

Entrepreneurial Self-Efficacy and Entrepreneurial Intention: The Mediating Role of Entrepreneurship Intentional Self-Regulation among Undergraduate Students

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Entrepreneurial Self-Efficacy and Entrepreneurial Intention: The Mediating Role of Entrepreneurship Intentional Self- Regulation among Undergraduate Students

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ABSTRACT

Prior studies have explored the correlation between students' Entrepreneurial Self-Efficacy and Entrepreneurial Intention, where several studies found a strong relationship between them, while others suggested moderate even weak correlation on it. This research aims to explore the mediating effect of Entrepreneurship Intentional Self-Regulation (EISR) on the relationship between Entrepreneurial Self-Efficacy (ESE) and Entrepreneurial Intention (EI) among undergraduate students in Indonesia. There is a need to explain this concept considering that the emergence of entrepreneurs is one of the government's priorities in Indonesia. Data were collected from 299 undergraduate students on their final year of studies from eight universities which provide entrepreneurship education in Jakarta and Bandung. Hayes's PROCESS Macro in SPSS was used to analyse the effect and showed that Entrepreneurship Intentional Self-Regulation (EISR) was fully mediated the relationship between Entrepreneurial Self-Efficacy and Entrepreneurial Intention among undergraduate students in Indonesia.

ABSTRAK

Beberapa penelitian sebelumnya telah menyelidiki korelasi antara Entrepreneurial Self-Efficacy dan Entrepreneurial Intention pada mahasiswa, dimana terdapat beberapa penelitian yang menemukan adanya hubungan yang kuat diantara kedua variabel tersebut, sementara penelitian lainnya menggambarkan korelasi dalam tingkat sedang atau bahkan lemah diantara keduanya. Penelitian ini bertujuan untuk menguji efek mediasi dari Entrepreneurship Intentional Self-Regulation (EISR) dalam hubungan antara Entrepreneurial Self-Efficacy (ESE) dan Entrepreneurial Intention (EI) pada mahasiswa sarjana tingkat akhir di Indonesia. Konsep ini menjadi penting untuk dipahami karena mempertimbangkan aspek lahirnya wirausahawan baru merupakan salah satu prioritas dari pemerintah di Indonesia. Data penelitian dikumpulkan dari 299 mahasiswa sarjana tingkat akhir dari delapan universitas berbeda yang menyelenggarakan pendidikan berbasis kewirausahaan di wilayah Jakarta dan Bandung. Hayes's PROCESS Macro dalam SPSS digunakan untuk menganalisis korelasi yang muncul antara ketiga variabel tersebut dan hasil analisis menunjukkan bahwa Entrepreneurship Intentional Self-Regulation (EISR) secara penuh memediasi hubungan antara Entrepreneurial Self-Efficacy dan Entrepreneurial Intention pada mahasiswa sarjana tingkat akhir di Indonesia.

Key words:

Entrepreneurial Self-Efficacy, Entrepreneurship Intentional Self-Regulation, Entrepreneurial Intention, Undergraduate Students

1. INTRODUCTION

Currently, entrepreneurship is one of the biggest topic widely discussed in many countries, including Indonesia. Entrepreneurship is a process of generating value on some products or services which

often seen as a risky action but it actually brings positive impacts from small to broader scope, such as job creation, revenue, productivity and economic growth (Mishra & Zachary 2015; Austin & Nauta 2016; Esfandiar et al. 2019). Indonesia's government has successfully created 9.38

million new jobs within a span of 3 years from 2015 as positive result of entrepreneurial activities (Indonesian Ministry of National Development Planning 2018). President of the Republic of Indonesia also directed all parties to make efforts in accelerating the increasing ratio of entrepreneurs to reach a minimum ratio of 14% (Kuwado 2018). To meet these expectation, several parties have taken a part in generating new entrepreneurs in Indonesia. For instance, government focuses on making entrepreneurial regulations while companies contribute through corporate citizenship program to increase the creativity of its employees. Other agencies in collaboration with the government, such as HIPMI (Himpunan Pengusaha Muda Indonesia) supports the creation of new entrepreneurs through development program in form of innovation events. Lastly, educational institutions also contribute in facilitating students with entrepreneurial knowledge and skills which aims to generate new entrepreneurs.

To support the educational efforts in creating entrepreneurship, Indonesian Ministry of Research, Technology and Higher Education formed an integrated entrepreneurial program for undergraduate students, namely Program Kewirausahaan Mahasiswa Indonesia (PKMI). PKMI is a form of collaboration between the government and universities that aims to build character and basic skills of entrepreneurship among undergraduate students to run a sustainable business and strengthen the universities as an entrepreneurial development institution. Universities provide entrepreneurial education, capital assistance, socialization, and exhibition for students' new businesses. This step is runs based on belief that entrepreneurial education is an important aspect to encourage the emergence of young entrepreneurs because it affects students' entrepreneurial attitude and intention on responding the entrepreneurial chance (Hattab 2014; Lavelle 2019).

This phenomenon brings us to the concept of Entrepreneurial Intention (EI)

which influence students' career choice to become an entrepreneur (Mauer, Neergaard & Linstad 2009; Omorede, Thorgren & Wincent 2015). Several studies have discussed EI and its predictors, which can caused by external or internal factors (Linan, Moriano, & Jaen 2016; Bacq et al. 2017; Weiss, Anisimova & Shirokova 2019). Previous research illustrated the influence of contextual support, like entrepreneurial role models, on the other hand suggested the effect of personal factors in affecting students' EI, for example motivation, personality, self-enhancement, and self-efficacy (Linan, Moriano, & Jaen 2016; Bacq et al. 2017; Weiss, Anisimova, & Shirokova 2019). Furthermore, recent studies have much focused on direct influence of internal factors because its greater effects to students' EI, such as students' belief about their control to perform entrepreneurship effectively or commonly referred as Entrepreneurial Self-Efficacy (ESE) (Krueger, Reilly & Carsrud 2000; Mauer, Neergaard & Linstad 2009; Bandura 2012; Linan, Moriano, & Jaen 2016; Esfandiar et al. 2019). ESE is students' belief about their abilities to perform entrepreneurial roles and tasks successfully (Bandura 2012; Esfandiar et al. 2019). Most literatures argued that ESE is the best predictor to EI (Ajzen 1991; Mauer et al. 2009), but on the other side, other research found the moderate and even weak correlation between ESE and EI (Kurczewska & Bialek 2014; Saraih et al. 2018). In general, there is still a few research explaining the clearer mechanisms happened between ESE and EI. Trying to clarify these findings, one literature emerged from Solesvik (2017) found that there was a mediation effect from personal initiatives in the relationship between students' ESE and intention (Solesvik 2017).

So, in attempt to provide better understanding about the relationship between students' ESE and EI, especially among undergraduate students in Indonesia, we explore the role of Entrepreneurship Intentional Self-Regulation (EISR) as mediator between

these variables. According to Social Cognitive Theory, Self-Efficacy as general, can affect the Self-Regulation (Bandura 2012). Specifically, EISR is an adjustment process on fitting the internal resources and external demands in order to achieve entrepreneurial goals (Gestsdottir & Lerner 2008; Geldhof et al. 2014). In addition, EISR is quite widely investigated in examining the context of young entrepreneurship and it also found to be correlated positively with EI (Gestsdottir & Lerner 2008; Geldhof et al. 2014).

This study involved eight universities with similar vision, mission, and values to generate excellent graduates with entrepreneurial spirit, such as innovation, business, improvement, and creativity. Majors, curriculum, courses, and methods delivered have prepared to develop students' entrepreneurial mindset and skills. For example, employing project-based learning which facilitates students to understand the theory and to develop a venture at the same. Some entrepreneurial events are also regularly held in these universities, namely entrepreneur week, business competition, sharing session, and seminar.

2. THEORETICAL FRAMEWORK & HYPOTHESES

Entrepreneurial Intention

Entrepreneurial Intention (EI) is one of the individual factors that can affect students' behavior to choose entrepreneurship as their career choice based on their belief and decision associated with past and future evaluation (Bandura 2012; Omoredede, Thorgren & Wincent 2015). EI is interpreted as an indication of the new entrepreneur's emergence because the higher students' intention will be followed by higher possibility of becoming entrepreneur (Esfandiar et al. 2019). It is in line with research conducted by Bogatyreva et al. (2019), which stated that students who had EI contributed 2.5 times higher of possibility in creating new venture compared with students who had no intention in the next

two years. EI can be influenced by contextual factors such as culture, family, social support or personal factors, such as motivation, personality, self-efficacy, and self-regulation (Geldhof et al. 2014; Linan, Moriano, & Jaen 2016; Bacq et al. 2017; Weiss, Anisimova, & Shirokova 2019). However, personal factors are more dominant in explaining EI compared to external factors (Linan, Moriano, & Jaen 2016). One of the personal factors commonly used to understand specific concept like entrepreneurship is Entrepreneurial Self-Efficacy (ESE), which had positive correlation with EI (Chen, Greene & Crick 1998; Cardon & Kirk 2013; Hsu, Wiklund & Cotton 2017; Yamakawa, Peng & Deeds 2015; Gorgievski et al. 2018;). Similarly, in investigating the context of young entrepreneurship, recent studies have focused on the role of Entrepreneurship Intentional Self-Regulation (EISR) on EI (Bryant 2007; Gestsdottir & Lerner 2008; Geldhof et al. 2014). These literatures explained the influence of students' belief about their capabilities and their self-regulatory strategies used to determine specific goals, such as preference to become an entrepreneur (Chen, Greene & Crick 1998; Gestsdottir et al. 2015).

Several frameworks which focus on individual factors are used to explain the determinants of EI. For example, Theory of Planned Behavior (TPB) (Ajzen 1991) which suggested three determinants of EI, consisted of (i) attitude toward behavior, defined as students' belief that entrepreneur is a beneficial job, (ii) social norms, defined as students' belief that being an entrepreneur is an attempt to fulfill their significant person's expectancy, and (iii) perceived behavior control, defined as students' belief that they have capabilities to do the entrepreneurial role successfully (Krueger 2009).

Another framework that is commonly used to explore EI's predictors is Social Cognitive Theory (Bandura 1982; Bandura 2000). It emphasizes the role of Entrepreneurial Self-Efficacy (ESE) as significant predictor of EI, which is the same

concept as perceived behavior control in TPB (Bandura 1982; Chen, Greene & Crick 1998; Bandura 2000; Krueger, Reilly & Carsrud 2000; Mauer, Neergaard & Linstad 2009). In this study, we employ Social Cognitive Theory because it assumed students as an intentional decision-maker who considers belief about abilities or Entrepreneurial Self-Efficacy as key factor that can strongly influence Entrepreneurial Intention (Chen, Greene & Crick 1998). In some literatures, this framework is also applied to predict entrepreneurs' persistence or even effectiveness (Chen, Greene & Crick 1998).

Entrepreneurial Self-Efficacy

Entrepreneurial Self-Efficacy (ESE) was found to be one of the predictors of EI. In the current study, we focus on ESE since it has been explored as important determinant of various goal-directed behaviour, such as entrepreneurial career choice, launching process of new business, and other entrepreneurs' actions in both developed or developing countries like Indonesia (Naktiyok, Karabey & Gulluce 2009; Oyugi 2015; Newman et al. 2019). Students with higher ESE usually associated with higher goals for success and risk-taking skills, that they will proactively seek opportunities and show persistence in solving challenges. Additionally, building new venture is a process that requires specific skills for achieving targets, finding opportunities, and also facing the entrepreneurial obstacles (Oyugi 2015). Therefore, we assumed the higher students' ESE will be followed by higher EI.

....According to Social Cognitive Theory, ESE referred to students' belief about their capabilities to complete entrepreneurial tasks and perform well in entrepreneurship circumstances (Bandura 1982; Bandura 2012). ESE plays an essential role to increase EI; if we want to increase students' preference to be an entrepreneur, stimulating the ESE will be a useful way (Gorgievski et al. 2018). Several studies have explored the correlation between ESE and EI, where students with higher self-efficacy

will have strong belief that they are capable to perform entrepreneurial roles effectively and solve challenges, then it raises the tendency to start a venture (Bandura 1982; Chen, Greene & Crick 1998; Bandura 2000; Cardon & Kirk 2013; Hsu, Wiklund & Cotton 2017; Yamakawa, Peng & Deeds 2015).

Students' ESE is strongly influenced by experiences, education, and teaching methods (Hsu, Wiklund & Cotton 2017). Past failure can reduce the preference to launch new business, on the contrary, entrepreneurial meaningful experience can encourage students' belief on their competence so they carry out their entrepreneurial role effectively (Hsu, Wiklund & Cotton 2017). Entrepreneurial education, such as development program, training, seminar, and socialization also have an impact on students' belief in handling any troubles appeared in future (Pihie & Bagheri 2013). In addition, teaching methods can affect students' ESE, for example practical methods, like case study, simulation, and seminars can provide real experience and evaluation for students also improve their confidence level in fixing up the entrepreneurial issues, then contribute to increase students' EI (Pihie & Bagheri 2013).

While other studies suggest that students' ESE is the strongest determinant to EI, several researchers have found different results. Some prior studies found weak and moderate correlation between Entrepreneurial Self-Efficacy and Entrepreneurial Intention, which the coefficient ranges between 0.30 and 0.45 (Kurczewska & Bialek 2014; Saraih et al. 2018). These literatures indicate that underlying psychological mechanisms occur between this relationship.

Students' ESE will be measured using an instrument developed by De Noble, Jung & Ehrlich (1999) which focuses on cognitive aspects rather than technical and functional aspects. This measurement consists of six dimensions: (i) developing new product and market opportunities; (ii) building an innovative environment; (iii) initiating investor relationships; (iv) defining core

purpose; (v) coping with unexpected challenges; and (vi) developing critical human resources (De Noble, Jung & Ehrlich, 1999).

Entrepreneurship Intentional Self-Regulation

In 2012, Bandura stated that levels of ESE can affect the levels of Self-Regulation (Bandura 2012). Specifically, Entrepreneurship Intentional Self-Regulation (EISR) is defined as adjustment process of emotions and thoughts in fitting external demands and internal sources to attain entrepreneurial opportunities (Gestsdottir & Lerner 2008; Geldhof et al. 2014). Students with higher ESE will followed by higher EISR, that they believe they can overcome entrepreneurial obstacles optimally and focus on determining realistic steps in an effort to achieve their entrepreneurial goals, hence it increases the tendency to become an entrepreneur (Bryant 2007; Gestsdottir & Lerner 2008).

The dynamic processes of EISR involve various psychological functions, such as beliefs, emotions, thoughts, and also adaptation with the environment to reach the entrepreneurial objectives (Gestsdottir et al. 2015). Several literatures believed that there was a correlation between ESE and EISR, where students with higher ESE will have more effort in facing obstacles and produce higher entrepreneurial performances, so they can be more accurate in determining the entrepreneurial chance (Bandura 1982; Gestsdottir & Lerner 2008). When dealing with entrepreneurial problems, students' with higher EISR will have various ways and solutions and learn from past mistakes to develop themselves and achieve desired goals (Gestsdottir et al. 2015). Moreover, students with higher ESE will recognize and seize the entrepreneurial chance consistently which boost their self-confidence, so it enhances their intention to become an entrepreneurs (Bryant 2007). So, in line with these literatures, we expect students' ESE will be related to EISR.

One of the Entrepreneurship Intentional Self-Regulation model frequently used is

³ Selection, Optimization, and Compensation (SOC). SOC model explains the development of entrepreneurship, consisting of four dimensions: elective selection, loss-based selection, optimization, and compensation (Weiner, Geldhof & Lerner 2011). Selection is divided into elective selection which focuses on selecting goals and Loss-Based Selection which focuses on rearranging the goal after losing the resources or if there is no chance to reach the previous goal (Freund & Baltes 2002; Geldhof et al. 2014). Optimization involves identifying resources and strategies that can be used to pursue the goals, then Compensation emphasizes the using of new or alternative resources when the previous resource are not available (Freund & Baltes 2002; Geldhof et al. 2014). SOC dimensions were understood as a global factor and related to success in work, development plans and other goal-directed actions, such as determining work choices in adolescence and young adult (Gestsdottir & Lerner 2008). In their research using SOC model, Geldhof et al. (2014) in addition, stated that there was correlation between EISR and EI, where students with higher SOC skills will have higher possibility to place entrepreneurs as their career choice. In particular, students who believe themselves as a self-starter and keep monitoring other opportunities, had higher score of intention than other students (Geldhof et al. 2014).

In this study, EISR questionnaire from Geldhof et al. (2014) ³ as used to assess Entrepreneurship Intentional Self-Regulation, which consists of four dimensions: (i) elective selection, (ii) optimization, (iii) compensation, and (iv) loss-based selection.

Based on ¹ this consideration, the hypotheses of this study is: *The relationship between students' Entrepreneurial Self-Efficacy (ESE) and Entrepreneurial Intention (EI) is mediated by Entrepreneurship Intentional Self-Regulation (EISR).*

3. RESEARCH METHOD

Sample

Participants of this study were final year undergraduate students who had entrepreneurship-based education from eight universities in Jakarta and Bandung. They were selected by accidental sampling (non-probability sampling), considering the availability of participants and desire to participate (Gravetter & Forzano 2012). Participants came from different several majors, such as entrepreneurship, management, business management, international business, business administration, and business creation. All participants are currently in the range of semester 6 to 10.

We sent an online questionnaire using Google form to several students from each university, then they forward the questionnaire to other students through the group's social network. In some majors, we are also invited to enter their group's social network so we got access to remind participants directly. In the initial part of survey, we provide informed consent that contains study's objective, estimated time needed to complete the survey, confidentiality, and voluntary statement. To increase the validity scale and ensure that all participants pay attention during the questionnaire filling, we added two attention checking items (Kung, Kwok & Brown 2018), consists of "Please choose number 1 (strongly disagree) to fill in this statement" and "Please choose number 7 (strongly agree) to fill in this statement".

Other participant's criteria that we determined are year of studies and education program. Students who are final year of studies will be associated with career choice (Mauer, Neergaard & Linstad 2009; Austin & Nauta 2016) and entrepreneurship-based majoring in universities as formed of entrepreneurial education can also influenced the levels of students' entrepreneurial self-efficacy as the predictor variable (Pihie & Bagheri 2013).

From the 494 questionnaires collected, 187 questionnaires did not pass the attention checking criteria, so 307 questionnaires can be processed. To make sure all data were ready to use, we checked the normality

scale, outliers, and extreme responses, then produced 8 questionnaires that could not be used because participants' answers tend to be extreme, either 1 or 7 or else strongly disagree or strongly agree in most of questions. From this step, we got 299 questionnaires could be processed further. We also conducted Confirmatory Factor Analysis (CFA) to confirm the variable's structure of our proposed latent variables. We followed the goodness-of fit indices as suggested by Hu and Bentler (1999), namely CFI with the value ≥ 0.95 , RMSEA with the value ≤ 0.06 , and SRMR with the value ≤ 0.08 . Based on these criteria, our data indicate that the proposed model with separate EI, ESE, and EISR latent variables was not good-fit (CFI = 0.874, RMSEA = 0.056, SRMR = 0.066). We discuss this results later in the discussion section.

Furthermore, of all participants involved, 163 participants (54.5%) were male and 136 participants (45.5%) were female. When viewed from its age range, 57 participants (19.1%) were 19-20 years old, 187 participants (62.5%) were 21 years old, and 55 participants (18.4%) were 22-23 years old. There were 244 participants (81.6%) who already had experience in building a venture and 55 participants (18.4%) were not. Related to the experience of creating products or services, 274 participants (91.6%) already had the experience and 25 participants (8.4%) were not. Then, there were 205 participants (68.6%) who have parents worked as entrepreneur and 94 participants (31.4%) have not.

Measurement

All measurements were translated into Bahasa Indonesia to fit the Indonesian culture and reviewed by expert. Before the data collection, we do the item analysis process to ensure all items are in accordance with the dimensions measured and randomize the order of items so it isn't arranged according to each dimension. Seven scales were adopted to measure students' EI, ESE, and EISR, which ranged from 1 (*strongly disagree*) to 7 (*strongly agree*). Before the data collection, we conducted the

pilot study to 32 undergraduate students which had same characteristics with participants of this study. This process aims to validate all items and as a result, text revisions were carried out on 18 items.

Entrepreneurial Intention. We used 4 items from EI questionnaire developed by Liñán (2008) to measure students' entrepreneurial intention. Measurements were rated on 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). A sample of statement was "I am ready to do anything to be an entrepreneur". The Cronbach's alpha coefficient was 0.812.

Entrepreneurial Self-Efficacy. Students' ESE was measured using 16 items from self-efficacy questionnaire developed by De Noble, Jung & Ehrlich (1999). Questionnaires were rated on 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). An example statement was "I can persist in the face of adversity". The Cronbach's alpha coefficient for this scale was 0.902.

Entrepreneurship Intentional Self-Regulation. We used 11 items from questionnaire developed by Geldhof et al. (2014) to measure students' entrepreneurship intentional self-regulation. Items were rated on 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). An example item was "I select challenging goals" and Cronbach's alpha coefficient was 0.858.

Test of Common Method Variance

Harman's single-factor test was used to test the common method variance issue and determine the majority variance that can be accounted by one general factor. As a result, we did not find single factor that accounted majority of variance. There were 26 factors that has an eigenvalue above one and the first factor accounted for only 33.158 percent of variance, so it could not be linked with common method variance issue (Podsakoff et al. 2003).

4. DATA ANALYSIS AND DISCUSSION

Before presenting the results of hypothesis testing, we first discuss about CFA results which suggested that our proposed model does not meet the goodness-of-fit indices. It can be caused by several factors, such as the high correlation between predictors (ESE and EISR) or the quality of measurement (Hooper, Coughlan & Mullen 2008). Due to a high correlation between ESE and EISR, we provided collinearity test using Variance Inflation Factor (VIF) in SPSS. We got VIF scale 1.00 or less than 10, it means there was no collinearity issue between these two variables (Hair et al. 1995). Moreover, in some cases, measurement with too many indicators or items existed in latent variables can decrease the value of Comparative Fit Index (CFI) as occurred in this study. However, even though our proposed model did not indicate significant results based on CFA results, all measurements could still be used because of its good reliability based on Cronbach's alpha coefficient.

Means, standard deviations, and correlations between variables are shown on Table 1. Age was not significantly correlated to EI ($r=0.00$, $p>0.01$), experience in building a venture was not significantly related to students' EI ($r=0.09$, $p>0.01$), experience in creating products or services was not significantly correlated to students' EI ($r=0.00$, $p>0.01$), but parents' job as an entrepreneur was significantly correlated to entrepreneurial intention ($r=0.21$, $p<0.01$). We control these variables in hypothesis testing process, then explored the effects occurred when relating control variables as predictors to EISR and EI, which presented in Table 2. As explained above, parents' job as an entrepreneur was significantly associated with entrepreneurial intention. Similar with Nguyen (2018), it illustrated that students with self-employed parents would had higher intention to build new venture because parents as students' role model can provide entrepreneurial understanding related to new business establishment.

Table 1

Means, Standard Deviation, and Correlations among Variables									
Variables	M	SD	1	2	3	4	5	6	7
1. Age	21	0.66	NA						
2. Experience in building a venture	0.82	0.38	0.07	NA					
3. Experience in creating products or services	0.92	0.27	0.05	0.29**	NA				
4. Parents' job as an entrepreneur	0.69	0.46	-0.05	0.01	-0.04	NA			
5. ESE	4.73	0.70	-0.04	0.15**	0.08	0.08	(0.90)		
6. EISR	4.05	0.52	-0.03	0.15**	0.06	0.07	0.81**	(0.85)	
7. EI	5.17	0.56	0.03	0.09	0.00	0.21**	0.38**	0.42**	(0.81)

Note. N=299. * $p < 0.05$, ** $p < 0.01$ (two-tailed). NA: Not Applicable. Age was measure in years. Having an experience in building a venture, experience in creating products or services, and having parents working as an entrepreneur were dummy-coded (0=No, 1=Yes). All other scales were measured on 7-point scale. ESE=Entrepreneurial Self-Efficacy, EISR=Entrepreneurship Intentional Self-Regulation, EI=Entrepreneurial Intention.

Table 2
Results of Mediation Effects for Entrepreneurial Intention

Variables		Outcomes							
		EISR				EI			
		Coeff.	SE.	t	p	Coeff.	SE.	t	p
Constant	i_M	1.65	0.63	2.62	0.00	i_Y	0.52	1.21	0.43
Age		-0.00	0.02	-0.07	0.93		0.06	0.05	1.19
Experience in building a venture		0.03	0.05	0.75	0.44		0.05	0.09	0.51
Experience in creating products or services		-0.02	0.07	-0.37	0.70		-0.06	0.13	-0.49
Parents' job as an entrepreneur		0.01	0.04	0.29	0.77		0.27	0.07	3.51
ESE	a	0.87	0.03	23.58	0.00	c	0.49	0.07	6.86
		-	-	-	-	c'	0.14	0.12	1.18
EISR		-	-	-	-	b	0.40	0.11	3.61
		$R^2 = 0.66$				$R^2 = 0.22$			
		$F(5,293) = 116.79, p = 0.00$				$F(6,292) = 13.85, p = 0.00$			

Note. N = 299. ESE=Entrepreneurial Self-Efficacy, EISR=Entrepreneurship Intentional Self-Regulation, EI=Entrepreneurial Intention.

We tested the hypothesis of simple mediation model through Hayes'

PROCESS SPSS and choose the number 4 model (Hayes 2012). We explored the

effects occurred when relating control variables as predictors to EISR and EI. As showed in Figure 1, there was positive and significant effect from ESE to EISR (effect=0.87, SE=0.03, $t=23.58$, 95% CI [0.80,0.94]). This supports prior findings that students with stronger belief about their entrepreneurial capabilities will be more flexible in adapting their strategies to fit entrepreneurial demands and achieve their targets (Gestsdottir & Lerner 2008; Bandura 2012).

In addition, students' EISR was found positive and significantly related to EI (effect=0.40, SE=0.11, $t=3.61$, 95% CI [0.18,0.62]). It supports prior study which illustrated that students' who have more effort in recognizing new business opportunities and looking for various

ways to face entrepreneurial challenges consistently tend to have higher tendency to build new venture (Geldhof et al. 2014).

Finally, the direct effect of students' ESE on EI found to be not significant (direct effect=0.14, SE=0.12, $t=1.18$, 95% CI [-0.09,0.38]), on the other hand, there was a significant and positive effect indirectly from ESE to EI which mediated by EISR (indirect effect=0.49, SE=0.07, $t=6.86$, 95% CI [0.35,0.63]), then suggested full mediation effect. It confirmed a significant indirect effect from students' Entrepreneurial Self-Efficacy to Entrepreneurial Intention through Entrepreneurship Intentional Self-Regulation which supports our hypothesis.

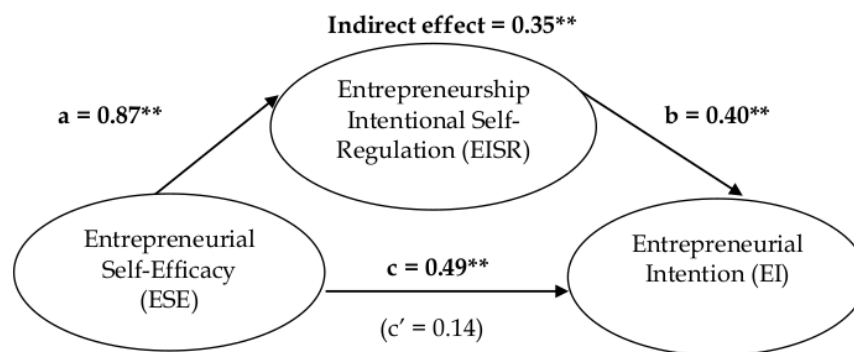


Figure 1
Mediating Effect of Entrepreneurship Intentional Self-Regulation on Relationship Between Entrepreneurial Self-Efficacy and Entrepreneurial Intention

Note. N=299. * $p<0.05$, ** $p<0.01$ (two-tailed). Control variables: age, experience in building a venture, experience in creating products or services, and parents' job as an entrepreneur. Number of bootstrap samples for bias-corrected bootstrap confidence intervals: 5000 (confidence level 95 percent).

As we got a full mediation effect from Entrepreneurship Intentional Self-Regulation in relationship between students' Entrepreneurial Self-Efficacy and Entrepreneurial Intention, it means we found similarity with previous studies which explained weak direct correlation between ESE and EI and proved the important role of EISR as mediator variable (Geldhof et al. 2014; Kurczewska

& Bialek 2014; Solesvik 2017; Saraih et al. 2018).

5. CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS

As confirming our hypothesis, results of this study proved that students' Entrepreneurship Intentional Self-Regulation fully mediates the relationship

between Entrepreneurial Self-Efficacy and Entrepreneurial Intention.

Related to theoretical contribution, prior studies have explained several variables which affected the relationship between ESE and EI, one of them is personal initiative as mediator variable which was explored by using Theory of Planned Behavior framework (Solesvik 2017). Most research has focused on Theory of Planned Behavior, however, we believe that Social Cognitive Theory is more suitable framework to explore the ESE-EI relationship among undergraduate students in Indonesia. Entrepreneurship education is currently one of the main focuses at some universities in Indonesia because the education plays an important role in improving students' belief about their entrepreneurial abilities or ESE with the aim of creating new entrepreneurs. Moreover, this framework provides clearer understanding about the important role of Entrepreneurship Intentional Self-Regulation as mediator variable between ESE-EI relationship, in which higher ESE will increase the use of self-regulation strategies in realizing entrepreneurial targets, such as setting goal, using various ways in facing challenges, and in turn improving entrepreneurial intention and performance, and in turn leads to higher intention to develop a venture (Bryant 2007; Bandura 2012; Gestsdottir et al. 2015).

This study also have some practical implications for educational institutions. In attempt to boost EI among students, educators can focus in implementing program aimed to develop students' ESE, for example provide entrepreneurial subject, courses, and program modules to enhance students' understanding about process and steps involved in starting new business. In addition, educators should accommodate students with practical methods, such as case study, simulation, or another development programs, such as training and seminar to encourage not only students' knowledge, but also

facilitate valuable experience related to entrepreneurship.

Even though this research can provide better understanding about the mediating effect of students' EISR in ESE-EI relationship, it also has several limitations. First, as explained above, we found a not fit model in CFA process. To improve proposed model, future research should check the quality of measurement, correlation between latent variables, and selection of respondents (Hooper, Coughlan & Mullen 2008). Second, self-report technique used in this research can cause participant's bias. Although we have guaranteed confidentiality with anonymity, but it may also trigger a bias. Therefore, future research should use several combination techniques to measure all variables, such as adding observation technique or other possible techniques. Lastly, in context of young entrepreneurship, longitudinal study can be used to produce a comprehensive explanation about the development and interrelationship between variables.

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