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Can Entrepreneurship Education and Personality Encourage Students to Become Entrepreneurs?

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ABSTRACT

Entrepreneurs are business people who remarkably contribute to the country's economic growth. The growing intention and interest in entrepreneurship will create new jobs, innovative products, and services. Entrepreneurial intent is essential in motivating students to pursue careers as entrepreneurs in their professional lives. This study aims to understand students' entrepreneurial intentions by analyzing the influence of entrepreneurship education and personality. Moreover, the conceptual framework built in this study used the Theory of Planned Behavior (TPB) integrated with entrepreneurship education and individual personality. Data were collected using purposive sampling of students of the undergraduate entrepreneurship program. The structural equations were tested using WarpPLS software. The findings revealed that education regarding entrepreneurship and personality impacts subjective norms and attitudes. Furthermore, all the elements of the theory of planned behavior influence entrepreneurial intention. As a result, entrepreneurship education programs should cover management courses to improve business competency and develop positive emotions toward entrepreneurship.

Keywords: Attitude, Entrepreneurship Education, Entrepreneurial Intention, Perceived Behavioral Control, Personality, Subjective Norms

INTRODUCTION

Poverty is a major social issue confronting the Indonesian government (Hill, 2021). An essential strategy for overcoming poverty is entrepreneurship (Zacharias, Yusriadi, Firman, & Rianti, 2021) because it creates employment and generates revenue (Almodóvar-González, Fernández-Portillo, & Díaz-Casero, 2020; Morris & Kuratko, 2020). Entrepreneurship also drives economic productivity by transferring knowledge and innovation to the market through products, methods, and production (Lafuente, Acs, Sanders, & Szerb, 2020). In Indonesia, the number of entrepreneurs has grown recently but is relatively small (Wardana et al., 2020). As a result, the government wants to encourage people to become entrepreneurs to reduce unemployment and improve the country's economy (Prasetyo & Kistanti, 2020).

Entrepreneurship scholars have been interested in what motivates people to become entrepreneurs (Özsungur, 2019; Murnieks, Klotz, & Shepherd, 2020; Amorós, Cristi, & Naudé, 2021) since it has significant and widespread effects on society (De Silva & Wright, 2019). One of the most vital research in this regard is the study of factors that predict the intention to become an entrepreneur (Su et al., 2021; Hou, Su, Lu, & Qi, 2019). The intention to become an entrepreneur signifies an individual's resolve to initiate a business (Bazan et al., 2019). The entrepreneurial intention can influence the development of forthcoming entrepreneurial actions (Belchior & Lyons, 2021). Individuals with entrepreneurial intentions believe they can run a new venture shortly (Jena, 2020) and successfully (Botha & Taljaard, 2019).

Entrepreneurship is a multifaceted concept and there is a lack of consensus regarding the factors that determine an individual’s decision to begin a business. Comprehending the elements that impact an individual's desire to pursue entrepreneurship can expedite the entrepreneurial process, endorse both the practical and theoretical aspects of entrepreneurship, and recognize their significance in attaining favorable economic development (Iwu et al., 2021). Scholarly has revealed that entrepreneurship intention is influenced by internal (Hsu et al., 2019; Ahmed, Islam, & Usman, 2021) and external factors (Tornikoski & Maalaoui, 2019; Wegner, Thomas, Teixeira, & Maehler, 2021). To the best of our knowledge, only a few research has combined both internal and external factors to measure entrepreneurial intention and this study attempts to fill the gap.

One of the frameworks used by many researchers to anticipate entrepreneurial intention is the theory of planned behavior, and there is empirical data that validates its relevance (Su et al., 2021). The Theory of Planned Behavior is a widely recognized social psychology theory that regards intentions as significant predictors of behavior, particularly in situations involving deliberate and purposeful actions (Fang & Chen, 2019). Moreover, entrepreneurship can be defined as planned behavior (Londono, Wilson, & Osorio-Tinoco, 2020) because people are active agents in their development and do not engage in entrepreneurship by chance (Nikolaev, Lerman, & Mueller, 2020; Lidow, 2022). The Theory of Planned Behavior defines entrepreneurial intention as an individual's endeavor to participate in entrepreneurship, determined by attitude-based dimensions that anticipate behavior (Munir, Jianfeng, & Ramzan, 2019).

Li et al. (2020) propose that the foundation of entrepreneurial behavior can be attributed to personality traits. Personality traits influence a person's vision and life goals (Koole, Schlinkert, Maldei, & Baumann, 2019). Şahin, Karadağ, and Tuncer (2019) Nguyen, Do, Vu, Dang, and Nguyen (2019) state that individual and personal factors are at the heart of the entrepreneurship phenomenon. Personality traits reflect differences in individual behavior in various social systems (Chung, 2017). Personality is a distinct attribute that manifests when individuals interact with diverse environmental circumstances. Personality traits are a crucial aspect of entrepreneurship that can enhance an

individual's confidence, awareness, and fascination with entrepreneurship (Schmitt-Rodermund, 2004).

Education is critical in developing students' knowledge and skill that provide alternative job opportunities. Many educational institutions encourage entrepreneurship by offering entrepreneurship courses. Entrepreneurship education act as a catalyst for increasing student interest in becoming entrepreneurs (Cahyani, Riani, Kurniadi, & Paningrum, 2018). Duval-Couetil, Reed-Rhoads, and Haghighi (2012) suggest that entrepreneurship education can boost entrepreneurial aspirations and inspire students to participate in entrepreneurial ventures, providing them with opportunities to choose from various entrepreneurial careers. Through the process of entrepreneurship education, students acquire the knowledge and skills that promote their intention, interest, and motivation toward their desired outcomes (Hahn, Minola, Bosio, & Cassia, 2020).

The paper establishes a connection between personality traits, education, and the three dimensions of the Theory of Planned Behavior in predicting entrepreneurial intention. This contributes to a fresh empirical comprehension of the correlation between personality traits, education, and entrepreneurial intention. Prior research on TPB has argued that a more comprehensive understanding of the role of several influential factors is still needed for a robust theory (Wach, Kruse, Costa, & Antonio Moriano, 2021). Furthermore, assessing the interaction of personality, entrepreneurship education, and the element of the Theory of Planned Behavior will help to gain a better understanding of the formation of entrepreneurial intention.

LITERATURE REVIEW

Entrepreneurial Intentions

Entrepreneurship, or starting new businesses, is a conscious, volitionally controlled behavior (Schlaegel & Koenig, 2014). Entrepreneurial intentions refer to an individual's mental state, which concentrates on attention, experiences, and actions toward starting a new business venture (Tomy & Pardede, 2020). According to Ajzen (2020), Intentions depict an individual's readiness to participate in a specific behavior in the future. Thus, the entrepreneurial intention has been regarded as a possible predictor of entrepreneurial behavior (Koe, Sa'ari, Majid, & Ismail, 2012; Rai, Prasad, & Murthy, 2017).

Personality

Personal-level factors such as personality traits and psychological elements can impact an individual's entrepreneurial intention and inclination (Hyrsky & Tuunanen, 1999; Şahin et al., 2019; Kerr, Kerr, & Xu, 2018; Ispir, Elibol, & Sönmez, 2019). An increasing amount of research has focused on particular personality traits, contending that these are the most significant in determining an individual's decision to pursue entrepreneurship as an occupation (Karabulut, 2016; Batool, Razzaq, & Imam 2022). These include the need for achievement (Che Embi, Jaiyeoba, & Yussof, 2019), opportunity recognition (Doanh, Than, Nga, Van, & Hoa, 2021), innovativeness (Stauffer, 2016), and propensity to take risks (Forlani & Mullins, 2000).

The need for achievement denotes an individual's mindset towards their previous task accomplishments or their belief that they can outperform others in a given situation. It stems from comparing an individual's present attitude and achievement desire. As a result, attitudes can be reflected through the desire for success and accomplishment. The need for achievement describes a person who tends to set challenging objectives and complete activities (Lens & Vansteenkiste, 2020). A person with a high demand for achievement will usually design a strategy to attain job performance because they are driven by the satisfaction of completing onerous tasks to the highest standard and

without error (Pramono, Sondakh, Bernarto, Juliana, & Purwanto, 2021). Individuals with a higher need for achievement tend to outperform than those with a lower need for achievement. They are inclined to take risks, be accountable, be skillful, and receive feedback. It can be assumed that a high achievers are more likely to pursue entrepreneurial endeavors (Vodă & Florea, 2019; Soomro & Shah, 2022). The need for achievement is related to starting new businesses, according to research by Arkorful and Hilton (2022). Moreover, the need for achievement can predict attitudes (Mahmood Mamun, & Ibrahim, 2020).

Opportunity recognition (OR) is a cognitive phenomenon related to a person's entrepreneurial decision-making process (Filser et al., 2020). One of the entrepreneurial processes involves finding business prospects among other new business startups. An entrepreneur might select an excellent idea before putting it into a business concept (Chang & Chen, 2020). The capacity to recognize opportunities encompasses the ability to locate, identify, and create opportunities (Hunter, 2013). Opportunity recognition is essential to create an atmosphere that generates entrepreneurial purpose through entrepreneurial planned behavior and inspires future entrepreneurial activities.

Wathanakom, Khlaisang, & Songkram (2020) assert there is a close correlation between entrepreneurship and innovation. According to Hernández-Perlines, Ibarra Cisneros, Ribeiro-Soriano, & Mogorrón-Guerrero (2020), innovativeness is the capacity and propensity to think creatively, put up with original and feasible concepts, create new markets, and promote unique goods and services. Individuals with a greater level of creativity tend to have a more positive perception of entrepreneurship and feel more empowered in making business decisions (Soomro, Memon, & Shah, 2021). It consequently makes them more determined to launch their own company. People that can think creatively and develop original ideas for businesses need to do so to perform better (Skala & Skala, 2019). Entrepreneurs with pioneering ideas can open new markets and introduce innovative goods and services. Past studies have shown that innovativeness predicts attitude (Akhtar, Albarrak, Ahmad, Akram, & Ciddikie, 2022).

One of the characteristics of entrepreneurship is its tendency to take risks. Risk-taking propensity is the predisposition to take risks, accept uncertainty, and be accountable for the future (Xie, 2021). Financial, psychological, and social risks are risks faced by entrepreneurs (Hisrich, Peters, & Shepherd, 2005). Individuals who can manage risks are more inclined to initiate their own businesses than those who lack those abilities (Hartmann, Backmann, Newman, Brykman, & Pidduck, 2022).

Education

Entrepreneurship education refers to any form of educational program or pedagogical approach that promotes the development of entrepreneurial attitudes and skills (Hägg & Gabrielsson, 2020). Entrepreneurship education provided by university institutions can endow students with the necessary skills and knowledge to establish new businesses and pursue entrepreneurial careers (Hameed & Irfan, 2019; Gianiodis & Meek, 2020). These programs cultivate the capacity and sensitivity to recognize business opportunities, boost emotional intelligence, and instruct creative thinking that shapes innovation behavior (Wei, Liu, & Sha, 2019). By taking entrepreneurship education and training, students will learn and develop entrepreneurial traits, attitudes, and abilities (Lv et al., 2021).

As an exogenous variable, entrepreneurship education affects entrepreneurial attitudes and intentions. Boubker, Arroud, & Ouajdouni (2021) and Hassan, Anwar, Saleem, Islam, & Hussain (2021) argue that entrepreneurship education directly leads to the development of entrepreneurial intentions. Entrepreneurship education also escalates students' attitudes toward entrepreneurship (Boldureanu et al., 2020). It educates

students on the fundamental behavioral qualities an entrepreneur needs to possess to deal with uncertainty and challenges and be successful (Harima, Gießelmann, Göttsch, & Schlichting, 2021). Proper entrepreneurship education can inspire individuals to discover their potential (Badri & Hachicha, 2019) and pursue entrepreneurial jobs (Rodriguez & Lieber, 2020). According to Bauman & Lucy (2021), entrepreneurship education helps student's entrepreneurial capabilities develop.

Theory of Planned Behavior

The theory of planned behavior (TPB) is the most commonly used model for examining start-up intention in entrepreneurship research (Al-Mamary & Alraja, 2022). The theory of planned behavior (TPB) identifies three key elements that reflect entrepreneurial intention, namely personal attitude towards entrepreneurship, subjective norms, and perceived behavioral control. Personal attitude towards entrepreneurship refers to an individual's positive or negative evaluation of entrepreneurial behavior and its outcomes. Subjective norms refer to the social pressure or expectations that an individual perceives from their significant others or social environment about engaging in entrepreneurial behavior. Perceived behavioral control refers to an individual's perceived ability to control the outcome of the behavior and the resources available to them to engage in entrepreneurial activities. It reflects how easy or difficult a person thinks it is to engage in entrepreneurship.

Starting a business is a multifaceted process that requires the completion of several tasks and often involves significant time delays (Gieure, del Mar Benavides-Espinosa, & Roig-Dobon, 2020; Isaga, 2019). Therefore it is characterized as a goal-directed behavior (Kruse, 2020). The TPB model is built on the notion that a person's need to carry out behavior and confidence in their capacity to do so determine their intent to engage in that action. The TPB model is adequate as a theoretical framework for entrepreneurial intentions (Fang & Chen, 2019; Al-Jubari, 2019).

Ajzen (1991) defines personal attitude (P.A.) as an individual's perception of their capacity to engage in entrepreneurial activity. Depending on one's mindset, the perception may be favorable or unfavorable. Research has revealed that, along with the other two elements of the TPB framework, personal attitude influences entrepreneurial intentions. A person with a positive attitude has a more favorable opinion of entrepreneurial activity than a person with a negative perception (Phuong, Quoc, Cup, & Lien, 2021). Also, this significantly affects one's ambitions to start a business. Mohammed, Fethi, & Djaoued (2017) and Yang (2013) validated the connection between personal attitude and intention to start a business.

Subjective norms are beliefs regarding the approval or disapproval of conduct by family members or society (Ajzen, 1991; Nasoha, Ngarbingan, & Ginting, 2022). According to Thanh et al. (2020), one of the biggest obstacles to entrepreneurship was the normative framework (country cultures and values). Based on the research by Alharbi, Almahdi, & Mosbah (2018) and Kautonen Van Gelderen, & Tornikoski (2013), there is a strong correlation between subjective norms and aspirations to start a business.

The third element of the TPB framework is perceived behavior control, which is characterized as a person's perception of how simple or complex a situation is for them to handle (Ajzen, 1991). A person's intentions are influenced by their perceived ability to regulate their conduct (Ajzen, 1985). People with a higher capacity to control their behavior may find it easier to deal with difficulty and adversity, which leads to stronger entrepreneurial intentions. The direct link between perceived behavior control and entrepreneurial intentions is supported by studies from Hui-Chen, Kuen-Hung, & Chen-Yi (2014); Şen, Yılmaz, & Arı (2018); and Duong (2022). As a result of the above reviews, the following hypotheses for the study have been established:

H1: Personality characteristics influence attitudes
H2: Personality characteristics influence subjective norms
H3: Personality characteristics influence entrepreneurial intentions
H4: Entrepreneurship education has an impact on shaping attitudes
H5: Entrepreneurship education has an impact on shaping subjective norms
H6: Entrepreneurship education has an impact on the development of entrepreneurial intentions
H7: Attitude has an impact on the development of entrepreneurial intentions
H8: Subjective norms have an impact on the development of entrepreneurial intentions
H9: Attitude affect perceived behavioral control
H10: Subjective norms affect perceived behavioral control
H11: Perceived behavioural control has an impact on the development of entrepreneurial intentions

RESEARCH METHOD

Research Design

The objective of this study is to investigate the determinants of entrepreneurial intentions. The research methodology involves a survey, which gathers data on personality traits, entrepreneurship education, subjective norms, personal attitude, perceived behavioral control, and entrepreneurial intentions. The survey questions are constructed using validated instruments from existing literature. The collected data is analyzed using the WarpPLS software program to evaluate the proposed research model.

Research Instrument

The present study examines 29 items that represent independent and dependent variables, which are based on previously validated tools from existing literature. Personality measurement is adopted from Akhtar et al. (2022); Anwar and Saleem (2019), while the Theory of Planned Behavior is adopted from Mohammed et al. (2017); Shah, Amjed, & Jaboob (2020); and Aliedan, Elshaer, Alyahya, and Sobaih (2022). Additionally, the measurement of entrepreneurial education and intention is adapted from Liñán and Chen (2009). The measuring instrument consists of three sections, with Section A collecting demographic information such as age, gender, and education. Section B contains the 29 items that measure the study variables on a 5-point scale ranging from 1 = “strongly disagree” to 5 = “strongly agree.” Before distribution, a pilot test was conducted, and necessary item rephrasing was done to ensure relevance to the present study.

Sampling and Data Collection

The study involved distributing 202 questionnaires to undergraduate students in Indonesia using a convenience sampling method. A scanning question was used to filter respondents who were over seventeen years old. The PLS technique was used to analyze the data and evaluate the structural model.

RESULTS

Demographic Profiles

Table 1 displays the background information of the participants. About 76 male students (37.6%) and 126 female students (62.4%) were participants in this study. Most students are 21-22 years old (56.4%), and the monthly allowance is IDR 2-3 million.

Table 1. Demographic Profile

	N	% of the total sample
Gender		
Male	76	37,6
Female	126	62,4
	202	100
Age (in years)		
17 - 18	17	8,4
19 - 20	68	33,7
21 - 22	114	56,4
23 - 24	3	1,5
	202	100
Monthly allowance (in IDR)		
< 2 million	41	20,2
2 – 3 million	147	72,8
3 – 5 million	10	5,0
> 5 million	4	2
	202	100

Measurement Model

The validity of the measurement model was assessed using convergent and discriminant validity tests. The loading factor, composite reliability (C.R.), and average extracted variance (AVE) were used to assess convergent validity (Hair, Hult, Ringle, & Sarstedt, 2022). All loading values were found to be higher than the recommended threshold of 0.6, as shown in Table 2 (Chin, Peterson, & Brown, 2008). The C.R. and Cronbach's alpha values were both above 0.7, indicating that the indicators effectively represent the latent constructs. The AVE was higher than the suggested threshold of 0.5, indicating that the variation in indicators was explained by the latent construct (Hair et al., 2022).

The low correlation between constructs demonstrates discriminant validity. The findings show that the value of discriminant validity is sufficient because the square root of the AVE (diagonal values) of each construct is greater than the associated correlation coefficient (Fornell & Larcker, 1981). The findings also illustrate that all items with reflecting construct are more than or equal to 0.60. The measurement model exhibits sufficient discriminant and convergent validity.

Table 2. Validity and Reliability Test

Constructs and Items	Loadings	AVE	CR	Cronbach alpha
Personality Characteristics (X1)		0.521	0.884	0.846
I can recognize business opportunities that others can't recognize (X1. 1)	0.739			
During my daily activities, I come across many potential new venture ideas (X1.2)	0.737			
I'm sure there's always a new way of doing things (X1.3)	0.713			
I believe there is a better way of doing everything (X1.4)	0.707			

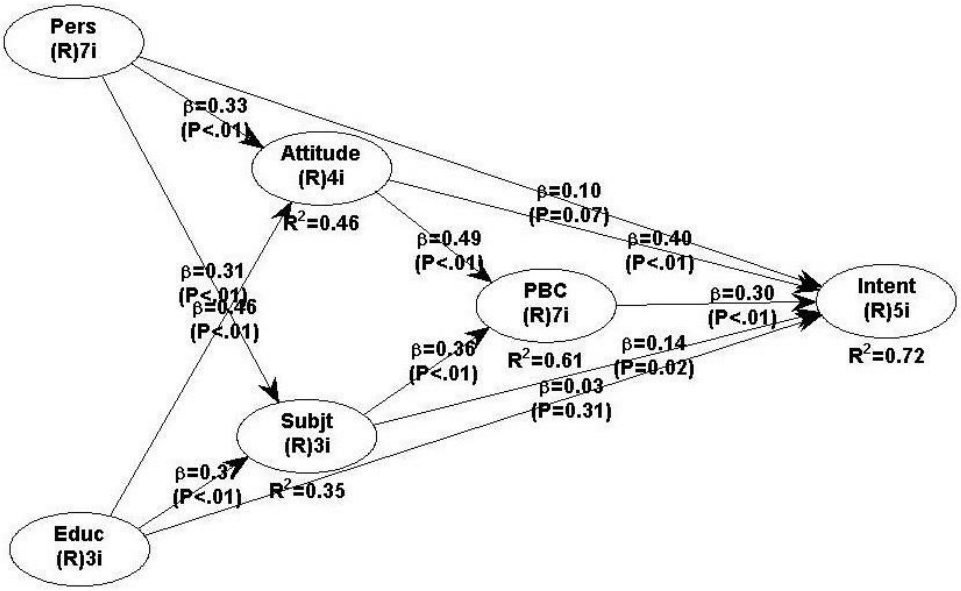
Constructs and Items	Loadings	AVE	CR	Cronbach alpha
I often surprise people with my new ideas (X1.5)	0.773			
I'm willing to take higher risks for higher yields (X1.6)	0.667			
I'm not afraid to start a new venture (X1.7)	0.712			
Subjective norm (X2)		0.737	0.893	0.817
People who are important to me, provide support for me to run my own business (X2.1)	0.748			
People who have influence in my life think that I should be an entrepreneur (X2.2)	0.930			
People whose opinions are important to me think that I should run my own business (X2.3)	0.886			
Attitude (X3)		0.705	0.905	0.860
I can gain many profitable things by becoming an entrepreneur (X3.1)	0.788			
If I have the opportunity, I would like to start my own venture (X3.2)	0.828			
Being an entrepreneur will bring me great satisfaction (X3.3)	0.891			
Among the various job options, I prefer to be an entrepreneur (X3.4)	0.848			
Perceived behavioral control (X4)		0.732	0.950	0.939
Running a business is easy for me (X4.1)	0.822			
I can easily pursue a career as an entrepreneur. (X4.2)	0.840			
I will have a high chance of success if I become an entrepreneur (X4.3)	0.875			
I have the ability to be an entrepreneur (X4. 4)	0.869			
I was able to control the process of starting a business (X4. 5)	0.865			
I believe I am able to face the obstacles to become an entrepreneur (X4.6)	0.869			
I was able to control the barriers that prevented me from becoming an entrepreneur (X4.7)	0.849			
Entrepreneurship Education (X5)		0.841	0.941	0.905
The entrepreneurship education I gained encouraged me to become an entrepreneur (X5.1)	0.886			
Entrepreneurship education helps me have the skills I need to become an entrepreneur (X5.2)	0.936			
Entrepreneurship education helps me have the abilities I need to become an entrepreneur (X5.3)	0.928			

Constructs and Items	Loadings	AVE	CR	Cronbach alpha
Entrepreneurial intentions (Y1)		0.796	0.951	0.935
I'm ready to do anything to become an entrepreneur (Y1.1)	0.821			
I want to have a profession as an entrepreneur (Y1.2)	0.902			
I will endeavor to run my own business (Y1.3)	0.922			
I am determined to start my own business in the future (Y1.4)	0.901			
I have serious thoughts about starting my own venture (Y1.5)	0.910			

Structural Model

The p-value for the three key quality indices is significant at 0.01 for APC = 0.298, ARS = 0.537, and AARS = 0.531. The Tenenhaus goodness of fit model showed large predictive power (GoF = 0.622). The hypotheses were tested by performing the t-test with 1% alpha level. Based on the R2 value, Chin et al. (2008) categorized the strength of the relationship as substantial, moderate, or weak. The results showed that R2 of attitude = 0.459 as moderate, R2 of subjective norm = 0.353 as moderate, R2 of perceived behavioral control = 0.613 as moderate, and R2 of entrepreneurial intention = 0.722 as strong. The structural model showed in Figure 1.

Figure 1. Structural Model



DISCUSSION

The study aims to determine how the chosen factors influence entrepreneurial intentions. The first hypothesis (H1) looked at the impact of personality traits on attitude, namely the need for achievement, opportunity recognition, innovativeness, and risk-taking propensity. It was discovered that attitudes are significantly improved by personality traits and relevant to the study of Nunfam, Asitik, & Afrifa-Yamoah (2021) and Vodă & Florea (2019).

Based on the second hypothesis (H2), personality traits impacted subjective norms. According to the findings, personality traits significantly and positively affect subjective norms, correlating with Munir et al. (2019). One's perception, which includes individual normative ideas and reasons for upholding them, can be improved by personality.

Hypothesis three (H3) investigated the direct correlation between personality traits and the intention to initiate a business. According to the findings, the p-value is more than 0.05 (p-value = 0.072), indicating that it is insignificant. This result contradicts the earlier research by Mat, Maat, & Mohd (2015), but it is pertinent to Naushad (2018) and Ngo et al. (2022). Not everyone with a particular trait will commit to starting a new business.

The fourth hypothesis (H4) examined how entrepreneurial education might affect attitudes. According to research by Wijayati, Fazlurrahman, Hadi, & Arifah (2021) and Mahendra, Djatmika, & Hermawan (2017), there is a significant and positive relationship between entrepreneurial education and attitude. Students' attitudes toward entrepreneurship are stimulated through entrepreneurship education. A practical strategy for forming upright students' attitudes is to formulate entrepreneurship education with all areas of students' capacity building as learning goals, such as insight, skill sets, and pragmatic skills.

The fifth hypothesis (H5) aimed to explore the influence of entrepreneurship education on subjective norms. Subjective norms and entrepreneurial education have a significant positive relationship. The result was supported by Balder et al. (2020). Education in entrepreneurship improves healthy psychological traits, including subjective norms that influence entrepreneurial intention.

To examine the direct effect of entrepreneurship education on entrepreneurial intentions, the sixth hypothesis (H6) was tested. However, the results showed that there is no significant relationship between entrepreneurship education and entrepreneurial intentions. The finding of this study is consistent with research by Nowiński, Haddoud, Lančarič, Egerová, & Czeglédi (2017) and Mahendra et al. (2017). According to Oosterbeek, Van Praag, & Ijsselstein (2010), the relationship is insignificant because students' participation is compulsory. In comparison to the credit points they receive, the amount of time and effort required from the participants is high. Additionally, the large number of students in each group may hinder active participation and lead some participants to engage in free-riding.

The seventh hypothesis (H7) examined how attitudes affected entrepreneurship intentions. The finding illustrates that the student's likelihood of starting his own business will increase as his attitude becomes more positive. Some empirical research, such as those by Azim & Islam (2022) and Biswas & Verma (2021), have proven the link between attitude and intention. They discovered that attitude predicts entrepreneurial intention directly.

The eighth hypothesis (H8) investigates the connection between subjective norms and entrepreneurial intentions, which is in line with previous studies conducted by Majeed, Ghumman, Abbas, & Ahmad. (2021) and Liu, Gorgievski, Qi, & Paas (2022). A favorable subjective norm toward entrepreneurship as a career choice implies that family, friends, and colleagues perceive entrepreneurship as a suitable career path, which consequently motivates individuals to become entrepreneurs.

The ninth hypothesis (H9) examined how attitude affects how behavioral control is perceived. Between attitude and perceived behavioral control, there is a significant positive relationship. The result is consistent with Usman & Yennita (2019).

The tenth hypothesis (H10) tested the effect of subjective norms on perceived behavioral control. Subjective norms and perceived behavioral control have a strong positive relationship that is relevant to Trang & Doanh's (2019) study. An individual's personal opinions regarding their capacity to engage in particular conduct are influenced by social beliefs. One can have a belief that they have the capability, expertise, and proficiency needed to accomplish a task effectively.

The eleventh hypothesis (H11) investigated the impact of perceived behavioral control on entrepreneurial intentions. The study found that there is a significant positive association between entrepreneurial intentions and perceived behavioral control. This finding is consistent with previous research conducted by Vamvaka, Stoforos, Palaskas, and Botsaris (2020) and Ambad & Damit (2016).

In the current study, personality traits were found to positively and significantly influence attitudes and subjective norms. It is pertinent to the finding of Munir et al. (2019), which indicates that a proactive personality is characterized by a strong desire for achievement, an inclination towards innovation, the ability to recognize opportunities, and a willingness to take risks. These traits can impact one's attitude and subjective norms towards entrepreneurship. A person's attitude toward entrepreneurship is influenced by the plausibility of their demand for achievement, opportunity recognition, innovativeness, and propensity to take risks. It suggests a strong attitude toward entrepreneurship created by the need or want to accomplish a positive result. A person with an entrepreneurial personality will be more motivated to take on tasks or activities that require expertise, effort, and high levels of responsibility.

The study also revealed that entrepreneurship education had a substantial impact on shaping attitudes and subjective norms. Higher education institutions aim to enhance students' social, environmental, and economic capacities by providing them with instruction in business creation and entrepreneurship development. The ultimate goal of entrepreneurship education is to cultivate positive mindsets and attitudes among students towards entrepreneurial activities. Students will therefore be able to recognize, choose, and acquire entrepreneurial opportunities (Busenitz, Plummer, Klotz, Shahzad, & Rhoads, 2014). Entrepreneurship education should work in conjunction with subjective norms to enhance entrepreneurial intentions.

According to Morris, Webb, Fu, & Singhal (2013), the purpose of entrepreneurship education in the entrepreneurship setting is to disseminate knowledge about the standards and principles of entrepreneurship (Dohse & Walter, 2012). Hence, entrepreneurship education can aid students in making the decision to choose entrepreneurship as a profession. A key component of learning entrepreneurial skills, entrepreneurship education can help students develop their attitude, enhance their knowledge and skills, and develop theoretical insights into business processes. The availability of entrepreneurship education contributes to developing confidence in students' entrepreneurial potential. Training, pedagogical strategies, and various entrepreneurial learning mechanism is needed to boost students' entrepreneurial ability and confidence (Fayolle & Gailly, 2015).

Entrepreneurship education has been found to shape attitudes that can subsequently influence students' intentions to start a business. Zampetakis, Kafetsios, Bouranta, Dewett, and Moustakis's (2009) research support the idea that entrepreneurial attitudes have an impact on a person's entrepreneurial intentions. Attitudes play a significant role in the field of entrepreneurship as they can influence perceptions of desire and subsequently affect intentions (Ajzen, 2002). When students have a favorable attitude towards entrepreneurship due to education, it strengthens their intention to start a business. Therefore, entrepreneurship education programs should not only offer

management courses that enhance business skills but also focus on building self-confidence and developing positive emotions toward entrepreneurship.

The finding supports Dinc and Budic's (2016) study that entrepreneurial intentions are impacted by the subjective norm. Students' decisions to become entrepreneurs are influenced by the social environment that inspires them. Farrukh, Alzubi, Shahzad, Waheed, and Kanwal (2018) also noted that students with supportive surroundings who are active in business would encourage to pursue similar career paths. Subjective norms as a factor that influences individuals to conform to the expectations and values of their social environment (Farrukh et al., 2018).

Based on the results, the intention to start a business is significantly influenced by perceived behavioral control. Perceived behavioral control is readiness, business knowledge, and management abilities. One element impacting the development of entrepreneurial intention is one student's conviction that they can feel the need to start their own business. Students with an understanding of entrepreneurship display better perceived behavioral control.

The study found that there was no significant direct relationship between personality traits and entrepreneurship education on entrepreneurial intention. The findings align with the study conducted by Ahmed, Khattak, and Anwar (2022). The study indicates that personal traits and entrepreneurship education have an indirect impact on students' entrepreneurial intention through their effect on attitudes, subjective norms, and perceived behavioral control.

Even though entrepreneurship education gives an overview of the relevant information and abilities, the assessment criteria mainly depend on student engagement and credit points earned. To alter students' entrepreneurial goals, entrepreneurship education in Indonesia should be improved, more targeted, and focused. A lack of understanding of entrepreneurship caused by the current entrepreneurship courses in Indonesia primarily instruct students on how to operate a business and less practical exercises to encourage students' innovativeness.

As far as the researcher knows, this study is among the first to use personality traits, entrepreneurship education, and components of the Theory of Planned Behavior (TPB) to evaluate entrepreneurial intentions in Indonesia. Additionally, the use of TPB in entrepreneurship contexts added to the corpus of information already available on this subject. Furthermore, based on their capacity to predict entrepreneurial intention, the study's findings using the local sample frame were found to validate the TPB's robustness.

CONCLUSION

This study combined personality traits, entrepreneurship education, and the component of the theory of planned behavior (TPB) to examine the aspects influencing the student's intentions to start their own business. The majority of the relationships inside the model were discovered to be positive and significant. This study made a contribution by strengthening the element of planned behavior theory's predictive power about intentions to start a business. The TPB theory was also supported by this investigation in an entrepreneurship context. This study employed TPB to identify the variables influencing new company setup aspirations for the theoretical implications. The results indicated the importance of TPB for the intention to launch a new business or venture.

LIMITATION

Only undergraduate entrepreneurship students were included in this study. Further study can be done with undergraduate students from all programs and considering additional factors. The findings of this study used a small sample. Greater sample sizes and more participants from diverse backgrounds may provide varied outcomes in surveys

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The authors state that there are no known financial or personal relationships that could have influenced the results reported in this paper.

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