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Development of digital entrepreneurial intention model in Uncertain Era

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ABSTRACT

Article history: Received April 18, 2021 Received in revised format June 25, 2021 Accepted July 7 2022 Available online July 7 2022 Keywords: Digital entrepreneurial education Entrepreneurial self-efficacy Digital entrepreneurial intention Uncertain era Student's digital entrepreneurial intention is a key to develop nascent digital entrepreneurs from university graduates in an uncertain era. The aim of this study is to analyze the effect of digital entrepreneurial education, risk propensity and environment support on entrepreneurial self-efficacy and digital entrepreneurial intention of university students in Semarang. The research population is students from several universities in Semarang City who have participated in digital entrepreneurship learning. 90 students are elected to be tested as research respondents. The collected data are then analyzed using descriptive analysis of the structural equation model. Risk propensity, entrepreneurial education, and environmental support positively support entrepreneurial self-efficacy. Risk propensity and entrepreneurial education also found a significant effect on digital entrepreneurial intention. University, government and the private sector are highly expected to increase students' digital entrepreneurial intention through training and learning programs both in the classroom or outside the classroom.

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1. Introduction

The presence of the fourth industrial revolution is an inevitable phenomenon and has had the impact that most jobs with middle and low skills will be replaced by digitalization and automation. Digital technology entrepreneurship built through networks The internet has had a tremendous impact on the world and was able to change the world with the formation of communication patterns without geographic barriers that brough the world into an era of disruption. This space offers a substantial contribution to the development of an entrepreneurial career in the near future.

Digital entrepreneurship has also attracted millennial business people especially in college. Digital entrepreneurship quickly creates entrepreneurial intention, although not always in a formal form (Dutot & Van Horne, 2015). Students can use their time to develop digital businesses when they are carrying out their obligations to complete college. The digital business developed during college is not only limited to additional income but also promises a career as a digital entrepreneur after students finish college.

The development of student entrepreneurship practices, which so far has only been limited to producing products marketed conventionally, through business startup and digital entrepreneurship courses, students are asked to practice selling products online. The development of digital entrepreneurship in students through business start-up courses and student digital entrepreneurship or digital marketing is very important and strategic because it plays a role in producing digital entrepreneurs who will graduate from higher education in the future.

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Entrepreneurship research is generally divided into two, the first is research on entrepreneurial intentions and behavior for prospective entrepreneurs who take entrepreneurship training, students who take entrepreneurship courses and practices, and students who are entrepreneurs. Theories that have spawned many entrepreneurial researches are: Theory of Entrepreneurial Event, Theory of Plan Behavior and Social Cognitive Theory (Darmanto & Lestari, 2014), while the second research is entrepreneurship in the view of economists who view entrepreneurship as an agent of economic change (Castillo & Freer, 2018). Several researchers and practitioners have developed and applied this economic view into the concept of entrepreneurial orientation (Lumpkin & Dess, 1996), and entrepreneurial competence as a variable that plays a role in increasing business performance (Darmanto et al., 2021). Underlying the theory of Planned Behavior, entrepreneurial intention can grow from three basic aspects, namely: personal, social and environmental (Darmanto & Lestari, 2014). Risk propensity is considered as the personal aspect that has the greatest influence on entrepreneurial intention. Likewise, entrepreneurship education from the social aspect and the environmental support aspect are also assessed as the background factors that have the greatest influence on entrepreneurial intention.

Research on the effect of risk propensity, entrepreneurship education and environmental support on entrepreneurial intention still produce conclusions that are not the same. Research conducted by Bae et al. (2014), Ajike et al. (2015), and Efrata et al. (2021) prove that entrepreneurship education has a significant effect on entrepreneurial intentions, while research conducted by Bernardus et al. (2019), and Widiasih and Darma (2021) prove that entrepreneurship education has no significant effect on entrepreneurial intentions. Moraes et al. (2018), and Shahzad et al. (2021) in their research proves that risk propensity has a significant effect on entrepreneurial intentions, while the results of research by Sharaf et al. (2018), and Younis et al. (2020) concludes that risk propensity has no significant effect on entrepreneurial intentions. Testing the role of environmental support on entrepreneurial intentions by Moraes et al. (2018), Widiasih and Darma (2021), and Akter and Iqbal (2022) proved significant results, while the results of research by Sesen (2013), and Walter et al. (2013) concluded that environmental support has no significant effect on entrepreneurial intentions.

To bridge the research gap in personality, education and environment aspects, entrepreneurial self-efficacy was proposed which in previous studies had a mediating role and as a variable that was considered to have the strongest influence in influencing digital entrepreneurial intentions (Sesen, 2013; Wu et al., 2022). Zhao et al. (2005) identified that the relationship between risk propensity and entrepreneurial intention is fully mediated by entrepreneurial self-efficacy. The findings of Jiatong et al. (2021) show that self-efficacy mediates the indirect effect of entrepreneur education on the entrepreneurial intention of university students of Jiangsu and Zhejiang province of China. The results of research by Elnadi and Gheith (2021) show that students' perceptions of the entrepreneurial ecosystem environment affect entrepreneurial intentions both directly and indirectly through entrepreneurial self-efficacy.

Most of the research conducted on students underlies entrepreneurship in general. This research was conducted on college students in Semarang who have taken digital entrepreneurship courses inside or outside the classroom. The information from this research is to contribute to efforts to develop intention and behavior in digital entrepreneurship in students as a provision to face the era of uncertainty due to the effects of the fourth industrial revolution.

2. Literature Review

2.1 Risk propensity on Entrepreneurial self-efficacy

There are four ways as a source in developing self-efficacy: enactive mastery, modeling, social persuasion, judgment of their own physiological states (Boyd & Vozikis, 1994). Risk propensity is related to a person's judgment of physiological state in starting a business, thus individuals who have a tendency to take risk will feel more confident and possess higher self-efficacy (Zhao et al., 2005). Elqadri and Priyono (2017) found a significant effect of risk propensity on entrepreneurial self-efficacy of vocational students in Indonesia. Darmanto and Yuliari (2018) also found a significant effect of risk propensity on entrepreneurial self-efficacy of entrepreneurial students.

H1: Risk propensity significantly affects entrepreneurial self-efficacy.

2.2 Risk propensity on entrepreneurial intention

Risk propensity is one personality trait that will determine whether a person will ultimately realize the business or not. Individuals who have a tendency to take risks have confidence in the face of business barriers that have the intention of developing the business (Elqadri et al. 2017). Risk propensity is the courage to pursue opportunities aggressively by choosing high-risk projects with high yields over low-risk projects (Spicka, 2020). Uncertainty situations (especially in the digital era) become an obstacle to one's intention to start a business (Agustina & Fauzia, 2021). Risk propensity will arise confidence and the ability to be involved in decision making (Shahzad, et al., 2021). Previous studies conducted by Darmanto & Yuliari (2018), Shahzad, et al (2021), Hussain et al. (2021) also prove that risk propensity has a significant effect on entrepreneurial intentions.

H₂: Risk propensity has a significant effect on entrepreneurial intentions.

2.3 Entrepreneurial Education on entrepreneurial self-efficacy

Education, both in the classroom and by taking entrepreneurship courses outside the classroom, has a strong influence in shaping his belief in realizing a business which will ultimately make him a successful entrepreneur (Akter & Iqbal , 2022). Entrepreneurship education in which there are entrepreneurship practices will increase their experience (enactive mastery) as one of the factors that shape entrepreneurial self-efficacy (Darmanto & Yuliari , 2018). Botha and Bignotti (2016) stated that entrepreneurship education interventions are considered effective for increasing entrepreneurial intention and entrepreneurial self-efficacy. Research conducted by Puni et al. (2018) proves that entrepreneurship education has a significant effect on entrepreneurial self-efficacy in students in Ghana. Wu et al. (2022) conducted research on entrepreneurial self-efficacy. A cross-sectional survey in Zimbabwe by Ndofirepi (2020) shows entrepreneurship education has a positive and statistically significant relationship with entrepreneurial goal intentions. The findings of the research by Cai et al. (2021) show that entrepreneurial behavior through the intervention mechanism of entrepreneurial self-efficacy.

H₃: Entrepreneurial education positive effect on entrepreneurial self-efficacy.

Referring to social cognitive theory, environmental as social persuasion is one of three interrelationship factors (personal, behavior, and environment) that can strengthen entrepreneurial self-efficacy (Darmanto & Yuliari, 2018). In the field of digital entrepreneurship, policy support from universities will increase student's confidence to realize their digital business (Widiasih & Darma, 2021). Environmental factors in the context of supporting capital, network and information were also proved as the influence factors in arising entrepreneurial self-efficacy (Darmanto & Yuliari, 2018). Nguyen (2020) Nguyen (2020) found a significant effect of social support as an environmental factor towards student's entrepreneurial self-efficacy in Vietnam.

H4: Environmental support has a significant effect on entrepreneurial self-efficacy.

2.5 Environmental support on entrepreneurial intention

Most of the research on the antecedents of entrepreneurial intentions and behavior is more oriented to internal factors, and there are still few that involve external factors such as environmental support (Akter & Iqbal, 2022). Environmental support in entrepreneurship research is manifested in several forms, including subjective norms, instrumental readiness (Darmanto & Lestari, 2014), and policy support (Widiasih & Darma, 2021). This study combines support from the immediate environment and support for universities and the government as environmental support for digital entrepreneurial intention.

Research conducted by Saeed et al. (2015) identified environmental support factors that play an important role in influencing students' entrepreneurial intentions. The study of Roca-Barcelo et al. (2021) concluded that the university environment had a positive effect on entrepreneurial behavior and intentions in students. In line, the findings of (Sim et al., 2021) state that university support for entrepreneurship has an indirect effect on students' entrepreneurial intentions. This is reinforced by the results of a study by Iizuka et al. (2022) that environmental support for educational institutions such as teachers has been shown to encourage entrepreneurial intentions and behavior. Several previous studies have also shown that environmental support has a significant influence on entrepreneurial intentions (Lucky & Ibrahim, 2015; Thi et al., 2015; Widiasih & Darma, 2021).

Hs: Environmental support has a significant effect on entrepreneurial intention.

2.6 Entrepreneurial Self-efficacy on digital entrepreneurial intention

The concept of self-efficacy was first proposed by Bandura and Schunk (1981), and later by Chen et al. (1998) applied in entrepreneurship as entrepreneurial self-efficacy which is defined as a person's belief in his ability to achieve success in entrepreneurship. Entrepreneurial self-efficacy is assessed as the factor that has the greatest influence on entrepreneurial intentions, individuals who have higher entrepreneurial self-efficacy belief are prone to be entrepreneurs (Yang, 2019). Entrepreneurial self-efficacy is emerging as a key psychological influence on entrepreneurial motivation, intention, behavior and performance, and is an important target for outcomes of entrepreneurship training and education (Newman et al., 2019). Ahmed et al. (2021) stated the importance of considering self-efficacy was found to have a significant influence on digital entrepreneurial intention. Widiasih and Darma (2021) conducted a study on the factors that influence digital entrepreneurial intention in 240 digital content creators, the results of which prove that entrepreneurial self-efficacy has a significant effect on digital entrepreneurial intention. Yuliana et al. (2020) also proved the positive and significance of entrepreneurial self-efficacy on digital entrepreneurial self-efficacy on digital entrepreneurial self-efficacy on digital entrepreneurial self-efficacy and significance of entrepreneurial intention.

H₆: Entrepreneurial self-efficacy positively impacts digital entrepreneurial intention.

3. Methodology

3.1 Research design

Descriptive -correlation was adopted as the research design because this method is most suitable to achieve the research objectives. The quantitative research paradigm was chosen (Creswell, 2014), to determine the effect between exogenous, mediating, and endogenous variables.

3.2 Measurement

Research data was collected by distributing research questionnaires which were divided into two sections. The first part is about the demographics of the respondents , and the second part concerns the questions that reflect the research variables. The entrepreneurship education variable was adopted from previous studies with four indicators: take a lot of entrepreneurship courses; knowledge to run a business, knowledge to creative, and knowledge to understand the science of business accountability (Jiatong et al., 2021; Widiasih & Darma, 2021; Yeh et al., 2021). Scales from several studies were chosen to measure environmental support with indicators of family support, social support, and financial support (Ahmed et al., 2021; Saeed et al., 2015; Sesen, 2013). The risk propensity of this study was measured based on three items: dare to take business risks, enjoy developing new business, and do not upset of failure to try again Zhao, et al (2005), Elqadri, et al (2017), and Shahzad et al (2021) (Elqadri & Priyono, 2017; Shahzad et al., 2021; Zhao et al., 2005). Entrepreneurial selfefficacy operationalized in a five-item questionnaire include: the level of perception about the ability to be successful, the level of ability to convince others in establishing a business, the level of confidence to build a business digital, the level of ability to take advantage of digital business opportunities, and the level of confidence in digital business development (Darmanto & Yuliari, 2018; Efrata et al., 2021; Jiatong et al., 2021; Shahzad et al., 2021; Yasir et al., 2019). Digital Entrepreneurial Intention was adopted from previously established research with four indicators want to have their own digital business, level of desire to succeed in digital business, level of desire to start email, and choose an entrepreneurial career over others (Darmanto & Yuliari, 2018; Kassim et al., 2021; Widiasih & Darma, 2021; Yurtkoru et al., 2014). Responses to the research questions were expressed on a five-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree).

3.3 Sample

The research population is students from several universities in Semarang City who have participated in digital entrepreneurship learning. Cross-sectional data were obtained from field surveys, with the target population of this study being diploma and undergraduate students at public and private universities in Semarang City, Central Java, Indonesia. The sampling method was chosen by purposive sampling with the criteria of students who have received entrepreneurship education both formally and informally. The distribution of the questionnaires was carried out using a mix method through paper and google forms. The results of the distribution of the questionnaire were filtered for completeness of responses and outliers so that 90 answers were obtained which were considered worthy of being research respondents. The profile of the respondents can be seen in Table 1. The demographics of the respondents showed that there were more women (56.7%) than men, aged between 22 to 25 years (42.2%), undergraduate education (92.2%) than diplomas. This shows that students in Semarang have matured to choose a career as an entrepreneur.



Fig. 2. Respondent Demographic Statistics

3.4 Data analysis

The collected data was then analyzed using the Partial Least Square-Structural Equation Model (PLS-SEM). PLS-SEM is still considered better than CB-SEM to predict the relationship that occurs. PLS-SEM is a modeling technique that combines two stages: confirmatory factor analysis for validity testing, and path analysis for prediction (Hair Jr et al., 2021). Convergent validity was measured by standardized factor loadings, Cronbach's alpha reliability, rho-A, composite reliability, and average variance extracted. Discriminant analysis of data validity through the Fornell–Larcker Criterion by assessing the ratio of the square root of the AVE and the correlation between factors (Fornell & Larcker, 1981). Finally, the bootstrapping method was chosen for the estimated values for path relationships in the structural model with SmartPLS version 3.7 software (Ringle et al., 2015).

4. Results and Discussion

4.1 Result



Fig. 2. Measurement and Structural Model

Fig. 2 illustrates the research framework that has been tested empirically with data from 120 respondents. The results of the evaluation of the measurement and structural models will be explained in Tables 2 to 5. The evaluation of the measurement model includes the concepts of convergent validity, discriminant validity and construct reliability. Evaluation of the structural model includes the coefficient of determination (R^2), the effect size (f^2), and the inflation variance factor (VIF).

Table 1

Reliability Validity Test Results

Indicator	Loading Factor	Cronbach's Alpha	rho A	Composite Reliability	Average Variance Extracted (AVE)
EE1	0.880	0.839	0.875	0.891	0.671
EE2	0.829				
EE3	0.792				
EE4	0.770				
ES1	0.815	0.749	0.750	0.857	0.667
ES2	0.842				
ES3	0.792				
RP1	0.939	0.922	0.924	0.951	0.865
RP2	0.950				
RP3	0.902				
ESE1	0.862	0.934	0.936	0.950	0.792
ESE2	0.882				
ESE3	0.913				
ESE4	0.904				
ESE5	0.887				
DEI1	0.834	0.869	0.873	0.911	0.719
DEI2	0.819				
DEI3	0.873				
DEI4	0.863				

The calculation results in Table 1 show that the factor loading indicator in the model is > 0.700, which indicates good convergent validity. The result of the next calculation is that the Cronbach's Alpha, rho_A, and Composite Reliability values between 0.70 and 0.90 can be considered as satisfactory. Furthermore, for AVE values higher than 0.50 which indicates acceptable reliability. This finding shows the construct has very good internal reliability consistency for the effective model.

Table 2

Fornell-Larcker Criteria					
Variables	EE	ICE	RP	ESE	DGI
Entrepreneurial Education	0.819				
Environmental Support	0.595	0.816			
Risk Propensity	0.582	0.653	0.93 0		
Entrepreneurial Self-Efficacy	0.707	0.771	0.752	0.89 0	
Digital Entrepreneurial Intention	0.514	0.661	0.787	0.765	0.848

Fornell-Larcker criterion is the first and more conservative approach to assessing discriminant validity. This criterion compares the square root of the AVE value with the correlation of the latent variables. Specifically, the square root of the AVE of each of these constructs must be greater than the highest correlation with the other constructs. Based on Table 1, it is known that the square root of the extracted mean variance (AVE) shown on the diagonal, the value is higher than the correlation. The results show that the model has good discriminant validity.

Table 3

Criteria for Heterotrait-Monotrait Ratio (HTMT)

Variables	EE	ICE	RP	ESE	DGI
Entrepreneurial Education			•	-	
Environmental Support	0.745				
Risk Propensity	0.657	0.784			
Entrepreneurial Self-Efficacy	0.773	0.921	0.808		
Digital Entrepreneurial Intention	0.592	0.820	0.875	0.844	

The HTMT approach is an estimate of the correlation between parallel constructs with the correlation of the values of the constructs that are not attenuated. Technically, the HTMT approach provides two advantages of score correlation constructs: it does not require factor analysis for other factor loadings, and it does not require the calculation of score constructs. Of the three approaches, HTMT 0.85 is the most conservative criterion, while HTMT 0.90 and HTMT 0.95 indicate that discriminant validity has been established. The results in Table 2 show that the model has sufficient discriminant validity, because there are some values that are still lower than the specified threshold value of 0.85.

Table 4

Goodness of Fit Index Calculation

Variables	f Square	R Square	R Square Adjusted	VIF
Entrepreneurial Education	0.186			1722
Environmental Support	0.303			2.263
Risk Propensity	0.305			2.157
Entrepreneurial Self-Efficacy	0.111	0.749	0.743	3.3 1 0
Digital Entrepreneurial Intention		0.691	0.683	

This study uses the model in PLS to assess the structural model in relation to the quality of the PLS model. This allows us to assess the variance in the explanatory model, the magnitude of the influence and contribution of each variable and the significance of the relationship between the hypothesized variables. This criterion consists of a determination coefficient (R^2), effect size (f^2), and the inflation variance factor (VIF). The results of the evaluation of the structural model that we obtained are depicted in Table 4 obtained. In addition, we obtain the value of the effect size (f^2) generated by the predictors in our model that ranges from 0.111 to 0.305, belonging to the high category. These values determine the contribution of each predictor in the model to explain the variance of the dependent variable. Another result is that the R^2 values for Entrepreneurial Self-Efficacy and Digital Entrepreneurial Intention are 0.749 and 0.691 are also high criteria. Finally, the VIF value ranges from 0.722 to 0.360, meaning that for each predictor in the model it is less than 3.3. This shows that there is no significant correlation or collinearity between the predictor variables in the model.

Table 5

Hypothesis Testing							
Hypothesis	Relationship	Estimate	T-Statistics	P - Values	Decision		
1	$EE \rightarrow ESE$	0.284	4.825	0.000	Supported		
2	$ES \rightarrow ESE$	0.382	5.096	0.000	Supported		
3	$RP \rightarrow ESE$	0.337	3.746	0.000	Supported		
4	$ES \rightarrow DEI$	0.090	1,207	0.227	Rejected		
5	$RP \rightarrow DEI$	0.473	5.305	0.000	Supported		
6	$ESE \rightarrow DEI$	0.340	3.311	0.001	Supported		

Table 6		
Mediation	Role	Testing

Indirect Effect	Estimate	T-Statistics	P-Values	Decision
$EE \rightarrow ESE \rightarrow DEI$	0.096	2,988	0.003	Supported
$\mathbf{ES} \to \mathbf{ESE} \to \mathbf{DEI}$	0.130	2,929	0.003	Supported
$RP \rightarrow ESE \rightarrow DEI$	0.115	2.173	0.030	Supported

This study tested the derived hypothesis for the relationship between variables by performing a bootstrap procedure. In testing these hypotheses, we assessed the direction of the path coefficients, and accepted or rejected each hypothesis based on a 95% confidence interval, resulting in a 5% (one-sided) significance level. Overall, our results support 5 hypotheses about the relationship between predictors and outcomes, and one hypothesis is not supported (Table 5). The calculation results show a significance at p 0.05 at 95% so it can be concluded that H1, H2, H3, H5 and H6 are fully supported. The study found that the effect of ES on Digital Entrepreneurial Intention was not significant, with beta (β) values of 0.090, t-statistic of 1.207 < 1.64, and significance at p=0.227>0.05 so that H4 was rejected. In addition, this study found a significant indirect relationship EE \rightarrow ESE \rightarrow DEI and ES \rightarrow ESE \rightarrow DEI , with beta (β) values of 0.096, 0.130 and 0.115, respectively, which are significant in p 0.05 at 95% CI. Therefore, it can be concluded that the mediating role of entrepreneurial self-efficacy in the model is also fully supported.

4.2 Discussion

This study aims to analyze the effect of risk propensity, entrepreneurial education and environmental support on students' digital entrepreneurship intentions with entrepreneurial self-efficacy as an intervening variable. Five hypotheses proved significant, namely: risk propensity, entrepreneurial education and environmental support had a positive and significant effect on entrepreneurial self-efficacy had a positive and significant effect on students' digital entrepreneurship intentions. While one hypothesis, namely environmental support for digital entrepreneurship intentions is not significant.

Risk propensity will increase one's confidence and ability in decision making (Shahzad et al., 2021), and also confidence to face business barriers (Elqadri & Priyono, 2017). Risk propensity the high, medium or low reputation to increase their probability to success and found that younger people such students are more likely to be risk takers than (Castillo & Freer, 2018). Newman et al. (2019) argue that entrepreneurship does not only involve risk taking, uncertainty, creativity, leadership and being proactive, but also requires entrepreneurial self-efficacy This finding supported previous studies by Elqdri, et al (2017), Darmanto and Yuliari (2018), and Samydevan et al. (2021) which concluded that risk propensity positive effect on entrepreneurial self-efficacy.

Risk propensity has also been shown to have a significant direct influence on students' digital entrepreneurship intentions. Risk propensity is considered as the personal factor that has the greatest influence on entrepreneurial intentions, it will further enhance the strong desire to realize the business and make one ready to face the risk of loss that may happen (Darmanto and Yuliari, 2018). Risk propensity significantly has a direct effect on entrepreneurial intention, this finding is supported by previous study by <u>Poolsawat (2021)</u> who studied the effect of risk taking propensity on entrepreneurial intention of 412 business students enrolled in Southern Thai universities. Shahzad (2021) also found a higher risk propensity at younger students than elders in his study in Pakistan. Furthermore, the study of Ayeh et al. (2022) explains that students who have a willingness to take risks tend to have a favorable disposition towards start-ups, and this has an impact on their entrepreneurial decisions.

Awareness of the importance of entrepreneurship education in supporting the formation and creation of entrepreneurs has long been owned and realized by universities through several entrepreneurship learning programs, ranging from entrepreneurship lectures to informal learning such as entrepreneurship discussions or seminars (Wijaya & Radianto, 2017). In the development of digital entrepreneurship in universities, digital entrepreneurship education will foster student confidence to be able to realize their desire to have a digital business (Widiasih and Darma, 2021). Research conducted by Wu, et al (2021) on 804 students in Zheijiang China proves that entrepreneurship education has a positive and significant effect on entrepreneurial self-efficacy. Soomro and Shah (2022) also proved that entrepreneurship education had a positive and significant influence on their research on 125 business students in Pakistan.

The role of environmental support includes internal environmental support in the form of entrepreneurship support from the closest people and external environmental support (support from universities, government and private sector) as social persuasion which is one element of forming self-efficacy. Nguyen (2020) suggests the importance of research on the effect of environmental support on entrepreneurial self-efficacy as an important contribution to the development of entrepreneurship in universities. Widiasih and Darma (2021) conclude that environmental support in the form of public support has a positive and significant influence on entrepreneurial self-efficacy for the formation of digital entrepreneurial intention. Previous research conducted by Darmanto and Yuliari also proves the role of environmental support in the form of instrumental readiness has a positive and significant influence on entrepreneurial self-efficacy.

However, environmental support does not have a direct influence on students' digital entrepreneurship intentions, environmental support will have an influence on entrepreneurial intentions through entrepreneurial self-efficacy. Accessibility supports the existing environment has not been quite able to encourage increased entrepreneurial intention so that it requires a concerted effort to further enhance support for the development of new business. The influence of the personality aspect is considered stronger on entrepreneurial intentions than environmental support (Sesen , 2013). These findings contrasted with a previous study by Nguyen (2020) which concluded that environmental support's factor (perceived financial, non-financial support, social supports) had a significant effect on entrepreneurial intention of students in Vietnam. The result of the Widiasih and Darma (2021) also concluded that environmental support (public support) had a significant effect on digital entrepreneurial intention. But the result was supported by Sesen (2013) which concluded that environmental supports (capital, business information, supportive environment for entrepreneurship in the university) were found insignificant effect of environmental support (2018) also found an insignificant effect of environmental support on entrepreneurial intention.

Entrepreneurial self-efficacy found a significant effect on digital entrepreneurial intention, it is suggested as the strongest variable toward entrepreneurial intention (Sesen , 2013). Entrepreneurial self-efficacy and entrepreneurial intention enable a person to exhibit one's career management activities which link to the achievement of career goals that one desires (Yang, 2019). The result supported the Widiasih and Darma (2021) study which found a positive and significant effect on digital entrepreneurial intention.

Entrepreneurial self-efficacy is also proven to have the ability to mediate risk propensity, entrepreneurial education, environmental support toward digital entrepreneurial intention. It has been regarded that entrepreneurial self-efficacy has been a key antecedent with various individuals and environmental variables which affect entrepreneurial intention (Yang , 2019). A cross-sectional survey in Zimbabwe by Ndofirepi (2020) shows entrepreneurship education has a positive and statistically significant relationship with entrepreneurial goal intentions. The findings of the research by Cai et al. (2021) show that entrepreneurial spirit and entrepreneurial self-efficacy. The results of the analysis of Anwar et al. (2022) reveal that entrepreneurship education, opportunity recognition not only affects entrepreneurial intentions directly but also affects indirectly through the mediating effect of self- efficacy. The results of research by Elnadi and Gheith (2021) show that students' perceptions of the entrepreneurial ecosystem environment affect entrepreneurial intentions both directly and indirectly through entrepreneurial self-efficacy. The results of the research by Elnadi and Sheith (2021) show that self-efficacy and indirectly through entrepreneurial self-efficacy. The results of the research by Elnadi and Sheith (2021) show that students' perceptions of the entrepreneurial ecosystem environment affect entrepreneurial intentions both directly and indirectly through entrepreneurial self-efficacy. The results of the research by Setiawan et al. (2022) show that self-efficacy and indirectly through entrepreneurial self-efficacy. The results of the research by Setiawan et al. (2022) show that self-efficacy and indirectly through entrepreneurial self-efficacy social support on entrepreneurial orientation attitudes.

5. Implications

The results of this study are in line with and strengthen the basic concept of social cognitive theory, that self-efficacy is determined by judgment of their own physiological states (risk propensity), active mastery (entrepreneurial education), social persuasion (environmental support). Aspects of personality, psychology, environment and motivation as antecedents of entrepreneurial intention are background factors in the theory of planned behavior which have implications for developing theory for the purposes of developing digital entrepreneurship. Practically, digital entrepreneurship education must be properly prepared starting from the curriculum, providing digital practices, role models to mental encouragement and enthusiasm that will enhance entrepreneurial self-efficacy as the main factor in forming digital entrepreneurship intentions.

6. Conclusions

The fourth industrial revolution brings the consequences of digitalization which encourages the development of entrepreneurship towards business digitization, including among students. Research on the factors that influence students' digital entrepreneurial intention is important to contribute to students' digital business development efforts as a continuation of the entrepreneurial development that has been done previously. Six hypotheses were proposed, five hypotheses proved to have a significant effect, namely the effect of risk propensity, entrepreneurship education on entrepreneurial self-efficacy, the effect of risk propensity, environmental support on digital entrepreneurship intentions, the influence of entrepreneurial self-efficacy on digital entrepreneurship intentions. While one hypothesis, namely the effect of environmental support on self-efficacy has no significant effect on digital entrepreneurship intentions. The results of this study also show that entrepreneurial self -efficacy has the ability to mediate personal, psychological and environmental factors on students' digital entrepreneurship intentions.

7. Limitations and recommendations

This study only involves several variables, namely risk propensity, entrepreneurship education, and environmental support to predict the development of students' digital entrepreneurship intentions. In addition to personal, psychological and environmental aspects, several researchers suggest examining several aspects such as human capital and entrepreneurship capital and role models which are proven to have a significant influence on students' entrepreneurial intentions. The scope of this research is only limited to students in Semarang, so it is necessary to expand the scope of research more broadly with a larger number of research samples. University, government and the private sector are highly expected to increase students' digital entrepreneurial intention through training and learning programs both in the classroom or outside the classroom. The emergence of digital entrepreneurs born from universities will make a major contribution to the nation's economy as a whole.

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