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Digital Entrepreneurship Education and Digital Entrepreneurial Intention: The Role of Digital Skills and Entrepreneurial Self-Efficacy

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ABSTRACT

Digital entrepreneurship education aims at preparing the students to identify business opportunities and set up technology-based enterprises. The study seeks to know the relationship between digital entrepreneurship education and digital entrepreneurial intention with the role of digital skills and entrepreneurial self-efficacy. A survey design that is quantitative and cross-sectional is planned among the 300 university students which are selected through convenience sampling. Information was gathered through a structured questionnaire that uses a Likert scale of five points and analysed using descriptive statistics, cronbach alpha, correlation, multiple regression and mediation analysis with 5000 bootstraps. The findings showed that the mean score of digital skills obtained the highest ($M = 3.84$, $SD = 0.66$); followed by digital entrepreneurship education ($M = 3.72$, $SD = 0.71$); digital entrepreneurial intention ($M = 3.68$, $SD = 0.76$); and entrepreneurial self-efficacy ($M = 3.61$, $SD = 0.74$). The education of digital entrepreneurship ($\beta = 0.31$ $p < .001$) showed a positive relationship with the digital entrepreneurial intention. Also, the digital skills ($\beta = 0.21$ $p < .001$) and the entrepreneurial self-efficacy ($\beta = 0.36$ $p < .001$) showed a positive relationship as well. In the mediation model, the indirect effects through digital skills (0.11) and entrepreneurial self-efficacy (0.14) were significant. The findings suggested that entrepreneurial confidence and digital competencies may contribute to explaining DEI. The research emphasized the possible value of practical digital entrepreneurship education in higher education.



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Introduction

Digital entrepreneurship is an important research topic as the digital technologies affect the way in which individuals seek opportunities for entrepreneurship, develop a new product, communicate with customers and start new businesses. Technology has paved the way for more people to be able to start a business with less traditional obstacles through the use of online platforms, digital payment systems, social media, and more. But, the presence of these technologies does not guarantee that people have to engage in entrepreneurial activity. Entrepreneurs must also have knowledge and knowhow in the subject, have hands on digital skills and be confident in managing business processes. These digital technologies are changing the nature of entrepreneurship by impacting the processes, opportunities and outcomes of entrepreneurship, explained Nambisan (2017). Additionally, Kraus et. al (2019) discussed digital entrepreneurship in a wider perspective of digital business models.

Digital entrepreneurship education emerged as a convenient method of training people in the utilisation of tools like technology in conducting business. Provided students with an opportunity to learn entrepreneurial knowledge, identifying opportunities in the markets, gaining an overview of digital business models, as well as using technology for business activities. Digital entrepreneurship education compared to traditional entrepreneurship education emphasised more the use of digital platforms, online marketing and business, online business buying and selling and technology based business development. Nabi et al (2017) who conducted a systematic review of the entrepreneurship literature, suggested that an investigation into entrepreneurial learning outcomes and traditional learning outcomes like knowledge and satisfaction should be conducted. Secundo et al. (2021) analyzed the linkage of entrepreneurship and digital technologies with the higher education era and entrepreneurial development field.

Digital entrepreneurial intention was an individual's desire or intended intention to pursue the entrepreneurial task using digital technologies to a high level. This may be influenced by educational experiences, technological skills, individual perspectives and beliefs, and

perceptions of entrepreneurial opportunities. Through digital skills might a person use digital tools, the analysis digital information, communicate with customers and manage technology-based activities in a business. Self-efficacy, however, related to the interpretation of an entrepreneur's confidence in performing the tasks he must perform to build and operate a business, was defined as entrepreneurial self-efficacy. Newman et al. (2019) studied entrepreneurial self-efficacy, whereas the importance of entrepreneurial self-efficacy in entrepreneurial behaviour and outcome was discussed. Accordingly, the present study touched upon digital entrepreneurship education and intention to be digital entrepreneurs, with emphasis on the digital skills and entrepreneurial self-efficacy. This aimed to pinpoint areas of education, applied technological skills and entrepreneurial self-confidence as they have the potential to interact and spark thought into the possibility of digital business opportunities.

Background of the Study

The digital transformation also redefined the entrepreneurial environment, putting more importance on digital means when it comes to creating and developing a business. They might then be able to leverage web-based markets, social network sites, cloud-based solutions and digital communication to reach larger numbers of people with products and services. There were also modifications in the demands for entrepreneurial participation. The existing knowledge, skills and experience applicable to business was still relevant, but aspiring entrepreneurs would need to understand and have the ability to apply digital technology to address business problems. According to Nambisan (2017), digital technologies added to the both entrepreneurial activity and its processes, such as the formulation of opportunities, new possibilities and complexities. The aim of this paper was to further explore the concept of digital entrepreneurship in the context of the evolving nature of business and entrepreneurship, as suggested by Kraus et al. (2019).

Concerning entrepreneurship development aspect, special attention was given to education where learning experience with an entrepreneur may

influence the learning outcome such as knowledge, attitude, and intention of the entrepreneur. Entrepreneurship education covered aspects of opportunity recognition and business planning and introduced entrepreneurship concepts and issues, such as innovation and new venture management. The effectiveness of this kind of education, however, partly was related to the ability of learners transfer theoretical messages to the practical entrepreneurial aspects. Similarly, Nabi et al. (2017) called for the need for a detailed study of entrepreneurship education and its effect on entrepreneurship. Rauch and Hulsink (2015) also studied the role of EE in relation to entrepreneurial behaviour (in this instance the emergence of intentions and the learning processes related to them).

Two factors were thus seen as relevant to the context, Entrepreneurially Entrepreneurial Intentions (EEI), and Digital Skills and Entrepreneurial Self Efficacy. Digital competence helped to develop competence in using technology, while the entrepreneurial self-efficacy respondents were asked about entailed good self-efficacy in carrying out the entrepreneurial tasks. Someone could have a knowledge of online business platforms but might not want to start a business due to concerns over financial, marketing, or operational management. Entrepreneurs who are very confident in launching an entrepreneurial venture might be found to have certain hassles if they don't have the skills related to digital to operate online. The research of student digital competence, entrepreneurial learning and self-efficacy therefore set the groundwork to look at these in relation to each other. Sánchez (2013) analysed the relationship between Entrepreneurial Education and Entrepreneurial Competencies, and Newman et al. (2019) reviewed the importance of Entrepreneurial Self-Efficacy in Entrepreneurial Research. With this idea in mind, the present study tried to investigate the relationship between digital entrepreneurship education and the recognition of digital entrepreneurial intention and examine if digital skills and entrepreneurial self-efficacy could explain this relationship.

Research Objectives

1. To examine the relationship between digital entrepreneurship education and digital

entrepreneurial intention.

2. To investigate the role of digital skills in the relationship between digital entrepreneurship education and digital entrepreneurial intention.
3. To assess the role of entrepreneurial self-efficacy in explaining the relationship between digital entrepreneurship education and digital entrepreneurial intention.

Research Questions

1. What relationship existed between digital entrepreneurship education and digital entrepreneurial intention?
2. How did digital skills contribute to the relationship between digital entrepreneurship education and digital entrepreneurial intention?
3. What role did entrepreneurial self-efficacy play in the relationship between digital entrepreneurship education and digital entrepreneurial intention?

Significance of the Study

This study was very significant due to the study of the very important educational and individual factors to improve the digital entrepreneurial intention (DEI) was carried out. The combination of digital entrepreneurship learning, digital skills and entrepreneurial self-efficacy, helped to provide the framework from which to understand how to shape learning experiences and personal capabilities to inspire and educate them to consider digital business opportunities. Grant et al. (2021) have examined previous studies on the impact of digital entrepreneur's education and its relation with entrepreneurial self-efficacy, and also new studies by National Education's Institute of Research and Development (IEE) on the impact of digital competency on entrepreneurial intentions. The study's implications included those of the universities, entrepreneurship education, policy and students. Its outputs can be used by Universities to develop 'real-world' learning experiences in the areas of online business development (and/or digital business) and digital marketing. Also, teachers could design programmes to enhance the self-confidence of their students in their ability to carry out entrepreneurial activities. The results might help as input data for the creation of digital entrepreneurship policies specifically on the policies aimed at digital "digital ready youth".

Literature Review

Given this promising ability, the role of digital entrepreneurship education has been paid increasing attention towards his/her digital skills to sense business opportunities and his/her abilities to make use of the digital technologies in entrepreneurial activities. This includes aspects of digital marketing, electronic commerce and models of online business, social media and technology which drive business development. Duong et al., (2024) conducted a study that assessed approximately 1,665 students and discovered that digital entrepreneurship education has a positive impact on digital entrepreneurial intention. They also found that the relationship between perceived digital entrepreneurial self-efficacy and dSES was to some degree mediated by Pdelay. Vu et al. (2024) discussed the digital entrepreneurial intention against engineering students and suggested that the digital entrepreneurship education significantly affected engineering student digital entrepreneurship knowledge and self-efficacy. Based on the findings, it is recommended that the educational programmes are able to motivate entrepreneurial intention through knowledge and confidence development. The aim of this study was to find out the relationship of Entrepreneurship education, creativity and practice-oriented education to Digital Entrepreneurship intention and Digital Entrepreneurship intention to Digital literacy. This study explored the connection between entrepreneurship education, creativity and practice-oriented education on the effect it has on digital entrepreneurial intention and the connection between digital entrepreneurial intention and digital literacy explored by Liang et al. (2025), which includes students who graduated in the course of the year that is 1,188 students.

Digital skills are the broad spectrum of skills needed by anyone who wants to work in business and enterprise that is dependent on digital technologies. These are skills with regard to the digital platforms, creating digital content, understanding information, interacting with customers and running a digital business. Usually, a time-lagged approach is used to analyze the relationship between digital competencies and entrepreneurial intention by leveraging data from people who took part in a MOC. The relationship between digital competencies and entrepreneurial

intention was studied by Bachmann et al. (2024) from data at both cross-section and time-lagged levels from participants of a MOC course. Based on their findings, they suggested that the associations existing between digital competencies and entrepreneurial intention occurred via entrepreneurial orientation and self-efficacy. This means that digital skills can play a role in facilitating the way people see opportunities, increase their sense of readiness to act and therefore may play a role in entrepreneurial intention. Similarly, Donaldson et al. (2025) also investigated digital skills and entrepreneurial self-efficacy amongst university students. They found that digital skills were positively associated with intrapreneurial intention and via this link showed a positive association with high-growth entrepreneurial intention.

Comprising one's confidence in one's own competence to undertake the tasks involved in starting and operating a business, entrepreneurial self-efficacy is an individual's perception of his or her abilities. This requires confidence of understanding and accepting opportunities, making decisions, problem solving, and dealing with uncertainty in business situations. This is particularly so at this current time, where tech entrepreneurs might feel uncomfortable at using technology in creating business concepts or stay ahead with the digital market. In the current study, the digital competency and digital entrepreneurial intention relationship were explored by analyzing the data of 380 samples in Taiwan. Ta and colleagues (2025) studied 380 participants from Taiwan who were linked to entrepreneurial intent and the digital competency of these individuals. They have found that the relationship between individual competencies and digital self-efficacy can be mediated by the digital entrepreneurial intention. Bui and Duong (2024) explored the adoption of ChatGPT, technostress, digital entrepreneurial self-efficacy, and digital entrepreneurial intention in another study. They found that the technological experiences and psychological factors were important to take into account, when explaining entrepreneurial intention.

Two but related factors of entrepreneurial development are digital skills and entrepreneurial self-efficacy. Entrepreneurial Self-efficacy is

defined as one's level of self-assurance in engaging in entrepreneurial activities and Digital skills are defined as the extent to which the person can utilise technologies. Digital competencies were found to be positively related to entrepreneurial intention but this "digital awareness" took the form of entrepreneurial orientation and self-efficacy (Bachmann et al., 2024); technology competence may therefore contribute to increased entrepreneurial confidence. Vu et al. (2024) reported the relations of digital entrepreneurial education with digital entrepreneurial knowledge; Digital entrepreneurial education with attitude towards digital entrepreneurship; Digital entrepreneurial knowledge with attitude towards digital entrepreneurship; Digital entrepreneurial self-efficacy with attitude towards digital entrepreneurship. Recently, Pham et al. (2026) investigated antepredpreneurial readiness, levels of status quo, self-efficacy, perceived behavioural control, and digital entrepreneurial intention in the case of an entrepreneur sample of 718 entrepreneurs of the university students in entrepreneurship education. They found that this entrepreneurial education led to an increase in participants' self-efficacy and perceived behaviour control and facilitated their perception of entrepreneurial intent in digital.

The following have been demonstrated in previous studies on the critical linkages: DIF-IC; ESE-DAI; and DAI-EE. Wibowo et al (2023) studied the influence of digital entrepreneurship on entrepreneurial intentions and investigated the social media and entrepreneurial intuition (SI). Beyond that, Duong et al. (2024) were able to identify digital entrepreneurial self-efficacy that is able to explain the relationship between education and entrepreneurial intention. Liang et al. (2025) analysed the actual entrepreneurship education, creativity and digital literacy of university students. Pham et al. (2026) conducted a more recent study, examining how introducing ChatGPT into entrepreneurship education helped reinforce the bonds between entrepreneurship education and self-efficacy, digital entrepreneurial intention and perceived behavioural control. The present study thus focused on digital entrepreneurship education as

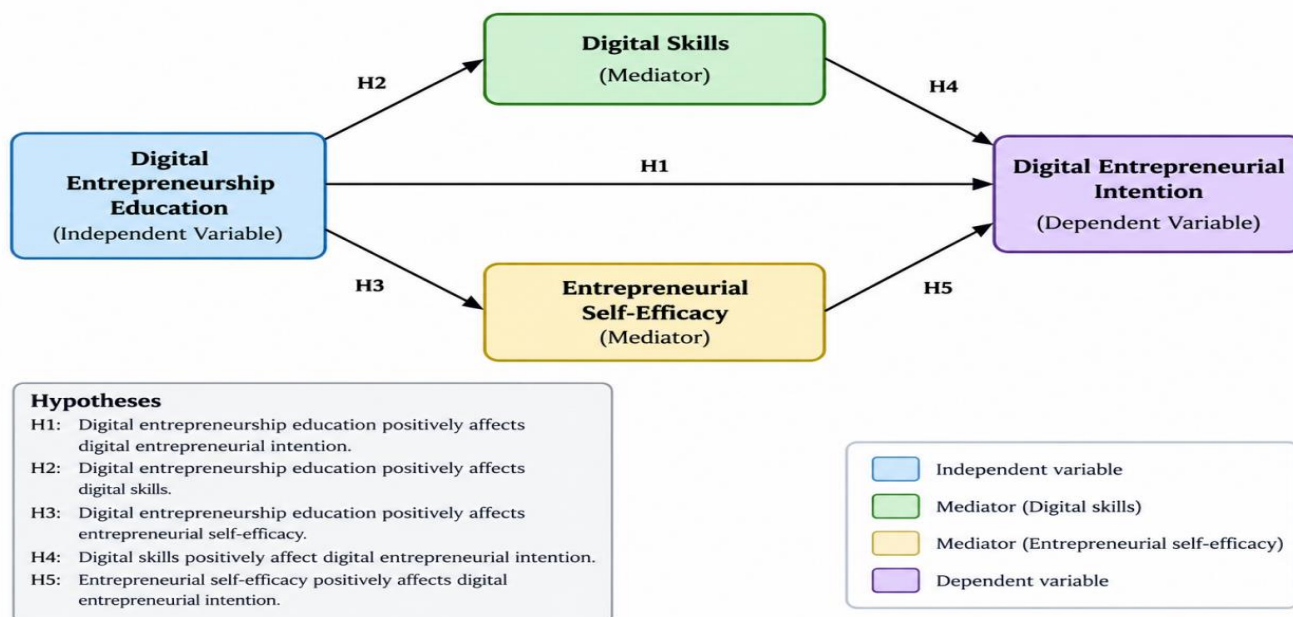
the main explanatory variable, the outcome variable was digital entrepreneurial intention, and the explanatory mechanisms were digital skills and entrepreneurial self-efficacy.

Conceptual Framework Model

The conceptual framework depicts a path of causality that explains the relationships between Digital Entrepreneurship Education, Digital Entrepreneurial Intent (DEI) and the two mediating variables of Digital Skills and Entrepreneurial Self-Efficacy (ESE). Digital entrepreneurship education relates to the dependent variable, namely the entrepreneurial intention, and the independent variable is digital entrepreneurship education. The model suggests that DE learning can help develop students' DS and entrepreneurial SE, which can positively impact students' entrepreneurial intentions with digital enterprises. Digital skills empower students to utilise digital platforms, effective online business activities, and find technology associated opportunities. Entrepreneurial self-efficacy is students' self-confidence in engaging in entrepreneurial activities and dealing with business difficulties. The framework additionally suggests a straight connection between digital entrepreneurship education and the intention of digital entrepreneurship. By combining these relationships, it can be discussed how educational experiences, technological skills and entrepreneurial confidence are associated with the students' intentions to pursue digital entrepreneurship.

Research Hypotheses

- H1:** The positive relationship between digital entrepreneurship education and digital entrepreneurial intention is confirmed.
- H2:** Digital entrepreneurship education positively impacts digital skills of students.
- H3:** Positive effects of digital entrepreneurship education on entrepreneurial self-efficacy.
- H4:** Digital skills positively affect the digital entrepreneurial intention.
- H5:** There is a positive relationship between the two, that is, entrepreneurial self-efficacy positively affects digital entrepreneurial intention.

Figure 1: Conceptual Framework Model

Research Methodology

Research Design

This study used quantitative research design to explore the relationships between digital entrepreneurship education and the entrepreneurial intention of students, focusing on the aspects of digital skills and entrepreneurial self-efficacy. For quantitative research, numerical information was obtained and the researcher could analyze the relationship that exists between the variables of the study using statistical analysis and materials. The survey design was employed to allow for collecting data from participants at a point in time, and was thus a cross sectional survey design.

Population of the Study

The population comprised of the students enrolled in the universities selected for the study, both undergraduate and postgraduate students. This group of students was relevant since HEIs were an appropriate platform for learning entrepreneurial knowledge, digital skills, and skills related to business. A special focus of the study concerns students who were part of business education courses or engaged in studies and business on the Internet, as well as through other electronic media. Students of various academic fields were included in the population to get a general picture about DETI. Participants were assumed to come from

the business administration, information technology and computer science as well as management and other relevant disciplines since digital entrepreneurship requires knowledge of the business sphere as well as technical skills.

Sample Size and Sampling Technique

The study adopted a sample of 300 students of the universities selected from the higher education institutions. The number of cases was judged to be adequate to explore the relationships among the four major study variables and for implementing regression-based mediation analysis. The selection of participants depends upon the convenience of sampling and the participants' willingness to participate in the sampling process, and thus a non-probability sampling technique was used. The researcher engaged students in academic departments, academic networks and internet communication forums. Participants were asked to fill out the questionnaire voluntarily.

Research Instrument

The data gathered comprised structured questionnaire prepared based on the study objectives and literature consulted. The questionnaire comprised of two – large sections. The first part gathered information about sociodemographic such as sex, age, level of study, area of study, and prior exposure to entrepreneurship education and Digital

technologies experiences. The second part was studying the concept of digital entrepreneurship education, its use of digital skills, entrepreneurial self-efficacy, and digital entrepreneurial intention. Adopted items were borrowed from previously developed measurement instruments for entrepreneurship education, digital competence and entrepreneurial intention studies. Digital entrepreneurship education pieces that targeted participants' contact with the knowledge of digital business, practical activities for learning, online development of business, and entrepreneurial training through technology. The digital skills items measured participants' self-efficacy in operating digital tools, managing online information, interacting with digital platforms and applying technology to conducting business. The items related to entrepreneurial self-efficacy assessed self-efficacy in the areas of business opportunity identification, business problems solving, business decision making and business ownership. Items used in the domains of digital entrepreneurial intention assessed intention and plans to create or develop a digital business.

Data Collection Procedure

The necessary institutional permissions were obtained and the purpose of the study explained to people potentially interested in participating in the data collection process. The questionnaire was sent out via an online survey platform as well as, if relevant, directly to University students. Participants were informed about the voluntary nature of participation, its educational uses, and its confidentiality of responses. They were also told they did not have to do it and if they did they would have no problems. Completed

questionnaires were gathered during the determined data collection period and responses were checked for completeness. Any responses that had a significant amount of missing information, had been submitted more than once, or it was obvious that the responses were incomplete were not included in the final data set. Only retained responses were coded to be statistically analysed.

Data Analysis

The data collected were analyzed with the Statistical Package for the Social Sciences (SPSS). Demographic characteristics and responses on all the study variables were summarised by descriptive statistics such as frequencies, percentages, means, and standard deviations. The missing information, unusual responses and possible outliers were recognized in the data screening process. Internal consistency of the measurement scales was indicated by Cronbach's alpha with a value of .70 or higher considered acceptable. To investigate the relationships between digital entrepreneurship education, digital skills, entrepreneurial self-efficacy, and digital entrepreneurial intention, correlation analysis was used. Data was analysed using multiple regression and mediation analysis to test the proposed mediations and relationships. Results of indirect effects were analyzed using bootstrapping with 5,000 re-randomizations and 95% confidence intervals – a CI of zero was interpreted as not being statistically significant. Where relevant, important demographic factors were added as control factors, with the significance level considered at $(p < .05)$.

Results and Analysis

Descriptive Statistics of Study Variables

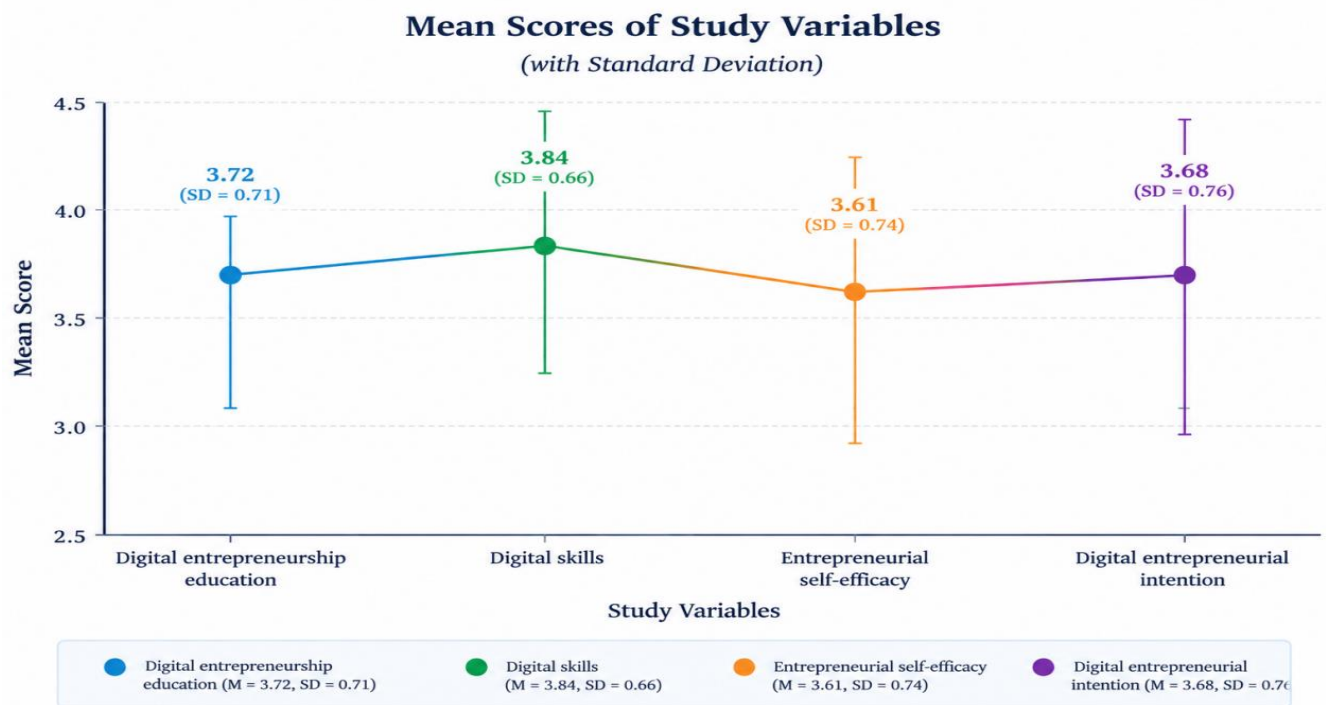
Table 1: Descriptive Statistics of the Main Study Variables

Variable	N	Mean	Standard deviation
Digital entrepreneurship education	300	3.72	0.71
Digital skills	300	3.84	0.66
Entrepreneurial self-efficacy	300	3.61	0.74
Digital entrepreneurial intention	300	3.68	0.76

As shown in Table 2, the means and standard deviations of all four study variables. The mean score for digital skills was 3.84 (SD = 0.66) which reflected that the respondents usually opined positively regarding their perceptions about the use of the digital technologies. Digital entrepreneurship education has a mean score of 3.72 (SD = 0.71), showing that respondents rated digital entrepreneurship education relatively favourably. Based on the analysis, the digital entrepreneurial intention had a mean score of 3.68

(SD = 0.76) which implies generally positive willingness among the participants to set up or just develop a digital business. The aspect of entrepreneurial self-efficacy had the lowest mean score of 3.61 (SD = 0.74), although this score was above the midpoint. The perception of participants of their digital skills was more positive than the confidence they had on carrying entrepreneurial tasks. The standard deviations were between 0.66 and 0.76, which showed the participants' responses.

Figure 2: Descriptive Statistics of the Main Study Variables



Correlation Analysis

Table 2: Correlations Among the Main Study Variables

Variables	1	2	3	4
1. Digital entrepreneurship education	1.00			
2. Digital skills	0.52	1.00		
3. Entrepreneurial self-efficacy	0.49	0.55	1.00	
4. Digital entrepreneurial intention	0.58	0.54	0.62	1.00

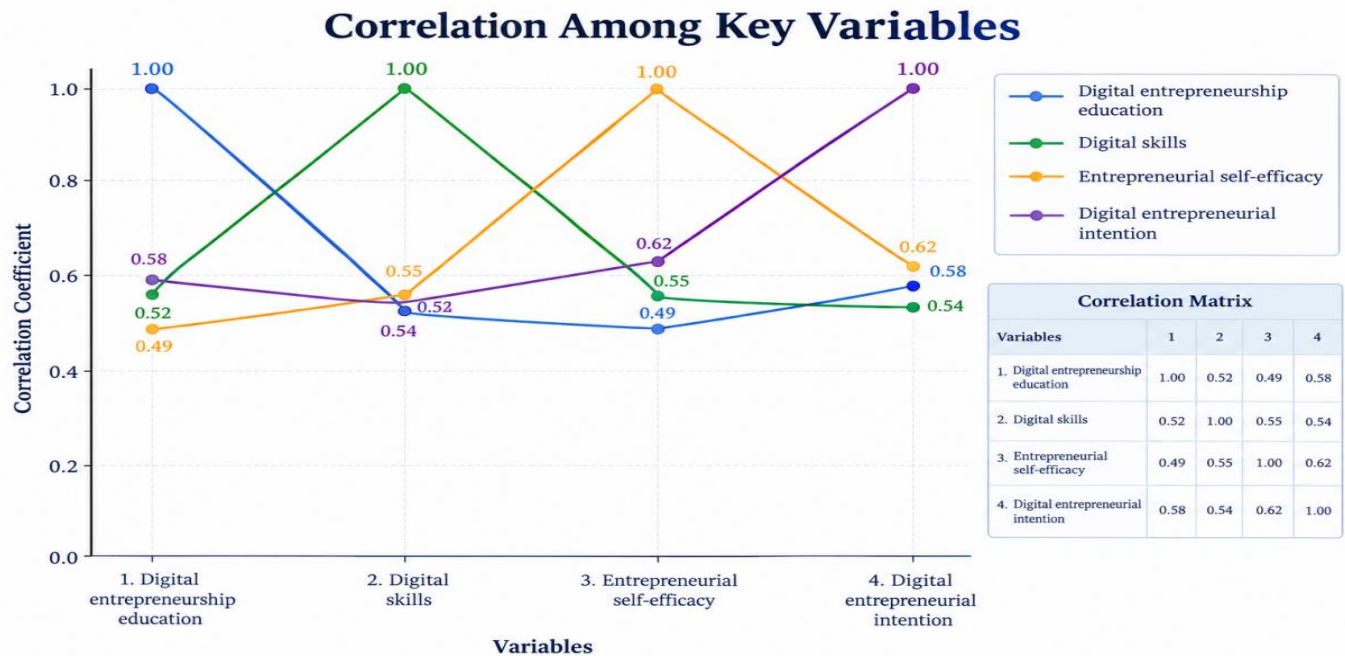
According to Table 4, the conjectural correlations between the Digital Entrepreneurship Education Digital skills, Entrepreneurial Self-efficacy and Digital Entrepreneurial Intention. The findings of the correlation test indicate that digital entrepreneurship education is significantly

correlated with digital entrepreneurial intention ($r = .58, p < .01$). This shows that those who had a better educational experience reported a stronger digital entrepreneurial intention to establish a digital business. A positive association was found between digital skills ($r = .54, p < .01$)

and entrepreneurial intention, meaning participants who perceive they have strong digital skills also express a greater interest in digital entrepreneurship. There was a strong relationship between digital entrepreneurial intention and entrepreneurial self-efficacy ($r = .62, p < .01$). This indicates that confidence in performing entrepreneurial activities is strongly related to intention to do digital entrepreneurship. The

digital entrepreneurship education had also shown positive relationship with the digital skills ($r = .52, p < .01$) and entrepreneurial self-efficacy ($r = .49, p < .01$). A significant positive relationship was found between digital skills and entrepreneurial self-efficacy ($r = .55, p < .01$). The proposed conceptual framework received initial support from these relationships.

Figure 3: Correlations Among the Main Study Variables



Regression Analysis

Table 3: Regression Analysis Predicting Digital Entrepreneurial Intention

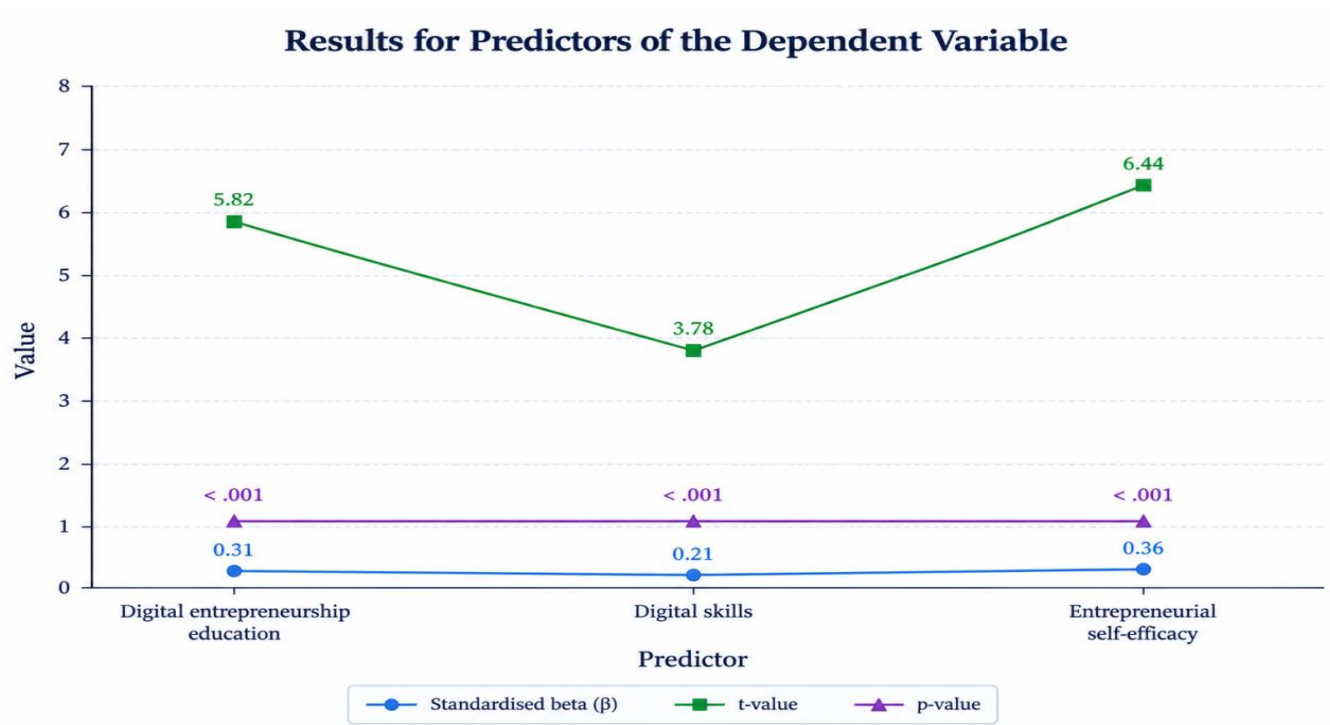
Predictor	Standardised beta (β)	t-value	p-value
Digital entrepreneurship education	0.31	5.82	< .001
Digital skills	0.21	3.78	< .001
Entrepreneurial self-efficacy	0.36	6.44	< .001

According to Table 5, the potential regression results for digital entrepreneurial intention. Education on digital entrepreneurship was shown to have a positive standardized coefficient ($\beta = .31, p < .001$), meaning it had contributed to favourable educational experience and intention to become an entrepreneur when others being equal. Digital skills were also positively related to entrepreneurial intention ($\beta = .21, p < .001$), showing that participants' perceptions of their own technological abilities were a statistically

significant predictor of their willingness to set up a digital business. Entrepreneurial self-efficacy was found to have the largest standardised coefficient ($\beta = .36, p < .001$). This finding indicates that confidence in performing entrepreneurial activities was the strongest predictor among the three variables in the hypothetical model. The research findings indicate that educational experience, software competence, and confidence in being an entrepreneur offer unique information. Results

also showed self-efficacy must be given special programmes.
attention in designing entrepreneurship

Figure 4: Regression Analysis Predicting Digital Entrepreneurial Intention



Mediation Analysis

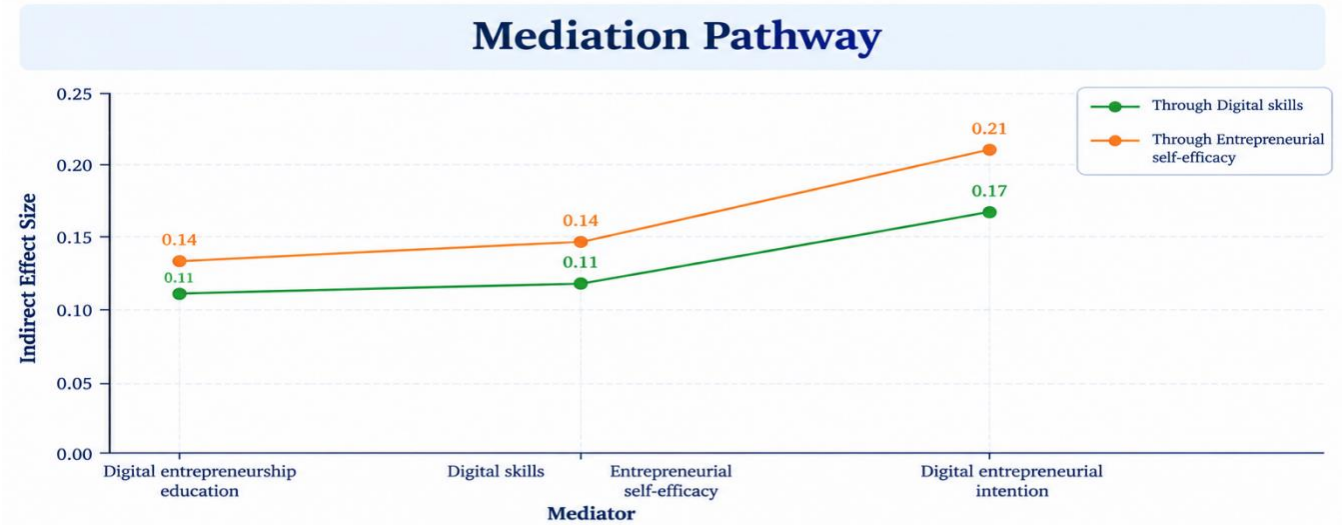
Table 4: Hypothetical Indirect Effects of Digital Entrepreneurship Education

Mediation pathway	Indirect effect	Bootstrapped 95% confidence interval	Interpretation
Digital entrepreneurship education → Digital skills → Digital entrepreneurial intention	0.11	[0.06, 0.17]	Significant indirect effect
Digital entrepreneurship education → Entrepreneurial self-efficacy → Digital entrepreneurial intention	0.14	[0.08, 0.21]	Significant indirect effect

Hypothetical mediation results for the two indirect pathways suggested were presented in Table 6. Analysis of the indirect effect through digital skills revealed 0.11, with a 95% bootstrapped confidence interval 0.06 – 0.17. Given that this range excluded zero, the indirect effect was statistically significant based on the results shown. The observed association of digital

entrepreneurship education with stronger digital entrepreneurial intention was partly due to the perceived digital skills of the participants. According to the study, the second pathway through entrepreneurial self-efficacy had an indirect effect of 0.14, 95% CI [0.08, 0.21]. Zero was not included in this interval too, indicating a significant indirect effect in the analysis.

Figure 5: Hypothetical Indirect Effects of Digital Entrepreneurship Education



Hypothesis Testing

Table 5: Summary of Hypothesis Testing Results

Hypothesis	Proposed relationship	Standardised coefficient (β)	p-value	Decision
H1	Digital entrepreneurship education $\rightarrow$ Digital entrepreneurial intention	0.31	< .001	Supported
H2	Digital entrepreneurship education $\rightarrow$ Digital skills	—	—	Requires testing
H3	Digital entrepreneurship education $\rightarrow$ Entrepreneurial self-efficacy	—	—	Requires testing
H4	Digital skills $\rightarrow$ Digital entrepreneurial intention	0.21	< .001	Supported
H5	Entrepreneurial self-efficacy $\rightarrow$ Digital entrepreneurial intention	0.36	< .001	Supported

The results of testing 5 hypotheses are shown in table 7 of the study’s conceptual framework. H1’s assertion was accepted as there was a positive and significant ($p<.001$) relationship between digital entrepreneurship education and digital entrepreneurial intention ($\beta = .31$). The findings indicated that students with more positive digital entrepreneurship education experiences were also more likely to report stronger intentions to establish digital businesses. Because digital skills had a positive prediction on digital entrepreneurial intention ($\beta = 0.21$, $p < .001$), H4 was supported, indicating the technological competencies are associated with the students’ entrepreneurial intention. H5 also

received supported, as enterprising self-efficacy was positively related and significant to digital enterprising intention ($\beta = 0.36$, $p < .001$). This means that, out of the three predictors, the entrepreneurial self-efficacy had the biggest standardised coefficient. As the regression results considered digital entrepreneurial intention as the dependent variable, thus, H2 and H3 could not be assessed by using the reported results.

Discussion

In this study, the digital entrepreneurial intention-response relationship from digital entrepreneurship education and the focus were digital skills and entrepreneurial self-efficacy. The

results indicated that greater number of educational experiences yielded higher digital entrepreneurial intention, suggesting that digital entrepreneurship education could stimulate thinking about the creation of a digital business. The authors can conclude that similar with the pattern proposed by Duong et al. (2024), the education on digital entrepreneurship can be positive effect on the intension of digital entrepreneurship for students. Vu et al. (2024) found that the digital entrepreneurship education helped the transfer of knowledge and self-efficacy in the engineering students in terms of digital entrepreneurial activities and business. Moreover, Mukhtar et al (2023) also studied the effect of learning entrepreneurship digital education to the entrepreneurial intention of students, by focusing the students' attention to entrepreneurship alertness. Based on these results it can be concluded that education has a positive influence on the development of entrepreneurial intention, so it is important for students to be able to discover business opportunities, to learn about the possibilities of digital technologies in business development.

Digital skills were also shown to be as relevant as in terms of understanding Digital entrepreneurial intention. The descriptive regression analysis results showed that there was a positive correlation between digital skill and entrepreneurial intention, meaning that students who stated that their level of digital skills was high, the same level of interest in digital business activities was observed. This interpretation demonstrated similarities with the explanation provided by Bachmann et al. (2024) which focused on entrepreneurial competence and entrepreneurial intentions by considering entrepreneurial orientation and self-efficacy. Additionally, Donaldson et al. (2025) found that the digital skills helped to shape entrepreneurial intentions and indirectly affected high growth entrepreneurial intentions. Besides, apart from digital competence, Lam et. al (2025) explored the social cognitive theory, the notion of digital entrepreneurial intention, the importance of digital competence in entrepreneurial development. The results of these studies led us to believe that the technological properties are likely to be useful in the process of dealing with online markets and communication with prospective customers, but

also in discovering new ideas and suggestions for a product or service. The answers to the universities might come in the way of conducting practical digital activities in entrepreneurship education.

The strongest relationship with the digital entrepreneurial intention in the regression model was demonstrated by entrepreneurial self-efficacy. The result showed that there might be specific relevance in the confidence to undertake entrepreneurial activities when students viewed their intentions to set up a digital business. The results of Duong et al. (2024) showed that digital entrepreneurial self-efficacy acts as a mediator between digital entrepreneurial intention. Ta et al. (2025) also investigated digital competencies and the digital entrepreneurial intention and found digital self-efficacy as a mediation variable between them. Recent studies by Nguyen-Viet (2025) and Nguyen (2025) also emphasized the significance of entrepreneurial self-efficacy in the connection between entrepreneurship education and entrepreneurial intention, taking into account incorporating the use of generative AI. The results corroborated the idea that education programs could benefit from practical endeavors that would develop students' confidence in the participation of mentoring, teamwork and business ideas. This could lead students to favour considering the creation of a digital business, if thinking about the challenges of entrepreneurship would lead them to think in the same way.

The results obtained from the mediation also suggested the role of the digital skills and the digital entrepreneurial self-efficacy on the relationship between digital entrepreneurship education and the digital entrepreneurial intention. This study took Hu et al. (2025)'s interpretation of digital entrepreneurship education, digital entrepreneurial knowledge, skills, and intention, as the basis for the educational process. Additionally, Taufiq et al. (2025) explored the relationships between two digital competencies, namely entrepreneurial self-efficacy and entrepreneurial mindset, and entrepreneurial intention. Additionally, Silfina et al. (2026) have discussed how the educational aspect of entrepreneurship relates to the application of digital entrepreneurial readiness and entrepreneurial awareness in terms of digital entrepreneurship intention. The research

concluded that education programmes were more effective when they were graduated building up technological skills and psychological confidence to business developing. The proposed framework presented in this study was therefore valuable to do such analysis in the same framework.

Conclusion

In this study researchers the correlation among conceptual variables digital entrepreneurship education, digital entrepreneurial intention and the role of digital skill and self-efficacy of an entrepreneur. Based on the result in the suggested analysis framework, digital entrepreneurship education through enhancing technological skills and confidence to implement entrepreneurial activity, could motivate the learners to venture in digital entrepreneurship. Digital skills might be

useful for navigating online platforms, recognising market opportunities, and for conducting entrepreneurial activities online, whereas entrepreneurial self-efficacy could boost students' entrepreneurship confidence to undertake entrepreneurial issues. The research found that combining a university degree with practical learning of skills in: digital learning, business planning, online marketing and entrepreneurial training would be beneficial. Pupils might be prepared for careers in the increasingly digital economy through these activities. Different types of learning environments as well as longitudinal designs can be used to discuss the relationships with other educational setting and what influence would have on entrepreneurial intention over time.

Conflict of Interest

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