9

Crant, J. M. (1996). The proactive personality scale as a predictor of entrepreneurial intentions. *Management, 29*(3), 62-74.

Díaz-Casero, J. C., Hernández-Mogollón, R., & Roldán, J. L. (2011). A structural model of the antecedents to entrepreneurial capacity. *International Small Business Journal, 30*(8), 850– 872. https://doi.org/10.1177/0266242610385263

Donbesuur, F., Boso, N., & Hultman, M. (2020). The effect of entrepreneurial orientation on new venture performance: Contingency roles of entrepreneurial actions. *Journal of Business Research, 118*, 150–161. https://doi.org/10.1016/j.jbusres.2020.06.042

Douglas, E. J., & Shepherd, D. A. (2002). Self-Employment as a career choice: Attitudes, entrepreneurial intentions, and utility maximization. *Entrepreneurship Theory and Practice, 26*(3), 81–90. https://doi.org/10.1177/104225870202600305

Duong, C. D. (2021). Exploring the link between entrepreneurship education and entrepreneurial intentions: The moderating role of educational fields. *Education + Training, 64*(7), 869–891. https://doi.org/10.1108/et-05-2021-0173

Franke, N., & Lüthje, C. (2004). Entrepreneurship and Innovation. In *Springer eBooks* (pp. 33– 46). Springer. https://doi.org/10.1007/978-3-642-17114-7_3

Galloway, L., & Brown, W. (2002). Entrepreneurship education at university: A driver in the creation of high growth firms? *Education + Training, 44*(8/9), 398–405. https://doi.org/10.1108/00400910210449231

Gunaseelan, K., Subramaniam, T. S., Sern, L. C., Jabor, M. K., & Rathakrishnan, G. (2022). Digital entrepreneurship among higher education students. *International Journal of Academic Research in Business and Social Sciences, 12*(9). https://doi.org/10.6007/ijarbss/v12- i9/14842

Hamdie, K. M., Koroy, T. R., Arifin, Z., Muslim, M., & Naviri, T. (2022). The analysis of determinants of compliance in mandatory manpower report with Theory of Planned Behavior and Institutional Theory. *Journal of International Conference Proceedings, 5*(1), 385-399. https://doi.org/10.32535/jicp.v5i1.1487

Hassan, H. K. (2020). Intention towards social entrepreneurship of university students in an emerging economy: the influence of entrepreneurial self-efficacy and entrepreneurship education. *On the Horizon, 28*(3), 133–151. https://doi.org/10.1108/oth-04-2020-0012

Hu, M. K., & Kee, D. M. H. (2022). Harmonising global higher education: Optimise learning in the new normal. In E. J. Valeau, R. L. Raby, & U. Gaulee (Eds.), *Shaping a Humane World Through Global Higher Education: Pre-Challenges and Post-Opportunities During a Pandemic* (pp. 130-140). STAR Scholars.

Hu, R., Shen, Z., Kang, T. W., Wang, L., Bin, P., & Sun, S. (2023). Entrepreneurial passion matters: The relationship between proactive personality and entrepreneurial intention. *SAGE Open, 13*(4), 21582440231200940. https://doi.org/10.1177/21582440231200940

Huang, Z., & Kee, D. M. H. (2024). Exploring entrepreneurial intention: The roles of proactive personality, education, opportunity and planned behavior. *Heliyon*, e31714. https://doi.org/10.1016/j.heliyon.2024.e31714

Hueso, J. A., Jaén, I., & Liñán, F. (2021). From personal values to entrepreneurial intention: A systematic literature review. *International Journal of Entrepreneurial Behaviour & Research, 27*(1), 205–230. https://doi.org/10.1108/ijebr-06-2020-0383

Karimi, S., Biemans, H. J., Naderi Mahdei, K., Lans, T., Chizari, M., & Mulder, M. (2017). Testing the relationship between personality characteristics, contextual factors and entrepreneurial intentions in a developing country. *International Journal of Psychology, 52*(3), 227-240. https://doi.org/10.1002/ijop.12209

Kee, D. M. H., Miguel, C., & Khin, S (2023). The key enablers of SMEs readiness in Industry 4.0: A case of Malaysia. *International Journal of Emerging Markets*, https://doi.org/10.1108/IJOEM-08-2021-1291

Khin, S., & Kee, D. M. H. (2022). Factors influencing Industry 4.0 adoption. *Journal of Manufacturing Technology Management, 33*(3), 448-467. https://doi.org/10.1108/JMTM-03-2021-0111

Leong, C. K. (2008). *Entrepreneurial intention: An empirical study among Open University Malaysia (OUM) students* [Master's thesis, Open University Malaysia (OUM)]. Open University Malaysia Knowledge Repository. https://library.oum.edu.my/repository/306/

Leroy, H., Maes, J., Sels, L., Debrulle, J., & Meuleman, M. (2009). *Gender effects on entrepreneurial intentions: A Tab Multi Group Analysis at factor and indicator level* [Paper presentation]. Academy of Management Annual Meeting, Chicago, Illinois, USA.

Liñán, F., & Chen, Y. (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

Mensah, I. K., Zeng, G., Luo, C., Xiao, Z., & Lu, M. (2021). Exploring the predictors of Chinese college students' entrepreneurial intention. *SAGE Open, 11*(3), 215824402110299. https://doi.org/10.1177/21582440211029941

Meoli, A., Fini, R., Sobrero, M., & Wiklund, J. (2020). How entrepreneurial intentions influence entrepreneurial career choices: The moderating influence of social context. *Journal of Business Venturing, 35*(3), 105982. https://doi.org/10.1016/j.jbusvent.2019.105982

Mohammed, S. A. S. A., Bamahros, H. M. A., Grada, M. S., & Alaswadi, W. (2023). EC-education, gender disparity, and digital entrepreneurship intention: The moderating role of attitude components; a competitive advantage of the Ha'il region. *International Journal of Information Management Data Insights, 3*(2), 100179. https://doi.org/10.1016/j.jjimei.2023.100179

Naz, S., Li, C., Zaman, U., & Rafiq, M. (2020). Linking proactive personality and entrepreneurial intentions: A serial mediation model involving broader and specific self-efficacy. *Journal of Open Innovation, 6*(4), 166. https://doi.org/10.3390/joitmc6040166

Ng, H. S., Chiang, T. Y, & Kee, D. M. H. (2022). Entrepreneurial intention-behaviour link: The moderating effects of COVID-19 perception, entrepreneurial motivation, and prior entrepreneurial exposure. *International Journal of Entrepreneurship and Management Practices, 5*(19), 01-09. https://doi.org/10.35631/ijemp.519001

Ng, H. S., Kee, D. M. H., & Khan, M. J. (2021). Effects of personality, education and opportunities on entrepreneurial intentions. *Education + Training, 63*(7/8), 992-1014. https://doi.org/10.1108/ET-02-2019-0040

Nguyen, P. N. D., & Nguyen, H. H. (2024). Unveiling the link between digital entrepreneurship education and intention among university students in an emerging economy. *Technological Forecasting and Social Change, 203*, 123330. https://doi.org/10.1016/j.techfore.2024.123330

Phong, N. D., Thao, N. T. P., & Nguyen, N. P. (2020). Entrepreneurial intent of business students: Empirical evidence from a transitional economy. *Cogent Business & Management, 7*(1), 1747962. https://doi.org/10.1080/23311975.2020.1747962

Sandroto, C. W., Ramawati, Y., & Darmoyo, S. (2024). Elements of entrepreneur competencies and intention to be entrepreneurs. *International Journal of Applied Business and International Management, 9*(1), 1-16. https://doi.org/10.32535/ijabim.v9i1.2

Sharifian, N., Sol, K., Zahodne, L. B., & Antonucci, T. C. (2022). Social relationships and adaptation in later life. In *Elsevier eBooks* (pp. 52–72). Elsevier. https://doi.org/10.1016/b978-0-12- 818697-8.00016-9

Singh, R., & Dwivedi, A. (2022). Digital entrepreneurship competency and digital entrepreneurial intention: Role of entrepreneurial motivation. *Journal of Positive School Psychology*, 2310-2322.

The Star. (2023, November 20). *Malaysia recorded 5.92 million graduates in 2022, says Statistics Dept*. The Star. https://www.thestar.com.my/news/nation/2023/11/20/malaysia-produced-almost-six-million-graduates-in-2022-says-statistics-dept#:~:text=PUTRAJAYA%3A%20Malaysia%20recorded%205.92%20million,by%20the%20Malaysia%20Statistics%20Department.

Vu, T. H., Duc, A., DO, Ha, D. L., Hoang, D. T., Van Le, T. A., & Le, T. T. H. (2024). Antecedents of digital entrepreneurial intention among engineering students. *International Journal of Information Management Data Insights, 4*(1), 100233. https://doi.org/10.1016/j.jjimei.2024.100233

Wibowo, A., Narmaditya, B. S., Sebayang, K. D. A., Mukhtar, S., & Shafiai, M. H. M. (2023). How does digital entrepreneurship education promote entrepreneurial intention? The role of social media and entrepreneurial intuition. *Social Sciences & Humanities Open, 8*(1), 100681. https://doi.org/10.1016/j.ssaho.2023.100681

Yang, W., & Meyer, K. E. (2019). Alliance proactiveness and firm performance in an emerging economy. *Industrial Marketing Management, 82*, 226–237. https://doi.org/10.1016/j.indmarman.2019.01.010

ABOUT THE AUTHOR(S)

1st Author
Daisy Mui Hung Kee is an Associate Professor at the School of Management, Universiti Sains Malaysia. Her areas of interests are in Human Resource Management, Organizational Behavior, Work Values, Leadership, Entrepreneurship, and Psychosocial safety climate. Her current program of research focuses on Leadership and Psychosocial safety climate. She holds a PhD in Business and Management from International Graduate School of Business, University of South Australia. She was the secretary of Management Case Study Journal, Australia (2004-2006). She was award recipient of Merdeka Award 2006 from the Australia Malaysia Business Council of South Australia (AMBCSA) by former South Australia Governor Sir Eric Neal (2006). The award recognizes the Most Outstanding Malaysian University students in South Australia.She earned her MBA from School of Management, Universiti Sains Malaysia. She was awarded Dean's List for being one of the top MBA students (2003). Presently, she is an active academician and researcher supervising a numbers of MBA, MA and PhD candidates with working experience across diverse industries. She has published a good numbers of journal papers during the course of her career. She has conducted series of training related to motivation and research in USM under Professional and Personal Development (PPD) workshop.
Email: daisy@usm.my
ORCID ID: 0000-0002-7748-8230

2nd Author
Yen Jou Khor is currently undergraduate student at Universiti Sains Malaysia.
Email: christinajou523@student.usm.my

3rd Author
Jie Ning Khor is currently undergraduate student focusing on Accounting at Universiti Sains Malaysia.
Email: jiening@student.usm.my

4th Author
Jia Yue Han is currently undergraduate student at Universiti Sains Malaysia.
Email: hanjiayue@student.usm.my

5th Author
Xin Lan Jiang is currently undergraduate student focusing on Accounting at Universiti Sains Malaysia.
Email: jiang2466936016@student.usm.my

6th Author
Ayushi Singh is currently pursuing MBA at IMS Engineering College Ghaziabad.
Email: ayushiisingh061@gmail.com