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THE IMPORTANT ROLE OF ENTREPRENEURSHIP EDUCATION IN
ENCOURAGING INTENTION TO INNOVATE
(CASE STUDY ON STUDENT BUSINESS PROJECT)

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Abstract. *One way to improve the Indonesian economy is to increase the number of entrepreneurs so that the number of businesses running is also increasing. But along with the increasing number of businesses in Indonesia, innovation is needed so that these businesses can survive in the market. This study aims to determine the relationship between personality traits and entrepreneurial learning that has been obtained on the intention or intention to innovate on the business project being run. The study sample size was 168 respondents. Researchers use Smart-PLS 4.0 software in data processing. The results of the study found that entrepreneurial education and personality traits have a significant impact on innovation intention. Personality traits will increase the influence of entrepreneurial education on innovation intention. This research is expected to be the basis for future research on innovation intention considering the lack of research that discusses it.*

Abstrak. Salah satu cara untuk meningkatkan perekonomian Indonesia adalah dengan memperbanyak jumlah wirausaha sehingga jumlah usaha yang dijalankan juga semakin banyak. Namun seiring dengan semakin banyaknya pelaku usaha di Indonesia, diperlukan inovasi agar pelaku usaha tersebut dapat bertahan di pasar. Penelitian ini bertujuan untuk mengetahui hubungan antara ciri-ciri kepribadian dan pembelajaran kewirausahaan yang diperoleh terhadap niat atau niat untuk berinovasi pada proyek bisnis yang dijalankan. Besar sampel penelitian adalah 168 responden. Peneliti menggunakan software Smart-PLS 4.0 dalam pengolahan data. Hasil penelitian menemukan bahwa pendidikan kewirausahaan dan ciri-ciri kepribadian mempunyai pengaruh yang signifikan terhadap niat berinovasi. Ciri-ciri kepribadian akan meningkatkan pengaruh pendidikan kewirausahaan terhadap niat berinovasi. Penelitian ini diharapkan dapat menjadi dasar penelitian selanjutnya mengenai intensi inovasi mengingat masih sedikitnya penelitian yang membahasnya.

INTRODUCTION

Indonesia is one of the countries with the fourth largest population in the world (Kristian & Widayanti, 2016). The total population of Indonesia is 278.69 million people. This number is up 1.05% year-on-year (Population Census, 2023). Rapid population growth if not balanced with the increase in the community's economy, the country's economic growth will be hampered or regressed (Rochaida, 2016). Population growth that continues to increase every year is still not balanced with the fulfillment of job opportunities, considering the tendency of the labor force as job seekers, not as job creators (Indriyatni, Wahyuningsih & Purwanto, 2014). Based on data from the Central Statistics Agency, the number of unemployed people in Indonesia until February 2023 reached 7.99 million people, which decreased by 4.88% compared to the previous period of 8.40 million people. BPS data shares the open unemployment rate at the university level in 2022 at 4.80%. Based on data from the Central Statistics Agency that has been presented earlier, it can be seen that higher education graduates contribute to unemployment because these graduates tend to choose to become workers rather than entrepreneurs. Therefore, there is a need for concrete solutions such as developing the knowledge and skills of university graduates in entrepreneurship so that they have independence in building careers, reducing unemployment and having a positive impact on the country's economy (Listyawati, 2017; Mirawati, Wardana & Sukaatmadja, 2016).

Indonesia's current economic condition is still lagging when compared to other countries that utilize all resources efficiently. Only 3 percent or 8.06 million people of the total population of Indonesia become entrepreneurs (Rochaida, 2016). Data from the Ministry of Cooperatives and MSMEs states that the ratio of entrepreneurship in the country is still around 3.18% of the total population. This percentage shows that Indonesia is still lagging behind other ASEAN countries. Compared to neighboring countries such as Malaysia, Thailand, and Singapore, Indonesia's entrepreneur ratio is still far behind. The percentage of Thai entrepreneurs has now reached 4.2%, Malaysia 4.7%, and Singapore reached 8.7%.

The Indonesian government recognizes the importance of entrepreneurial skills to produce an independent generation. Therefore, the Indonesian government has created a National Entrepreneurship Movement since February 2011 to encourage the younger generation to be active in entrepreneurship (Setyawan, 2016; Mirawati, Wardana & Sukaatmadja, 2016). The application of entrepreneurship material has been implemented in several universities in Indonesia with the hope that university graduates will be able to become successful, independent, and highly competitive entrepreneurs (Primandaru, 2017; Darmawan & Warmika, 2016; Fatimah, 2013). This implementation is more intensively carried out after the MBKM program from the Ministry of Education. One of the universities that implemented entrepreneurship education before the program was Ciputra University Surabaya. This university is one of the universities that strongly supports its students to become superior entrepreneurs by providing entrepreneurship curriculum and real business practice experience (Abdi et al., 2021). One of the study programs that provides entrepreneurship material in each semester is International Business Management (IBM) where students will get a series of learning and entrepreneurial project (EP) materials. The series of Entrepreneurial Project (EP) materials provided, designed as a continuation of the previous Entrepreneurial Project and applied in the skills subjects of each semester to develop entrepreneurial skills, creativity, and innovative thinking that an entrepreneur must have to survive in a competitive business environment (Lenny, 2013). The series of entrepreneurial project learning starts by providing a fundamental understanding of the basic concepts of entrepreneurship, making business concepts, and business execution. Students are given material about business innovation in the entrepreneurial project series. The entire series of entrepreneurial projects is one of the advantages of

IBM Universitas Ciputra which not only provides material but also provides opportunities to conduct business practices directly.

As an entrepreneur, students must be able to adapt and innovate in their businesses to face increasingly fierce global competition. According to Everett (1983), innovation can mean all new things in the form of ideas, ideas, practices, or objects/objects that are consciously accepted for adoption by an agency, group, or individual. Innovation is a specific tool for companies, where innovation can explore or take advantage of changes that occur as an opportunity to run a different business (Drucker., 2012). Innovation can not only be done by creating new products, but can also be in the form of better performance systems, business models, processes, networks, marketing or sales, and also new technology. Innovation must be done so that the business always has additional value compared to competitors and makes customers choose products from the business. Along with the development of innovation science, there was a shift in the concept of innovation where Ten Types of Innovation were introduced which are used in business development (Keeley et al., 2013). The ten types of innovation consist of Profit Model, Network, Structure, Process, Product Performance, Product System, Service, Channel, Brand, and Customer Engagement (Keeley et al., 2013). The ten types of innovations will be divided into 3 categories, namely configuration, offering, and experience. These three aspects are used as the company's strategy to improve internal aspects for good external results. With this type of innovation, companies can create strategies that are not pegged only to product and service innovation.

Innovation has a positive influence on one's intention in entrepreneurship (Muna & Subawa, 2022). Innovation does have a positive impact on business sustainability. But in reality, it is not always entrepreneurs who have innovative ideas for business development. The influence factor of innovation intention discussed in this study is personality traits using The Big Five Personality (Keeley et al., 2013) and entrepreneurship education (Anwar, Alalyani, et al., 2022; Anwar et al., 2020; Hassan et al., 2020; Thoudam et al., 2023). Previous research using The Big Five Personality stated that several dimensions of the theory had a significant positive impact on entrepreneurial innovation intentions (Putri & Etikariena, 2015; Nadhiroh, 2020). In addition, many previous studies have found that entrepreneurship education in universities is considered to have a significant role in shaping one's innovation intentions (Souitaris et al., 2007; Zhang et al., 2019; Tantawy et al., 2021). This research was made to further understand students' intentions on business projects in innovating. Entrepreneurial learning at Ciputra University Surabaya has its challenges at every semester level. In semester 4, students are given an understanding and theory of business innovation. Innovation execution is essential for a business to be able to continue to grow and survive. The existence of learning and understanding of theory about innovation attracts researchers to further know the magnitude of the intention to innovate on the business projects formed. This study aims to determine the relationship between personal traits (personal factors in each individual) and entrepreneurial learning that has been obtained on the intention or intention to innovate on business projects carried out.

LITERATURE REVIEW

Personality Traits

Personality traits are traits that are expressed consistently in an individual's behavior across different situations that stabilize over time (Mischel et al., 2003). One method that is considered very good for describing personality traits is The Big Five Theory initiated by Fiske (1949) which was later refined by several other experts such as Norman (1967), Smith (1967), Goldberg (1981), and McCrae & Costa (1987). Indicators of personality traits will use The Big Five Theory because the theory was developed due to the complexity of human personality to be explained into five broad categories

(Goldberg, 1990). Sahin et al., (2019), stated that variables in the Big Five Theory are not only a determining factor of entrepreneurship intention but also a key indicator that affects entrepreneurship intention.

The indicators of The Big Five Theory that have been identified by Fiske (1949) John et al., 1999 Gosling et al., (2003) are extraversion, openness, conscientiousness, agreeableness, and neuroticism. Extraversion refers to a trait in which individuals are energetic, independent, friendly, enthusiastic, and can actively express themselves (McCrae & Costa, 1992). Entrepreneurial activities require entrepreneurs to interact more socially with others so extroverted entrepreneurs generally show excellent self-confidence, enthusiasm, and social skills in social events, and can occupy a dominant position in the entrepreneurial process (Zhao et al., 2010). Agreeableness refers to the positive relationship between tolerance, selflessness, trust, and altruism toward others (Ciavarella et al., 2004; Obschonka et al., 2019). For entrepreneurs, these characteristics can help them maintain and develop cooperative relationships, especially for the long-term development of new companies (Ciavarella et al., 2004). Conscientiousness refers to individual reliability in the completion of tasks and goals, demonstrating persistence, reliability and responsibility (Presenza et al., 2020). Entrepreneurs with good conscientiousness think first and then act on goals and tasks, and can carry out entrepreneurial activities in a planned and organized manner. Neuroticism refers to an individual's tendency to easily experience negative emotions, such as hostility, tension, depression, and anxiety. Emotional stability refers to an individual's tendency to experience positive emotions, such as peace, relaxation, strength, calmness, and self-confidence (Gomez et al., 2020). The last indicator is openness to experience referring to individual curiosity in terms of intelligence, innovative ideas, and creativity in thinking (Antoncic et al., 2015). Individuals with a high openness to experience are better able to have unique entrepreneurial creativity and entrepreneurial spirit and are more willing to experience new things.

Entrepreneurial Education

Linan (2007) defines entrepreneurial education as a whole series of activities either within the scope of education or not the scope of education that tries to develop individual interest to have entrepreneurial behavior. In this study, entrepreneurial education in question is a person's attitude and interest in the field of entrepreneurship in the scope of education which will encourage the individual to become an entrepreneur and be able to make an innovative business. A person's intention to become an entrepreneur is influenced by several factors, one of which is entrepreneurial education taught in schools (Wahyono et al., 2015). Entrepreneurial education is an important factor in cultivating and developing the desire, spirit and behavior of entrepreneurship among the younger generation because education is a source of overall attitudes and interests to become successful entrepreneurs in the future (Fatoki, 2014). The Indonesian government has also realized the importance of entrepreneurial education in inspiring entrepreneurs (Jena, 2020). This is because entrepreneurship education not only increases one's knowledge, thinking, attitude, and self-efficacy but also entrepreneurial goals and talents (Kim & Park, 2019). Previous research has discussed the direct and indirect impact of entrepreneurship education in cultivating entrepreneurship and concluded that receiving entrepreneurship education helps one learn and practice the skills and knowledge necessary for entrepreneurship (Anwar, Alalyani, et al., 2022; Anwar et al., 2020; Hassan et al., 2020; Thoudam et al., 2023).

Quoting from Hasan et al., (2017), Denanyoh et al., (2015), Walter & Block (2016), the entrepreneurial education indicator used in this study is entrepreneurship knowledge. Entrepreneurial knowledge refers to a person's abilities obtained through theory learned through education related to entrepreneurship. One can acquire entrepreneurial knowledge through school instruction and training

(Ni & Ye, 2018). These results show that entrepreneurial knowledge and mindset gained through entrepreneurship education have a beneficial impact on one's entrepreneurial intentions.

Innovation Intention

One of the most important characteristics of an entrepreneur is his ability to innovate (Larsen and Lewis, 2007). In a business, innovation is needed because customers will not always consume and look for the same product. Customers tend to look for products from other companies that are considered capable of meeting and satisfying their needs. Innovation intention is a psychological trait or willingness to make large investments in human and material resources by implementing management practices, processes, structures, or techniques for efficiency improvement. Innovation intention is a strong predictor of innovation behavior in an individual's innovation process (Choi, 2004), which can reflect one's innovation enthusiasm and one's self-control ability (Berends et al., 2006). It is still used to describe managers' innovation preferences and is considered the best predictor of innovation behavior. Strong innovation intention motivates managers to regularly analyze and understand the dynamics of the external environment and the gap between current organizational performance and potential performance (Guillen, 1994). Driven by strong innovation intentions, managers undertake a quest for relevant knowledge through intended activities (Williams and Rao, 1998). Indicators of innovation intention identified by Ajzen (1991) are attitude towards innovation behavior, subjective norms, and perceived behavioral control.

Relationships Between Variables and Hypotheses

The relationship between entrepreneurial education and innovation intention

Entrepreneurial education is the key to encouraging high-quality economic development and is a very important component in the implementation of the national innovation system (Schmitz et al., 2017). In a narrow sense, entrepreneurial education refers to entrepreneurial activities that are commercialized and carried out by individual academics or academic organizations based on the results of scientific research (Louis et al., 1989; Klofsten and Jones-Evans, 2000). Researchers assess that students have more innovative thinking and are more willing to apply the results of their creativity to entrepreneurship so that it can provide benefits for many people (Vega-Gomez et al., 2020). They also believe that entrepreneurial education involves innovation based on previous research, such as finding new perspectives, theories, content, and research methods. Based on this picture, the researcher proposed the first hypothesis (H1) as follows:

H1: entrepreneurial education has a positive effect on innovation intention

The relationship between entrepreneurial education and personality traits

Entrepreneurial education is an educational process that aims to shape the entrepreneurial spirit in students to become creative, innovative, and productive individuals (Majdi, 2012). Personality is something that is studied and how individuals react to situations determines what individuals look for in life (Pauline, 2012). The attitude of individuals who are able to tolerate risk and dare to face obstacles in the business world has the intention to become an entrepreneur (Wijaya, 2008). The existence of entrepreneurship education helps someone develop an entrepreneurial mindset. According to Gordon Allport in Robbins (2003: 94) states that personality is a dynamic organization within the individual of psychophysical systems that determine his unique adjustment to the environment. Previous literature states that there is a positive correlation between entrepreneurship education and personality traits although personality traits do not have a very influential correlation with entrepreneurial intentions, personality traits are one of the elements that influence entrepreneurial intentions (Tulenan, 2018). Personality traits are important predictors of entrepreneurial behavior and continue to be a concern in entrepreneurship research (Ranch & Frese, 2000).

H2: entrepreneurial education positively affects personality traits

The relationship between personality traits and innovation intention

The existing literature on the influence of personality traits on innovation focuses on employee performance innovation (Buchanan, 1998; Hsieh et al., 2011) or a person's tendency to accept innovative new products (Yi, Fiedler, & Park, 2006). Since the 1980s, The Big Five Theory has been recognized and widely used by experts as the primary reference system for studying entrepreneurial personality traits (Sahin et al., 2019; Zhao and Seibert, 2006). However, very little research has studied the influence of personality traits using The Big Five Theory method on a person's innovation intention. Based on this understanding, the researcher proposed the second hypothesis (H2) as follows:

H3: personality traits have a positive influence on innovation intention

The relationship between entrepreneurial education and innovation intention mediated by personality traits

Entrepreneurial education has the potential to equip individuals with relevant knowledge and skills to be able to generate innovative business ideas. Through entrepreneurial education, individuals can experience increased openness to experience, develop creativity, and dare to take risks. According to Israr & Hashim (2017), personality is important in cultivating entrepreneurial interest and personality also has characteristics such as being proactive, creative, and having a consistent vision. An entrepreneur has self-values such as having a vision and mission, being creative and innovative, daring to bear risks, having a competitive spirit, being able to see and create opportunities, being responsive and fast-moving, having a social spirit, and being generous (Gina, 2009). This is related to the theory of personality traits, namely The Big Five Theory (Fiske, 1949; John et al., 1999; Gosling et al., 2003). Literature by Siti Sarah (2016) shows that The Big Five Theory simultaneously influences students' entrepreneurial intentions. Supported by Harahap & Fitria (2017) which shows that personality type has a significant influence on entrepreneurial intentions in students simultaneously. None of the previous literature has gone deeper into the relationship of personality traits to one's innovation intention. Therefore, researchers want to know the correlation between entrepreneurial education and innovation intention mediated by personality traits. Based on this understanding, the researcher proposed the third hypothesis (H4) as follows:

H4: entrepreneurial education positively affects innovation intention mediated by personality traits

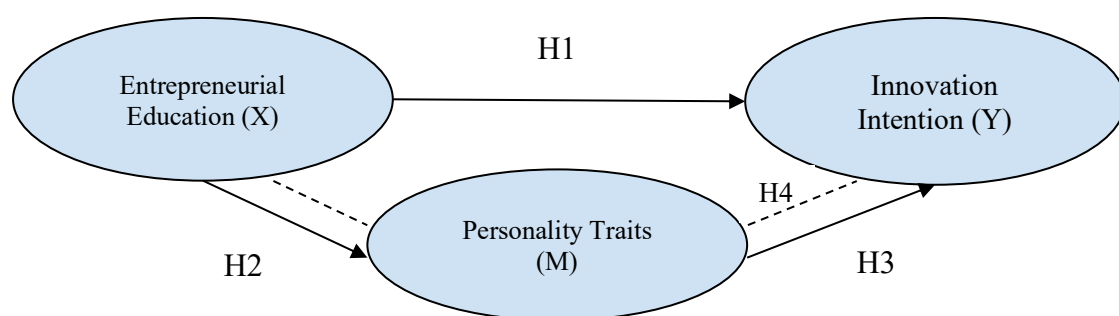


Figure 1. Analysis Model

RESEARCH METHOD

This research has a type of explanatory research with a quantitative approach to examine predetermined models. Explanatory research is research that explains the relationship between research variables through hypothesis testing (Singarimbun & Effendi, 2010). The

types of data used in this study are primary and secondary data. Primary data comes from questionnaires distributed to business teams that have been previously recorded. Secondary data are obtained from literacy studies and studies on selected topics and variables. The data collection procedure is carried out by distributing questionnaires online to samples determined according to the criteria using Google form tools. In the Google form, we use the Likert scale to measure individual values, attitudes, opinions, and perceptions about a phenomenon. Respondents rated their responses to each item on the instrument using a scale of (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, to (5) strongly agree.

The population in this study is students majoring in International Business Management, at Ciputra University Surabaya who have been equipped with understanding and knowledge about business innovation. Material on business innovation has been obtained by students through a series of entrepreneurial projects passed from semesters 1 to 6. However, in this study, the population used was 5th semester International Business Management students because the implementation of innovation material was carried out in that semester. The sample used is part of a predetermined population. The sample calculation method we use is the Raosoft application with calculations: The population is 435; Margin of Error of 5%; Confidence level is 90%; and 50% response distribution; The recommended sample size results were 168 respondents. This study uses a quantitative analysis approach Partial Least Square structural equation model (PLS-SEM). Researchers use Smart-PLS 4.0 software in data processing.

RESULT AND DISCUSSION

Respondent Profile

The response rate of this study was 100%. The total number of data obtained is 168 with the following picture:

Table 1. Sample Profile

Profile	Category	Frequency	Percentage (%)
Gender	Man	77	45,83%
	Woman	91	54,17%
Age	18 years old	2	1,19%
	19 years old	29	17,26%
	20 years	119	70,83%
	21 years old	18	10,71%
Business Type	Food & Beverages	68	40,47%
	Farm	4	2,38%
	Agriculture	2	1,19%
	Fashion	15	8,92%
	Service	30	17,85%
	Creative Industries	41	24,40%
	Home Decor	6	3,57%
	Construction	2	1,19%
	<6 months	24	14,28%

Profile	Category	Frequency	Percentage (%)
Long Running Business	6 - 12 months	48	28,57%
	1 - 2 years	70	41,67%
	>2 years	26	15,47%
Turnover per Month	< IDR 1,000,000	40	23,80%
	IDR 1,000,000 - IDR 5,000,000	101	60,12%
	IDR 5,000,000 - IDR 10,000,000	8	4,76%
	> IDR 10,000,000	19	11,30%

All respondents who participated in this questionnaire were Semester 5 students of Ciputra University Surabaya consisting of 45.83% men and 54.17% women. The age range of students is 18 - 21 years with the most business fields in the field of Food & Beverage at 40.47%, followed by Creative Industries at 24.40%, Services at 17.85%, Fashion at 8.92%, and other industries such as agriculture, animal husbandry, home décor, and construction which are below 5%. Most of the businesses they run have been running for 1-2 years with a percentage of 41.67% and 14.28% stating that the business has only been running for less than 6 months. The monthly income turnover of the business was dominated by respondents with a turnover of IDR 1,000,000 - IDR 5,000,000 of 60.12%, a turnover of < of IDR 1,000,000 of 23.80%, turnover above > of IDR 10,000,000 of 11.30%, and a turnover of IDR 5,000,000 - IDR 10,000,000 of 4.76%.

Convergent Validity Test

Table 2. Convergent Validity

Operational Items	Entrepreneurial Education	Innovation Intention	Personality Traits
X1	0,853		
X2	0,831		
X3	0,835		
X4	0,810		
X5	0,826		
X6	0,840		
X7	0,737		
Y1		0,807	
Y3		0,800	
Y5		0,848	
Y6		0,732	
Y7		0,830	
Z10			0,798
Z11			0,756
Z14			0,691
Z15			0,713
Z16			0,746
Z3			0,778
Z4			0,713
Z7			0,669
Z9			0,749

Source: data processed from SmartPLS (2023)

Convergent validity is a correlation between reflexive indicator scores and latent variable scores. Convergent validity is achieved when indicators of the construct are highly correlated with each other and have sufficient scores. Validity is indicated not only by the loading score but also by the convergence of all measures in a construct of magnitude (Abdillah and Jogiyanto, 2015). According to Maulana & Rakhman (2022), the convergent validity of a model can be determined from the outer loading of each item. Outer loading looks at the correlation of each indicator to a variable. In the table above, all items meet the outer loading validity requirement of > 0.60 . The highest correlation was found in item X1 with an outer loading of 0.853. The lowest correlation was found in Z7 items with an outer loading of 0.669

Fornell-Larcker Criterion

Table 3. Fornell-Larcker Criterion

	E_Education	Innov Intention	P_Traits
E_Education	0,820		
Innov Intention	0,773	0,804	
P_Traits	0,516	0,561	0,736

Source: data processed from SmartPLS (2023)

The Fornell-Larcker Criterion is one of the tests of discriminant validity (Judge, 2022). The Fornell-Larcker Criterion calculates the AVE root of each variable and compares it to other variables (Judge, 2022). A variable is considered valid based on the Fornell-Larcker Criterion if it has a greater AVE root value than other variables (Ashoer, et al., 2020). In the table above, it is found that all variables have the highest AVE root in each comparison with the AVE root of the other variable. As a result, all variables can be declared discriminantly valid based on the Fornell-Larcker Criterion.

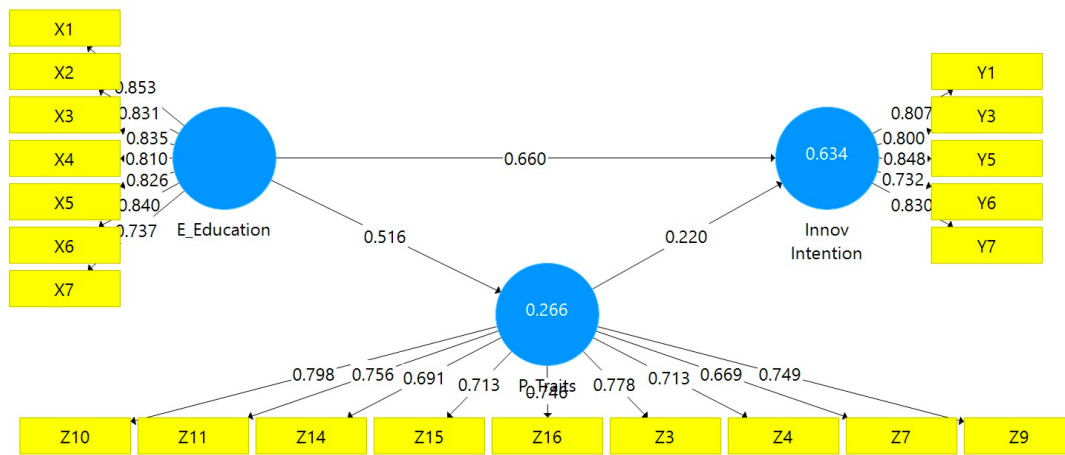
Heterotrait-Monotrait Ratio

Table 4. HTMT

	E_Education	Innov Intention	P_Traits	Information
E_Education				
Innov Intention	0,851			Valid
P_Traits	0,538	0,625		

Source: data processed from SmartPLS (2023)

Heterotrait-Monotrait Ratio (HTMT) is a form of discriminant validity test (Hakim, 2022). The Heterotrait-Monotrait Ratio is stated as the discriminant test tool with the highest reliability today (Kristia, 2021). Indicators on a variable can be said to be valid if they have a Heterotrait-Monotrait Ratio value of < 0.9 (Hakim, 2022). In the table found all variables have HTMT values below 0.9. Based on these data, all indicators on existing variables can be declared discriminant valid based on the Heterotrait-Monotrait Ratio.



Source: data processed from SmartPLS (2023)

Hairani & Handriana (2022) stated that cross-loading is one type of discriminant validity test. Cross-loading compares the outer loading of items on their variables compared to other variables in a model (Hairani & Handriana, 2022). The cross-loading value of an item needs to be greater in its variables than other variables to be considered valid. Based on the table above, it can be seen that the loading factor value of each variable is greater than the cross-loading value. This indicates that all indicators of the variables used are declared valid.

Validity of AVE Value

Table 5. AVE Value Validity

Average Variance Extracted (AVE)	
Entrepreneurial Education	0,672
Innovation Intention	0,647
Personality Traits	0,542

Source: data processed from SmartPLS (2023)

Maulana & Rakhman (2022) stated that the value of average variance extracted (AVE) also assesses the convergent validity of a model. The size of the AVE value describes the diversity of manifest variables that may be contained in the latent variable. The AVE value is the average amount of variation that can be explained by latent constructs in observed variables that are theoretically related (dos Santos & Cirillo, 2021). The greater the variance or diversity of manifest variables owned by latent constructs, the greater the representation of manifest variables owned by latent constructs (Yamin & Kurniawan, 2011). The AVE value of a variable can be considered valid if it has an average variance extracted > 0.5. All variables in this study had AVE values above 0.5 and were declared valid.

Reliability Test

Table 6. Reliability Test (Cronbach Alpha & Composite Reliability)

	Cronbach Alpha	Composite Reliability
Entrepreneurial Education	0,918	0,935
Innovation Intention	0,863	0,901
Personality Traits	0,894	0,914

Source: data processed from SmartPLS (2023)

Cronbach's Alpha is a test that can be used for composite reliability (Maulana & Rakhman, 2022). Composite reliability measures the true value of reliability and is better rated to estimate the internal

consistency of constructs. Maulana & Rakhman (2022) stated that indicators on a variable can be declared valid if they meet the minimum requirements of Cronbach alpha >0.7 (Maulana & Rakhman, 2022) and composite reliability >0.7 (Ghozali, 2016). In the table above, it is found that all variables have Cronbach's alpha above 0.7. All variables also have a composite reliability value above 0.7. As a result, all data collected has been declared reliable.

R-Square Test (R^2)

Table 7. R-square test (R^2)

Variable	R-Square (R^2)
Innovation Intention	0,634
Personality Traits	0,266

Source: data processed from SmartPLS (2023)

The r-square test value has an interval of 0 to 1 to see the variation in changes in respondents' answers. The variation in change explains the degree of influence of the independent variable on the dependent variable. There are three categories of r-square (R^2) value grouping, namely strong category, moderate category, and weak category (Hair et al., 2011). Hair et al stated that the r-square value of 0.75 belongs to the strong category, the r-square value of 0.50 belongs to the moderate category and the r-square value of 0.25 belongs to the weak category (Hair et al., 2011). In the table above, it can be seen that innovation intention has a strong influence while personality traits have a weak influence.

F-Square Test (F^2)

Table 8. Test f-square (F^2)

Variable	f-square (F^2)
Entrepreneurial Education to Innovation Intention	0,873
Personality Traits to Innovation Intention	0,097
Entrepreneurial Education into Personality Traits	0,363

Source: data processed from SmartPLS (2023)

f-square (F^2) measures the relative impact of each independent variable on the dependent variable (Jufrizen & Ramadhani, 2020). The value of f-square (F^2) can be used to evaluate the importance of the existence of a variable in a model and its substantive impact if the variable is omitted from the model (Jufrizen & Ramadhani, 2020). The f-square value is 0.02 for small, 0.15 for medium and 0.35 for large. Values below 0.02 may be ignored or considered to have no effect (Sarstedt et al., 2017). In the table above, the F^2 value of entrepreneurial education to innovation intention is 0.873 so it can be concluded that entrepreneurial education has a very large influence. The big influence can also be seen from the influence of entrepreneurial education on personality traits with a value of 0.363. The effect of personality traits on innovation intention is 0.097 where it can be concluded that the influence is moderate because it is valued above 0.02 (Sarstedt et al., 2017).

Fit Model

Table 9. Model Fit summary

	Saturated Model	Estimated Model
SRMR	0,099	0,099
d_U LS	2,244	2,244
d_G	0,905	0,905

Chi-Square	776,601	776,601
NFI	0,708	0,708

Source: data processed from SmartPLS (2023)

SRMR is a Standardized Root mean square residual which is a model fit measurement tool. The SRMR value accepted as a fit model is less than 0.1 (Worthington, 2006). An SRMR value of ≤ 0.08 is acceptable as an accepted model (Weston et al., 2006). Based on the value of SRMR or Standardized Root Mean Square, the value is $0.099 < 0.10$ then the model fit. So it can be concluded that the model fits with the data.

Hypothesis Testing

Table 10. Hypothesis Testing

Research Hypothesis	Description	T Statistics	P-Value	Information
H1	Entrepreneurial Education → Innovation Intention	10,323	0,000	Accepted
H2	Entrepreneurial Education → Personality Traits	7,309	0,000	Accepted
H3	Personality Traits → Innovation Intention	3,482	0,001	Accepted
H4	Entrepreneurial education → innovation intention mediated by personality traits	2,724	0,006	Accepted

Source: data processed from SmartPLS (2023)

In this research, tests the hypothesis using T Statistics and P-value numbers to determine the influence and significance of an independent variable on the dependent variable. A variable is determined to have a significant positive influence if it meets the requirements of T Statistics $>$ T Table and P-Value < 0.05 . Based on the table and using a sample of 168 respondents (t -table $>$ 1.97419) with a standard deviation of 5% (Ashoer, et al., 2020). Based on the table, it was found that the relationship between entrepreneurial education (X) and innovation intention (Y) had a statistical T value of 10.323 and a p-value of 0. It can be concluded that entrepreneurial education (X) has a significant effect on innovation intention (Y) because it meets the requirements of T Statistics $>$ T Table and P-Value < 0.05 . Something similar is found in the relationship of entrepreneurial education (X1) to personality traits (Z). It can be concluded that there is a significant positive influence of entrepreneurial education (X) on personality traits (Z) because it has a T Statistics value of 7.309 and a P-value of 0. Based on the table, it was found that personality traits (Z) affect innovation intention (Y) as evidenced by a t-statistic value of 3.482 and a p-value of 0.001. Finally, it was found that the relationship between entrepreneurial education (X) and innovation intention (Z) mediated by personality traits (Z) had a T Statistics value of 2.724 and a P-Value of 0.006. It can be concluded that personality traits (Z) have a positive influence on entrepreneurial education (X) to innovation intention (Y).

DISCUSSION

The results of the data above show that the four hypotheses influence the existing variables. The first hypothesis shows a significant influence between entrepreneurial education and innovation intention. The intention of students to become entrepreneurs is influenced by several factors, one of which is entrepreneurial education taught in schools (Wahyono et al., 2015). Entrepreneurial education

is the key to encouraging high-quality economic development and is a very important component in the implementation of the national innovation system (Schmitz et al., 2017). There are not many previous studies that discuss the influence of entrepreneurial education on innovation intention. But in this study, researchers managed to find a very significant influence between the two variables.

The findings of the second hypothesis test found a striking influence of entrepreneurial education on personality traits. Previous literature has only examined the influence of personality traits on entrepreneurial intention (Poetara, 2013; Jeremiah & Widjaja, 2019; Awwad & Al-Aseer, 2021; Hasanah & Friyatmi, 2023; Noegraheni, 2014) so in this study, researchers want to know more about the influence of entrepreneurial education on personality trait. A person's entrepreneurial interests can be influenced by a person's personality traits and environment (Alma, 2010). According to Luthje and Franke's Model (LFM) in Fauzani, Suryani, & Rahmawati (2019), there are internal and external factors that influence growing entrepreneurial interest. One of the external factors in question is environmental factors as well as formal and non-formal education. With entrepreneurial education, will increase a person's desire and enthusiasm to develop entrepreneurial personality traits (Abdi et al., 2021).

The findings of the third hypothesis test suggest that personality traits influence innovation intention. Entrepreneurship is an important sector that supports a country's economic growth. An entrepreneur must have entrepreneurial personality traits obtained from formal education (Vanessa & Sienatra, 2020). The theory used is The Big Five Personality where this theory states that several dimensions of the theory have a significant positive impact on entrepreneurial innovation intentions (Putri & Etikariena, 2015; Nadhiroh, 2020). Previous literature states that there is a positive correlation between entrepreneurship education and personality traits although personality traits do not have a very influential correlation with entrepreneurial intentions, personality traits are one of the elements that influence entrepreneurial intentions (Tulenan, 2018).

Analyzing the fourth hypothesis found that personality traits support the influence of entrepreneurial education on innovation intention even though the influence provided is less significant. These results mean that with entrepreneur personality traits, entrepreneurial education has greater potential to equip individuals with the relevant knowledge and skills to be able to generate innovative business ideas. Previous literature only discussed the influence of entrepreneurship education on entrepreneurial intention with moderated personality traits (Mahendra, 2022; Santoso & Tanoto, 2020; Wijaya et al., 2021; Hidayat, 2020; Santika, 2021). Literature by Siti Sarah (2016) shows that The Big Five Theory simultaneously influences students' entrepreneurial intentions. Supported by Harahap & Fitria (2017) which shows that personality type has a significant influence on entrepreneurial intentions in students simultaneously.

CONCLUSION

Based on the research that has been done, it can be concluded that the four hypotheses proposed are acceptable. The existence of entrepreneurial education increases students' intentions to innovate. This can happen because education or knowledge about business in more depth can equip students with relevant knowledge and skills to be able to produce innovative business ideas. Personality traits also affect innovation intention where the attitude of individuals who are able to tolerate risk and dare to face challenges in the business world has the intention to become an entrepreneur and increase the possibility to innovate (Wijaya, 2008). With a person's personality that is open to experience, reliability in completing tasks, responsibility, enthusiasm for new knowledge, and a positive relationship between tolerance and others, someone is considered to have more intentions in doing business innovation.

Although this research provides valuable insights, there are still limitations that can be explored more deeply by researchers in the future as development suggestions;

1. The distribution of samples is still limited because it is only within Ciputra University Surabaya. A wider or more diverse sample can open up a broader view of innovation intentions.
2. Literacy about innovation intention is interesting to discuss even though it is still limited
3. The involvement or influence of other variables that can be possible to have a relationship.
4. External perspectives (e.g. consumers) can complement research results. This research only focuses on student business.

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