

Determinants of entrepreneurial intention of Indonesian students

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Abstract

This study explored the mediating roles of entrepreneurial self-efficacy and need for achievement in the effect of entrepreneurship education on entrepreneurial intention. This study also analyzed the effect of entrepreneurship education on entrepreneurial self-efficacy, need for achievement and entrepreneurial intention. The study population consisted of active university students in Indonesia. The sample comprised 633 students from 30 universities in Indonesia, both state and private. SEM PLS warp-PLS was used as the analysis tool. The results indicate that entrepreneurship education positively affected entrepreneurial self-efficacy, need for achievement, and entrepreneurial intention. Entrepreneurial self-efficacy and need for achievement mediated the effects of entrepreneurship education on entrepreneurial intention. The findings provide additional theoretical knowledge regarding the relationship between entrepreneurship education, entrepreneurial self-efficacy, need for achievement, and entrepreneurial intention. The findings of this study strengthen the theoretical relationship among the variables. In terms of originality, this study adds to the research field on entrepreneurship education and its impact on entrepreneurial self-efficacy, need for achievement and entrepreneurial intention in higher education institutions in Indonesia context that is different from the cultural point of view. In practice, the findings provide recommendations to university management to set the curriculum in such a way to guarantee that entrepreneurship education can meet the need and run well.

Keywords

entrepreneurial intention; entrepreneurship education; entrepreneurial self-efficacy; need for achievement

INTRODUCTION

In recent years, the study of entrepreneurship has grown rapidly. This condition has attracted the interest of academics, professionals and public authorities. The increasing attention to this field is also driven by the fact that there is an increase in social impact indicators that lead to economic growth of this entrepreneurial activity (Urbano et al., 2019). This phenomenon is not only national, but also international. This indication is in line with the statement of Ismail et al. (2009) that currently the importance of entrepreneurship

is increasing throughout the world. It is strengthened by Margaca et.al. (2024) that entrepreneurship is a developing phenomenon worldwide, not only because it contributes to job creation but also because it contributes to the long-term competitiveness of a country's economic activity. Thus, entrepreneurial activities have become one of the components main way to solve unemployment problems in almost all countries.

Realizing that entrepreneurship is important in creating value and growing a country's economy, countries in the world, including Indonesia, promote

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entrepreneurial activities as one of the models of inclusive economic development. Increasing entrepreneurial intention (EI) among the community is an important initial step. This indication is in accordance with the statement of Akhtar et al. (2020) that EI is the initial step in the entrepreneurial process. While several experts have made significant contributions to the literature on EI by building a strong entrepreneurial foundation. In this context, knowing the antecedents of entrepreneurial intention becomes relevant.

Entrepreneurship education is an important variable in entrepreneurship. Ismail et al. (2009) stated that to promote entrepreneurship, several countries create public awareness through entrepreneurship education (EE). EE is a process equipping prospective entrepreneurs with skills that help them in identifying opportunities, allocating resources and finally establishing new businesses (Jones & English, 2004). According to Cardon and Potter (2003) EE is crucial to developing the mindset of potential entrepreneurs and acts as a key opening the door to entrepreneurial activities.

In the last 20 years, European countries have made significant progress in EE. Meanwhile, universities in Asia have progressively improved students' EE since the 2000s (Mitra & Matlay, 2004). EE not only improves cognitive and non-cognitive skills but also increases the intention in becoming a successful entrepreneur. Cognitive (intellectual) and non-cognitive (personality, behavior, motivation, self-confidence, problem solving) skills plus EE foster an individual's level of efficacy to achieve desired outcomes (Deepali et al., 2017), which ultimately leads them to develop a constructive attitude towards new venture initiation.

Furthermore, EE is responsible for developing attitudes, behaviors, and skills that will be used during a career as an entrepreneur (Wilson et al., 2009). EE encourages independence, desire, adaptability to change, awareness of opportunities, and tolerance for ambiguity through attitudes, while instilling characteristics, intentions, and behaviors (Steenekamp, 2013).

Similar to the organizational environment, behavior is considered a

function of education and training. Entrepreneurs tend to have the same norms in the context of entrepreneurship (Wilson et al., 2007). Several studies have highlighted this causal relationship. They found that potential and existing entrepreneurs are influenced by EE (Fayolle & Gailly, 2015). Similarly, according to the conservation of resources theory, every human being is motivated to maintain the resources they currently have and seek new resources. The same phenomenon also applies in this context. Entrepreneurs having received learning and education about their business potential have increased intentions to start the business.

However, in a meta-analysis review, Bae et al. (2014) found that although EE has a positive effect on EI, the effect is weak. While Pedrini et al. (2017) found that EE has a positive effect on EI. In contrast, the results of Gerba's (2012) study indicated that EE had a negative effect on EI and EE had no effect on EI in the results of Paço et al. (2015) study. These varied findings indicate the importance of further research to provide a stronger theoretical basis for the relationship between these variables.

On the other hand, entrepreneurship will be related to risk taking and managing various problems arising (Krueger, 2003). The perception of these difficulties and risks can limit the effectiveness of the effect of EE on EI. To overcome these challenges, a prospective entrepreneur may need certain psychological resources, motivation and positive energy (Baron, 2004). Thus, identifying the mechanisms transforming entrepreneurship education into EI becomes urgent. Knowledge of these mechanisms will pave the way for the design and content of EE programs to consider factors that will facilitate the development of prospective entrepreneurs (Edelman et al., 2008). Thus, the need to investigate other antecedents of EI as mediators in the relationship between EE and EI becomes an important issue to pursue.

The indication is relevant with Bae et al. (2014) noting that EI is affected by other variables and the effect is through mediation. Furthermore, Bae et al. (2014) suggested that future empirical studies should investigate mediators in the relationship between EE and EI. In this

regard, entrepreneurial self-efficacy (ESE) emerged from the literature as one of these potential mechanisms. ESE is an entrepreneur's belief in his ability to succeed in a particular entrepreneurial situation or task (Drnovsek et al., 2010). People with high ESE tend to show higher intrinsic intention in entrepreneurial behavior and activities (Miranda et al., 2017). ESE can be obtained through EE. EE helps in maintaining important skills and positive attitudes towards work and ultimately affects ESE (Pihie & Bagheri, 2010). Thus, ESE can mediate the relationship between EE and EI.

In addition to ESE, one of psychological resources that is predicted to have a mediating role in the influence of EE on EI is need for achievement (NA). NA refers to the degree to which a person sets and strives to achieve goals and the degree to which a person works hard and is satisfied with the results of his work (Gerba, 2012). In the literature, this concept is closely related to entrepreneurship (Awang et al., 2016; Zhang et al., 2014) where this concept is interpreted as human attributes such as the desire for independence and the continuous pursuit of goals. A number of research results show that NA is the main determinant of entrepreneurial potential (Zeffane, 2013), and EI college students (Paço et al., 2015). The effect of NA on various issues related to entrepreneurship cannot be ignored. Thus it is important to first understand an entrepreneur in order to understand entrepreneurship as a whole (Baum et al., 2006). There are several research gaps for psychological traits such as NA that are important to study. These attributes are of great interest to entrepreneurship educators, especially following research that certain personality attributes influence students willingness to learn entrepreneurship and future entrepreneurial behavior (Radipere, 2012). According to Wincent and Örtqvist (2009), NA attributes can be acquired through education. Thus, it is important to determine how NA levels are affected by EE and subsequently impact EI. It can be cultural factors, like collectivistic and uncertainty avoidance influencing the relationship.

Recognizing the importance of EE on ESE, NA, and EI, the current study investigated the effect of EE on ESE, NA,

and EI. This study will also investigate the mediating role of ESE and NA on the effect of EE on EI. The findings of this study will provide empirical evidence for policy makers and university authorities to help develop EE in order to improve ESE, NA, and EI among individual students. The findings of this study also add depth to the literature by confirming the relationship between the variables in this study in the Indonesian context. The cultural contexts between different countries will produce different research results on entrepreneurship, which is very appropriate. Culture influences an individual's intentions, motivation, risk-taking behavior, and recognition of business opportunities.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

This study applies McClelland's (1961) theory of needs. McClelland (1961) argued that individuals with a high need for achievement have a strong need for activities to achieve a goal. Furthermore, McClelland (1961) argued that entrepreneurial roles are characterized by having a higher level of task attributes than other careers. Thus, someone with a high need for achievement will be more likely to pursue an entrepreneurial career than other types of roles.

The results of the study showed that EE affects students' EI. A study by Webb et al. (1982) found that students who participated in an entrepreneurship program would have EI compared to those who did not participate. Peterman and Kennedy (2003) revealed that participation in an entrepreneurship program significantly increased the feasibility of starting a business. Noel (2001) also confirmed that graduates of entrepreneurship programs had a higher interest in opening a business. Furthermore, Katz (2007) stated that entrepreneurship training can add real value by increasing the chances of greater success. Franke and Lüthje (2004) found that EE has a positive impact on students' EI. EE is important in encouraging new ideas, new knowledge, and ultimately leading to new businesses (Karimi et al., 2016). Ajike et al. (2015) emphasized that students participating in EE programs tend to be more likely to form their own

businesses than those who do not participate. According to Cho (1998), EE plays an important role in promoting EI. Entrepreneurial knowledge and skills will help and motivate individuals to open new businesses. EE is important in encouraging individual intention in entrepreneurship (Donckels, 1991). Students with better EE tend to have greater EI (Wu & Wu, 2008). It is supported by Gazi et al. (2024) that EI can be improved by EE. From the description above, the hypothesis 1 of this study is:

H1: Entrepreneurship education has a positive effect on entrepreneurial intention.

Entrepreneurship education provides benefits in improving ESE. Motta and Galina (2023) identified a number of benefits of implementing experiential activities in EE. The benefits include: developing entrepreneurial knowledge, understanding the process of starting a business, improving teamwork skills, increasing creativity, improving problem-solving skills, improving organizational planning skills, mastering opportunity identification mechanisms, improving networking skills and increasing self-confidence and risk taking. Boubker et al. (2022) confirmed that teaching entrepreneurship through learning by doing helps improve entrepreneurial attitudes and abilities. Furthermore, Wardana et al. (2020) support the positive effect of EE on ESE. Likewise, Eh et al. (2021) that EE has a positive influence on ESE. From the description above, the hypothesis 2 of this study is:

H2: Entrepreneurship education has a positive effect on entrepreneurial self-efficacy.

Participation in entrepreneurship programs has an impact on the need for achievement. Hansemark (1998) research findings showed that participants in the entrepreneurship program developed higher NA. Ndofirepi (2020) also examined the effect of EE on NA. The research findings showed that EE had a positive effect on NA. In this study, the strongest influence was actually given to NA from several other variables used in the study. Furthermore, EE

has the strongest impact on NA also confirmed McClelland (1961) that educators through certain approaches are able to instill in students, the need for achievement. The research findings of Afrianti et al. (2024) also showed that EE has a positive effect on NA. From the description above, the research hypothesis 3 is:

H3: Entrepreneurship education has a positive effect on the need for achievement.

ESE is believed to be an important determinant of EI (Memon et al., 2019). (Akhtar et al., 2020) stated that ESE has a significant influence on EI. Having high ESE means that an entrepreneur has dared to take big risks (Ali & Yousuf, 2019). High levels of ESE also indicate a higher intrinsic EI (Memon et al., 2019). Self-efficacy as a personality trait is important when discussing the characteristics of EI. ESE refers to the belief and confidence in one's own ability to perform work to achieve goals. ESE can also be defined as a person's ability and talent to perform tasks by utilizing personal resources and focusing on the skills they have (Bandura, 2006). ESE is considered an important antecedent of EI (Zhao et al., 2005). From the description above, hypothesis 4 of this study is:

H4: Entrepreneurial self-efficacy has a positive effect on entrepreneurial intention.

The NA is the degree to which a person setting and striving to achieve goals and the extent to which a person works hard and is satisfied with the results of his work (Gerba, 2012). According to McClelland (1961) perception, having a high NA means that individuals are more likely to engage in enthusiastic and innovative activities, such as entrepreneurship. Entrepreneurship requires individuals to be obligated to overcome the consequences of tasks when compared to those with lower NA. According to Ida Ketut (2019), NA has an important role in the small business sector, which can be a prediction of EI. As a dimension of psychological factors, NA is identified as a key driver of EI (Kristiansen & Indarti, 2004; Rokhman & Ahamed, 2015). Karabulut

Table 1.
Construct measurement

Num	Construct	Sources	Number of items	Example of item
1.	Entrepreneurial Education	McGee et al. (2009)	3 items	Entrepreneurship education is useful for increasing knowledge about entrepreneurship
2.	Entrepreneurial Self Efficacy	Pihie and Akmaliah (2009)	6 items	If I create a new business, I'm confident that I will succeed
3.	Need of Achievement	Robichaud et al. (2001)	4 items	I need to fulfill my life challenges
4.	Entrepreneurial Intention	Ajzen (1991) and Liñán and Chen (2009)	5 items	I plan to become an entrepreneur after finishing my study

(2016) found that having high NA will lead to increased EI. Based on empirical research on students in Romania, Popescu et al. (2016) supported that NA helps increase EI. Furthermore, Vodă and Florea (2019) provided the reason that NA positively influences individuals' interest in starting a business. Several studies have shown that there is a correlation between NA and the interest needed to increase business activities in the early stages of business establishment (Langowitz & Minniti, 2007). The results of previous studies illustrate that students' NA is one of the drivers of their careers. Small business owners are observed to have a higher need to excel in entrepreneurship studies which ultimately have an EI Lam et al. (2017). From the description above, the hypothesis 5 of this study is:

H5: Need for achievement has a positive effect on entrepreneurial intention.

The relationship between EE and ESE and the relationship between ESE and EI have been investigated by a number of studies. While this study explores the mediating role of ESE on the effect of EE on EI. The mediating role of ESE on these two variables has been studied by several researchers (Zhao et al., 2005). According to Krueger and Brazeal (1994), EE enhances learners' knowledge, increases their level of self-confidence and self-efficacy. Thus, it enhances their self-perception of the possibility of starting a new business and strengthens their intention. Furthermore, Zhao et al. (2005) argue that self-efficacy lays the theoretical foundation for the relationship between education and EI.

Meanwhile, Yousaf et al. (2020) stated that ESE is the main key that can help entrepreneurs overcome difficulties and face challenges in the entrepreneurial process. The ESE possessed by these entrepreneurs has an effect on their EI. Meanwhile, ESE can be improved through EE, which in turn will increase their EI. From the description above, the hypothesis 6 of this study is:

H6: Entrepreneurial self-efficacy mediates the effect of entrepreneurship education on entrepreneurial intention.

The NA has a mediating role in the effect of EE on EI. This indication is in line with the research findings of Afrianti et al. (2024). The results of this study indicate that NA mediates the influence of EE on EI. This means that the better the level of EE of students, the higher the need for achievement. This high level of NA will increase students' EI. Meanwhile, the results of Hansemark (1998) study, OC showed that respondents who participated in the EE program had an impact on increasing NA. High NA has an influence on high EI. This is in accordance with a number of previous research results. The results of Maharani et al. (2020) showed that NA has an influence on EI. High NA will encourage someone to take challenging actions, dare to be responsible and dare to take risks. These characteristics are possessed by someone who has high EI. The findings of Agustina and Fauzia (2021) study also support this indication. High NA encourages the growth of high EI as well. From the description above, the 7th hypothesis of this study is:

Table 1A.
Validity and reliability test

Indicator	Coefisien pearson	p-value/criteria	Results
JS1	0.837	0.000	valid
JS2	0.760	0.000	valid
JS3	0.756	0.000	valid
JS4	0.680	0.000	valid
TIK1	0.843	0.000	Valid
TIK2	0.860	0.000	Valid
TIK3	0.705	0.000	Valid
TIK4	0.802	0.000	Valid
KS1	0.668	0.000	Valid
KS2	0.766	0.000	Valid
KS3	0.837	0.000	Valid
KS4	0.803	0.000	Valid
KAM1	0.620	0.000	Valid
KAM2	0.776	0.000	Valid
KAM3	0.874	0.000	Valid
KAM4	0.854	0.000	Valid
KAM5	0.740	0.000	Valid
JS	0.755	0.70	Reliable
TIK	0.809	0.70	Reliable
KS	0.771	0.70	Reliable
KAM	0.830	0.70	Reliable

Source: Primary Data Processed, 2025

Table 1B.
Model fit and quality indices results

Model fit and quality indices	Fit criteria	Model fit and quality indices results
Average Path coefficient (APC)	Accepted if $p < 0.05$	$p < 0.001$
Average R-squared (ARS)	Accepted if $p < 0.05$	$p < 0.001$
Average adjusted R-squared (AARS)	Accepted if $p < 0.05$	$p < 0.001$
Average block VIF (AVIF)	Accepted if ≤ 5	1.573
Average full collinearity VIF	Accepted if ≤ 5	1.643
GoF Tenenhaus (GoF)	Small > 0.1 , Medium > 0.25 , Large > 0.36	0.587
Symphon's paradox ratio	Accepted if ≥ 0.7	1.000
R squared contribution ratio	Accepted if ≥ 0.9	1.000
Statistical suppression ratio	Accepted if ≥ 0.7	1.000
Nonlinear bivariate causality direction ratio (NLBCDR)	Accepted if ≥ 0.7	1.000

Source: Primary Data Processed, 2025

H7: Need for Achievement mediates the effect of entrepreneurship education on entrepreneurial intention.

METHODS

This study tests the proposed hypotheses. The expected results will strengthen the existing theoretical basis regarding the relationship between the variables in this study. This study uses primary data in the

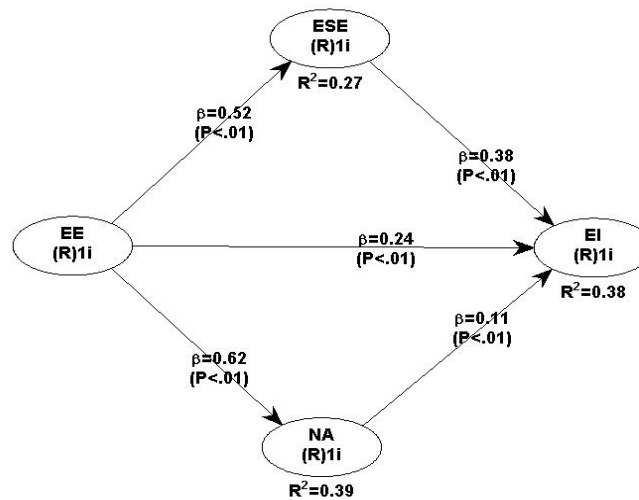
form of questionnaires. This study entirely relies on self-reported data, which may lead to common method bias. The EI questionnaire was adapted from the questionnaires of Ajzen (1991) and Liñán and Chen (2009). While EE questionnaire was adapted from the questionnaire of McGee et al. (2009). The questionnaire of Pihie and Akmaliah (2009) was used to measure ESE. While the NA questionnaire was adapted from the questionnaire of

Table 1C.
Hypothesis testing

Predictor variable	Response variable	Path coefficient	p-value	Remarks
EE	EI	0.236	<0.001	H1 accepted
EE	ESE	0.516	<0.001	H2 accepted
EE	NA	0.622	<0.001	H3 accepted
ESE	EI	0.383	<0.001	H4 accepted
NA	EI	0.114	<0.002	H5 accepted
EE → ESE	EI	0.388	<0.001	H6 accepted
EE → NA	EI	0.111	<0.003	H7 accepted

Source: Primary Data Processed, 2025

Figure 1.
Path diagram of hypothesis test results



Robichaud et al. (2001). The respondents of this study were 633 students spread across 30 universities in Indonesia, both state and private. Non-probability sampling was used to determine the respondents of the study. This means that respondents with certain characteristics, at least semester 4, were made respondents until the respondent quota was met. This sampling technique is used because the total population size is not known with certainty. Besides, it gives researchers greater flexibility in selecting samples based on availability, allowing for more practical field research. However it has limitation that it has a high risk of sampling bias, poor generalizability to broader populations. The This study used the PLS Structural Equation Model (SEM) with WarpPLS (Partial Least Square) as a tool for data analysis. The reason for choosing this analysis tool is that WarpPLS can estimate the p-value for the path coefficient automatically. WarpPLus can also provide

some model fit indicators that can be useful for comparing the best models between different models. In addition, WarpPLS can provide coefficient results and p-values for the moderation model directly.

RESULTS AND DISCUSSION

The respondents of this study were 633 students from 30 state and private universities in Indonesia. The respondents' study programs include: management, accounting, Islamic financial accounting, finance and banking, agrotechnology, agronomy, information technology, digital business, Islamic accounting, and Islamic banking. While the respondents are in the range of semesters 4-8.

Based on the ten models of fit indices, the results show that the data meets all the criteria for fit indicators. The following are the results of the fit model in table 1B. From Table 1C regarding hypothesis testing, it is

known that all hypotheses in this study are accepted. It can be seen from the p-value which is below 0,05. Thus, this study has succeeded in proving the effect of EE, ESE and NA on EI. The study also provides evidence regarding the mediating role of ESE and NA on the effect of EE on EI. Furthermore, the findings indicate that partial mediation occurs in the study. It means that the effect of independent variabel, EE, towards EI can be direct and indirect one. Theoritically, the findings strengthen the attribution theory of the variables used in the study. Practically, efforts to improve EI can be carried out through NA, ESE and EE.

The results of data processing indicate that EE has a positive effect on EI. This means that the better the EE received by students, the better the student's EI. Thus, hypothesis 1 is accepted. The results of this study are in line with the results of research by Lubada et al. (2021). With respondents from students of the Faculty of Economics, State University of Malang, Indonesia, this study found that EE has a positive effect on EI. EE not only emphasizes the creation of new businesses but also emphasizes good entrepreneurial attitudes and behaviors (Rauch & Hulsink, 2015). Good entrepreneurial behavior includes: responsibility, daring to take risks, daring to manage a business and learning from the experiences of others who have succeeded (Karimi et al., 2010). While EI is a condition of the heart that drives action and directs attention to entrepreneurial behavior such as: initiating new businesses and becoming entrepreneurs (Esfandiar et al., 2019). EE is believed to increase awareness of the importance of entrepreneurship, increase entrepreneurial motivation, enable students to develop entrepreneurial skills and assist them in choosing a career (Rauch & Hulsink, 2015).

Meanwhile, hypothesis 2 states that EE has a positive effect on ESE. The results of the data analysis provide support for the above hypothesis. Thus, increasing ESE can be done by improving the quality of EE. This is a challenge for campus management to have a curriculum with content covering EE. The EE that is truly able to raise students' enthusiasm, confidence and trust to start a business. The finding of this study

is in line with the findings of Bouarir et al. (2023) that there is a positive effect between EE on ESE. The better a person receives EE, the better he or she will have self-confidence and optimism to succeed in entrepreneurship. Thus, he or she will have a higher chance of success in entrepreneurship. The findings of the study by Lubada et al. (2021) also showed that EE has a positive influence on ESE. Students with high ESE tend to have an intrinsic EI. The difference of Lubada et al. (2021) study's with the current study is the respondents of study that are just students of the Faculty of Economics, State University of Malang. Yang and Kim (2020) stated that EE is an effective medium to encourage ESE. EE has the potential to enhance creative, perceptual and artistic skills which are core elements of psychological traits. These psychological traits are important factors of entrepreneurial activity. One of these psychological traits is ESE.

Regarding hypothesis 3, from the results of the data processing conducted, it is known that NA is influenced by EE. Thus, increasing the quality of entrepreneurship education will have a positive impact on students' NA. From Table C, it is known that path coefficient of EE to NA is the strongest, namely 0.622. This finding supports the results of Hansemark (1998) research that increasing NA can be stimulated by EE. Increasing student entrepreneurship through stimulating psychological characteristics is considered important for entrepreneurial activities. More specifically, NA believed to be stimulated in certain EE situations. The finding implies that even theoretically, NA is described as a relatively stable psychological trait. It means that one will have this potential power, NA, since born. The study proved that NA is not only relatively stable psychological trait. It can be shaped by EE. The phenomena are not the contradictory one, instead they complete each other. Both have their own theoretical bases, namely: traits and behavior theory.

Hypothesis 4 states that ESE has a positive effect on EI. Data processing indicates that hypothesis 4 is accepted. Increasing EI can be done by increasing ESE. The results of this study support a number of previous studies (Puni et al.,

2018; Akhtar et al., 2020; Soomro & Shah, 2022) that ESE affects EI. This finding provides empirical evidence that ESE is an important determinant of EI (Asimakopoulos et al., 2019; Akhtar et al., 2020). This motivational trait encourages individuals to be more confident and protagonist in doing business. Having high ESE has an influence on students' enthusiasm to open their new businesses. Having high ESE means having high confidence and self-confidence to be successful in entrepreneurship.

Hypothesis 5 is about the positive effect of NA on EI. This study successfully proved this influence. Thus, hypothesis 5 is accepted. Increasing EI can be done by increasing NA. The findings of this study support the findings of previous studies Soomro and Shah (2015) and Ndofirepi (2020). However, a number of research results show the opposite finding, that NA has no effect on EI Hansemark (2003); Akhtar et al. (2020). In the context of this study, NA has an important role in increasing students' EI. People having high NA are willing to overcome the big challenges they face. They continue to learn to establish their business, immediately after completing their studies. According to him, personal growth, serious effort, and self-determination are the secrets to success (Soomro & Shah, 2022). NA is a tendency in the entrepreneurial process. NA affects a person's characteristics. A person with high NA tends to choose difficult tasks. He is responsible and expects feedback (Rauch & Frese, 2007). This indication is proven in this study which found that NA has a direct effect on EI. One of the characteristics of someone having the intention to become an entrepreneur is usually marked by a person's desire to excel in running their business (Do & Dadvari, 2017). EI is identical to a person's desire to achieve success in the business they founded. People having a high NA are strongly predicted to have EI. He wants to achieve success. He wants to show himself as entrepreneurs who are able to build entrepreneurial success in a competitive market (Karambulut, A.T., 2016; Lubada et al. (2021).

The mediating role of ESE on the effect of EE on EI is the 6th hypothesis of this study. This study successfully proves that

the effect of EE on EI is mediated by ESE. From Table C, it is known that the mediating path coefficient is 0.388. This study also proves that EE to EI can have a direct effect. Thus, this mediating role is called partial mediation. This finding provides an indication that to improve EI can be done by increasing students' ESE and/or EE. According to Hoang et al. (2021) the relationship between EE and ESE and the relationship between ESE and EI has been studied in a number of previous studies. The mediating role of ESE on the effect of EE on EI has also been explored in several studies (Zhao et al., 2005). According to Krueger and Brazeal (1994), EE increases learners' knowledge, increases self-confidence and consolidates their beliefs and optimism. This condition increases their self-perception towards EI. Furthermore, Zhao et al. (2005) argue that ESE acts as a theoretical foundation for the relationship between EE and EI. The results of the study by Lubada et al. (2021) are in line with the findings of this study. ESE mediates the influence of EE on EI. EE is believed to influence a person's ESE. EE will provide a person with learning experiences so that he will have an entrepreneurial attitude and nature. Self-confidence is one of the important elements of an entrepreneur (Lebusa, 2011). Meanwhile, Puni et al. (2018) stated that ESE can be achieved through EE. EE helps in maintaining important skills and positive attitudes which ultimately affect ESE. Puni et al. (2018) stated that the aspect of belief is closely related to entrepreneurship. Belief is considered a major factor in entrepreneurship. ESE is identical to high confidence in the success that will be achieved. This belief will stimulate someone to take risks in entrepreneurship.

Hypothesis 7 is about the mediating role of NA on the effect of EE on EI. This study successfully proves that NA has a role as a mediating variable on the effect of EE on EI. From Tabel C, it is known that mediating coefficient path is 0.111. This study also successfully proves that the effect of EE on EI can be direct. Thus, the mediating role in this study is partial mediation. This finding provides an indication that efforts to improve EI can be done through increasing NA and/or EE. The findings of this study support the results of Ndofirepi (2020) research.

Ndofirepi (2020) research tested a conceptual model hypothesizing that the relationship between EE and EI is mediated by several psychological attributes. One of them is NA. One of the research findings shows that EE has an effect on NA. The strongest effect is on NA. This finding reflects several previous studies on personality traits which are changeable psychological attributes (Hansemark, 1998, 2003; Prakash et al. 2015). In addition, the fact shows that EE has the strongest impact on NA. This finding confirms McClelland (1961) statement about NA as an innate need, which educators can possibly develop in students through the use of certain educational approaches and techniques. The previous findings support the conceptual premise that EE a person can change his psychological outlook, with further impact on his career choices. In Ndofirepi (2020) study, of the three proposed mediators, only NA had a statistically significant mediation effect on the relationship between EE and EI. This finding also supports previous research on the relationship between EE, NA and EI. Several of these studies have shown that EE programs strengthen their NA Hansemark (1998, 2003) and that a strong need for achievement strongly predicts EI (Dinis et al., 2013; Uddin & Bose, 2012).

NA has a weaker effect than ESE. This may be due to cultural factors in Indonesia, such as high collectivism. In highly collectivistic cultures, individual achievement may be viewed through the lens of group success. Thus, ESE becomes a more important driver. Furthermore, the high uncertainty avoidance inherent in Indonesian culture can also weaken the effect of NA. Individuals may hesitate to achieve success individually and instead focus on a safer, collective approach to success. In this situation, ESE, which is associated with confidence and belief in one's own abilities, becomes more influential.

CONCLUSION

This study examines and analyzes the mediating role of ESE and NA on the effect of EE on EI. This study also examines the effect of EE, ESE and NA on EI. The findings

indicated that the two variables above, ESE and NA, mediate the effect of EE on EI. Other research findings are that EE, ESE and NA have a positive effect on EI. The effect of EE on EI can be direct, or through mediation. Thus, the mediating role in this study is partial mediation. Efforts to improve EI can be done by improving ESE, NA and EE. While improving ESE and NA can be done by improving the quality of EE.

This study has theoretical and practical implications. In terms of theoretical implications, the findings of the study provide additional theoretical knowledge regarding the relationship between EE, ESE, NA and EI. The findings of this study strengthen the theoretical building of the relationship between the variables above. While in practice, the findings of this study provide recommendations to university management to set the curriculum in such a way that EE can meet the need and run well. Moreover, more practical implications, it could be added for curriculum design across different fields of study such as business and non-business programs. Entrepreneurship curricula for business and non-business students generally differ in focus, depth of material, and teaching approach, although the underlying principles are the same. These differences are intended to accommodate the needs of students with varying educational backgrounds. For example, entrepreneurship curricula for management department will be different with communication department one. Besides, the findings can be one of important inputs for the government to set a policy of entrepreneurial teaching in higher education.

This study has several limitations and future research agendas. First, the respondents of this study came from students with study program backgrounds that do not distinguish between business and non-business. For future research, it can distinguish the background of student study programs, between business and non-business ones. Second, entrepreneurship research with NA mediation is still limited, future research is still needed to provide a stronger theoretical picture regarding the role of NA mediation. Third, the data of this study were collected in one time unit, for future research, data can be taken using a

longitudinal approach to obtain more robust findings. This study is a cross-sectional study, it is difficult to collect large amounts of data with diverse samples to improve statistical analysis of hypotheses and provide a deeper and broader understanding of EI. Future research needs to consider mixed methods to combine quantitative data from questionnaires with qualitative data from observations and interviews to increase the credibility of conclusions and generalization of findings.

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