
**THE EFFECT OF PERCEIVED UNIVERSITY SUPPORT,
ENTREPRENEURIAL SELF-EFFICACY AND
PROACTIVE PERSONALITY IN PROMOTING STUDENT
ENTREPRENEURIAL INTENTION IN INDONESIA**

EL EFECTO DEL APOYO UNIVERSITARIO PERCIBIDO,
LA AUTOEFICACIA EMPRESARIAL Y LA
PERSONALIDAD PROACTIVA, EN LA PROMOCIÓN DE
LA INTENCIÓN EMPRENDEDORA DE LOS
ESTUDIANTES EN INDONESIA

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ABSTRACT

Entrepreneurship plays a pivotal role in economic growth for Indonesia. Unfortunately, the number of entrepreneurs in Indonesia is still lagging behind other ASEAN countries. The emergence of knowledge-based entrepreneurship makes universities become one of the vital supply sources for creating

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entrepreneurs. Even though it has institutional support from the Indonesian government, entrepreneurship is still not considered a promising alternative career choice. Therefore, this study aims to analyze the effect of university institutional support (perceived educational support, concept development support, and concept development support) and personal traits variables (self-efficacy and proactive personality) on Indonesian students' entrepreneurial intention. This study was conducted using a judgmental sampling technique on 302 active university students in Indonesia who have received entrepreneurship education. Data analysis in this study was carried out using the PLS-SEM. The findings of this study indicate that perceived educational support directly affects entrepreneurial intention. While, perceived concept development support and perceived business development support positively shape self-efficacy, leading to entrepreneurial intention. This study also confirms self-efficacy and proactive personality as predictors of entrepreneurial intention. Furthermore, the study also shows that self-efficacy mediates the relationship between proactive personality and Indonesian students' intentions to be entrepreneurs.

KEYWORDS

Perceived educational support, perceived concept development support, perceived business development support, entrepreneurial self-efficacy, proactive personality, entrepreneurial intention

RESUMEN

El espíritu empresarial juega un papel fundamental en el crecimiento económico de Indonesia. Desafortunadamente, el número de empresarios en Indonesia todavía está rezagado con respecto a otros países de la ASEAN. El surgimiento del emprendimiento basado en el conocimiento hace que las universidades se conviertan en una de las fuentes vitales de suministro para la creación de emprendedores. A pesar de que cuenta con el apoyo institucional del gobierno de Indonesia, el espíritu empresarial todavía no se considera una opción de carrera alternativa prometedora. Por lo tanto, este estudio tiene como objetivo analizar el efecto del apoyo institucional universitario (apoyo educativo percibido, apoyo al desarrollo de conceptos y apoyo al desarrollo de conceptos) y las variables de rasgos personales (autoeficacia y personalidad proactiva) en la intención emprendedora de los estudiantes indonesios. Este estudio se realizó utilizando una técnica de muestreo de juicio en 302 estudiantes universitarios activos en Indonesia que habían recibido educación empresarial. El análisis de datos en este estudio se llevó a cabo utilizando el PLS-SEM. Los hallazgos de este estudio indican que el apoyo educativo percibido afecta directamente la intención emprendedora. Mientras que, el apoyo percibido al desarrollo del concepto y el apoyo percibido al desarrollo empresarial dan forma positiva a la autoeficacia, lo que lleva a la intención emprendedora. Este estudio también confirma la autoeficacia y la personalidad proactiva como predictores de la intención emprendedora. Además, el estudio también muestra que la autoeficacia media la relación entre la personalidad proactiva y las intenciones de los estudiantes indonesios de ser empresarios.

PALABRAS CLAVE

Apoyo educativo percibido, apoyo al desarrollo de concepto percibido, apoyo al desarrollo empresarial percibido, autoeficacia empresarial, personalidad proactiva, intención empresarial

INTRODUCTION

Review Literature shows that entrepreneurship is an important stimulus in the economic growth (Scott & Venkataraman, 2000; Stel et al., 2005; Almodóvar-González et al., 2020). Entrepreneurship drives the growth of economic productivity through the transfer of knowledge and innovation in creating products, methods, and production to the market (Decker et al., 2014; Kritikos, 2014; Doran et al., 2018). However, according to the Indonesian Central Bureau of Statistics, the number of entrepreneurs in Indonesia has only reached 3.1% of the total population. This percentage is still relatively small compared to other South East Asia (ASEAN) countries (Kominfo.go.id, 2019; Kemenkopukm.go.id, 2020). Furthermore, based on Global Entrepreneurship Index (2019), Indonesia only ranks 75th out of 137 countries. Despite an increase in the index compared to the previous year, Indonesia's position is still below other ASEAN countries such as Vietnam, Thailand, Brunei, Malaysia, and Singapore. Indonesia needs at least more than 4% of the population to engage in entrepreneurship to boost economic growth (Hidayat, 2019) where an increase in entrepreneurial activity will create many jobs, which ultimately reduce the unemployment rate (Thurik et al., 2007, 2011) especially in developing countries (Asad et al., 2014; Doran et al., 2018; Bakry et al., 2019) including Indonesia.

Globalization has brought entrepreneurship to enter the era of entrepreneurial society, where knowledge (knowledge-based entrepreneurship) becomes a new source of competitive advantage in addition to mastering production factors (Audretsch & Lehmann, 2005). Drucker (1985) stated that entrepreneurship is a discipline. Therefore, as a discipline, entrepreneurship can be studied. Thus, universities as a source of knowledge also become one of the bases for increasing business actors. Education and teaching of entrepreneurship in universities will then learn and develop their entrepreneurial traits, attitudes, and skills (Hahn et al., 2017). University institutions, through entrepreneurship education, can equip students with the knowledge and skills they need to build new businesses and become entrepreneurs (Mcmullan & Long, 1987; Kuratko, 2005), cultivate the ability and sensitivity to see business opportunities, take risks, increase emotional intelligence, and also teach creative thinking that shapes innovation behavior (Cruz et al., 2009; Deveci & Cepni, 2017).

The results of previous studies indicate that *entrepreneurship education* is a factor that influences entrepreneurial intentions in college students (Tessema Gerba, 2012; Zhang et al., 2014; Westhead & Solesvik, 2016). In Indonesia itself, the government has implemented entrepreneurship education through the Ministry of Research and Technology since 2007. In order to stimulate students to become entrepreneurs, the government collaborates with universities in Indonesia to develop more in-depth entrepreneurship courses through various programs, create mentor-based entrepreneurship competition, and provide grant

funds to support student's start-up funding (Badan Riset dan Inovasi Republik Indonesia, 2012; Direktorat Jenderal Pendidikan Tinggi, 2021).

Although the Indonesian government has provided strong institutional support for entrepreneurship education and programs for students and implemented the entrepreneurship curriculum at the university level, the number of graduate students who eventually have careers as entrepreneurs remain relatively low. Regarding professional career aspirations, of the approximately 5 million students in Indonesia, 83% still want to work as paid employees, and only 4% of students aspire to become entrepreneurs (Riyandi, 2017).

Therefore, creating entrepreneurship in universities should not be seen from the aspect of the curriculum alone. In addition to the entrepreneurship curriculum, universities as institutions can also offer students various assistance in developing their interests and business skills (Saeed et al., 2015; Mustafa et al., 2016; Sidratulmunthah et al., 2018).

Institutionally, entrepreneurial universities act as catalysts for entrepreneurial activities through various research activities, technology transfer, university-industry collaboration, and venture development by university members (Mcmullan & Long, 1987; Chrisman et al., 1995; Guerrero & Urbano, 2012). Universities are natural incubators that create new ideas and technologies, promote the creation of new businesses, and offer various resources and capabilities essential to creating a sustainable competitive advantage (Urbano & Guerrero, 2013). The results of previous studies indicate that perceived university support in the form of perceived educational support, perceived concept development support and perceived business development support directly or indirectly affect the formation of entrepreneurial intentions among students (Nasiru et al., 2015; Saeed et al., 2015; Hussain, 2018; Mustafa et al., 2016).

From an environmental perspective, despite the increasing interest in academic entrepreneurship and the creation of new businesses by students, Most of the research mainly focused on the effect of entrepreneurial education on entrepreneurial intention (Shi et al., 2019). For the Indonesian context, the findings of results related to the influence of entrepreneurial education on entrepreneurship intentions also show inconsistent results (Setiawan & Lestari, 2021). Therefore, the effect of entrepreneurial education should not only be seen from the curriculum alone. The entrepreneurial education study should also consider students' perception of the overall aspect of university support they receive. Furthermore, research on the topic of university support factors that can encourage entrepreneurship among students is still very limited in Indonesia.

In addition to perceived university support as a contextual factor, a previous study conducted by Lüthje & Franke (2003) also showed that the formation of entrepreneurial intentions among students influences personality traits. The personality approach is one of the earliest and most classic approaches in the discussion of entrepreneurship. The results of a meta-analysis study show that self-efficacy is one of the personalities that affect an individual's ability to create a business (Rauch & Frese, 2007). In entrepreneurship, self-efficacy is indicated by the individual's belief in his quality and ability to effectively carry out various business activities (Lee et al., 2005). Individuals who have a strong perceived self-efficacy will have high resilience when facing problems (Bandura, 1977). Moreover, Wilson et al., study (2007) shows that entrepreneurship education had significantly strengthened student's self-efficacy which ultimately forms entrepreneurial intentions.

In addition to self-efficacy as an inward looking personality trait, the study adds proactive personality as an outward looking entrepreneurial personality. Previous studies have shown proactive personality as a predictor of entrepreneurial intention. Students who have proactive personalities tend to have entrepreneurship as a future career choice (Mustafa et al., 2016; Prabhu et al., 2012; Lestari et al., 2021). Students with proactive personalities can actively scan the environment around them for opportunities, initiate and take action, and persist until they achieve their goals (Bateman & Crant, 1993). Students who have proactive personalities also will try to create or control the surrounding situation. Entrepreneurial efforts to control the situation can be seen from their ability to capture and manage the business opportunities available in their environment. Therefore, the addition of proactive personality variables is essential to study in developing countries such as Indonesia because of limited access to the resources needed to start new ventures (Mustafa et al., 2016).

Therefore, this study seeks to answer the following questions:

1. Does perceived university support (in the form of perceived educational support, perceived concept development support, and perceived business development support) impact Student's Entrepreneurial Self-Efficacy in Indonesia?
2. How is the effect of entrepreneurial self-efficacy of students in Indonesia on entrepreneurial intention?
3. How does proactive personality affect the formation of entrepreneurial intentions among Indonesian students? Furthermore,
4. Whether entrepreneurial self-efficacy mediates the relationship between proactive personality and student entrepreneurial intention in Indonesia?

This study contributes to providing a better understanding of the role of the university environment as an entrepreneurial catalyst in the formation of EI. In Indonesia itself, where entrepreneurship is a national agenda, universities are required to play an active role in creating entrepreneurs. Therefore, University's role can be seen as a knowledge distributor and an enabler in the form of an ecosystem that stimulates the growth of entrepreneurial spirit. The study's goal was to look at the extent to which Perceived University Support (PUS) influences the formation of ESE students, which may have an impact on EI formation. In addition to environmental factors, this study also wanted to investigate the effect of proactive personality factors on the formation of ESE and EI. Variable Proactive personality is relevant to developing countries like Indonesia, where resources to start a business are scarce and difficult to obtain. Therefore, the results of this study can help policymakers such as governments and university leaders cultivate, implement and evaluate the implementation of effective entrepreneurship programs to grow EI.

LITERATURE REVIEW

Entrepreneurial Intention

Ajzen (1991) defines intention as the degree of readiness and motivation of a person to demonstrate the expected behavior. Bird (1988, 1992) defines entrepreneurial intention as an awareness of the mind that directs attention and individual experience towards planned entrepreneurial behavior. In other words,

the entrepreneurial intention is entrepreneurs' mindset, experience, and behavior to achieve specific goals or actions.

At least three approaches to the entrepreneurial intention model are widely used as a measurement reference. The first model is the theory of planned behavior (TPB) (Ajzen, 1988, 1991, 2002, 2012), which explains intentions through attitudes toward acts, perceptions of behavioral control, and subjective norms formed from individual interactions with the environment he belongs. Attitude toward action is an individual's assessment of personal desire to create a new business. Subjective norms reflect the individual's perception of the thoughts of those closest to them about the creation of a new business. Meanwhile, perceived behavioral control reflects individuals' perceptions of their ability to start a new business successfully. Ajzen (1991) revealed that intention is a direct antecedent of planned behavior. In this case, intention is considered as the best single predictor of a planned behavior.

The second model of entrepreneurial intention is Shapero's Entrepreneurial Event Model (SEE) (1982). The Model explained that entrepreneurial intention combines individual internal drives based on perceived desirability, feasibility, and propensity to act. Perceived feasibility is how individuals perceive they are personally capable of carrying out entrepreneurial activities. The formation of perceived feasibility is influenced by the presence of a role model or partner, barriers, financial and social support, education, belief in one's ability to perform entrepreneurial tasks, or perceived availability of resources needed to create a business (Gasse & Tremblay, 2011). Perceived desirability is defined as the extent to which individuals find the prospect of starting a business attractive. Meanwhile, the propensity to act upon opportunities refers to a tendency to perform to get the value of benefits from available options and refers to an innate disposition to work on one's decisions and depends on one's perception control.

In contrast to TPB and SEE, the Luthje and Franke (LFM) model integrates various direct exogenous factors to predict entrepreneurial intention. In LFM, the intention to pursue entrepreneurship as a career choice is influenced by contextual factors and personality traits (Lüthje & Franke, 2003). This model becomes relevant for use in developing countries (Mustafa et al., 2016; Hussain, 2018) which are limited in resources to start entrepreneurship, including in Indonesia.

Perceived University Support

In Luther and Franke's entrepreneurial model, the environment becomes an important contextual factor that influences the formation of student entrepreneurial intentions in addition to personality traits (Lüthje & Franke, 2003). From a contextual perspective, one of the environmental factors that play an essential role in the new knowledge economy is the university. In this context, entrepreneurial opportunities are then associated with knowledge as an essential source of production factors. This is what then encourages the emergence of the entrepreneurial university concept, which encourages universities to be a source of knowledge providers and a catalyst for the cultivation of values and attitudes towards entrepreneurship (Guerrero & Urbano, 2012; Urbano & Guerrero, 2013).

University support in fostering student entrepreneurship can be facilitated by providing and developing ideas of thinking and implementing entrepreneurship through educational programs and activities. The University can also encourage and support entrepreneurial initiatives by creating a stimulating environment

through knowledge and technology development, stakeholder engagement, and resource provision (Davey et al., 2016). herefore, the role of the University should not be seen from the educational factor alone but as a whole as an organizational perspective that serves as an enabler of entrepreneurship (Saeed et al., 2015; Shi et al., 2019).

Therefore the construction of Perceived University Support in this study refers to three separate interrelated factors: perceived educational support (PES), perceived concept development support (PCDS), and perceived business development support (PBDS) (Kraaijenbrink et al., 2010; Saeed et al., 2015; Hussain, 2018).

First, educational support through various educational programs can equip students with the knowledge, skills, and internship and networking opportunities needed to advance students' embryonic ideas into workable concepts (Saeed et al., 2015; Davey et al., 2016). By providing perceived concept development support, universities can increase students' entrepreneurial awareness and motivation, especially during the early stages of the entrepreneurial process, where identifying opportunities and developing opportunities into business ideas takes place (Shane & Venkataraman, 2010; Saeed et al., 2015). Through business development support, universities can help students develop their businesses further once they graduate from university. Broadly speaking, a supportive university environment for entrepreneurship can increase students' interest in entrepreneurship and their eligibility to engage in entrepreneurship as a career by increasing knowledge, building self-confidence, and promoting self-efficacy (Saeed et al., 2015; Mustafa et al., 2016).

Entrepreneurial Self-Efficacy

Self-efficacy is a person's belief about his ability to perform a given task or behavior successfully. Self-efficacy is based on individuals' self-perception of their skills and abilities (Bandura, 1977, 1986b). Self-efficacy reflects individuals' deepest thoughts about whether they have what it takes (self-confidence) to perform a particular task successfully (Bandura, 1986b). Therefore, self-efficacy is considered the main mediator of behavior or behavioral change to be used to understand and predict behavior. If someone has low self-efficacy towards particular behavior, it will lead to avoidance behavior. On the other hand, if a person has high self-efficacy, the tendency to perform the expected behavior is greater (Bandura, 1977). A person develops and strengthens beliefs about their efficacy in four ways: (1) experience of mastery (or enactive mastery); (2) modeling (observational learning); (3) social persuasion; and (4) assessment of one's physiological condition (Bandura, 1986a)

In entrepreneurship, the concept of self-efficacy is precious for understanding intentions towards planned and intentional behaviors such as entrepreneurship. Entrepreneurial Self-efficacy (ESE) is one of the main prerequisites that must be possessed by potential entrepreneurs (Krueger & Brazeal, 1994). Boyd & Vozikis (1994), added self-efficacy in the entrepreneurial intention model (Bird, 1988b). Self-efficacy affects an individual's ability to acquire skills, increase effort, and show a person's level of persistence in dealing with problems. Self-efficacy also affects a person's motivation in achieving something. A person with high self-confidence will be more tenacious and show more significant effort in dealing with problems (Bandura, 1986c, 1992).

Proactive Personality

Proactive personality is a stable disposition to form proactive behavior. The prototype of proactive personality is defined by (Bateman & Crant, 1993) as an individual who is relatively unfettered by situational forces and can influence changes in the surrounding environment. Individuals with a proactive personality will be able to identify and execute business opportunities they find. Individuals with this personality will show initiative, take action, and persist until they achieve the desired goal. They transform the organization's mission, find and solve problems, and want to impact the environment around them (Bateman & Crant, 1993; Crant, 1996). If we put the context into the individual career choices, proactive individuals will tend to be successful in the career they choose. It is because they tend to take control in the working environment they deal with to easily understand, adapt, and anticipate environmental changes (Seibert et al., 1999). Likewise, entrepreneurship requires a proactive personality in finding business opportunities. According to Shane & Venkataraman (2010), business opportunities do not just appear but wait to be discovered by proactive individuals seeking and exploiting them to generate added value.

Previous Research and Hypothesis Development

The Effect of Perceived University Support on Entrepreneurial Self-Efficacy (ESE) and Entrepreneurial Intention (EI)

Krueger & Brazeal (1994) stated that Entrepreneurship Education could increase entrepreneurial feasibility perceptions by increasing students' knowledge, building their self-confidence, and promoting entrepreneurial self-efficacy to start a new business. Thus, it can be concluded that universities' entrepreneurship programs and related support can play an essential role in fostering entrepreneurial self-efficacy among their students. This self-efficacy development strengthens the students' business intentions (Shi et al., 2019). Moreover, creating a positive business ecosystem and university support will help students gain a variety of tangible and intangible business resources and a set of skills that increase their confidence and enthusiasm for doing business and make entrepreneurship their career choice (Rohit Trivedi, 2016). Research conducted by Saeed et al., (2015) in Pakistan found perceived university support in the form of perceived education support, perceived concept development support, and perceived business development support provided by universities as the most influential on their ability and confidence to become an entrepreneur. Based on the results of previous studies, the hypotheses in this study are:

H1. Perceived educational support has a positive effect on entrepreneurial self-efficacy.

H3. Perceived concept development support has a positive effect on entrepreneurial self-efficacy.

H5. Perceived business development support has a positive effect on entrepreneurial self-efficacy.

Previous studies show that students' perception of university support positively affects the formation of entrepreneurial intentions (Nasiru et al., 2015; Shi et al., 2019). In terms of educational support, teaching about knowledge, skills, entrepreneurial abilities will increase interest in becoming an entrepreneur

(Saeed et al., 2015; Hussain, 2018). Students' intention to open a business can also be developed by implementing practical aspects of entrepreneurial education (Nasiru et al., 2015). In terms of perceived concept development support, the university can facilitate students to develop and validate business concepts, especially in the early stages (Mustafa et al., 2016). Furthermore, perceived business development support can be facilitated by the opportunity for students to run prototype companies on campus to build their interest in entrepreneurial behavior to be strong (Nasiru et al., 2015). Therefore, the hypotheses in this study are:

H2. Perceived educational support has a positive effect on entrepreneurial intention.

H4. Perceived concept development support has a positive effect on entrepreneurial intention.

H6. Perceived business development support has a positive effect on entrepreneurial intention.

The effect of Entrepreneurial Self-Efficacy (ESE) on Entrepreneurial Intention (EI)

Entrepreneur Self-efficacy has been proven as a predictor of Entrepreneurial Intention outstanding in entrepreneurship. Krueger & Brazeal (1994) proposed that Entrepreneurship Education is one of the main prerequisites for potential entrepreneurs. Research conducted by Saeed *et al.*, (2015) confirms the role of entrepreneurial self-efficacy as a predictor of entrepreneurial intention among university students. Individuals with high ESE will have high perceived feasibility for doing business (Setiawan & Lestari, 2021). Furthermore, research conducted by Hussain (2018) on female students in Pakistan also shows a positive influence between entrepreneurial self-efficacy and entrepreneurial intention. Students who have high self-efficacy have high confidence in their ability to start a new business (Hamid et al., 2020; Naz et al., 2020).

H7. Entrepreneurial self-efficacy has a positive effect on entrepreneurial intention.

The Effect of Proactive Personality (PP) on Entrepreneurial Self-Efficacy (ESE)

The research results conducted by Miao (2015) show that proactive personality positively affects entrepreneurial self-efficacy. Proactive individuals have a high can-do attitude and self-determination. Therefore, proactive individuals have self-efficacy to actively contribute more to their environment (Li et al., 2018). Furthermore, the research results conducted by Naz *et al.*, (2020) show that individuals who have a proactive and competitive personality will tend to have high entrepreneurial self-efficacy because they have ingenuity and more ability to learn and lead. Proactive individuals will show creativity, leadership, and passion for learning, making them more confident to choose entrepreneurship as a career.

H8. Proactiveness Personality has a positive effect on Entrepreneurial Self-Efficacy

The effect of Proactive Personality on Entrepreneurial Intention

The aspect of proactive personality to change the surrounding environment makes individuals tend to actively seek business opportunities that they can exploit (Bateman & Crant, 1993). The research results conducted by Crant (1996) show that students who have a proactive personality will tend to think about creating a business. This is reinforced by the research results conducted by Mustafa et al., (2016) on students in Malaysia, which shows that students with a proactive personality will have a more responsive reaction in exploring business opportunities. Students with this personality are also more consistent in pursuing entrepreneurship as their professional career choice. The same thing was found in research conducted by Hussain (2018), showing that proactive personality positively affects students' entrepreneurial intentions in Pakistan. Furthermore, female students with proactive personalities have more sense to identify available business opportunities around them. Based on the results of previous studies, the hypothesis in this study are:

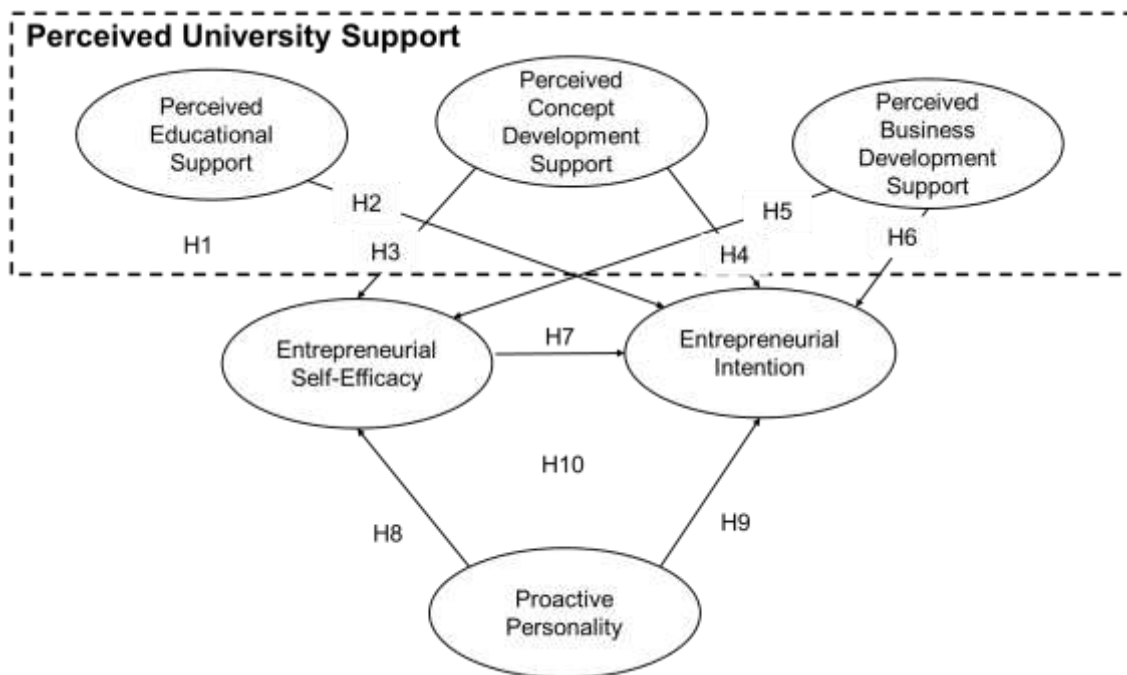
H9. proactiveness Personality positive effect on Entrepreneurial Intention

Entrepreneurial Self-Efficacy mediates the relationship between Proactive Personality and Entrepreneurial Intention

Self-efficacy is a motivational construct that influences individual choices in choosing activities, the process of achieving goals, persistence, and performance in various life contexts, including entrepreneurship. The results of research conducted by Zhao, Hills and Seibert (2005) show that self-efficacy is a mediating variable of several factors that influence the formation of individual intentions to become entrepreneurs. The results of research conducted by Prabhu *et al.*, (2012) on business students in four countries show that self-efficacy fully mediates the relationship between proactive personality and entrepreneurial intention in two manifest forms, namely high growth and lifestyle, and partially mediates entrepreneurial intention in general. Similar findings were also showing that entrepreneurial self-efficacy partially positively mediates the relationship between proactive personality and entrepreneurial intention (Hussain, 2018; Kumar & Shukla, 2019; Nawaz et al., 2019).

H10. Entrepreneurial self-efficacy positively mediates the relationship between proactive personality and entrepreneurial intention

Figure 1. Research Model



METHODOLOGY

Sample and Data Collection

This empirical research was conducted on students in universities spread across Indonesia. This study uses non-probability sampling with judgmental sampling techniques. The criteria for selecting the sample in the study were still active students and had received entrepreneurship education at the college where they studied.

Meanwhile, the questions in the questionnaire include information about the demographics of the respondents (gender, age, domicile and majors taught) and also questions that measure research variables, namely entrepreneurial self-efficacy (ESE), student entrepreneurial intentions (EI), Perceived educational support (PES), Perceived Concept Development Support (PCDS) and Perceived Business Development Support (PBDS).

The approach to calculating the sample size used in this study refers to Hair et al., (2009) by looking at the number of observed variables multiplied by 5 or 10. This study uses $n \times 5$ observations with a total of 23 question indicators. The minimum sample to be taken in this study amounted to $23 \text{ indicators} \times 5 = 115$ respondents.

Data collection in this study was carried out using a digital questionnaire in the form of a google form. Of the 432 incoming data, only 302 (69.90%) data passed the criteria and could be further processed in the study.

Measures

All constructs in this study use a scale that has been used in previous studies. The Perceived University Support variable in this study was measured by 13 question items adapted from Saeed et al., (2015). The measurement of perceived university support is carried out in the form of three types of university support on entrepreneurial for its students. They are the perceived educational support

variable (consists of 6 question items), the perceived concept development support variable (consists of 4 question items) and 3 question items that represent the Perceived Business Development Support variable. The entrepreneurial Self-Efficacy variable was measured using 5 question items adapted from research by Zhao et al., (2005). The Proactive Personality variable in this study was measured from 17 question items adapted from Bateman & Crant (1993), while the student entrepreneurial intention variable was measured by 6 question items adapted from Liñán & Chen (2009)

All of the questions in the study were measured using a five-point scale, with a range of answers of 5 (strongly agree upon) to 1 (strongly disagree).

Data Analysis

The study's descriptive data processing was carried out with the Statistical Package for Social Sciences Program (SPSS) version 24. Meanwhile, the data analysis in this study used PLS-SEM, which was processed with SmartPLS 3 (Ringle et al., 2014). The use of PLS-SEM in this study was carried out in line with the research objectives, which wanted to predict and explain the relationship between construct variables (variance explanation) in exploratory research models (Hair et al., 2014, 2016; Ringle et al., 2014). The PLS analysis in this study was carried out in two steps. The first step is to evaluate the Measurement (Outer) Model followed by evaluating the inner structural model (Henseler et al., 2009; Wong, 2013; Hair et al., 2014).

To evaluate the common method variance bias, this study uses Harman's single-factor analysis. Based on the results of statistical tests, it was found that the variance of the research data was 31.427%. This figure is still below 50%. In other words, there is no common method variance bias in this study (Hussain, 2018).

RESULTS

Descriptive Analysis Results

From a total of 434 responses collected from the google form, only 302 responses or 69.59% of responses met the criteria for further processing in this study. Table 1 illustrates the results of the descriptive analysis of consumer demographics in this study.

Table 1. Results of Descriptive Analysis

Items	Category of answers	Number	Percentage (%)
Gender	Male	117	38.74%
	Female	185	61.26%
Age	17-19 years old	28	9.27%
	20-22 years old	254	84.11%
	23-25 years old	16	5.30%
	>25 years old	4	1.32%
Educational Major	Business Major	133	44.04%
	Non Business Major	169	55.96%
Entrepreneur	Yes	137	45.36%
Parent	No	165	54.64%

The results of descriptive analysis (table 1), regarding the demographics of respondents, shows that the majority of student respondents in this study are women, aged 20-22 years, domiciled in Greater Jakarta (Jakarta, Bogor, Depok, Tangerang and Bekasi), took majors in non-business college, and have parents who are not entrepreneur.

Analysis of Measurement (Outer) Model

Analysis of Measurement (Outer) The model is an element of the path model that contains the observed indicators and their relationship to the construct. Analysis of the Measurement (Outer) Model was carried out to evaluate the reliability and validity, where the reliability for the Measurement (Outer) PLS Model is measured from its internal consistency (Composite Reliability) and Indicator Reliability. Meanwhile, the validity is measured by convergent validity (Average Variance Extracted) and Discriminant Validity (Hair et al., 2014).

A Measurement (Outer) Model is said to be reliable if it has a Composite Reliability (CR) value greater than or equal to 0.60 – 0.70 and a Cronbach's Alpha value greater than 0.60. Meanwhile, to be valid, a Measurement (Outer) Model, a variable must have a higher outer loadings indicator value than its cross-loadings value against other constructs and the Fornell-Larcker Criterion, which compares the square root of AVE with the correlation of latent constructs. Where the square root of AVE must be greater than the correlation between latent constructs (discriminant validity) and the Average Variance Extracted (AVE) value is greater than 0.5, and the outer loadings indicator value must be greater than 0.708 (convergent validity) (Hair et al., 2014, 2016).

Table 2. Measurement (Outer) Model

Indicators	Outer Loadings	Cronbach's Alpha	Composite Reliability	Average Variance Extracted
Entrepreneurial Intention				
EI_1. I am ready to do anything to become an entrepreneur	0.819	0.906	0.928	0.681
EI_2. My professional goal is to become an entrepreneur	0.812			
EI_3. I will make every effort to start and run my own business in the future	0.839			
EI_4. I am determined to create my own company in the future	0.791			
EI_5. I am seriously thinking about starting a business	0.859			
EI_6. I have a strong intention to start a business one day.	0.830			
Perceived Business Development Support				
PBDS_1. My university helps facilitate students with access to capital to open a new business	0.792	0.789	0.877	0.703
PBDS_2. My university will be the main customer for students who are about to start a new business.	0.864			
PBDS_3. My university uses its reputation to support students in starting new businesses.	0.858			
Perceived Concept Development Support				
PCDS_1. My university offers the entrepreneurial profession (entrepreneur) as a career choice	0.726	0.796	0.868	0.622
PCDS_2. My university motivates students to start a new business	0.788			

Indicators	Outer Loadings	Cronbach's Alpha	Composite Reliability	Average Variance Extracted
PCDS_3. My university helps facilitate the process of finding ideas for starting a new business	0.808			
PCDS_4. My university provides students with the knowledge needed to start a new business.	0.828			
Perceived Educational Support				
PES_2. My university teaches entrepreneurship-related projects.	0.748	0.757	0.846	0.578
PES_3. My university offers an internship program that focuses on entrepreneurship.	0.759			
PES_4. My university offers specialization in entrepreneurship studies .	0.768			
PES_6. My university facilitates students who are interested in entrepreneurship to communicate with each other.	0.765			
Proactive Personality				
PRO_7. If I have a desire, then I will do my best to make it true.	0.705	0.870	0.900	0.563
PRO_9. I am good at finding opportunities.	0.735			
PRO_11. If I believe in an idea, then I will work hard to make it happen.	0.788			
PRO_12. If you have a problem, then I would confront.	0.713			
PRO_13. I was able to turn problems into opportunities.	0.772			
PRO_14. I can quickly find opportunities before others know it	0.746			
PRO_16. I like to take the initiative in what I do.	0.790			
Self-efficacy				
SE_1. I am confident in my ability to identify new business opportunities	0.848	0.856	0.897	0.635
SE_2. I am confident in my ability to find new business ideas.	0.812			
SE_3. I am confident in my ability to create a product/service.	0.821			
SE_4. I am confident in my ability to think creatively.	0.732			
SE_5. I am confident in my ability to market business ideas.	0.766			

Cronbach's Alpha Values and Composite Reliability (CR) are used to evaluate internal consistency in construct reliability. From Table 2, Cronbach's alpha and CR values for all constructs are greater than the threshold of 0.7. Thus, Cronbach's alpha and CR in this study showed a fairly reliable scale. To verify the convergent validity of the research variables, each outer loading for the observed variables and the mean extracted variance (AVE) from the latent construct was calculated. Table 2 shows that the value of outer loadings in this study is greater than 0.6. Furthermore, the AVE for all constructs in the study is above 0.5, so it can be said that the convergent validity and internal consistency of the measurement model in this study are good.

Moreover, this study used two parameters to evaluate the discriminant validity, namely Fornell-Lacker Criterion and cross loadings factors. Based on table 3, Fornell-Lacker Criterion or the square root of the AVE of all research variables is greater than the correlation between latent constructs, which indicates satisfactory discriminant validity. Moreover, the cross loadings score

of all construct on table 4 also exceed the minimum requirement of 0.7 (Hair et al., 2014, 2016).

Table 3. Fornell-Lacker Criterion (Discriminat Validity)

	EI	PBDS	PCDS	PES	PRO	SE
Entrepreneurial Intention	<i>0.825</i>					
Perceived Business Development Support	0.224	<i>0.839</i>				
Perceived Concept Development Support	0.327	0.477	<i>0.788</i>			
Perceived Organizational Support	0.357	0.450	0.714	<i>0.760</i>		
Proactiveness Personality	0.569	0.240	0.376	0.365	<i>0.751</i>	
Entrepreneurial Self-Efficacy	0.618	0.340	0.419	0.372	0.748	<i>0.797</i>

Note: The Italic letters represent the square root of AVE while the diagonals represent the correlation

Table 4. Cross Loadings

	EI	PBDS	PCDS	PES	PRO	SE
EI_1	0.819	0.221	0.225	0.287	0.492	0.528
EI_2	0.812	0.243	0.226	0.257	0.436	0.500
EI_3	0.839	0.230	0.261	0.287	0.436	0.523
EI_4	0.791	0.117	0.269	0.264	0.419	0.441
EI_5	0.859	0.184	0.347	0.382	0.533	0.569
EI_6	0.830	0.107	0.280	0.272	0.489	0.485
PBDS_1	0.164	0.792	0.386	0.342	0.169	0.265
PBDS_2	0.174	0.864	0.385	0.339	0.199	0.311
PBDS_3	0.223	0.858	0.429	0.449	0.234	0.279
PCDS_1	0.249	0.323	0.726	0.549	0.353	0.276
PCDS_2	0.288	0.310	0.788	0.502	0.254	0.331
PCDS_3	0.237	0.473	0.808	0.575	0.288	0.354
PCDS_4	0.256	0.396	0.828	0.627	0.300	0.355
PES_2	0.313	0.234	0.513	0.748	0.325	0.263
PES_3	0.233	0.432	0.495	0.759	0.203	0.254
PES_4	0.247	0.335	0.545	0.768	0.306	0.314
PES_6	0.285	0.381	0.608	0.765	0.263	0.296
PRO_7	0.424	0.134	0.335	0.269	0.705	0.560
PRO_9	0.408	0.156	0.262	0.278	0.735	0.591
PRO_11	0.445	0.168	0.280	0.302	0.788	0.535
PRO_12	0.435	0.181	0.361	0.387	0.713	0.471
PRO_13	0.423	0.192	0.214	0.223	0.772	0.546
PRO_14	0.429	0.236	0.222	0.209	0.746	0.600
PRO_16	0.428	0.192	0.308	0.263	0.790	0.613
SE_1	0.566	0.292	0.325	0.323	0.617	0.848
SE_2	0.530	0.308	0.358	0.352	0.652	0.812
SE_3	0.492	0.274	0.327	0.258	0.557	0.821
SE_4	0.395	0.155	0.284	0.216	0.588	0.732
SE_5	0.463	0.315	0.372	0.321	0.562	0.766

Analysis of Structural (Inner) Model Results for Hypothesis Testing

After Measurement (Outer) The research model is declared valid and reliable, the next step is to analyze the Structural (Inner) Model. Unlike CB SEM using the measurement Godness of Fit, the PLS-SEM, structural (inner) model is based on predictive capability model of research that seen from the coefficient determinant (R^2):the level of significance path coefficient (value β) and T Statistics (Hair et al., 2014, 2016; Ringle et al., 2018).

In this study, the R^2 values for two endogenous latent variables, entrepreneurial self-efficacy, and student entrepreneurial intention, are 0.589 and 0.412. This figure is included in the moderate R^2 value (Henseler et al., 2009; Hair et al., 2014, 2016). This means that 58.9% of the variance of the entrepreneurial self-efficacy variable can be explained by the perceived educational support, perceived concept development support, perceived business development support and Proactive Personality variables. Meanwhile, the variance for the student entrepreneurial intention variable which can be explained by variable perceived educational support, perceived concept development support, perceived business development support entrepreneurial self-efficacy and Proactive Personality variables by 41.2%.

Table 5. Adjusted R^2

Variable	Adj. R^2
Entrepreneurial Intention	0.412
Entrepreneurial Self-Efficacy	0.589

Testing the research hypothesis is done by looking at the T Statistics value, as shown in Figure 2 and Table 6. The T value shows the expected variation in the dependent construct for unit variations in the independent construct. The higher the value, the greater the substantial effect on the endogenous latent construction. Besides T Statistics, the study significance level must be verified using P-Value. The P-value score should be below 0.05 for a 95% confidence level to be significant (Chin, 1998).

Figure 2. Structural (Inner) Model Research Output

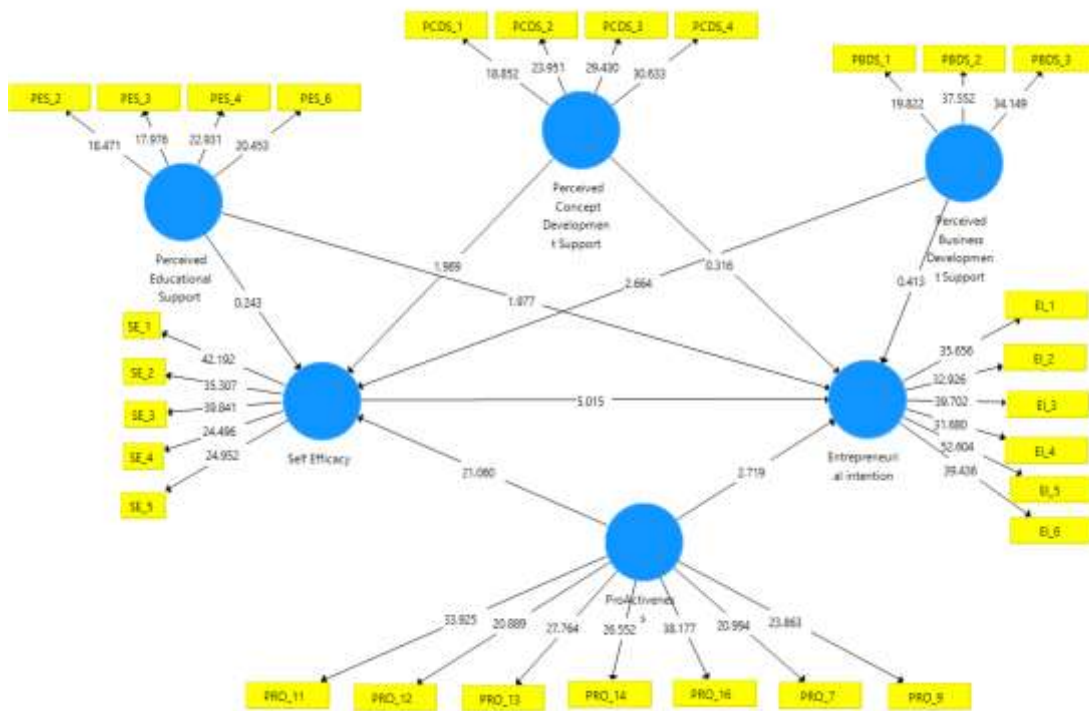


Table 6. Path Coefficient for Hypotheses Testing

Path Hypothesis	Standardized Beta (β)	Sample Mean (M)	Standard Deviation	T Statistic	P Value	Decision
H1 PES \rightarrow ESE	-0.013	-0.012	0.056	0.243	0.404	Not Supported
H2 PES \rightarrow EI	0.153	0.152	0.077	1.977	0.024	Supported
H3 PCDS \rightarrow ESE	0.111	0.111	0.056	1.969	0.024	Supported
H4 PCDS \rightarrow EI	-0.026	-0.022	0.083	0.316	0.376	Not Supported
H5 PBDS \rightarrow ESE	0.130	0.131	0.049	2.664	0.004	Supported
H6 PBDS \rightarrow EI	-0.027	-0.029	0.066	0.413	0.340	Not Supported
H7 ESE \rightarrow EI	0.420	0.416	0.084	5.015	0.000	Supported
H8 PRO \rightarrow ESE	0.680	0.681	0.032	21.060	0.000	Supported
H9 PRO \rightarrow EI	0.216	0.220	0.079	2.719	0.003	Supported

Table 6 show the hypotheses testing result of this study. This study shows that six out of nine direct hypotheses were supported while the other three were not. In terms of university support, perceived educational support (PES) factors have no significant effect on student entrepreneurial self-efficacy ($\beta = -0.013$, $T = 0.243$, $p = 0.404$) but positively affect the formation of student entrepreneurial intention ($\beta = 0.153$, $T = 1,977$, $p = 0.024$). These results show that hypothesis 1 is not supported while hypothesis 2 is supported. Furthermore, perceived concept development support (PCDS) positively affects student entrepreneurial self-efficacy ($\beta = 0.111$, $T = 1,969$, $p = 0.024$) but has no effect on student entrepreneurial intention ($\beta = -0.026$, $T = 0.316$, $p = 0.376$). This result suggests that Hypothesis 3 is supported while hypothesis 4 is not supported. Furthermore, hypothesis test results showed that perceived business development support (PBDS) factors had a positive effect on student entrepreneurial self-efficacy ($\beta = 0.130$, $T = 2,664$, $p = 0.004$) but had no effect on student entrepreneurial

intention ($\beta = -0.027$, $T = 0.413$, $p = 0.340$). This result indicates that hypothesis 5 is supported while hypothesis 6 is not supported.

In terms of personality traits, student self-efficacy positively affects the formation of entrepreneurial intentions ($\beta = 0.420$, $T = 5.015$, $p = 0.000$), indicating that hypothesis 7 is supported. Further hypothesis test results confirmed the positive influence of proactive personality on student self-efficacy ($\beta = 0.680$, $T = 21.060$, $p = 0.000$), indicating that hypothesis 8 was supported. Finally, the results of the hypothesis test also confirmed that proactive personality positively affects the formation of student entrepreneurial intentions ($\beta = 0.216$, $T = 2.719$, $p = 0.003$), indicating that hypothesis 9 is supported.

Mediation Analysis

The mediation analysis in this study was carried out using the bootstrapping method of indirect effects (Hair et al., 2014) using SmartPLS, where the authors measure the significance of the direct path relation of the proactive personality variable to the entrepreneurial intention variable. If the relationship is significant, then the next step is to see the indirect effect of Entrepreneurial Self-efficacy on Entrepreneurial intention. If the indirect effect is also significant, it can be concluded that mediation occurs.

Table 7. The Hypotheses Testing for Mediating Effect

Path Hypothesis	Standardized Beta (β)	Sample Mean (M)	Standard Deviation	T Statistic	P Value	Decision
H10 PRO \rightarrow EI (Total Indirect Effect)	0.502	0.503	0.051	9.863	0.000	Partial Mediation
PRO \rightarrow EI (Direct Effect)	0.216	0.220	0.079	2.719	0.003	
PRO \rightarrow ESE \rightarrow EI (Specific Indirect Effect)	0.286	0.283	0.057	4.974	0.000	

The statistical test results on Table 7 show that both the direct and indirect effects of the relationship between proactive personality and entrepreneurial intention mediated by entrepreneurial self-efficacy are significant because they have a statistic value above 1.96. The uptake (influence) of self-efficacy as a mediator is measured by VAF (Variance Accounted for) (Hair et al., 2014). The value of the VAF is obtained by the percentage of the distribution of the indirect effect (5.319) to the total effect (12.116). The value of the VAF mediator of self-efficacy in this study was 44% (20% VAF 80%), so it can be said that the Self-Efficacy variable partially mediates the relationship between proactive personality and entrepreneurial intention.

DISCUSSION

This study aims to determine how the perceived university support in the form of Perceived Educational Support, Perceived Concept Development Support, and Perceived Business Development Support affects the formation of entrepreneurial self-efficacy and entrepreneurial intentions among Indonesian students. The hypothesis test results in table 6 show that of the three factors of perception of university support, only perceived educational support variables

directly affect the formation of student entrepreneurial intentions. In contrast, perceived concept development support and perceived business development support are not supported. The positive influence of perceived education shows that the entrepreneurial educational support gained in the form of knowledge, skills and the ability to start a business increases students' intention to become entrepreneurs (Phuong et al., 2020). The application of a Project-based curriculum for entrepreneurship also helps hone creative thinking and problem-solving skills. Thus, the various support obtained by students from the educational side during their university studies will increase their intention to choose entrepreneurship as a future career choice.

Although perceived concept development support and perceived business development support do not affect entrepreneurial intentions, both of these factors positively affect the formation of entrepreneurial self-efficacy among students. Perceived concept development support positively affects entrepreneurial self-efficacy in Indonesian students. The findings of this study are in line with previous research (Saeed et al., 2015; Mustafa et al., 2016; Hussain, 2018) that shows universities can facilitate the student's process of developing their business concepts through a mechanism of peer-based business ideation that comes from lecturers, college friends and invited speakers who also came from business circles.

The results also show that perceived business development support positively influences entrepreneurial self-efficacy. The results of this study are in line with previous research conducted by Saeed et al., (2015). From this point of view, universities can facilitate student business development at an early stage by providing funding, leveraging the university's reputation and reputation to assist business development, and acting as customers for new businesses initiated by students. In the context of Indonesia, facilitation of concept development and business development support cannot be separated from the roles of the Ministry of higher education. The Indonesian government facilitates the concept and business development support by conducting entrepreneurial competition at the national level that opens up opportunities to fund the business idea in the future. Moreover, the university also facilitates the entrepreneurial ecosystem by developing campus incubator programs to increase students' self-efficacy to start a business.

Moreover, the study result also shows that entrepreneurial self-efficacy is a predictor of entrepreneurial intentions among students in Indonesia. This finding is in line with previous research conducted by Saeed et al., (2015), Hussain (2018) and Setiawan & Lestari (2021) , which state that person with high self-efficacy will grow self-awareness and self-motivation to start a business in the future.

In addition to entrepreneurial self-efficacy, proactive personality is also a predictor of entrepreneurial intention (Crant, 1996). The study results indicate that students who have a proactive personality are more likely to choose entrepreneurship as their future career choice. This is in line with the findings of previous research conducted by Hussain (2018) and Mustafa et al., (2016), which explained that individuals with proactive personalities will have high initiative and persistence in exploring and exploiting business opportunities environment. This study also shows that the entrepreneurial self-efficacy variable partially mediates the relationship between proactive personality and entrepreneurial intention. This finding is in line with previous research, which states that individuals who have a proactive personality and entrepreneurial self-

efficacy can quickly adapt to environmental changes to be more confident to start a business (Prabhu et al., 2012; Hussain, 2018; Kumar & Shukla, 2019).

CONCLUSION, RESEARCH CONTRIBUTION, AND LIMITATION

Conclusion

Entrepreneurship plays a vital role in the economic growth of a nation. Through entrepreneurship, jobs are created, and the wheels of the economy are turning. Unfortunately, the number of entrepreneurs in Indonesia is still lagging behind other ASEAN countries. To increase the number of entrepreneurs, the Indonesian government, through the ministry of higher education, encourages universities to become the primary source of supply for producing graduates who can create jobs instead of looking for work. Although institutional support and implementation of the entrepreneurship curriculum have been carried out for a long time, students' intentions to become entrepreneurs are still low in Indonesia. This study examines the effect of university support (perceived educational support, perceived concept development support, and perceived business development support) and personality traits (self-efficacy and proactive personality) on predictors of student entrepreneurial intentions. The research data were collected from 302 active college students who had previously taken entrepreneurship education in Indonesia. PLS-SEM carried out data analysis in this study. This study indicates that perceived university support varies in its effect on student entrepreneurial intention formation. The perceived educational support factor positively affects entrepreneurial intention, while perceived concept development support and perceived business development support positively affect self-efficacy that leads to entrepreneurial intention. This study also confirms that entrepreneurial self-efficacy and proactive personality are predictors of entrepreneurial intention. The results also show that entrepreneurial self-efficacy partially mediates the relationship between proactive personality and entrepreneurial intention.

Theoretical Contribution

Theoretically, the results of this study have several contributions. First, this study enriches the literature on the factors driving the creation of student entrepreneurial intentions in developing countries such as Indonesia, where access to entrepreneurial resources is relatively limited and challenging. Second, the results of this study also enrich the literature review on the influence of university institutional support in shaping student self-efficacy to launch new businesses in the future. Third, this study also enriches the literature review on personality traits (self-efficacy and proactive personality), which predict students' entrepreneurial intentions in Indonesia. Fourth, this study also confirms the role of entrepreneurial self-efficacy as a mediator between proactive personality and entrepreneurial intentions of students in Indonesia.

Practical implications

The findings of our research can be used by the ministry of higher education and universities in the policy-making process regarding strategies to increase the number of student entrepreneurs in Indonesia. This study indicates that perceived educational support significantly affects student intention to become an entrepreneur. Moreover, this study shows that concept development and

business development support strengthen students' self-efficacy, leading to an increased preference for entrepreneurship as their future career choice.

In terms of perceived concept development and business development support, entrepreneurship competitions, whether conducted at the local, regional, national, or international levels, can help the university achieve their expected learning outcomes in the entrepreneurship education curriculum. Hence, the competition result could be converted into academic values. Thus, participation in entrepreneurial competitions is no longer considered a burden but an achievement. Through support in participating in competitions, students get valuable input to validate and develop their business ideas and get the initial funding they need to start a new business.

Furthermore, the university can also create an entrepreneurial ecosystem by strengthening the role of business incubators by integrating it with the entrepreneurship education curriculum. Enhancing the role of university business incubators can facilitate students in supporting business concepts by providing mentoring or mentoring programs that can increase the feasibility of their business ideas. In addition, university incubators can also help facilitate student start-ups with access to funding through their network of investors. In terms of proactive personality, universities can improve character building and soft skills through training.

Limitation

Just like most other studies, our results have limitations. First, just like other studies on EI, the study focused only on entrepreneurship intentions measured by student perception rather than actual entrepreneurial behaviour. Therefore, further studies should be conducted to see how EI can turn into entrepreneurial behaviour when students graduate from college.

Second, the study is limited to measuring the influence of individual personality variables (which are limited to ESE and Proactiveness variables) and environmental factors in the form of university support. However, the results of previous studies have also shown that other personality variables such as big five personalities (Şahin et al., 2019), innovativeness, locus of control, self-confidence, propensity to take risk, need for achievement, and tolerance for ambiguity (Crant, 1996; Altinay et al., 2012; Nasip et al., 2015) also affects Student's EI formation. Furthermore, in addition to the university's support factors, further research can also examine the role of entrepreneurial education on EI (Shi et al., 2019; Saptono et al., 2020). Future research can also examine the influence of the social environment such as social support (Molino et al., 2018; Neneh, 2020) and family support (Altinay et al., 2012; Shen et al., 2017) the establishment of student's EI.

Finally, given the importance of entrepreneurship for developing countries, the same model can be tested back to other developing countries because university policies and strategies in encouraging entrepreneurship can vary in contexts in different countries.

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