

Analysis on the Effect of Need for Achievement and Locus of Control on Student Entrepreneurial Intentions

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Analysis on the Effect of Need for Achievement and Locus of Control on Student Entrepreneurial Intentions

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ABSTRACT

Purpose - this study aimed to analyze the Student Entrepreneurial Intentions model based on their psychological characteristics. Furthermore, this study sought to explain whether the Need for Achievement (N-Ach) and Locus of Control (LoC) of students has an influence on Entrepreneurial Intentions (EI).

Design / methodology / approach - this study adopted an inferential research design. This was a cross-sectional study because the data in this study were collected at one point in time. The sample of Jambi University FKIP students were chosen which was dominated by men (63.14%), and 81.78 percent of respondents aged less than 20 years. Data were collected through a questionnaire and analyzed using statistical correlation software between variables and linear regression models between independent variables and dependent variables to ensure the relationship between psychological characteristics and EI.

Findings - results indicated that a positive influence on psychological characteristics and EI. N-Ach and LoC positively influence EI, both partially and jointly.

Research limitations / implications - First, this study used a self-report questionnaire, which carried an opportunity for response bias. Second, the sample only included students from one Faculty. In addition, the sample size was low. Therefore, the model needs further development through the incorporation of behavioral characteristics. This will allow understanding of whether behavioral theories and traits are conflicting or complementary.

Originality / value - The results of the study reinforce the idea that psychological characteristics (trait approach) affect EI. The results of this study provide important evidence to improve entrepreneurship education for students in tertiary institutions.

Keywords: Need for Achievement, Locus of Control, and Entrepreneurial Intentions

1. Introduction

One of the challenges in developing a country is dealing with the problem of unemployment⁶⁵. Data from the Central Statistics Agency (BPS) of the Republic of Indonesia shows that unemployment in Indonesia is still very high. The number of unemployed people in Indonesia in August 2017 reached 5.50% of the total population of 264,000,000 people. One alternative to solving the problem of unemployment is by empowering the community and educated groups through entrepreneurship programs, which are expected to be able to contribute in the absorption of labor so as to reduce unemployment and state burdens (Adnyana, Agung, and Purnami, 2016: 25). [1] Today, entrepreneurship is seen as a key factor in the economy and sustainable development. This contributes to growing the country's competitiveness in its national and international markets, overcoming unemployment as a solution to today's growing problems, and encouraging entrepreneurs in bringing innovative ideas to market and achieving their personal growth (Acs and Szerb, 2010). [2]

Higher education institutions are expected to be able to prepare for a better future by developing intellectual competencies and skills so that the younger generation can carry out self-actualization. This shows that in addition to educational support, concepts and business⁴⁴ development support are equally important in encouraging students to have entrepreneurial intentions (Saeed, Yousafzai, Yani-De-Soriano & Muffatto, 2015). [3] The aim of offering entrepreneurship education at universities is not only to encourage students to start their own businesses but also to make them more creative and innovative (Schmitz et al., 2017). [4]

Higher education also plays a role in producing human resources who have entrepreneurial spirit and attitude in overcoming the problem of unemployment by creating jobs²⁷ (Prenesca et al., 2003). [5] Entrepreneurial Intentions arises because of its contribution to economic growth, rejuvenation of productive structures, re-launching of certain regions, dynamics of innovative processes and job creation (Schiavone, 2011). [6] Education at the university seeks to shape attitudes, skills, knowledge and competencies to students in order to develop their professional careers. Education, research⁴³ and community service are tridharma that are used as the main mission in the administration of higher education in Indonesia. But the progress of society and the influence of globalization have added a further mission, namely economic development, to the university domain (Stauvermann and Kumar, 2017). [7] Aligning all of these missions is crucial to building an entrepreneurial university (Ribeiro et al., 2010), [8] where entrepreneurship can be seen as the center of economic and community progress (Sanz et al., 2017). [9] Other experts have also recognized that entrepreneurship in the educational environment has a significant impact on Entrepreneurial Intentions (Martínez-Climent et al., 2018; [10] Kabok et al., 2017). [11] Thus, universities must now include this entrepreneurship education in their curriculum, because it can have direct and indirect effects on skills development, which in turn has a positive effect on Entrepreneurial Intentions (Clara Gieure et al., 2019). [12] At the University of Jambi in particular the Faculty of Teacher Training and Education has included an entrepreneurial course in its curriculum. As one of the main subjects that must be taken by students. Entrepreneurship courses not only¹⁸ provide a theoretical foundation on the concept of entrepreneurship but to form the mindset of students to become

entrepreneurs. This means that the University has prepared students to start a new business through the integration of experience, skills and knowledge that are essential for developing and expanding a new business venture. The existence of entrepreneurship courses can also increase the desire of students to choose entrepreneurship as a career choice other than career choices to become private employees, civil servants, or BUMN employees, which can significantly direct students towards Entrepreneurial Intentions.

From an academic perspective, many studies have examined entrepreneurs and the factors that drive or attract entrepreneurs to start a business. However, as stated by Turker and Sonmez Selçuk (2009) the majority of studies focus on established entrepreneurs. [13] and little is known about young adults and factors that drive them to start businesses (Henderson and Robertson, 2000). [14] Referring to the theory of planned behavior (TPB), which suggests that entrepreneurship is not only intentional but also pre-planned (Kirby and Ibrahim, 2011). [15] This study analyzes the effect of need for achievement and locus of control both individually and jointly on student entrepreneurial intentions. This study enriches research based on the TPB model by considering the entrepreneurial skills or abilities of students, which are obtained at the university. Thus, the model presented here contributes to the literature by including the role of entrepreneurship education as well as the skills and abilities acquired by students. This paper shows that education might have an indirect effect on the development of entrepreneurial skills. But in turn it will foster Entrepreneurial Intentions. In this context, the purpose of this research is to analyze the entrepreneurial intentions of students and the factors of psychological characteristics, which influence their intention to become entrepreneurs.

2. Literature Review and Hypothesis

2.1 Entrepreneurial Intentions (EI)

In recent years, entrepreneurship has been a major thing for job creation and economic growth. Government and educational institutions' interest shows an increase in promoting entrepreneurship. Many universities consider that investing in entrepreneurship education is very important for social and economic development in society (Gido-Lopez et al., 2018). [16] Such education can help to develop students' knowledge, skills and intentions to start a business (Jönén et al., 2018). [17] Theory of Planned Behavior (TPB; Ajzen, 1991) [18] suggests that intention is a strong predictor of behavior (Ajzen et al., 2009). [19] If applied to entrepreneurship, intention is influenced by general attitudes or entrepreneurial perceptions, normative evaluation of being an entrepreneur, and the feasibility of conducting entrepreneurial behavior (Krueger, 2017). [20] However according to Shapero's (1982) Entrepreneurial Event Model (EEM) proposes that entrepreneurial intentions are dependent on the perception of entrepreneurial desires and eligibility and the tendency of individuals to act. [21] According to Schlaegel and Koenig (2014) it seems that between the two models overlap. [22]

Entrepreneurial Intentions can be interpreted as the initial step of the process of establishing a business that is generally long-term in nature. It is a motivating factor that influences individuals to pursue entrepreneurial results. Intention is a determination to carry out certain activities or produce certain conditions in the future. Entrepreneurial Intentions are the

40 sires that exist in a person to show entrepreneurial behavior (Farida and Mahmud, 2015). [23] Intention is the best predictor of a person's entrepreneurial behavior. Because of that intention is very important for students to become entrepreneurs (Vemmy, 2012). [24] This means that Entrepreneurial Intentions is defined as the desire that exists in 60 person to display entrepreneurial behavior that can be seen from the desire of individuals to be able to take risks, take advantage of opportunities, become a creative and independent person and be able to process existing resources.

Intention is a critical first step to starting and running your own business (Krueger, 2017). [25] Characteristics, factors and processes that lead to intention have an impact on the initial formation and subsequent direction of new ventures (Bird, 2015). [26] Various factors have 22 been identified as influencing entrepreneurial intentions, including personality dimensions, need for achievement, need for autonomy, innovation, stress tolerance, 16 taking, resilience and locus of control (Ahmed et al., 2010; [27] Brandstätter, 2011 [28]). Self-efficacy is also consistently related to Entrepreneurial Intentions (Mauer et al., 2017). [29] Previous research also found that 31 entrepreneurship Education positively and significantly affects Perceived Desirability, Entrepreneurial Self-Efficacy and Entrepreneurial Intentions. Perceived Desirability and Entrepreneurial Self-Efficacy positively and significantly affects Entrepreneurial Intentions (Suratno, Ekawarna & Ade Kusmana, 2019). [30]

59 2.2 Need for Achievement (N-Ach)

Based on McClelland's motivation theory, need for achievement is defined as the desire to do something better or more efficiently than what has been done before. McClelland said that in some businesses the need 30 excel is so strong that it is more motivated than to achieve profit. To maximize satisfaction, individuals with a high need for achievement tend to set goals for themselves which is a challenge but can be achieved. Although these individuals do not avoid risks completely, they assess risks very carefully. Individuals who are motivated by need for achievement do not want to fail and will avoid tasks that involve too much risk. Individuals with low need for achievement generally avoid challenges, responsibilities, and risks (Wiratmo, 2018). [31] Need for achievement can also be interpreted as a desire to complete a task with a target more effectively. Individuals who have a high need for achievement tend to set quite difficult goals and make more risk in the decisions making (Griffin and Moorhead, 2013: 46). [32]

Setyawan (2015) argued that the level of need for achievement will make someone 15 able to overcome all obstacles, produce high quality work, and can compete to be the best. [33] With the need for achievement will make someone able to overcome all obstacles, produce high quality work, and can compete to be the best. In fact, students admit that it is still difficult to find ideas for entrepreneurship, and do not dare to be entrepreneurs because they do not have the capital and are afraid of the risk of failure, because they have formed a mindset of failure in entrepreneurship with the risk of entrepreneurship and they feel less confident that they can succeed if 4 entrepreneurship (Handaru, Agung Wahyu, 2014). [34] Davidsson and Wiklund (1999) state that need for achievement is not an important cause of entrepreneurial behavior. According

to this writer, the concept of need for achievement is unclear in its definition, and has problems in measurement. [35] However, several other researchers have found a relationship between need for achievement and entrepreneurial behavior (Davidsson, 1989), [36] and consider this need for achievement an important factor (Beverland and Lockshin, 2001). [37] Likewise, the results of Anabe Dinis, et al., (2013) showed that there was an influence between (some) psychological characteristics on entrepreneurial intentions. The propensity to risk negatively influences entrepreneurial intentions, meanwhile self-confidence and the need for achievement positively influences entrepreneurial intentions. [38] From the description put forward a hypothesis:

H1: N-Ach affects EI.

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2.3 Locus of Control (LoC)

Locus of control refers to the extent to which people expect that reinforcement (reinforcement) and other things derived from their behavior depends on their behavior or personal characteristics. (Allmon, 2003). [39] Someone who considers good and bad events to be the result of what they do is called an internal locus of control. Whereas individuals who consider events in life based on external forces that control such as the result of luck, chance, fate or the strength of others are called external locus of control. Someone with internal locus of control has responsibility for the actions and accepts responsibility for the results. Whereas someone with an external locus of control tends to blame others or say what happened is the result or result of other events originating from outside themselves.

Correspondingly Rapi and Juaini (2015) suggest that as an event experienced by someone as a reward or reinforcement, it can be stated that each individual has a different locus of control and also causes different reactions in each individual. Locus of control is one of the factors that determine individual behavior and also locus of control is defined as a description of one's beliefs about the source of behavior. [40] Locus of control is a personality dimension that explains that individuals behave influenced by expectations about themselves. When someone perceives that locus of control is within themselves, they will produce greater achievements in their lives because they feel their potential can really be utilized so that they become more creative and productive. This shows that the locus of control is a person's beliefs about the existence of his control, and how much control he has on the successes and failures he experiences and the situations or events that exist in his life.

According to Primandaru (2015) one of the factors related to the success of entrepreneurship is the locus of control. Locus of control is a person's belief about the existence of self - control, and how much control he/she has over the successes and failures he/she had experienced and the situations or events that exist in his/her life. [41] Confidence here is a belief in need for achievement. Locus of control is an individual's beliefs about the relationship between behavior and the consequences it has (Ninik, 2015). [42]

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Locus of control represents the extent to which individuals believe that their achievement depends on their own behavior. Appropriate individuals consider that the achievement of goals

or objectives depends more on their own abilities and actions, not the luck or efforts of others (Kuip and Verheul, 2003). [43] Longitudinal studies by Brockhaus (1980) show the existence of a positive correlation between orientation to the locus of control and entrepreneurial success. [44] In other studies, Brockhaus and Horwitz (1986) reinforce how locus of control can distinguish successful entrepreneurs from unsuccessful entrepreneurs. [45] Robinson et al. (1991) states that internal control leads to positive entrepreneurial attitudes and most students who obtain entrepreneurial learning can develop a higher level of control and self-efficiency. [46] From the description put forward a hypothesis:

H2: LoC has an effect on EI.

H3: LoC and N-Ach affect EI

3. Methods

3.1. Research Design

This study aims to analyze the effect of need for achievement (N-Ach), locus of control (LoC), on Entrepreneurial Intentions (EI) in the context of Jambi University Student in Indonesia. Thus, this study adopted inferential research designs. This was a cross-sectional study as the data in this study was collected at one point of time.

3.1.1. Participants

Participants of this empirical study were students of the Teaching and Education Faculty (FKIP) of the University of Jambi, Indonesia, coming from 6 study programs (Economic Education, English Education, Educational Administration, Elementary School Teacher Education, Pancasila and Citizenship Education, and Biology Education) who have implemented an entrepreneurial curriculum. Respondents are students who have contracted Entrepreneurship courses, students who have attended entrepreneurship learning and practice courses, and students who have graduated from contracting entrepreneurship courses. Of the 575 eligible students, a sample of 236 students (54.31% male-45.69% female) was selected, who were willing to collaborate to voluntarily participate by filling out an online questionnaire. Participants were guaranteed anonymity and were welcome to leave their contact number if they were wished to participate in a follow-up study.

3.1.2. Study Measures

The instrument for measuring all research variables in this study adopted the Entrepreneurial Intention Questionnaire (EIQ) Version 2.05, from F. Liñán & M.J. Rodríguez. The number of the themes and scales were adapted to the needs of on-line data collection and characteristics of students in Indonesia. After adaptation, the items were translated into Indonesian.

Entrepreneurial Intentions: All items were measured using a 5-point Likert scale with response options ranging from 1 (strongly disagree) to 5 (strongly agree). An example of an item

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was EI-1: I want to open my own business field after graduating from college, EI-10: I like to d information about the business world, especially from people who are experienced. The Cronbach's alpha for the scale was 0.877.

Need for Achievement: All items were measured using a 5-point Likert scale with response options ranging from 1 (strongly disagree) to 5 (strongly agree). Sample items included N-Ach-13 I like challenging but high-risk work, N-Ach-10: I need feedback for every job I do. The Cronbach's alpha for the scale was 0.838.

Locus of Control. All items were measured using a 5-point Likert scale with response ons ranging from 1 (strongly disagree) to 5 (strongly agree). Sample items included LoC-1: I have confidence in the ability to realize my dream in entrepreneurship, LoC-10: I need family support to motivate me in entrepreneurship. The Cronbach's alpha for the scale is 0.843.

3.2. Data Analysis

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Using statistical software, data were analyzed to determine whether there is a relationship between variables. Following the accepted standards adopted by several researchers (Koh, 1995; [47] Harris and Gibson, 2008; [48] Keat et al., 2011 [49], we measured the correlation between variables and linear regression models between independent variables and variables dependent.

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4. Results

4.1. Sample Characteristics

Characteristics of the sample are presented in Table 1. The sample is dominated by men (63.14%). As many as 81.78 percent of respondents were less than 20 years old, and 68.64 percent of them did not have a family business background. Most respondents (78.39%) had attended special entrepreneurship training.

Table 1. Summary of descriptive statistic sample characteristics

	Variable	Obs.	Number	Percentage	Cumulative
Merge	Male	149	236	63.14	63.14
	Female	87		36.86	100
Age	<20	193	236	81.78	81.78
	>21	43		18.22	100
Family background	Entrepreneur	74	236	31.36	31.36
	Non-Entrepreneur	162		68.64	100
Entrepreneur Training	Ever	185	236	78.39	78.39
	Never	51		21.61	100

4.2. Validity and Reliability

3 Validity was obtained by looking at the correlation between constructs or factors. Items must correlate more strongly with their own constructs than with others, indicating that they are regarded by respondents as their own theoretical constructs (Messick, 1988). [50] The results in Table 2 show the correlation matrix between the predictor constructors. All constructs, EI, N-Ach, and LoC, correlate strongly with their own constructs. All variables have a positive and significant correlation. Leech et al. (2005) suggest that reliability is an indicator of the extent to

which item differences, measurements, or judgments are mutually consistent, as an ongoing process in which one item provides evidence to support conformity, meaningfulness; and the specific use of conclusions made from scores about individuals from the sample and given context. [51] The approach used to test two important assumptions is Cronbach's alpha - because it is believed to be the most common measurement of reliability scale (Andy, 2005). [52] Under these conditions, alpha values ranged from 0.877 to 0.838 (Table 2). Therefore, surveys can be considered reliable.

Table 2. Summary of test validity & reliability results

Variable	Item	Correlation			Reliability	
		r	Sig.	Status	Alpha Cronbach	Status
Entrepreneurial Intention	EI-1	.52798**	.000	Valid	.877	Reliable
	EI-2	.53775**	.000			
	EI-3	.59643**	.000			
	EI-4	.61462**	.000			
	EI-5	.54417**	.000			
	EI-6	.60242**	.000			
	EI-7	.58284**	.000			
	EI-8	.64538**	.000			
	EI-9	.63203**	.000			
	EI-10	.58129**	.000			
Need for Achievement	N-Ach-1	.48151**	.000	Valid	.838	Reliable
	N-Ach-2	.47964**	.000			
	N-Ach-3	.50718**	.000			
	N-Ach-4	.53347**	.000			
	N-Ach-5	.56167**	.000			
	N-Ach-6	.48506**	.000			
	N-Ach-7	.55858**	.000			
	N-Ach-8	.51407**	.000			
	N-Ach-9	.50874**	.000			
	N-Ach-10	.58763**	.000			
Locus of Control	LoC-1	.52505**	.000	Valid	.843	Reliable
	LoC-2	.48161**	.000			
	LoC-3	.55543**	.000			
	LoC-4	.55105**	.000			
	LoC-5	.58111**	.000			
	LoC-6	.61937**	.000			
	LoC-7	.57797**	.000			
	LoC-8	.48716**	.000			
	LoC-9	.57611**	.000			
	LoC-10	.49124**	.000			

*significant at 0.05, **significant at 0.01

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4.3. Hypothesis Testing

The correlation matrix presented in Table 3 shows that there is a positive relationship between the predictor variables and the dependent variable. The correlation coefficient between N-Ach and EI is 0.792, LoC and EI is 0.741 indicating everything is positive and significant. Table 3 correlation coefficients only show the relationship between variables, but do not give an indication of the direction of causality. Therefore, to determine the direction of quality, the hypothesis is tested by applying linear regression. With the help of the SPSS release 22.0 application, the results are presented in Table 4.

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Table 3. Summary matrix correlations

		Entrepreneurial Intentions
Need for Achievement	Pearson Correlation	.792**
	Sig. (2-tailed)	.000
	N	236
Locus of Control	Pearson Correlation	.741**
	Sig. (2-tailed)	.000
	N	236
Entrepreneurial Intentions	Pearson Correlation	1
	Sig. (2-tailed)	.000
	N	236

** Correlation is significant at the 0.01 level (2-tailed).

Table 4. Summary hypothesis test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	9.845	3.479		2.830	.005
Need for Achievement	.880	.044	.792	19.850	.000
2 (Constant)	12.321	3.939		3.128	.002
Locus of Control	.840	.050	.741	16.897	.000
3 (Constant)	6.233	3.602		1.730	.085
Need for Achievement	.654	.084	.589	7.789	.000
Locus of Control	.270	.086	.238	3.149	.002

Dependent Variable: Entrepreneurial Intentions

Based on Table 4, it showed that the direction of causality between variables is positive and significant, indicating that all proposed hypotheses are accepted. This means that there is a positive and significant influence between N-Ach on IE, as well as LoC on IE. Based on the results of the analysis of the study obtained a coefficient so that it can form the equation $Y = 6.233 + 0.589X_1 + 0.238X_2 + e$. From the multiple linear regression equation, a constant of 6.233 is obtained, meaning that if the EI variable is influenced by the two independent variables (N-Ach and LoC) then the magnitude of EI is 6.233. The magnitude of the regression coefficient for the N-Ach variable of 0.589 is positive, meaning that when N-Ach has increased or added by one unit will cause an increase in EI of 0.589 with the assumption that the LoC is fixed or the same. Then the LoC regression coefficient of 0.238 is positive, meaning that at this time the LoC has increased or added by one-unit will cause an increase in EI of 0.238 with the assumption that N-Ach is fixed or the same.

5. Discussion and Conclusions

This study explained the influence of psychological characteristics on EI, the results indicated that there is a significant positive effect between N-Ach on EI, LoC on EI which means the higher N-Ach funds or LoC, then the resulting EI will also be higher. The results of this study are in line with research by Nizma and Siregar (2018) found LoC, N-Ach and risk taking as variables that have a significant effect on EI. [53] LoC has a direct positive effect on EI (Afifah, 2015). [54] N-Ach enables one to overcome all obstacles, produce high quality work, and can compete to be the best. In this case the meaning will increase EI. Besides personality characteristics such as N-Ach is one of the personality characteristics of someone who will encourage someone to have an EI (Setyawan, 2015). [55] Because basically also LoC is a belief that an individual has about the cause or factor of an event in life whether it is a success or a failure in achieving a hope or a desire. These factors can come from within themselves such as behavior or effort that has been done and other factors can be due to luck, or opportunity factors.

These two findings make it clear that to increase the level of entrepreneurial intentions, efforts must focus on two different directions: first, making entrepreneurship become an attractive career for students, for example, by presenting entrepreneurs as role models, emphasizing the benefits of entrepreneurship, developing a culture that supports entrepreneurship and, secondly, develop entrepreneurial abilities and confidence. Regarding this latter aspect, given that psychological characteristics are closely related to self-esteem, it is important to note that special efforts are needed to strengthen this aspect in entrepreneurial

learning, because as mentioned by Scott et al. (1996), as students get older, their self-esteem decreases. [56]

This finding is also in line with the conclusions by Bakotic and Kruzic (2010): according to this researchers, the entrepreneurship education program contributes to increasing perceptions about important aspects of entrepreneurship, as well as creating a realistic vision of entrepreneurial problems. Thus, the researcher advocates the need for permanent education for students, which must focus on developing additional competencies and skills needed later in the market context. [57] Regarding the relationship between psychological characteristics and entrepreneurial intentions, our results indicate that a relationship does exist. In addition, many studies support a positive correlation between orientation to entrepreneurship (De Vries, 1977; Begley and Boyd, 1987; Beverland and Lockshin, 2001; Brockhaus, 1980; Brockhaus and Horvath, 1986; Robinson et al., 1991). Likewise, the evidence from the literature review suggests how entrepreneurs are significantly more innovative than non-entrepreneurs (Robinson et al., 1991). [58]

The purpose of this study explains the understanding of whether students have entrepreneurial characteristics and whether these characteristics are related to entrepreneurial intentions. Our results indicate that students have entrepreneurial characteristics at a fairly high level, such as innovation, locus of control, need of achievement and tolerance for ambiguity, but this has nothing to do with the intention to start a business. Previous studies have shown that these characteristics are important features of entrepreneurs and must be incorporated into entrepreneurship education (Neck and Greene, 2011; [59] Jusoh et al., 2011 [60]). Bearing this in mind, the challenge for educators at this stage is to preserve, or enhance, these psychological characteristics, while simultaneously making students more confident, more aware about, and more interested in entrepreneurial career. In other words, it is necessary to develop motivation to become an entrepreneur (including specific motivational characteristics such as locus of control and self-efficacy beliefs) as a key aspect in developing an entrepreneurial curriculum, because, as mentioned by Somuncuoglu and Yildirim (1999), motivation is the driving force for student learning goals. [61]

6. Limitations and Further Research

In interpreting the results of the study, we can point out some limitations regarding methodological aspects. First, this study uses a self-report questionnaire, which brings opportunities for response bias. Second, the sample only included students from one Faculty. In addition, the sample size is relatively small. These two factors suggest several precautions in the generalization of our results. Furthermore, it should also be noted that the measurement scale used needs to be retested for future studies. Discriminatory validity is not clear on all indicators, with some of them showing high cross-loadings in other constructions. There are also some limitations associated with entrepreneurial intentions. Because, some authors in the line of behavioral research (eg Gartner, 1989) stated that behavioral characteristics are more important than psychological characteristics, because entrepreneurship is more related to actions that result from behavior, and behavior is more easily changed than personality. However, other writers assume that there is actually a relationship not only between both behavior and entrepreneurship

but also between psychological and behavioral characteristics. This relationship is not considered in this work.

Based on the explanation above, directions for future research may need to be proposed. Considering methodological aspects, this study must be replicated by including more Faculties and more students as respondents to ensure generalization of the results. Future research should also consider the limitations of the other methodologies mentioned above to improve the reliability and validity of the results. Regarding the content aspect, the model must be developed through the incorporation of other types of variables, specifically those related to behavioral characteristics. This will enrich the study of the relationship between psychological characteristics, behavioral characteristics and entrepreneurial intentions.

REFERENCES

- [1] Adnyana, I Gusti Lanang Agung, dan Ni Made Purnami. 2016, "Pengaruh Pendidikan Kewirausahaan, *Self Efficacy* dan *Locus of Control* pada Niat Berwirausaha" *e-jurnal Manajemen Unud*, Vol. 5, No, 2, hlm. 160-118.
- [2] Acs, Z.J. and Szerb, L. (2010), "The global entrepreneurship and development index (GEDI)", Paper presented at the *Summer Conference on "Opening up Innovation: Strategy, Organization and Technology"*, Imperial College London Business School, 16-18 June.
- [3] Saeed, S., Yousafzai, S. Y., Yani-De-Soriano, M., & Muffatto, M. (2015). The role of perceived university support in the formation of students' entrepreneurial intention. *Journal of Small Business Management*, Vol. 53 No. 4, pp. 1127-1145.
- [4] Schmitz, A., Urbano, D., Dandolini, G.A., de Souza, J.A. and Guerrero, M. (2017), "Innovation and entrepreneurship in the academic setting: a systematic literature review", *International Entrepreneurship and Management Journal*, Vol. 13 No. 2, pp. 369-395.
- [5] Genesca, E., Urbano, D., Capelleras, J.L., Gualarte, C. and Verge, J. (Coord.) (2003), *Creació de empreses-entrepreneurship. Homenaje al profesor Jose' Mari'a Veciana Verge's*, Universitat Autònoma de Barcelona, Servei de Publicacions, Barcelona.
- [6] Schiavone, F. (2011), "Strategic reactions to technology competition: a decision-making model", *Management Decision*, Vol. 49 No. 5, pp. 801-9.
- [7] Stauvermann, P.J. and Kumar, R.R. (2017), "Enhancing growth and welfare through debt-financed education", *Economic research-Ekonomska istraživanja*, Vol. 30 No. 1, pp. 207-222.
- [8] Ribeiro, D., Roig, S. and Tansky, J. (2010), "Linking entrepreneurship and human resources in globalization", *Human Resource Management*, Vol. 49 No. 2, pp. 217-223.
- [9] Sanz, R., Peris, J.A. and Escámez, J. (2017), "Higher education in the fight

against poverty from the capabilities approach: the case of Spain”, *Journal of Innovation & Knowledge*, Vol. 2 No. 2, pp. 53-66.

- [10] Martínez-Climent, C., Zorio-Grima, A. and Ribeiro-Soriano, D. (2018), “Financial return crowdfunding: literature review and bibliometric analysis”, *International Entrepreneurship and Management Journal*, Vol. 14 No. 3, pp. 527-553.
- [11] Kabók, J., Radišić, S. and Kuzmanović, B. (2017), “Cluster analysis of higher-education competitiveness in selected European countries”, *Economic research-Ekonomska istraživanja*, Vol. 30 No. 1, pp. 845-857.
- [12] Clara Gieure, Maria del Mar Benavides-Espinosa, Salvador Roig-Dobón, (2019). "Entrepreneurial intentions in an international university environment", *International Journal of Entrepreneurial Behavior & Research*, Permanent link to this document:<https://doi.org/10.1108/IJEBR-12-2018-0810>
- [13] Turker, D. and Sonmez Selçuk, S. (2009), “Which factors affect entrepreneurial intention of university students?”, *Journal of European Industrial Training*, Vol. 33 No. 2, pp. 142-159.
- [14] Henderson, R. and Robertson, M. (2000), “Who wants to be an entrepreneur? Young adult attitudes to entrepreneurship as a career”, *Career Development International*, Vol. 5 No. 6, pp. 279-287.
- [15] Kirby, D.A. and Ibrahim, N. (2011), “The case for (social) entrepreneurship education in Egyptian universities”, *Education+ Training*, Vol. 53 No. 5, pp. 403-415.
- [16] Garrido-Lopez, M., Hillon, Y.C., Cagle, W. and Wright, E. (2018), “Project-based strategic management education: a client perspective on key challenges”, *Journal of Small Business Strategy*, Vol. 28 No. 2, pp. 68-79.
- [17] Ilonen, S., Heinonen, J. and Stenholm, P. (2018), “Identifying and understanding entrepreneurial decision-making logics in entrepreneurship education”, *International Journal of Entrepreneurial Behavior and Research*, Vol. 24 No. 1, pp. 59-80.
- [18] Ajzen, I. (1991), “The theory of planned behavior”, *Organizational Behavior and Human Decision Processes*, Vol. 50 No. 2, pp. 179-211.
- [19] Ajzen, I., Csasch, C. and Flood, M. (2009), “From intentions to behavior: implementation intention, commitment, and conscientiousness”, *Journal of Applied Social Psychology*, Vol. 39 No. 6, pp. 1356-1372.
- [20] Krueger, N. (2017), “Entrepreneurial intentions are dead: long live entrepreneurial intentions”, in Carsund, A. and Brännback, M. (Eds), *Revisiting the Entrepreneurial Mind: Inside the Black Box: An Expanded*

Edition, Springer International Publishing, Cham, pp. 13-34.

- [21] Shapero, A. (1982), "Social dimensions of entrepreneurship", in Kent, C., Sexton, D. and Vesper, K. (Eds),
The Encyclopedia of Entrepreneurship, Prentice-Hill, Englewood Cliffs, NJ, pp. 72-90.
- [22] Schlaegel, C. and Koenig, M. (2014), "Determinants of entrepreneurial intent: a meta-analytic test and integration of competing models", Entrepreneurship Theory and Practice, Vol. 38 No. 2, pp. 291-332.
- [23] Farida, Ida dan Mahmud. 2015, "Pengaruh *Theory od Planned Behavior* terhadap Intensi Berwirausaha", *Jurnal Ilmiah STIE MDP*, Vol. 5, No. 1, September, hlm 37-46. *Economic Education Analysis Journal* Vol.5, No. 1, Januari, hlm. 273-289.
- [24] Vemmy, Caecilia, S. 2012. "Faktor-Faktor Yang Mempengaruhi Intensi Berwirausaha Siswa Smk" *Jurnal Pendidikan Vokasi*, 2 (1), 117-126.
- [25] Krueger, N. (2017), "Entrepreneurial intentions are dead: long live entrepreneurial intentions", in Carsund, A. and Brännback, M. (Eds), *Revisiting the Entrepreneurial Mind: Inside the Black Box: An Expanded Edition*, Springer International Publishing, Cham, pp. 13-34.
- [26] Bird, B. (2015), "Entrepreneurial intentions research: a review and outlook", *International Review of Entrepreneurship*, Vol. 13 No. 3, pp. 143-168.
- [27] Ahmed, I., Nawaz, M., Ahmad, Z., Shaukat, M., Usman, A., Wasim-ul-Rehman and Ahmed, N. (2010), "Determinants of students' entrepreneurial career intentions: evidence from business graduates", *European Journal of Social Sciences*, Vol. 15 No. 2, pp. 14-22.
- [28] Brandstätter, H. (2011), "Personality aspects of entrepreneurship: a look at five meta-analyses", *Personality and Individual Differences*, Vol. 51 No. 3, pp. 222-230.
- [29] Mauer, R., Neergaard, H. and Linstad, A. (2017), "Self-efficacy: conditioning the entrepreneurial mindset", in Carsund, A. and Brännback, M. (Eds), *Revisiting the Entrepreneurial Mind: Inside the Black Box: An Expanded Edition*, Springer International Publishing, Cham, pp. 293-317.
- [30] Suratno, Ekawarna & Ade Kusmana, (2019). The Analysis of the Effect of Entrepreneurship Education, Perceived Desirability, and Entrepreneurial Self-Efficacy on University Students' Entrepreneurial Intention. *Universal Journal of Educational Research* 7(11): 2507-2518, 2019. <http://www.hrpub.org>. DOI: 10.13189/ujer.2019.071131
- [31] Wiratmo, M. (2018). *Pengantar Kewiraswastaan*. Yogyakarta: Penerbit Andi.

- [32] Griffin, R. W., & Moorhead, G. 2013. *Organizational Behavior: Managing People and Organizations, Ninth Edition*. Mason: South-Western.
- [33] Setyawan, B. 2015. *Peluang usaha*. Yogyakarta: Pustaka Baru Press.
- [34] Handaru, Agung Wahyu, Dkk. 2014, "Membangun Intensi Berwirausaha Melalui *Adversity Quotient*, *Self Efficacy*, Dan *Need For Achievement*", *jurnal ekonomi*, vol.17, No.2, hlm.155-166.
- [35] Davidsson, P. and Wiklund, J. (1999), "Suitable approaches for studying small firm growth: the role of entrepreneurship and small and medium enterprises", Proceedings of the 44th ICSB World Conference, June, 20-23, Napoles.
- [36] Davidsson, P. (1989), Continued Entrepreneurship and Small Firm Business, Stockholm Scholl of Economics, Stockholm.
- [37] Beverland, M. and Lockshin, L. (2001), "Organizational life cycles in small New Zealand wineries", *Journal of Small Business Management*, Vol. 39 No. 4, pp. 354-362.
- [38] Anabela Dinis, Covilhã, Portugal, Arminda do Paco, Joao Ferreira, Ma'rio Raposo and Ricardo Gouveia Rodrigues, (2013), Psychological characteristics and entrepreneurial intentions among secondary students. *Education & Training Vol. 55 No. 8/9, 2013, pp. 763-780*. DOI 10.1108/ET-06-2013-0085.
- [39] Allen P. Bem. (2003), *Personality Theories: Development, Growth And Deversity, 4th Edition*. United States of America, Pearson Education Inch.
- [40] Rapii, Muhammad dan Juaini, Muhammad. (2015). Analisis Pengaruh Locus Of Control, Self Efficacy Dan Need For Achievement Terhadap Intensi Berwirausaha Pada Mahasiswa Program Studi Pendidikan Ekonomi. *Jurnal Educatio. 10 (1), 131-146*.
- [41] Primandaru, Noormalita. 2017. Analisis Faktor-Faktor Yang Berpengaruh Pada Minat Berwirausaha Mahasiswa. *Jurnal Ekonomi. 13(1), 68-78*.
- [42] Ninik, Widyastuti. 2015, "Hubungan Antara *Locus Of Control* Internal Dengan Kematangan Karir Pada Siswa Smk N 1 Bantul", *Jurnal Psikologi, vol.12, No, 2, hlm.82-89*.
- [43] Kuip, I. and Verheul, I. (2003), "Early development of entrepreneurial qualities: the role of initial education", EIM Business & Policy Research, SCALES-paper N200311, Zoetermeer
- [44] Brockhaus, R.H. (1980), "Risk taking propensity of entrepreneurs", *Academy of Management Journal*, Vol. 23 No. 3, pp. 509-520.
- [45] Brockhaus, R.H. and Horwitz, P.S. (1986), "The psychology of the entrepreneur", in Sexton, D.L. and Smilor, R.W. (Eds), *The Art and*

Science of Entrepreneurship, Ballinger, Cambridge, MA, pp. 25-48.

- [46] Robinson, P.B., Stimpson, D.V., Huefner, J.C. and Hunt, H.K. (1991), "An attitude approach to the prediction of entrepreneurship", *Entrepreneurship: Theory and Practice*, Vol. 15 No. 4, pp. 13-31.
- [47] Koh, H.C. (1995), "Factors associated with entrepreneurial inclination: An empirical study of business undergraduates in Hong Kong", *Journal of Small Business Entrepreneurship*, Vol. 12 No. 2, pp. 29-41.
- [48] Harris M.L., and Gibson S.G. (2008a), "Examining the entrepreneurial attitudes of US business students", *Education + Training*, Vol. 50 No. 7, pp. 568-581.
- [49] Keat, O.Y., Selvarajah, C., and Meyer, D. (2011), "Inclination towards entrepreneurship among university students: An empirical study of Malaysian university students", *International Journal of Business and Social Science*, Vol. 2 No. 4, March, pp. 206-220.
- [50] Messick, S. (1988), "Validity", in Linn, R.L. (Ed.), *Educational Measurement*, 3rd ed., American Council on Education/Orix Press, New York, NY, pp. 33-48.
- [51] Leech, N.L., Barrett, K.C. and Morgan, G.A. (2005), *SPSS for Intermediate Statistics: Use and Interpretation*, 2nd ed., Lawrence Erlbaum Associates Publishers, Mahwah, NJ.
- [52] Andy, F. (2005), *Discovering Statistic Using SPSS*, 2nd ed., SAGE Publications, London.
- [53] Nizma, Cut dan Siregar, Arfianti Dina. 2018. Analisis Pengaruh Locus Of Control, Need For Achievement dan Risk Taking Terhadap Intensi Berwirausaha Alumni Mahasiswa Jurusan Akuntansi Politeknik Negeri Medan. *Jurnal Ekonomi dan Bisnis*. 19 (1), 30-37.
- [54] Afifah, Hanifati Sofia. (2015). *Pengaruh Pengaruh need for achivement, locus of control dan sikap siswa terhadap Intensi berwirausaha siswa SMK Negeri 1 Surakarta*. Surakarta: Pascasarjana Universitas Sebelas Maret.
- [55] Setyawan, B. 2015. *Peluang usaha*. Yogyakarta: Pustaka Baru Press.
- [56] Scott, C., Murray, G., Mertens, C. and Dustin, E. (1996), "Student self-esteem and the school system: perceptions and implications", *The Journal of Educational Research*, Vol. 89 No. 5, pp. 286-293.
- [57] Bakotic, D. and Kruzic, D. (2010), "Students' perceptions and intentions towards entrepreneurship: the empirical findings from Croatia", *The Business Review*, Vol. 14 No. 2, pp. 209-215.
- [58] Robinson, P.B., Stimpson, D.V., Huefner, J.C. and Hunt, H.K. (1991), "An attitude approach to the prediction of entrepreneurship", *Entrepreneurship:*

Theory and Practice, Vol. 15 No. 4, pp. 13-31.

- [59] Neck, H.M. and Greene, P.G. (2011), "Entrepreneurship education: known worlds and new frontiers", *Journal of Small Business Management*, Vol. 49 No. 1, pp. 55-70.
- [60] Jusoh, R., Ziyae, B., Asimiran, S. and Kadir, S.A. (2011), "Entrepreneur training needs analysis: implications on the entrepreneurial skills needed for successful entrepreneurs", *The International Business & Economics Research Journal*, Vol. 10 No. 1, pp. 143-148.
- [61] Somuncuoglu, Y. and Yildirim, A. (1999), "Relationship between achievement goal orientations and use of learning strategies", *The Journal of Educational Research*, Vol. 92 No. 5, pp. 267-277.

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<p>explanations why the results of the present study do not comport with findings from other relevant studies?</p> <p>Are theoretical implications and practical significance of the study discussed?</p> <p>Comments:</p> <p>In this part you need to:</p> <ol style="list-style-type: none">1. State the Major Findings of the Study The discussion should begin with a statement of the major findings of the study. This should be the very first paragraph in the discussion. It should be a direct, declarative, and succinct proclamation of the study results.2. Relate the Findings to Those of Similar Studies The discussion section should relate your study findings to those of other studies. Questions raised by previous studies may have served as the motivation for your study. The findings of other studies may support your findings, which strengthens the importance of your study results. It is also important to point out how your study differs from other similar studies.3. Acknowledge the Study's Limitations All studies have limitations. Unfortunately, the limitations of some studies are fatal flaws that preclude publication. However, even the best studies in the most prestigious journals have limitations. It is far better for you to identify and acknowledge your study's limitations than to have them pointed out by a peer-reviewer or a reader.4. Make Suggestions for Further Research Although a study may answer important questions, other questions related to the subject may remain unanswered. Moreover, some unanswered questions may become more focused because of your study. You should make suggestions for further study in the discussion section. <p>The discussion section gives you an opportunity to explain the meaning of your results. When writing the discussion, remember that the focus should be to help the reader understand the study and the highlight should be on the study data.</p>			√	
9. CONCLUSION AND IMPLICATIONS	Excellent	Acceptable	Unsatisfactory	NA

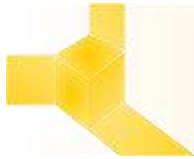


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<p>Does the conclusion succinctly but completely sum up the key takeaway points of the study? Does the conclusion match the objective?</p> <p>Are implications for further implementations, suggestions for further research, and limitations of the current study provided?</p> <p>Comments: A good conclusion should illustrate the key connections between your major points and your study as well as they key connections between your study and the broader discussion. That is; what is the significance of your study in a larger context?</p>		√	√	
10. CLARITY AND ACCURACY	Excellent	Acceptable	Unsatisfactory	NA
<p>Is the language appropriate and fluent?</p> <p>Is Syntax correct and appropriate?</p> <p>Are technical terms defined clearly?</p> <p>Is the manuscript easy to follow? The central idea is clear and supported. The organization is orderly. The manuscript flows smoothly and logically, with the sentences, paragraphs, and sections fitting together and carrying the reader forward comfortably.</p> <p>Comments:</p> <ol style="list-style-type: none"> 1. The point of research is to illuminate and clarify, not to obscure and muddle. So, use language that is clear, straightforward. Avoid a flowery style, obscure words, buzz words and long complex sentences, and you did it well. 2. Most of your empirical research will be written in the past tense since you are reporting on the data collecting process you have already undertaken and the findings that resulted from this. Some sections, like the Review of Literature, will be written in the present tense since you are discussing what others are thinking, and the Discussion will be a combination of past and present. Please revise. 		√ √	√ √	
DISCLOSURE STATEMENT	Excellent	Acceptable	Unsatisfactory	NA
<p>Does author provide a conflict of interest statement? (e.g. No potential conflict of interest was reported by the authors)</p>				√
REFERENCES	Excellent	Acceptable	Unsatisfactory	NA



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RECOMMENDATION (Please mark your choice)

Are in-text citations and references following the APA referencing system?			√	
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Recommendation for this manuscript (indicate your recommendation with an "X"):

___ **Accept** as written without any revisions

___ **Accept** with minor revisions (a second round of review is not necessary).

X **Accept** with major revisions (a second round of review will be necessary)

___ **Reject** (the paper is not suitable for publication)

Analysis on the Effect of Need for Achievement and Locus of Control on Student Entrepreneurial Intentions

Ekawarna
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Tarnak
FKIP Universitas Jambi

ABSTRACT

Purpose - this study aimed to analyze the Student Entrepreneurial Intentions model based on their psychological characteristics. Furthermore, this study sought to explain whether the Need for Achievement (N-Ach) and Locus of Control (LoC) of students has an influence on Entrepreneurial Intentions (EI).

Design / methodology / approach - this study adopted an inferential research design. This was a cross-sectional study because the data in this study were collected at one point in time. The sample of Jambi University FKIP students were chosen which was dominated by men (63.14%), and 81.78 percent of respondents aged less than 20 years. Data were collected through a questionnaire and analyzed using statistical correlation software between variables and linear regression models between independent variables and dependent variables to ensure the relationship between psychological characteristics and EI.

Findings - results indicated that a positive influence on psychological characteristics and EI. N-Ach and LoC positively influence EI, both partially and jointly.

Research limitations / implications - First, this study used a self-report questionnaire, which carried an opportunity for response bias. Second, the sample only included students from one Faculty. In addition, the sample size was low. Therefore, the model needs further development through the incorporation of behavioral characteristics. This will allow understanding of whether behavioral theories and traits are conflicting or complementary.

Originality / value - The results of the study reinforce the idea that psychological characteristics (trait approach) affect EI. The results of this study provide important evidence to improve entrepreneurship education for students in tertiary institutions.

Comment [L1]: Please, follow the IRJE guidelines (APA style) for the manuscript.

Comment [L2]: Abstract should contain approximately 150 to 300 words. It includes four main elements; objectives, methods, findings/ results, and conclusions of the study.

An example:

Abstract

This study aimed to analyze the Student Entrepreneurial Intentions model based on their psychological characteristics. More specifically, this study sought to explain whether the Need for Achievement (N-Ach) and Locus of Control (LoC) of students has an effect on

Entrepreneurial Intentions (EI). An inferential research design with a cross-sectional study was adopted to collect the data. Students from Faculty of Teacher Training and Education, Jambi University, were involved as the sample of the study. As 63.14% of male students was selected by using simple random sampling dominated by 81.78% of respondents aged less than 20 years. Data were collected through questionnaires and analyzed by using statistical correlation software and linear regression models to ensure the relationship between psychological characteristics and EI. The results indicated that there was a positive effect on psychological characteristics and EI on Student Entrepreneurial Intentions. N-Ach and LoC positively affected EI, both partially and jointly. Due to the limited instrument used in this study, only a self-report questionnaire, which carried an opportunity for response bias, and involved male students from a Faculty in Jambi University, therefore this model needs further development through the incorporation of behavioral characteristics by involving larger samples allow understanding on whether behavioral theories and traits are conflicting or complementary.

Keywords: Need for Achievement, Locus of Control, and Entrepreneurial Intentions

Comment [L3]: Please order the keywords alphabetically

1. Introduction

One of the challenges in developing a country is dealing with the problem of unemployment. Data from the Central Statistics Agency (BPS) of the Republic of Indonesia shows that the level of unemployment in Indonesia is still very high. The number of unemployed people in Indonesia in August 2017 reached 5.50% of the total population, of 264,000,000 people. One An alternative way to solveing the problem of unemployment is by empowering the community and educated groups through entrepreneurship programs, which are expected to be able to contribute in the absorption of labor so-as to reduce unemployment and state burdens (Adnyana, Agung, and Purnami, 2016: 25). [1] Today, entrepreneurship is seen as a key factor in the economic and sustainable development. This contributes to growing the country's competitiveness in its national and international markets, overcoming unemployment as a solution to today's growing problems, and encouraging entrepreneurs in bringing innovative ideas to market and achieving their personal growth (Acs and Szerb, 2010). [2]

Comment [L4]: Please follow the IRJE guideline (APA style) to cite in text reference. For instance, (Adnyana, Agung, & Purnami, 2006)

Comment [L5]: Please follow the IRJE guideline (APA style) to cite in text reference.

Higher education institutions are expected to be able to prepare for a better future by developing intellectual competencies and skills so that the younger generation can carry out self-actualization. This shows that in addition to educational support, concepts and business development support are equally important in encouraging students to have entrepreneurial intentions (Saeed, Yousafzai, Yani-De-Soriano & Muffatto, 2015). [3] The aim of offering entrepreneurship education at universities is not only to encourage students to start their own businesses but also to make them more creative and innovative (Schmitz et al., 2017). [4]

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Higher education also plays a role in producing human resources who have entrepreneurial spirit and attitude in overcoming the problem of unemployment by creating jobs

(Genesca` et al., 2003). ~~[5]~~ Entrepreneurial Intentions arises because of its contribution to economic growth, rejuvenation of productive structures, re-launching of certain regions, dynamics of innovative processes and job creation (Schiavone, 2011). ~~[6]~~ Education at the university seeks to shape attitudes, skills, knowledge and competencies to students in order to develop their professional careers. Education, research, and community service are Tridharma ~~that are~~ used as the main mission in the administration of higher education in Indonesia. ~~But~~ Meanwhile, the progress of society and the influence effect of globalization ~~have~~ has added a further mission, ~~namely economic development,~~ to the university domain named as economic development (Stauvermann and Kumar, 2017). [7] Aligning all of these missions is a crucial issue to building an entrepreneurial university (Ribeiro et al., 2010), ~~[8]~~ where entrepreneurship can be seen as the center of economic and community progress (Sanz et al., 2017). ~~[9]~~ Other experts have also recognized that entrepreneurship in the educational environment has a significant impact on Entrepreneurial Intentions (Martínez-Climent et al., 2018; [10] Kabok et al., 2017). [11] Thus, universities ~~must~~ should now include ~~this~~ entrepreneurship education in their curriculum, because it can have direct and indirect effects on skills development, which in turn has a positive effect on Entrepreneurial Intentions (Clara Gieure et al., 2019). ~~[12] At the University of Jambi~~ Jambi University, in particular the Faculty of Teacher Training and Education has included an entrepreneurial course in its curriculum. As one of the main subjects that must be taken by students, Entrepreneurship courses not only provides a theoretical foundation on the concept of entrepreneurship but also ~~to~~ forms the mindset of students to become entrepreneurs. This means that the University has prepared students to start a new business through the integration of experience, skills and knowledge that are essential for developing and expanding a new business venture. The existence of entrepreneurship courses can also increase the desire of students to choose entrepreneurship as a career choice ~~other than career choices~~ to become private employees, civil servants, or BUMN employees, which can significantly direct students towards Entrepreneurial Intentions.

From an academic perspective, many studies have examined entrepreneurship and the factors that drive or attract entrepreneurs to start a business. However, as stated by Turker and Sonmez Selçuk (2009), the majority of studies focused on established entrepreneurs. ~~[13]~~ and little is known about young adults and the factors that drive them to start businesses (Henderson and Robertson, 2000). ~~[14]~~ Referring to the theory of planned behavior (TPB), ~~which it~~ suggests that entrepreneurship is about not only intentional but also pre-planned (Kirby and Ibrahim, 2011). [15] This study analyzes the effect of need for achievement and locus of control both individually and jointly on student entrepreneurial intentions. This study enriches research based on the TPB model by considering the entrepreneurial skills or abilities of students, which are obtained at the university. Thus, the model presented here contributes to the literature by including the role of entrepreneurship education as well as the skills and abilities acquired by students. This paper shows that education might have an indirect effect on the development of entrepreneurial skills. But in turn it will foster Entrepreneurial Intentions. In this context, the purpose of this research is to analyze the entrepreneurial intentions of students and the factors of psychological characteristics, which influence their intention to become entrepreneurs.

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Comment [L11]: In this part, you are suggested to provide information about motivation/ justification for the reviews. Make sure to have a narrow focus and an explicit research question. Indicate these two points clearly in the introduction. Give theoretical or practical justifications for the need of a review. This part should end by explaining why the author(s) have written the article and how they have dealt with the subject area.

2. Literature Review and Hypothesis

2.1 Entrepreneurial Intentions (EI)

In recent years, entrepreneurship has been a major thing for job creation and economic growth. Government and educational institutions' interest shows an increase in promoting entrepreneurship. Many universities consider that investing in entrepreneurship education is very important for social and economic development in society (Garrido-Lopez et al., 2018). [16] Such education can help to develop students' knowledge, skills and intentions to start a business (Ilonen et al., 2018). [17] Theory of Planned Behavior (TPB; Ajzen, 1991) [18] suggests that intention is a strong predictor of behavior (Ajzen et al., 2009). [19] If applied to entrepreneurship, intention is influenced by general attitudes or entrepreneurial perceptions, normative evaluation of being an entrepreneur, and the feasibility of conducting entrepreneurial behavior (Krueger, 2017). [20] However according to Shapero's (1982) Entrepreneurial Event Model (EEM) proposes that entrepreneurial intentions are dependent on the perception of entrepreneurial desires and eligibility and the tendency of individuals to act. [21] According to Schlaegel and Koenig (2014) it seems that between the two models overlap. [22]

Entrepreneurial Intentions can be interpreted as the initial step of the process of establishing a business that is generally long-term in nature. It is a motivating factor that influences individuals to pursue entrepreneurial results. Intention is a determination to carry out certain activities or produce certain conditions in the future. Entrepreneurial Intentions are the desires that exist in a person to show entrepreneurial behavior (Farida and Mahmud, 2015). [23] Intention is the best predictor of a person's entrepreneurial behavior. Because of that intention is very important for students to become entrepreneurs (Vemmy, 2012). [24] This means that Entrepreneurial Intentions is defined as the desire that exists in a person to display entrepreneurial behavior that can be seen from the desire of individuals to be able to take risks, take advantage of opportunities, become a creative and independent person and be able to process existing resources.

Intention is a critical first step to starting and running your own business (Krueger, 2017). [25] Characteristics, factors and processes that lead to intention have an impact on the initial formation and subsequent direction of new ventures (Bird, 2015). [26] Various factors have been identified as influencing entrepreneurial intentions, including personality dimensions, need for achievement, need for autonomy, innovation, stress tolerance, risk taking, resilience and locus of control (Ahmed et al., 2010; [27] Brandstätter, 2011 [28]). Self-efficacy is also consistently related to Entrepreneurial Intentions (Mauer et al., 2017). [29] Previous research also found that Entrepreneurship Education positively and significantly affects Perceived Desirability, Entrepreneurial Self-Efficacy and Entrepreneurial Intentions. Perceived Desirability and Entrepreneurial Self-Efficacy positively and significantly affects Entrepreneurial Intentions (Suratno, Ekawarna & Ade Kusmana, 2019). [30]

2.2 Need for Achievement (N-Ach)

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Based on McClelland's motivation theory (year), need for achievement is defined as the desire to do something better or more efficiently than what has been done before. McClelland (year) said that in some businesses the need to excel is so strong ~~that~~ and it is more motivated than to achieve profit. To maximize satisfaction, individuals with a high need for achievement tend to set goals for themselves, that is a challenge but can be achieved. Although these individuals do not avoid risks completely, they assess risks very carefully. Individuals who are motivated by need for achievement do not want to fail and will avoid tasks that involve too much risk. Individuals with low need for achievement generally avoid challenges, responsibilities, and risks (Wiratmo, 2018). [31] Need for achievement can also be interpreted as a desire to complete a task with a target more effectively. Individuals who have a high need for achievement tend to set quite difficult goals and make more risk in the decisions making (Griffin and Moorhead, 2013: 46). [32]

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Setyawan (2015) argued that the level of need for achievement will make someone able to overcome all obstacles, produce high quality work, and can compete to be the best. [33] With the need for achievement will make someone able to overcome all obstacles, produce high quality work, and ~~can~~ compete to be the best. In fact, students admit that it is still difficult to find ideas for entrepreneurship, and do not dare to be entrepreneurs because they do not have the capital and are afraid of the risk of failure, because they have formed a mindset of failure ~~in entrepreneurship~~ with the risk of entrepreneurship and they feel less confident that they can succeed ~~if entrepreneurship~~ (Handaru, Agung Wahyu, 2014). [34] Davidsson and Wiklund (1999) state that need for achievement is not an important cause of entrepreneurial behavior. According to this writer, the concept of need for achievement is unclear in its definition, and has problems in measurement. [35] However, several other researchers have found a relationship between need for achievement and entrepreneurial behavior (Davidsson, 1989), [36] and consider this need for achievement an important factor (Beverland and Lockshin, 2001). [37] Likewise, the results of Anabe Dinis, et al., (2013) showed that there was an influence between (some) psychological characteristics on entrepreneurial intentions. The propensity to risk negatively ~~influences affects~~ entrepreneurial intentions, meanwhile self-confidence and the need for achievement positively ~~influences affects~~ entrepreneurial intentions. [38] From the description put forward a hypothesis:

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H1: N-Ach affects EI.

2.3 Locus of Control (LoC)

Locus of control refers to the extent to which people expect that reinforcement (~~reinforcement~~) and other things ~~derived from their behavior~~ depends on their behavior or personal characteristics. (Allen, 2003). [39] Someone who considers good and bad events to be the result of what they do is called ~~as~~ an internal locus of control. Whereas, individuals who consider events in life based on external forces that control such as the result of luck, chance, fate or the strength of others are called ~~as~~ external locus of control. Someone with internal locus of control has responsibility for the actions and accepts responsibility for the results. Whereas,

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someone with an external locus of control tends to blame others or say what happened is the ~~result of~~ result of other events originating from outside themselves.

Correspondingly, Rapi and Juaini (2015) suggest that as an event experienced by someone as a reward or reinforcement, it can be stated that each individual has a different locus of control and also causes different reactions in each individual. Locus of control is one of the factors that determine individual behavior and ~~also locus of control~~ is defined as a description of one's beliefs about the source of behavior. ~~[40] Locus of control~~ It is a personality dimension that explains that individuals behave influenced by expectations about themselves. When someone perceives that locus of control is within him or her, he or she will produce greater achievements in their lives because they feel their potential can really be utilized so that they become more creative and productive. This shows that the locus of control is a person's beliefs about the existence of his control, and how much control he has on the successes and failures he experiences and the situations or events that exist in his life.

According to Primandaru (2017) one of the factors related to the success of entrepreneurship is the locus of control. Locus of control is a person's belief about the existence of self - control, and how much control he/she has over the successes and failures he/she had experienced and the situations or events that exist in his/her life. [41] Confidence here is a belief in need for achievement. Locus of control is an individual's beliefs about the relationship between behavior and the consequences it has (Ninik, 2015). [42]

Locus of control represents the extent to which individuals believe that their achievement depends on their own behavior. Appropriate individuals consider that the achievement of goals or objectives depends more on their own abilities and actions, not the luck or efforts of others (Kuip and Verheul, 2003). [43] Longitudinal studies by Brockhaus (1980) show the existence of a positive correlation between orientation to the locus of control and entrepreneurial success. [44] In other studies, Brockhaus and Horwitz (1986) reinforce how locus of control can distinguish successful entrepreneurs from unsuccessful entrepreneurs. [45] Robinson et al. (1991) states that internal control leads to positive entrepreneurial attitudes and most students who obtain entrepreneurial learning can develop a higher level of control and self-efficiency. [46] From the description put forward a hypothesis:

H2: LoC has an effect on EI.

H3: LoC and N-Ach affect EI

3. Methods

3.1. Research Design

This study aims to analyze the effect of need for achievement (N-Ach), locus of control (LoC), on Entrepreneurial Intentions (EI) in the context of Jambi University Student in Indonesia. Thus, this study adopted inferential research designs. This was a cross-sectional study as the data in this study was collected at one point of time.

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3.1.1. Participants

Participants of this empirical study were students of the Teaching and Education Faculty (FKIP) of the University of Jambi, Indonesia, coming from 6 study programs (Economic Education, English Education, Educational Administration, Elementary School Teacher Education, Pancasila and Citizenship Education, and Biology Education) who have implemented an entrepreneurial curriculum. Respondents are students who have contracted Entrepreneurship courses, students who have attended entrepreneurship learning and practice courses, and students who have graduated from contracting entrepreneurship courses. Of the 575 eligible students, a sample of 236 students (54.31% male-45.69% female) was selected, who were willing to collaborate to voluntarily participate by filling out an online questionnaire. Participants were guaranteed anonymity and were welcome to leave their contact number if they were wished to participate in a follow-up study.

Comment [L39]: You have identified the major demographic characteristics of the participants such as their age and gender.

3.1.2. Study Measures

The instrument for measuring all research variables in this study adopted the Entrepreneurial Intention Questionnaire (EIQ) Version 2.05, from F. Liñán & M.J. Rodríguez. The number of the themes and scales were adapted to the needs of on-line data collection and characteristics of students in Indonesia. After adaptation, the items were translated into Indonesian.

Comment [L40]: You should include a description of the sampling method used to select the participants, the sample size, and the response rate. Any other pertinent information should also be included, such as how they were assigned to the experimental treatment conditions, the number of participants that were selected for the study but did not complete it (and why), eligibility and exclusion criteria, and any inducements given to encourage participation.

Comment [L41]: The reliability and quality of the measures should be described.

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Entrepreneurial Intentions. All items were measured using a 5-point Likert scale with response options ranging from 1 (strongly disagree) to 5 (strongly agree). An example of an item was EI-1: I want to open my own business field after graduating from college, EI-10: I like to find information about the business world, especially from people who are experienced. The Cronbach's alpha for the scale was 0.877.

Need for Achievement. All items were measured using a 5-point Likert scale with response options ranging from 1 (strongly disagree) to 5 (strongly agree). Sample items included N-Ach-1: I like challenging but high-risk work, N-Ach-10: I need feedback for every job I do. The Cronbach's alpha for the scale was 0.838.

Comment [L43]: *italic*

Locus of Control. All items were measured using a 5-point Likert scale with response options ranging from 1 (strongly disagree) to 5 (strongly agree). Sample items included LoC-1: I have confidence in the ability to realize my dreams in entrepreneurship, LoC-10: I need family support to motivate me in entrepreneurship. The Cronbach's alpha for the scale is 0.843.

Comment [L44]: *italic*

3.2. Data Analysis

Using statistical software, data were analyzed to determine whether there is a relationship between variables. Following the accepted standards adopted by several researchers (Koh, 1995; [47] Harris and Gibson, 2008; [48] Keat et al., 2011 [49], we measured the correlation between variables and linear regression models between independent variables and variables dependent.

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4. Results

4.1. Sample Characteristics

Comment [L46]: Please, summarize the data that were collected and their statistical treatment.

Characteristics of the sample are presented in Table 1. The sample is dominated by men (63.14%). As many as 81.78 percent of respondents were less than 20 years old, and 68.64 percent of them did not have a family business background. Most respondents (78.39%) had attended special entrepreneurship training.

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Table 1. Summary of descriptive statistic sample characteristics

	Variable	Obs.	Missing	Percentage	Cumulative
Gender	Male	149	236	63.14	63.14
	Female	87		36.86	100
Age	<20	193	236	81.78	81.78
	>21	43		18.22	100
Family background	Entrepreneur	76	236	31.36	31.36
	Non-Entrepreneur	162		68.64	100
Entrepreneur Training	Yes	187	236	78.39	78.39
	No	51		21.61	100

4.2. Validity and Reliability

Validity was obtained by looking at the correlation between constructs or factors. Items must correlate more strongly with their own constructs than with others, indicating that they are regarded by respondents as their own theoretical constructs (Messick, 1988). [50] The results in Table 2 show the correlation matrix between the predictor constructors. All constructs, EI, N-Ach, and LoC, correlate strongly with their own constructs. All variables have a positive and significant correlation. Leech et al. (2005) suggest that reliability is an indicator of the extent to which item differences, measurements, or judgments are mutually consistent, as an ongoing process in which one item provides evidence to support conformity, meaningfulness; and the specific use of conclusions made from scores about individuals from the sample and given context. [51] The approach used to test two important assumptions is Cronbach's alpha - because it is believed to be the most common measurement of reliability scale (Andy, 2005). [52] Under these conditions, alpha values ranged from 0.877 to 0.838 (Table 2). Therefore, surveys can be considered reliable.

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Table 2. Summary of test validity & reliability results

Variable	Item	Correlation	Alpha	Reliability
Entrepreneurial Orientation	EO-1	0.877	0.877	Reliable
	EO-2	0.877		
	EO-3	0.877		
	EO-4	0.877		
	EO-5	0.877		
	EO-6	0.877		
	EO-7	0.877		
	EO-8	0.877		
	EO-9	0.877		
	EO-10	0.877		
Need for Achievement	N-Ach-1	0.838	0.838	Reliable
	N-Ach-2	0.838		
	N-Ach-3	0.838		
	N-Ach-4	0.838		
	N-Ach-5	0.838		
	N-Ach-6	0.838		
	N-Ach-7	0.838		
	N-Ach-8	0.838		
	N-Ach-9	0.838		
	N-Ach-10	0.838		
Sense of Control	LoC-1	0.838	0.838	Reliable
	LoC-2	0.838		
	LoC-3	0.838		
	LoC-4	0.838		
	LoC-5	0.838		
	LoC-6	0.838		
	LoC-7	0.838		
	LoC-8	0.838		
	LoC-9	0.838		
	LoC-10	0.838		

*Significant at 0.05, **Significant at 0.01

Comment [L51]: The table cannot be read clearly. The fonts are too small. Please resize those fonts.

4.3. Hypothesis Testing

The correlation matrix presented in Table 3 shows that there is a positive relationship between the predictor variables and the dependent variable. The correlation coefficient between N-Ach and EI is 0.792, LoC and EI is 0.741 indicating everything is positive and significant. Table 3 correlation coefficients only show the relationship between variables, but do not give an indication of the direction of causality. Therefore, to determine the direction of quality, the hypothesis is tested by applying linear regression. With the help of the SPSS release 22.0 application, the results are presented in Table 4.

Table 3. Summary matrix correlations

		Entrepreneurial Intentions
Need for Achievement	Pearson Correlation	.792**
	Sig. (2-tailed)	.000
	N	238
Locus of Control	Pearson Correlation	.741**
	Sig. (2-tailed)	.000
	N	238
Entrepreneurial Intentions	Pearson Correlation	1
	Sig. (2-tailed)	.000
	N	238

** Correlation is significant at the 0.01 level (2-tailed).

Comment [L52]: The table cannot be read clearly. The fonts are too small. Please resize those fonts.

Table 4. Summary hypothesis test

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1 (Constant)	6.233	1.476			4.224	.000
Need for Achievement	.589	.044	.761		13.358	.000
2 (Constant)	12.121	1.019			11.897	.000
Locus of Control	.238	.010	.741		24.887	.000
3 (Constant)	8.118	1.402			5.788	.000
Need for Achievement	.454	.044	.589		10.309	.000
Locus of Control	.238	.010	.741		24.887	.000

Dependent Variable: Entrepreneurial Intentions

Comment [L53]: The table cannot be read clearly. The fonts are too small. Please resize those fonts.

Comment [L54]: In reporting and illustrating the direction of a statistically significant effect. You presented detailed quantitative data and illustrated main effects on variables.

Based on Table 4, it showed that the direction of causality between variables is positive and significant, indicating that all proposed hypotheses are accepted. This means that there is a positive and significant influence between N-Ach on IE, as well as LoC on IE. Based on the results of the analysis of the study obtained a coefficient so that it can form the equation $Y = 6.233 + 0.589X_1 + 0.238X_2 + e$. From the multiple linear regression equation, a constant of 6.233 is obtained, meaning that if the EI variable is influenced by the two independent variables (N-Ach and LoC) then the magnitude of EI is 6.233. The magnitude of the regression coefficient for the N-Ach variable of 0.589 is positive, meaning that when N-Ach has increased or added by one unit will cause an increase in EI of 0.589 with the assumption that the LoC is fixed or the same. Then the LoC regression coefficient of 0.238 is positive, meaning that at this time the LoC has increased or added by one-unit will cause an increase in EI of 0.238 with the assumption that N-Ach is fixed or the same.

Comment [L55]: Be sure to include sufficient descriptive statistics, such as cell sample size, means, correlations, and standard deviations, so that the nature of the effect can be understood. You should also provide evidence that your study has sufficient a priori power to detect an effect.

Comment [L56]:

Comment [L57]: You gave sufficient explanation to make sure that the reader is able to interpret it correctly. Thank you.

5. Discussion and Conclusions

This study explained the **influence effect** of psychological characteristics on EI, the results indicated that there is a significant positive effect between N-Ach on EI, LoC on EI which means the higher N-Ach funds or LoC, then the resulting EI will also be higher. The results of this study are in line with research by Nizma and Siregar (2018) who found LoC, N-Ach and risk taking as variables that have a significant effect on EI. [53] LoC has a direct positive effect on EI (Afifah, 2015). [54] N-Ach enables one to overcome all obstacles, produce high quality work, and can compete to be the best. In this case the meaning will increase EI. Besides personality characteristics such as N-Ach is one of the personality characteristics of someone who will encourage someone to have an EI (Setyawan, 2015). [55] Because basically also LoC is a belief that an individual has about the cause or factor of an event in life whether it is a success or a failure in achieving a hope or a desire. These factors can come from within themselves such as behavior or effort that has been done and other factors can be due to luck, or opportunity factors.

Comment [L58]: Be consistent to use 'simple past tense'

Comment [L59]: Please follow the IRJE guideline (APA style) to cite in text reference.

Comment [L60]: Please follow the IRJE guideline (APA style) to cite in text reference.

These two findings make it clear that to increase the level of entrepreneurial intentions, efforts must focus on two different directions: first, making entrepreneurship become an attractive career for students, for example, by presenting entrepreneurs as role models, emphasizing the benefits of entrepreneurship, developing a culture that supports entrepreneurship and, secondly, develop entrepreneurial abilities and confidence. Regarding this latter aspect, given that psychological characteristics are closely related to self-esteem, it is important to note that special efforts are needed to strengthen this aspect in entrepreneurial learning, because as mentioned by Scott et al. (1996), as students get older, their self-esteem decreases. [56]

Comment [L61]: Please follow the IRJE guideline (APA style) to cite in text reference.

This finding is also in line with the conclusions by Bakotic and Kruzic (2010). According to these researchers, the entrepreneurship education program contributes to increasing perceptions about important aspects of entrepreneurship, as well as creating a realistic vision of entrepreneurial problems. Thus, the researcher advocates the need for permanent education for students, which must focus on developing additional competencies and skills needed later in the market context. [57] Regarding the relationship between psychological characteristics and entrepreneurial intentions, our results indicate that a relationship does exist. In addition, many studies support a positive correlation between orientation to LoC and entrepreneurship (De Vries, 1977; Begley and Boyd, 1987; Beverland and Lockshin, 2001; Brockhaus, 1980; Brockhaus and Horwitz, 1986; Robinson et al., 1991). Likewise, the evidence from the literature review suggests how entrepreneurs are significantly more innovative than non-entrepreneurs (Robinson et al., 1991). [58]

Comment [L62]: Please follow the IRJE guideline (APA style) to cite in text reference.

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The purpose of this study explains the understanding of whether students have entrepreneurial characteristics and whether these characteristics are related to entrepreneurial intentions. ~~Our~~ The results indicate that students have entrepreneurial characteristics at a fairly high level, such as innovation, locus of control, need of achievement and tolerance for ambiguity, but this has nothing to do with the intention to start a business. Previous studies have shown that these characteristics are important features of entrepreneurs and must be incorporated into entrepreneurship education (Neck and Greene, 2011; [59] Jusoh et al., 2011 [60]). Bearing this in mind, the challenge for educators at this stage is to preserve, or enhance, these psychological

Comment [L65]: Please follow the IRJE guideline (APA style) to cite in text reference.

characteristics, while simultaneously making students more confident, more aware about, and more interested in entrepreneurial careers. In other words, it is necessary to develop motivation to become an entrepreneur (including specific motivational characteristics such as locus of control and self-efficacy beliefs) as a key aspect in developing an entrepreneurial curriculum, because, as mentioned by Somuncuoglu and Yildirim (1999), motivation is the driving force for student learning goals. [61]

Comment [L66]: Please follow the IRJE guideline (APA style) to cite in text reference.

6. Limitations and Further Research

In interpreting the results of the study, we can point out some limitations regarding methodological aspects. First, this study used a self-report questionnaire, which brings opportunities for response bias. Second, the sample only included students from one Faculty. In addition, the sample size ~~is~~ was relatively small. These two factors suggested several precautions in the generalization of our results. Furthermore, it should also be noted that the measurement scale used needs to be re-tested for future studies. Discriminatory validity ~~is~~ was not clear on all indicators, with some of them showing high cross-loadings in other constructions. There ~~are~~ were also some limitations associated with entrepreneurial intentions. Because, some authors in the line of behavioral research (~~eg~~ carried out by Gartner (1989)) stated that behavioral characteristics are more important than psychological characteristics, because entrepreneurship is more related to actions that result from behavior, and behavior is more easily changed than personality. However, other ~~writers~~ researchers assume that there is actually a relationship not only between both behavior and entrepreneurship but also between psychological and behavioral characteristics. This relationship is not considered in this work.

Based on the previous explanation ~~above~~, directions for future research may need to be proposed. Considering methodological aspects, this study ~~must~~ should be replicated by including more Faculties and more students as respondents to ensure generalization of the results. Future research should also consider the limitations of the other methodologies mentioned ~~above~~ to improve the reliability and validity of the results. Regarding the content aspect, the model ~~must~~ be developed through the incorporation of other types of variables, specifically those related to behavioral characteristics. This will enrich the study of the relationship between psychological characteristics, behavioral characteristics and entrepreneurial intentions.

REFERENCES

- [1] Adnyana, I Gusti Lanang Agung, dan Ni Made Purnami. 2016, "Pengaruh Pendidikan Kewirausahaan, *Self Efficacy* dan *Locus of Control* pada Niat Berwirausaha" *e-jurnal Manajemen Unud*, Vol. 5, No, 2, hlm. 160-118.
- [2] Acs, Z.J. and Szerb, L. (2010), "The global entrepreneurship and development index (GEDI)", Paper presented at the *Summer Conference on "Opening up Innovation: Strategy, Organization and Technology"*, Imperial College London Business School, 16-18 June.
- [3] Saeed, S., Yousafzai, S. Y., Yani-De-Soriano, M., & Muffatto, M. (2015). The role of perceived university support in the formation of students' entrepreneurial intention. *Journal of Small Business Management*, Vol. 53

Comment [L67]: Include every reference cited in the text. Do not include additional references. Please find the original source for the internet reference, check it has been correctly cited and cite it directly.

Comment [L68]: In all cases, *consistency* in presentation is the most important consideration.

Comment [L69]: All citations in the text of the study report must be cited accurately and completely in the reference list so that it is possible for readers to locate the works.

No. 4, pp. 1127-1145.

- [4] Schmitz, A., Urbano, D., Dandolini, G.A., de Souza, J.A. and Guerrero, M. (2017), "Innovation and entrepreneurship in the academic setting: a systematic literature review", *International Entrepreneurship and Management Journal*, Vol. 13 No. 2, pp. 369-395.
- [5] Genesca, E., Urbano, D., Capelleras, J.L., Gualarte, C. and Verge, J. (Coord.) (2003), *Creació'n de empreses-entrepreneurship. Homenaje al profesor Jose' Mari'a Veciana Verge's*, Universitat Auto'noma de Barcelona, Servei de Publicacions, Barcelona.
- [6] Schiavone, F. (2011), "Strategic reactions to technology competition: a decision-making model", *Management Decision*, Vol. 49 No. 5, pp. 801-9.
- [7] Stauvermann, P.J. and Kumar, R.R. (2017), "Enhancing growth and welfare through debt-financed education", *Economic research-Ekonomska istraživanja*, Vol. 30 No. 1, pp. 207-222.
- [8] Ribeiro, D., Roig, S. and Tansky, J. (2010), "Linking entrepreneurship and human resources in globalization", *Human Resource Management*, Vol. 49 No. 2, pp. 217-223.
- [9] Sanz, R., Peris, J.A. and Escámez, J. (2017), "Higher education in the fight against poverty from the capabilities approach: the case of Spain", *Journal of Innovation & Knowledge*, Vol. 2 No. 2, pp. 53-66.
- [10] Martínez-Climent, C., Zorio-Grima, A. and Ribeiro-Soriano, D. (2018), "Financial return crowdfunding: literature review and bibliometric analysis", *International Entrepreneurship and Management Journal*, Vol. 14 No. 3, pp. 527-553.
- [11] Kabók, J., Radišić, S. and Kuzmanović, B. (2017), "Cluster analysis of higher-education competitiveness in selected European countries", *Economic research-Ekonomska istraživanja*, Vol. 30 No. 1, pp. 845-857.
- [12] Clara Gieure, Maria del Mar Benavides-Espinosa, Salvador Roig-Dobón, (2019). "Entrepreneurial intentions in an international university environment", *International Journal of Entrepreneurial Behavior & Research*, Permanent link to this document:<https://doi.org/10.1108/IJEBR-12-2018-0810>
- [13] Turker, D. and Sonmez Selçuk, S. (2009), "Which factors affect entrepreneurial intention of university students?", *Journal of European Industrial Training*, Vol. 33 No. 2, pp. 142-159.
- [14] Henderson, R. and Robertson, M. (2000), "Who wants to be an entrepreneur? Young adult attitudes to entrepreneurship as a career", *Career Development International*, Vol. 5 No. 6, pp. 279-287.

- ^[15] Kirby, D.A. and Ibrahim, N. (2011), "The case for (social) entrepreneurship education in Egyptian universities", *Education+ Training*, Vol. 53 No. 5, pp. 403-415.
- ^[16] Garrido-Lopez, M., Hillon, Y.C., Cagle, W. and Wright, E. (2018), "Project-based strategic management education: a client perspective on key challenges", *Journal of Small Business Strategy*, Vol. 28 No. 2, pp. 68-79.
- ^[17] Ilonen, S., Heinonen, J. and Stenholm, P. (2018), "Identifying and understanding entrepreneurial decision-making logics in entrepreneurship education", *International Journal of Entrepreneurial Behavior and Research*, Vol. 24 No. 1, pp. 59-80.
- ^[18] Ajzen, I. (1991), "The theory of planned behavior", *Organizational Behavior and Human Decision Processes*, Vol. 50 No. 2, pp. 179-211.
- ^[19] Ajzen, I., Csasch, C. and Flood, M. (2009), "From intentions to behavior: implementation intention, commitment, and conscientiousness", *Journal of Applied Social Psychology*, Vol. 39 No. 6, pp. 1356-1372.
- ^[20] Krueger, N. (2017), "Entrepreneurial intentions are dead: long live entrepreneurial intentions", in Carsund, A. and Brännback, M. (Eds), *Revisiting the Entrepreneurial Mind: Inside the Black Box: An Expanded Edition*, Springer International Publishing, Cham, pp. 13-34.
- ^[21] Shapero, A. (1982), "Social dimensions of entrepreneurship", in Kent, C., Sexton, D. and Vesper, K. (Eds), *The Encyclopedia of Entrepreneurship*, Prentice-Hill, Englewood Cliffs, NJ, pp. 72-90.
- ^[22] Schlaegel, C. and Koenig, M. (2014), "Determinants of entrepreneurial intent: a meta-analytic test and integration of competing models", *Entrepreneurship Theory and Practice*, Vol. 38 No. 2, pp. 291-332.
- ^[23] Farida, Ida dan Mahmud. 2015, "Pengaruh *Theory od Planned Behavior* terhadap Intensi Berwirausaha", *Jurnal Ilmiah STIE MDP*, Vol. 5, No. 1, September, hlm 37-46. *Economic Education Analysis Journal* Vol.5, No. 1, Januari, hlm. 273-289.
- ^[24] Vemmy, Caecilia, S. 2012. "Faktor-Faktor Yang Mempengaruhi Intensi Berwirausaha Siswa Smk" *Jurnal Pendidikan Vokasi*, 2 (1), 117-126.
- ^[25] Krueger, N. (2017), "Entrepreneurial intentions are dead: long live entrepreneurial intentions", in Carsund, A. and Brännback, M. (Eds), *Revisiting the Entrepreneurial Mind: Inside the Black Box: An Expanded Edition*, Springer International Publishing, Cham, pp. 13-34.
- ^[26] Bird, B. (2015), "Entrepreneurial intentions research: a review and outlook", *International Review of Entrepreneurship*, Vol. 13 No. 3, pp. 143-168.

- [27] Ahmed, I., Nawaz, M., Ahmad, Z., Shaukat, M., Usman, A., Wasim-ul-Rehman and Ahmed, N. (2010), "Determinants of students' entrepreneurial career intentions: evidence from business graduates", *European Journal of Social Sciences*, Vol. 15 No. 2, pp. 14-22.
- [28] Brandstätter, H. (2011), "Personality aspects of entrepreneurship: a look at five meta-analyses", *Personality and Individual Differences*, Vol. 51 No. 3, pp. 222-230.
- [29] Mauer, R., Neergaard, H. and Linstad, A. (2017), "Self-efficacy: conditioning the entrepreneurial mindset", in Carsund, A. and Brännback, M. (Eds), *Revisiting the Entrepreneurial Mind: Inside the Black Box: An Expanded Edition*, Springer International Publishing, Cham, pp. 293-317.
- [30] Suratno, Ekawarna & Ade Kusmana, (2019). The Analysis of the Effect of Entrepreneurship Education, Perceived Desirability, and Entrepreneurial Self-Efficacy on University Students' Entrepreneurial Intention. *Universal Journal of Educational Research* 7(11): 2507-2518, 2019. <http://www.hrpub.org>. DOI: 10.13189/ujer.2019.071131
- [31] Wiratmo, M. (2018). *Pengantar Kewiraswastaan*. Yogyakarta: Penerbit Andi.
- [32] Griffin, R. W., & Moorhead, G. 2013. *Organizational Behavior: Managing People and Organizations, Ninth Edition*. Mason: South-Western.
- [33] Setyawan, B. 2015. *Peluang usaha*. Yogyakarta: Pustaka Baru Press.
- [34] Handaru, Agung Wahyu, Dkk. 2014, "Membangun Intensi Berwirausaha Melalui *Adversity Quotient*, *Self Efficacy*, Dan *Need For Achievement*", *jurnal ekonomi*, vol.17, No.2, hlm.155-166.
- [35] Davidsson, P. and Wiklund, J. (1999), "Suitable approaches for studying small firm growth: the role of entrepreneurship and small and medium enterprises", *Proceedings of the 44th ICSB World Conference*, June, 20-23, Napoles.
- [36] Davidsson, P. (1989), *Continued Entrepreneurship and Small Firm Business*, Stockholm School of Economics, Stockholm.
- [37] Beverland, M. and Lockshin, L. (2001), "Organizational life cycles in small New Zealand wineries", *Journal of Small Business Management*, Vol. 39 No. 4, pp. 354-362.
- [38] Anabela Dinis, Covilhã, Portugal, Arminda do Paco, Joao Ferreira, Ma'rio Raposo and Ricardo Gouveia Rodrigues, (2013), Psychological characteristics and entrepreneurial intentions among secondary students. *Education & Training* Vol. 55 No. 8/9, 2013, pp. 763-780. DOI 10.1108/ET-06-2013-0085.
- [39] Allen P. Bem. (2003), *Personality Theories: Development, Growth And*

Deversity, 4th Edition. United States of America, Pearson Education Inc.

- [40] Rapii, Muhammad dan Juaini, Muhammad. (2015). Analisis Pengaruh Locus Of Control, Self Efficacy Dan Need For Achievement Terhadap Intensi Berwirausaha Pada Mahasiswa Program Studi Pendidikan Ekonomi. *Jurnal Educatio*. 10 (1), 131-146.
- [41] Primandaru, Noormalita. 2017. Analisis Faktor-Faktor Yang Berpengaruh Pada Minat Berwirausaha Mahasiswa. *Jurnal Ekonomi*. 13(1), 68-78.
- [42] Ninik, Widyastuti. 2015, "Hubungan Antara *Locus Of Control* Internal Dengan Kematangan Karir Pada Siswa Smk N 1 Bantul", *Jurnal Psikologi*, vol.12, No, 2, hlm.82-89.
- [43] Kuip, I. and Verheul, I. (2003), "Early development of entrepreneurial qualities: the role of initial education", EIM Business & Policy Research, SCALES-paper N200311, Zoetermeer
- [44] Brockhaus, R.H. (1980), "Risk taking propensity of entrepreneurs", *Academy of Management Journal*, Vol. 23 No. 3, pp. 509-520.
- [45] Brockhaus, R.H. and Horwitz, P.S. (1986), "The psychology of the entrepreneur", in Sexton, D.L. and Smilor, R.W. (Eds), *The Art and Science of Entrepreneurship*, Ballinger, Cambridge, MA, pp. 25-48.
- [46] Robinson, P.B., Stimpson, D.V., Huefner, J.C. and Hunt, H.K. (1991), "An attitude approach to the prediction of entrepreneurship", *Entrepreneurship: Theory and Practice*, Vol. 15 No. 4, pp. 13-31.
- [47] Koh, H.C. (1995), "Factors associated with entrepreneurial inclination: An empirical study of business undergraduates in Hong Kong", *Journal of Small Business Entrepreneurship*, Vol. 12 No. 2, pp. 29-41.
- [48] Harris M.L., and Gibson S.G. (2008a), "Examining the entrepreneurial attitudes of US business students", *Education + Training*, Vol. 50 No. 7, pp. 568-581.
- [49] Keat, O.Y., Selvarajah, C., and Meyer, D. (2011), "Inclination towards entrepreneurship among university students: An empirical study of Malaysian university students", *International Journal of Business and Social Science*, Vol. 2 No. 4, March, pp. 206-220.
- [50] Messick, S. (1988), "Validity", in Linn, R.L. (Ed.), *Educational Measurement*, 3rd ed., American Council on Education/Orix Press, New York, NY, pp. 33-48.
- [51] Leech, N.L., Barrett, K.C. and Morgan, G.A. (2005), *SPSS for Intermediate Statistics: Use and Interpretation*, 2nd ed., Lawrence Erlbaum Associates Publishers, Mahwah, NJ.
- [52] Andy, F. (2005), *Discovering Statistic Using SPSS*, 2nd ed., SAGE Publications, London.

- [53] Nizma, Cut dan Siregar, Arfianti Dina. 2018. Analisis Pengaruh Locus Of Control, Need For Achievement dan Risk Taking Terhadap Intensi Berwirausaha Alumni Mahasiswa Jurusan Akuntansi Politeknik Negeri Medan. *Jurnal Ekonomi dan Bisnis*. 19 (1), 30-37.
- [54] Afifah, Hanifati Sofia. (2015). *Pengaruh Pengaruh need for achivement, locus of control dan sikap siswa terhadap Intensi berwirausaha siswa SMK Negeri 1 Surakarta*. Surakarta: Pascasarjana Universitas Sebelas Maret.
- [55] Setyawan, B. 2015. *Peluang usaha*. Yogyakarta: Pustaka Baru Press.
- [56] Scott, C., Murray, G., Mertens, C. and Dustin, E. (1996), "Student self-esteem and the school system: perceptions and implications", *The Journal of Educational Research*, Vol. 89 No. 5, pp. 286-293.
- [57] Bakotic, D. and Kruzic, D. (2010), "Students' perceptions and intentions towards entrepreneurship: the empirical findings from Croatia", *The Business Review*, Vol. 14 No. 2, pp. 209-215.
- [58] Robinson, P.B., Stimpson, D.V., Huefner, J.C. and Hunt, H.K. (1991), "An attitude approach to the prediction of entrepreneurship", *Entrepreneurship: Theory and Practice*, Vol. 15 No. 4, pp. 13-31.
- [59] Neck, H.M. and Greene, P.G. (2011), "Entrepreneurship education: known worlds and new frontiers", *Journal of Small Business Management*, Vol. 49 No. 1, pp. 55-70.
- [60] Jusoh, R., Ziyae, B., Asimiran, S. and Kadir, S.A. (2011), "Entrepreneur training needs analysis: implications on the entrepreneurial skills needed for successful entrepreneurs", *The International Business & Economics Research Journal*, Vol. 10 No. 1, pp. 143-148.
- [61] Somuncuoglu, Y. and Yildirim, A. (1999), "Relationship between achievement goal orientations and use of learning strategies", *The Journal of Educational Research*, Vol. 92 No. 5, pp. 267-277.



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Criteria to be rated	Excellent	Acceptable	Unsatisfactory	NA
1. TITLE (<u>maximum 12 words</u>)		X		
Does the title reflect the content properly? Does the title clearly or adequately describe the intent of the study? Comments: The title clearly describes the intent of the study. But it needs to be shortened with not more than 12 words.		X X		
2. TABLES AND FIGURES	Excellent	Acceptable	Unsatisfactory	NA
Are the tables and figures understandable and following the IRJE guidelines (APA style)? Comments: The table is understandable, unfortunately it was not follow the IRJE guidelines.			X	
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Are the aim, design and nature of the study well expressed in the abstract? Are participants' characteristics, data collection		X X		



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analysis, and major findings summarized in the abstract? Comments: The aim, nature of the study, participants' characteristics, data collection analysis, and major findings have been summarized in the abstract unfortunately it was more than 150 words.				
4. INTRODUCTION	Excellent	Acceptable	Unsatisfactory	NA
<p>Is the problem described clearly in light of what is already known about the study topic?</p> <p>Is the purpose of the study clearly stated?</p> <p>Is the gap in the literature well-established?</p> <p>Are research questions generated accordingly?</p> <p>Do the authors justify the need for this study, and does this research address the need?</p> <p>Comments: The purpose of the study is clearly stated, the gap in the literature is well-established, and research questions are generated accordingly. The related literatures are up-date. The research questions are not stated.</p>	<p>X</p> <p>X</p> <p>X</p> <p>X</p>			X
5. THE REVIEW OF THE LITERATURE	Excellent	Acceptable	Unsatisfactory	NA
<p>Is the review of the literature up-to-date and comprehensive?</p> <p>Does it address the need for the manuscript?</p> <p>Are the references accurate and in agreement with the statements made in the manuscript?</p> <p>Are the references primary or secondary? The references should generally be the original studies rather than narrative or other reviews or journal supplements.</p> <p>Comments: the some related literatures are not up-to-date but it already comprehensive, it address manuscript's need already.</p>		<p>X</p> <p>X</p> <p>X</p>	X	



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6. METHODS	Excellent	Acceptable	Unsatisfactory	NA
<p>Is the research design clearly described and appropriate for the purpose of the study?</p> <p>Are the participants, their characteristics and their selection methods described in detail and justified?</p> <p>Is the context of the study elaborated to provide in-depth understanding about the setting?</p> <p>Are the purpose, content and usage of data collection tools explained and justified?</p> <p>Are data collection and analysis procedures are clearly explained with a reference to the role and competency of the researcher(s)?</p> <p>For quantitative research, Are the validity and reliability processes in data collection and analyses described sufficiently?</p> <p>For qualitative research, is the credibility or the “trustworthiness described sufficiently?</p> <p>Is the way to protect the rights of human participants described sufficiently?</p> <p>Comments: The participants, their characteristics and their selection methods are described in detail and justified.</p>	<p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p>			
7. FINDINGS	Excellent	Acceptable	Unsatisfactory	NA
<p>Do findings respond to the purpose of the study, and are presented systematically?</p> <p>Are findings supported with sufficient and relevant quotations, examples, tables, and diagrams?</p> <p>Is the description of the findings consistent with the study methodology (e.g., authors refer to the specific group, time period, or other key details in describing the study findings, so that readers understand the findings clearly)?</p> <p>Comment: Findings respond to the purpose of the study, and are presented systematically. The findings also supported with sufficient and relevant quotations and tables, unfortunately the table’s format was not following the IRJE format.</p>		<p>X</p> <p>X</p> <p>X</p>		



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8. DISCUSSION	Excellent	Acceptable	Unsatisfactory	NA
<p>Does the discussion briefly review the principal findings of the current study?</p> <p>Are findings are discussed with a reference to relevant and recent literature?</p> <p>If applicable, do the authors provide possible explanations why the results of the present study do not comport with findings from other relevant studies?</p> <p>Are theoretical implications and practical significance of the study discussed?</p> <p>Comments: Findings are discussed with a reference to relevant and recent literature</p>	<p>X</p> <p>X</p>	<p>X</p>		
9. CONCLUSION AND IMPLICATIONS	Excellent	Acceptable	Unsatisfactory	NA
<p>Does the conclusion succinctly but completely sum up the key takeaway points of the study? Does the conclusion match the objective?</p> <p>Are implications for further implementations, suggestions for further research, and limitations of the current study provided?</p> <p>Comments: Conclusions and implications for further implementations are provided. Theoretical implications and practical significance of the study are also discussed. Implications for further implementations, suggestions for further research, and limitations of the current study are provided.</p>	<p>X</p> <p>X</p>			
10. CLARITY AND ACCURACY	Excellent	Acceptable	Unsatisfactory	NA
<p>Is the language appropriate and fluent?</p> <p>Is Syntax correct and appropriate?</p> <p>Are technical terms defined clearly?</p> <p>Is the manuscript easy to follow?</p> <p>Comments: The central idea is clear and supported. The organization is orderly. The manuscript flows smoothly and logically, with the sentences, paragraphs, and sections fitting together and carrying the reader forward comfortably. Unfortunately some grammatical error should be revised.</p>		<p>X</p> <p>X</p> <p>X</p> <p>x</p>		



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DISCLOSURE STATEMENT	Excellent	Acceptable	Unsatisfactory	NA
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Analysis ~~on~~ the Effect of Need for Achievement and Locus of Control on Student's Entrepreneurial Intentions

Comment [P1]: See IRJE guidelines for the title

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ABSTRACT

Purpose - this study aimed to analyze the Student Entrepreneurial Intentions model based on their psychological characteristics. Furthermore, this study sought to explain whether the Need for Achievement (N-Ach) and Locus of Control (LoC) of students ~~has an~~ influence ~~on~~ their Entrepreneurial Intentions (EI).

Design / methodology / approach - this study adopted an inferential research design. This was a cross-sectional study because the data in this study were collected at one point in time. The sample of Jambi University FKIP students were chosen which was dominated by men (63.14%), and 81.78 percent of respondents aged less than 20 years. Data were collected through a questionnaire and analyzed using statistical correlation software between variables and linear regression models between independent variables and dependent variables to ensure the relationship between psychological characteristics and EI.

Findings - results indicated that ~~there was~~ positive influence on psychological characteristics and EI. N-Ach and LoC positively influence EI, both partially and jointly.

Research limitations / implications - First, this study used a self-report questionnaire, which carried an opportunity for response bias. Second, the sample only included students from one Faculty. In addition, the sample size was ~~low~~ not big. Therefore, the model needs further development through the incorporation of behavioral characteristics. This will allow understanding of whether behavioral theories and traits are conflicting or complementary.

Originality / value - The results of the study reinforce the idea that psychological characteristics (trait approach) affect EI. The results of this study provide important evidence to improve entrepreneurship education for students in tertiary institutions.

Comment [P2]: Abstract must be concise (150 words or less). It consists of the purpose, design and nature of the study as well as participants, data collection tools, data analysis and major findings are summarized in the abstract.

Keywords: Need for Achievement, Locus of Control, and Entrepreneurial Intentions

1. Introduction

One of the challenges in developing a country is dealing with the problem of unemployment. Data from the Central Statistics Agency (BPS) of the Republic of Indonesia shows that unemployment in Indonesia is still very high. The number of unemployed people in Indonesia in August 2017 reached 5.50% of the total population of 264,000,000 people. One alternative to solve~~ing~~ the problem of unemployment is by empowering the community and educat~~ed~~ing groups through entrepreneurship programs, which are expected to be able to contribute in the absorption of labor so as to reduce unemployment and state burdens (Adnyana, Agung, and Purnami, 2016: 25).~~++~~ Today, entrepreneurship is seen as a key factor in the economy and sustainable development. This contributes to grow~~ing~~ the country's competitiveness in its national and international markets, overcoming unemployment as a solution to today's growing problems, and encouraging entrepreneurs in bringing innovative ideas to market and achieving their personal growth (Acs and Szerb, 2010).~~++~~

Higher education institutions are expected to be able to prepare ~~for~~ a better future for young generation by developing intellectual competencies and skills so that the younger generation can carry out self-actualization. This shows that in addition to educational support, concepts and business development support are equally important in encouraging students to have entrepreneurial intentions (Saeed, Yousafzai, Yani-De-Soriano & Muffatto, 2015).~~++~~ The aim of offering entrepreneurship education at universities is not only to encourage students to start their own businesses but also to make them more creative and innovative (Schmitz et al., 2017). ~~++~~

Higher education also plays a role in producing human resources who have entrepreneurial spirit and attitude in overcoming the problem of unemployment by creating jobs (Genesca` et al., 2003). ~~++~~ Entrepreneurial Intentions arises because of its contribution to economic growth, rejuvenation of productive structures, re-launching of certain regions, dynamics of innovative processes and job creation (Schiavone, 2011). ~~++~~ Education at the university seeks to shape attitudes, skills, knowledge and competencies to students in order to develop their professional careers. Education, research and community service are *tri dharma* that are used as the main mission in the administration of higher education in Indonesia. But the progress of society and the influence of globalization have added a further mission, namely economic development, to the university domain (Stauvermann and Kumar, 2017). ~~++~~ Aligning all of these missions is crucial to build~~ing~~ an entrepreneurial university (Ribeiro et al., 2010), ~~++~~ where entrepreneurship can be seen as the center of economic and community progress (Sanz et al., 2017). ~~++~~ Other experts have also recognized that entrepreneurship in the educational environment has a significant impact on Entrepreneurial Intentions (Martínez-Climent et al., 2018; [10] Kabok et al., 2017). ~~++~~ Thus, universities must now include this entrepreneurship education in their curriculum, because it can have direct and indirect effects on skills development, which in turn has a positive effect on Entrepreneurial Intentions (Clara Gieure et al., 2019). ~~++~~ At the University of Jambi Universitas Jambi, in particularly at the Faculty of Teacher Training and Education has included an entrepreneurial course in its curriculum. As one of the main subjects that must be taken by students. Entrepreneurship courses not only provide a

Comment [P3]: The purpose of the study is clearly stated, the gap in the literature is well-established, and research questions are generated accordingly. The related literatures are up-date. The research questions are not stated.

theoretical foundation on the concept of entrepreneurship but also to form the mindset of students to become entrepreneurs. This means that the University has prepared students to start a new business through the integration of experience, skills and knowledge that are essential for developing and expanding a new business venture. The existence of entrepreneurship courses can also increase the desire of students to choose entrepreneurship as a career choice other than career choices to become private employees, civil servants, or BUMN employees, which can significantly direct students towards Entrepreneurial Intentions.

From an academic perspective, many studies have examined entrepreneurship and the factors that drive or attract entrepreneurs to start a business. However, as stated by Turker and Sonmez Selçuk (2009) the majority of studies focus on established entrepreneurs and little is known about young adults and the factors that drive them to start businesses (Henderson and Robertson, 2000). Referring to the theory of planned behavior (TPB), which suggests that entrepreneurship is not only intentional but also pre-planned (Kirby and Ibrahim, 2011). This study analyzes the effect of need for achievement and locus of control both individually and jointly on student entrepreneurial intentions. This study enriches research based on the TPB model by considering the entrepreneurial skills or abilities of students, which are obtained at the university. Thus, the model presented here contributed to the literature by including the role of entrepreneurship education as well as the skills and abilities acquired by students. This paper showed that education might have an indirect effect on the development of entrepreneurial skills. But in turn it will foster Entrepreneurial Intentions. In this context, the purpose of this research is to analyze the entrepreneurial intentions of students and the factors of psychological characteristics, which influence their intention to become entrepreneurs.

2. Literature Review and Hypothesis

2.1 Entrepreneurial Intentions (EI)

In recent years, entrepreneurship has been become a major thing for job creation and economic growth. Government and educational institutions' interest shows an increase in promoting entrepreneurship. Many universities consider that investing in entrepreneurship education is very important for social and economic development in society (Garrido-Lopez et al., 2018). Such education can help to develop students' knowledge, skills and intentions to start a business (Ilonen et al., 2018). Theory of Planned Behavior (TPB; Ajzen, 1991) suggests that intention is a strong predictor of behavior (Ajzen et al., 2009). If applied to entrepreneurship, intention is influenced by general attitudes or entrepreneurial perceptions, normative evaluation of being an entrepreneur, and the feasibility of conducting entrepreneurial behavior (Krueger, 2017). However, according to Shapero's (1982) Entrepreneurial Event Model (EEM) proposes that entrepreneurial intentions are dependent on the perception of entrepreneurial desires and eligibility and the tendency of individuals to act. According to Schlaegel and Koenig (2014) argued that it seems that between the two models overlap.

Entrepreneurial Intentions can be interpreted as the initial step of the process of establishing a business that is generally long-term in nature. It is a motivating factor that influences individuals to pursue entrepreneurial results. Intention is a determination to carry out

certain activities or produce certain conditions in the future. Entrepreneurial Intentions are the desires that exist in a person to show entrepreneurial behavior (Farida and Mahmud, 2015). ^[23] Intention is the best predictor of a person's entrepreneurial behavior. Because ~~of that intention~~ it is very important for students to become entrepreneurs (Vemmy, 2012). ^[24] This means that Entrepreneurial Intentions is defined as the desire that exists in a person to display entrepreneurial behavior that can be seen from the desire of individuals to be able to take risks, take advantage of opportunities, become a creative and independent person and be able to process existing resources.

Intention is a critical first step to start~~ing~~ and to run~~ning~~ your own business (Krueger, 2017). ^[25] Characteristics, factors and processes that lead to intention have an impact on the initial formation and subsequent direction of new ventures (Bird, 2015). ^[26] Various factors have been identified as influencing entrepreneurial intentions, including personality dimensions, need for achievement, need for autonomy, innovation, stress tolerance, risk taking, resilience and locus of control (Ahmed et al., 2010; ^[27] Brandstätter, 2011 ^[28]). Self-efficacy is also consistently related to Entrepreneurial Intentions (Mauer et al., 2017). ^[29] Previous research also found that Entrepreneurship Education positively and significantly affect~~ed~~ Perceived Desirability, Entrepreneurial Self-Efficacy and Entrepreneurial Intentions. Perceived Desirability and Entrepreneurial Self-Efficacy positively and significantly affect~~ed~~ Entrepreneurial Intentions (Suratno, Ekawarna & Ade Kusmana, 2019). ^[30]

2.2 Need for Achievement (N-Ach)

Based on McClelland's motivation theory, need for achievement is defined as the desire to do something better or more efficiently than what has been done before. McClelland said that in some businesses the need to excel is so strong that it is more motivated than to achieve profit. To maximize satisfaction, individuals with a high need for achievement tend to set goals for themselves which is a challenge but can be achieved. Although these individuals do not avoid risks completely, they assess risks very carefully. Individuals who are motivated by need for achievement do not want to fail and will avoid tasks that involve too much risk. Individuals with low need for achievement generally avoid challenges, responsibilities, and risks (Wiratmo, 2018). ^[31] Need for achievement can also be interpreted as a desire to complete a task with a target more effectively. Individuals who have a high need for achievement tend to set quite difficult goals and make more risk in the decisions making (Griffin and Moorhead, 2013: 46). ^[32]

Setyawan (2015) argued that the level of need for achievement will make someone able to overcome all obstacles, produce high quality work, and can compete to be the best. ^[33] With the need for achievement will make someone able to overcome all obstacles, produce high quality work, and can compete to be the best. In fact, students admit that it is still difficult to find ideas for entrepreneurship, and do not dare to be entrepreneurs because they do not have the capital and are afraid of the risk of failure, because they have formed a mindset of failure in entrepreneurship with the risk of entrepreneurship and they feel less confident that they can succeed if entrepreneurship (Handaru, Agung Wahyu, 2014). ^[34] Davidsson and Wiklund (1999)

state that need for achievement is not an important cause of entrepreneurial behavior. According to this writer, the concept of need for achievement is unclear in its definition, and has problems in measurement. ^[35] However, ~~several~~ other researchers have found a relationship between need for achievement and entrepreneurial behavior (Davidsson, 1989), ^[36] and consider this need for achievement as an important factor (Beverland and Lockshin, 2001). ^[37] Likewise, the results of Anabe Dinis, et al., (2013) showed that there was an influence between (some) psychological characteristics on entrepreneurial intentions. The propensity to risk negatively influences entrepreneurial intentions, meanwhile self-confidence and the need for achievement positively influences entrepreneurial intentions. ^[38] From the description put forward a hypothesis:

H1: N-Ach affects EI.

2.3 Locus of Control (LoC)

Locus of control refers to the extent to which people expect that reinforcement ~~(reinforcement)~~ and other things derived from their behavior depends on their behavior or personal characteristics (Allen, 2003). ^[39] Someone who considers good and bad events to be the result of what they do is called an internal locus of control. Whereas individuals who consider events in life based on external forces that control such as the result of luck, chance, fate or the strength of others are called external locus of control. Someone with internal locus of control has responsibility for the actions and accepts responsibility for the results. Whereas someone with an external locus of control tends to blame others or say what happened is the result or result of other events originating from outside themselves.

Correspondingly Rapi and Juaini (2015) suggest that as an event experienced by someone as a reward or reinforcement, it can be stated that each individual has a different locus of control and also causes different reactions in each individual. Locus of control is one of the factors that determine individual behavior and also locus of control is defined as a description of one's beliefs about the source of behavior. ^[40] Locus of control is a personality dimension that explains that individuals behave influenced by expectations about themselves. When someone perceives that locus of control is within themselves, they will produce greater achievements in their lives because they feel their potential can really be utilized so that they become more creative and productive. This shows that the locus of control is a person's beliefs about the existence of his control, and how much control he has on the successes and failures he experiences and the situations or events that exist in his life.

According to Primandaru (2017) one of the factors related to the success of entrepreneurship is the locus of control. Locus of control is a person's belief about the existence of self - control, and how much control he/she has over the successes and failures he/she had experienced and the situations or events that exist in his/her life. ^[41] Confidence here is a belief in need for achievement. Locus of control is an individual's beliefs about the relationship between behavior and the consequences it has (Ninik, 2015). ^[42]

Locus of control represents the extent to which individuals believe that their achievement depends on their own behavior. Appropriate individuals consider that the achievement of goals or objectives depends more on their own abilities and actions, not the luck or efforts of others (Kuip and Verheul, 2003). ~~[43]~~ Longitudinal studies by Brockhaus (1980) show the existence of a positive correlation between orientation to the locus of control and entrepreneurial success. ~~[44]~~ In other studies, Brockhaus and Horwitz (1986) reinforce how locus of control can distinguish successful entrepreneurs from unsuccessful entrepreneurs. ~~[45]~~ Robinson et al. (1991) states that internal control leads to positive entrepreneurial attitudes and most students who obtain entrepreneurial learning can develop a higher level of control and self-efficiency. ~~[46]~~ From the description put forward a hypothesis:

H2: LoC has an effect on EI.

H3: LoC and N-Ach affect EI

3. Methods

3.1. Research Design

This study aimed to analyze the effect of need for achievement (N-Ach), and locus of control (LoC), on Entrepreneurial Intentions (EI) in the context of Jambi University Student in Indonesia. Thus, this study adopted inferential research designs. This was a cross-sectional study as the data in this study was collected at one point of time.

3.1.1. Participants

Participants of this empirical study were students of ~~the Teaching and Education Faculty~~ Faculty of Teacher Training and Educational Sciences (FKIP), Universitas Jambi ~~of the University of Jambi~~, Indonesia, coming from 6 study programs (Economic Education, English Education, Educational Administration, Elementary School Teacher Education, Pancasila and Citizenship Education, and Biology Education) who have implemented an entrepreneurial curriculum. Respondents ~~are~~ were students who have contracted Entrepreneurship courses, students who have attended entrepreneurship learning and practice courses, and students who ~~passed have graduated from contracting~~ entrepreneurship courses. Of the 575 eligible students, a sample of 236 students (54.31% male-45.69% female) was selected, who were willing to collaborate to voluntarily participate by filling out an online questionnaire. Participants were guaranteed anonymity and were welcome to leave their contact number if they were wished to participate in a follow-up study.

3.1.2. Study Measures

The instrument for measuring all research variables in this study adopted the Entrepreneurial Intention Questionnaire (EIQ) Version 2.05, from F. Liñán & M.J. Rodríguez. The number of the themes and scales were adapted to the needs of on-line data collection and characteristics of students in Indonesia. After adaptation, the items were translated into Indonesian.

Entrepreneurial Intentions: All items were measured using a 5-point Likert scale with response options ranging from 1 (strongly disagree) to 5 (strongly agree). An example of an item was EI-1: I want to open my own business field after graduating from college, EI-10: I like to find information about the business world, especially from people who are experienced. The Cronbach's alpha for the scale was 0.877.

Need for Achievement: All items were measured using a 5-point Likert scale with response options ranging from 1 (strongly disagree) to 5 (strongly agree). Sample items included N-Ach-1: I like challenging but high-risk work, N-Ach-10: I need feedback for every job I do. The Cronbach's alpha for the scale was 0.838.

Locus of Control: All items were measured using a 5-point Likert scale with response options ranging from 1 (strongly disagree) to 5 (strongly agree). Sample items included LoC-1: I have confidence in the ability to realize my dreams in entrepreneurship, LoC-10: I need family support to motivate me in entrepreneurship. The Cronbach's alpha for the scale is 0.843.

3.2. Data Analysis

Using statistical software, data were analyzed to determine whether there is a relationship between variables. Following the accepted standards adopted by several researchers (Koh, 1995; ~~447~~ Harris and Gibson, 2008; ~~448~~ Keat et al., 2011 ~~449~~), we measured the correlation between variables and linear regression models between independent variables and variables dependent.

4. Results

4.1. Sample Characteristics

Characteristics of the sample are presented in Table 1. The sample is dominated by men (63.14%). As many as 81.78 percent of respondents were less than 20 years old, and 68.64 percent of them did not have a family business background. Most respondents (78.39%) had attended special entrepreneurship training.

Table 1. Summary of descriptive statistic sample characteristics

Variable	Obs.	Number	Percentage	Cumulative
Gender	Male	149	236	63.14
	Female	87	136	81.78
Age	<20	193	236	81.78
	>21	43	136	95.22
Family background	Entrepreneur	76	236	31.36
	Non-Entrepreneur	160	136	68.64
Entrepreneur Training	Yes	187	236	78.39
	No	49	136	95.22

Comment [P4]: Use APA style for table format

4.2. Validity and Reliability

Validity was obtained by looking at the correlation between constructs or factors. Items must correlate more strongly with their own constructs than with others, indicating that they are regarded by respondents as their own theoretical constructs (Messick, 1988). ~~450~~ The results in Table 2 showed the correlation matrix between the predictor constructors. All constructs, EI, N-Ach, and LoC, correlate strongly with their own constructs. All variables have a positive and significant correlation. Leech et al. (2005) suggest that reliability is an indicator of the extent to which item differences, measurements, or judgments are mutually consistent, as an ongoing process in which one item provides evidence to support conformity, meaningfulness; and the specific use of conclusions made from scores about individuals from the sample and given

context. ~~51~~ The approach used to test two important assumptions is Cronbach's alpha - because it is believed to be the most common measurement of reliability scale (Andy, 2005). ~~52~~ Under these conditions, alpha values ranged from 0.877 to 0.838 (Table 2). Therefore, surveys can be considered reliable.

Table 2. Summary of test validity & reliability results

Variable	Item	Correlation		Status	Reliability	
		r	Sig.		Alpha Coefficient	Status
Entrepreneurial Intentions	Int-1	.673***	.000	Valid	.877	Reliable
	Int-2	.713***	.000			
	Int-3	.784***	.000			
	Int-4	.649***	.000			
	Int-5	.641***	.000			
	Int-6	.702***	.000			
	Int-7	.702***	.000			
	Int-8	.673***	.000			
	Int-9	.673***	.000			
	Int-10	.681***	.000			
Need for Achievement	N-Ach-1	.681***	.000	Valid	.838	Reliable
	N-Ach-2	.673***	.000			
	N-Ach-3	.673***	.000			
	N-Ach-4	.681***	.000			
	N-Ach-5	.681***	.000			
	N-Ach-6	.673***	.000			
	N-Ach-7	.673***	.000			
	N-Ach-8	.673***	.000			
	N-Ach-9	.673***	.000			
	N-Ach-10	.673***	.000			
Locus of Control	LoC-1	.673***	.000	Valid	.838	Reliable
	LoC-2	.681***	.000			
	LoC-3	.673***	.000			
	LoC-4	.673***	.000			
	LoC-5	.673***	.000			
	LoC-6	.673***	.000			
	LoC-7	.673***	.000			
	LoC-8	.673***	.000			
	LoC-9	.673***	.000			
	LoC-10	.673***	.000			

***. Correlation is significant at the 0.01 level (2-tailed).

Comment [P5]: See APA style for table format

4.3. Hypothesis Testing

The correlation matrix presented in Table 3 showed that there ~~is~~ was a positive relationship between the predictor variables and the dependent variable. The correlation coefficient between N-Ach and EI is 0.792, LoC and EI is 0.741 indicating everything is positive and significant. Table 3 correlation coefficients only show the relationship between variables, but do not give an indication of the direction of causality. Therefore, to determine the direction of quality, the hypothesis is tested by applying linear regression. With the help of the SPSS release 22.0 application, the results ~~are~~ were presented in Table 4.

Table 3. Summary matrix correlations

		Entrepreneurial Intentions
Need for Achievement	Pearson Correlation	.792**
	Sig. (2-tailed)	.000
	N	236
Locus of Control	Pearson Correlation	.741**
	Sig. (2-tailed)	.000
	N	236
Entrepreneurial Intentions	Pearson Correlation	1
	Sig. (2-tailed)	.000
	N	236

**. Correlation is significant at the 0.01 level (2-tailed).

Comment [P6]: See APA style for table format

Table 4. Summary hypothesis test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	6.243	1.476		2.840	.003
Need for Achievement	.880	.048	.793	18.539	.000
2 (Constant)	17.121	1.019		3.128	.002
Locus of Control	.840	.010	.741	16.837	.000
3 (Constant)	8.119	1.402		3.719	.000
Need for Achievement	.614	.048	.589	7.789	.000
Locus of Control	.270	.010	.238	3.149	.002

Dependent Variable: Entrepreneurial Intentions

Comment [P7]: See APA style for table format

Based on Table 4, it showed that the direction of causality between variables is positive and significant, indicating that all proposed hypotheses are accepted. This means that there is a positive and significant influence between N-Ach on IE, as well as LoC on IE. Based on the results of the analysis of the study obtained a coefficient so that it can form the equation $Y = 6.233 + 0.589X_1 + 0.238X_2 + e$. From the multiple linear regression equation, a constant of 6.233 is obtained, meaning that if the EI variable is influenced by the two independent variables (N-Ach and LoC) then the magnitude of EI is 6.233. The magnitude of the regression coefficient for the N-Ach variable of 0.589 is positive, meaning that when N-Ach has increased or added by one unit will cause an increase in EI of 0.589 with the assumption that the LoC is fixed or the same. Then the LoC regression coefficient of 0.238 is positive, meaning that at this time the LoC has increased or added by one-unit will cause an increase in EI of 0.238 with the assumption that N-Ach is fixed or the same.

5. Discussion and Conclusions

This study explained the influence of psychological characteristics on EI, the results indicated that there is a significant positive effect between N-Ach on EI, LoC on EI which means the higher N-Ach funds or LoC, then the resulting EI will also be higher. The results of this study are in line with research by Nizma and Siregar (2018) who found LoC, N-Ach and risk taking as variables that have a significant effect on EI. ~~[53]~~ LoC has a direct positive effect on EI (Afifah, 2015). ~~[54]~~ N-Ach enables someone to overcome all obstacles, produce high quality work, and can compete to be the best. In this case the meaning will increase EI. Besides personality characteristics such as N-Ach is one of the personality characteristics of someone who will encourage someone to have an EI (Setyawan, 2015). ~~[55]~~ Because basically also LoC is a belief that an individual has about the cause or factor of an event in life whether it is a success or a failure in achieving a hope or a desire. These factors can come from within themselves such as behavior or effort that has been done and other factors can be due to luck, or opportunity factors.

These two findings ~~make it clear~~ emphasized that to increase the level of entrepreneurial intentions, efforts must focus on two different directions: first, making entrepreneurship become an attractive career for students, for example, by presenting entrepreneurs as role models, emphasizing the benefits of entrepreneurship, developing a culture that supports entrepreneurship. ~~and~~ ~~Secondly~~, develop entrepreneurial abilities and confidence. Regarding this latter aspect, given that psychological characteristics are closely related to self-esteem, it is important to note that special efforts are needed to strengthen this aspect in

Comment [P8]: Re-check grammatical aspect. Use past tense rather than present tense

entrepreneurial learning, because as mentioned by Scott et al. (1996), as students get older, their self-esteem decreases. ~~{56}~~

This finding is also in line with ~~the conclusions~~ study conducted by Bakotic and Kruzic (2010): ~~according to this these researchers~~, it was concluded that the entrepreneurship education program contributed ~~to increasing in increasing~~ perceptions about important aspects of entrepreneurship, as well as creating a realistic vision of entrepreneurial problems. Thus, the researcher advocated the need for permanent education for students, which must focus on developing additional competencies and skills needed ~~later~~ in the market context ~~later on~~. ~~{57}~~ Regarding the relationship between psychological characteristics and entrepreneurial intentions, ~~our results~~ the findings of this study indicated that there was a relationship ~~does exist~~. In addition, many studies support a positive correlation between orientation to LoC and entrepreneurship (De Vries, 1977; Begley and Boyd, 1987; Beverland and Lockshin, 2001; Brockhaus, 1980; Brockhaus and Horwitz, 1986; Robinson et al., 1991). Likewise, the evidence from the literature review suggested how entrepreneurs are significantly more innovative than non-entrepreneurs (Robinson et al., 1991). ~~{58}~~

Comment [P9]: The sources were too old.

The purpose of this study explained the understanding of whether students have entrepreneurial characteristics and whether these characteristics are related to entrepreneurial intentions. ~~Our results~~ The findings indicated that students have entrepreneurial characteristics at a fairly high level, such as innovation, locus of control, need of achievement and tolerance for ambiguity, but this has nothing to do with the intention to start a business. Previous studies have shown that these characteristics are important features of entrepreneurs and must be incorporated into entrepreneurship education (Neck and Greene, 2011; ~~{59}~~ Jusoh et al., 2011 ~~{60}~~). Bearing this in mind, the challenge for educators at this stage is to preserve, or enhance, these psychological characteristics, while simultaneously making students more confident, more aware about, and more interested in entrepreneurial careers. In other words, it is necessary to develop motivation to become an entrepreneur (including specific motivational characteristics such as locus of control and self-efficacy beliefs) as a key aspect in developing an entrepreneurial curriculum, because, as mentioned by Somuncuoglu and Yildirim (1999), motivation is the driving force for student learning goals. ~~{61}~~

6. Limitations and Further Research

In interpreting the results of the study, we can point out some limitations regarding methodological aspects. First, this study used a self-report questionnaire, which brings opportunities for response bias. Second, the sample only included students from one Faculty. In addition, the sample size is relatively small. These two factors suggest several precautions in the generalization of our results. Furthermore, it should also be noted that the measurement scale used needs to be retested for future studies. Discriminatory validity is not clear on all indicators, with some of them showing high cross-loadings in other constructions. There are also some limitations associated with entrepreneurial intentions. Because, some authors in the line of behavioral research (eg Gartner, 1989) stated that behavioral characteristics are more important than psychological characteristics, because entrepreneurship is more related to actions that result from behavior, and behavior is more easily changed than personality. However, other writers

assume that there is actually a relationship not only between both behavior and entrepreneurship but also between psychological and behavioral characteristics. This relationship ~~is~~ was not ~~considered~~ included in this ~~work~~ study.

Based on the explanation above, ~~directions~~ recommendation for future research may need to be proposed. Considering methodological aspects, this study must be replicated by including more Faculties and more students as respondents to ensure generalization of the results. Future research should also consider the limitations of the other methodologies mentioned above to improve the reliability and validity of the results. Regarding the content aspect, the model must be developed through the incorporation of other types of variables, specifically those related to behavioral characteristics. This will enrich the study of the relationship between psychological characteristics, behavioral characteristics and entrepreneurial intentions.

REFERENCES

- [1] Adnyana, I Gusti Lanang Agung, dan Ni Made Purnami. 2016, "Pengaruh Pendidikan Kewirausahaan, *Self Efficacy* dan *Locus of Control* pada Niat Berwirausaha" *e-jurnal Manajemen Unud*, Vol. 5, No, 2, hlm. 160-118.
- [2] Acs, Z.J. and Szerb, L. (2010), "The global entrepreneurship and development index (GEDI)", Paper presented at the *Summer Conference on "Opening up Innovation: Strategy, Organization and Technology"*, Imperial College London Business School, 16-18 June.
- [3] Saeed, S., Yousafzai, S. Y., Yani-De-Soriano, M., & Muffatto, M. (2015). The role of perceived university support in the formation of students' entrepreneurial intention. *Journal of Small Business Management*, Vol. 53 No. 4, pp. 1127-1145.
- [4] Schmitz, A., Urbano, D., Dandolini, G.A., de Souza, J.A. and Guerrero, M. (2017), "Innovation and entrepreneurship in the academic setting: a systematic literature review", *International Entrepreneurship and Management Journal*, Vol. 13 No. 2, pp. 369-395.
- [5] Genesca, E., Urbano, D., Capelleras, J.L., Gualarte, C. and Verge's, J. (Coord.) (2003), *Creació'n de empreses-entrepreneurship. Homenaje al profesor Jose' Mari'a Veciana Verge's*, Universitat Auto'noma de Barcelona, Servei de Publicacions, Barcelona.
- [6] Schiavone, F. (2011), "Strategic reactions to technology competition: a decision-making model", *Management Decision*, Vol. 49 No. 5, pp. 801-9.
- [7] Stauvermann, P.J. and Kumar, R.R. (2017), "Enhancing growth and welfare through debt-financed education", *Economic research-Ekonomika istraživanja*, Vol. 30 No. 1, pp. 207-222.
- [8] Ribeiro, D., Roig, S. and Tansky, J. (2010), "Linking entrepreneurship and human resources in globalization", *Human Resource Management*, Vol. 49 No. 2, pp. 217-223.

Comment [P10]: See APA style for references format

- [9] Sanz, R., Peris, J.A. and Escámez, J. (2017), "Higher education in the fight against poverty from the capabilities approach: the case of Spain", *Journal of Innovation & Knowledge*, Vol. 2 No. 2, pp. 53-66.
- [10] Martínez-Climent, C., Zorio-Grima, A. and Ribeiro-Soriano, D. (2018), "Financial return crowdfunding: literature review and bibliometric analysis", *International Entrepreneurship and Management Journal*, Vol. 14 No. 3, pp. 527-553.
- [11] Kabók, J., Radišić, S. and Kuzmanović, B. (2017), "Cluster analysis of higher-education competitiveness in selected European countries", *Economic research-Ekonomska istraživanja*, Vol. 30 No. 1, pp. 845-857.
- [12] Clara Gieure, Maria del Mar Benavides-Espinosa, Salvador Roig-Dobón, (2019). "Entrepreneurial intentions in an international university environment", *International Journal of Entrepreneurial Behavior & Research*, Permanent link to this document:<https://doi.org/10.1108/IJEBR-12-2018-0810>
- [13] Turker, D. and Sonmez Selçuk, S. (2009), "Which factors affect entrepreneurial intention of university students?", *Journal of European Industrial Training*, Vol. 33 No. 2, pp. 142-159.
- [14] Henderson, R. and Robertson, M. (2000), "Who wants to be an entrepreneur? Young adult attitudes to entrepreneurship as a career", *Career Development International*, Vol. 5 No. 6, pp. 279-287.
- [15] Kirby, D.A. and Ibrahim, N. (2011), "The case for (social) entrepreneurship education in Egyptian universities", *Education+ Training*, Vol. 53 No. 5, pp. 403-415.
- [16] Garrido-Lopez, M., Hillon, Y.C., Cagle, W. and Wright, E. (2018), "Project-based strategic management education: a client perspective on key challenges", *Journal of Small Business Strategy*, Vol. 28 No. 2, pp. 68-79.
- [17] Ilonen, S., Heinonen, J. and Stenholm, P. (2018), "Identifying and understanding entrepreneurial decision-making logics in entrepreneurship education", *International Journal of Entrepreneurial Behavior and Research*, Vol. 24 No. 1, pp. 59-80.
- [18] Ajzen, I. (1991), "The theory of planned behavior", *Organizational Behavior and Human Decision Processes*, Vol. 50 No. 2, pp. 179-211.
- [19] Ajzen, I., Csasch, C. and Flood, M. (2009), "From intentions to behavior: implementation intention, commitment, and conscientiousness", *Journal of Applied Social Psychology*, Vol. 39 No. 6, pp. 1356-1372.
- Krueger, N. (2017), "Entrepreneurial intentions are dead: long live entrepreneurial intentions", in Carsund, A. and Brännback, M. (Eds),

Revisiting the Entrepreneurial Mind: Inside the Black Box: An Expanded Edition, Springer International Publishing, Cham, pp. 13-34.

- [21] Shapero, A. (1982), "Social dimensions of entrepreneurship", in Kent, C., Sexton, D. and Vesper, K. (Eds),
The Encyclopedia of Entrepreneurship, Prentice-Hill, Englewood Cliffs, NJ, pp. 72-90.
- [22] Schlaegel, C. and Koenig, M. (2014), "Determinants of entrepreneurial intent: a meta-analytic test and integration of competing models", Entrepreneurship Theory and Practice, Vol. 38 No. 2, pp. 291-332.
- [23] Farida, Ida dan Mahmud. 2015, "Pengaruh *Theory od Planned Behavior* terhadap Intensi Berwirausaha", *Jurnal Ilmiah STIE MDP*, Vol. 5, No. 1, September, hlm 37-46. *Economic Education Analysis Journal* Vol.5, No, 1, Januari, hlm. 273-289.
- [24] Vemmy, Caecilia, S. 2012. "Faktor-Faktor Yang Mempengaruhi Intensi Berwirausaha Siswa Smk" *Jurnal Pendidikan Vokasi*, 2 (1), 117-126.
- [25] Krueger, N. (2017), "Entrepreneurial intentions are dead: long live entrepreneurial intentions", in Carsund, A. and Brännback, M. (Eds), Revisiting the Entrepreneurial Mind: Inside the Black Box: An Expanded Edition, Springer International Publishing, Cham, pp. 13-34.
- [26] Bird, B. (2015), "Entrepreneurial intentions research: a review and outlook", *International Review of Entrepreneurship*, Vol. 13 No. 3, pp. 143-168.
- [27] Ahmed, I., Nawaz, M., Ahmad, Z., Shaukat, M., Usman, A., Wasim-ul-Rehman and Ahmed, N. (2010), "Determinants of students' entrepreneurial career intentions: evidence from business graduates", *European Journal of Social Sciences*, Vol. 15 No. 2, pp. 14-22.
- [28] Brandstätter, H. (2011), "Personality aspects of entrepreneurship: a look at five meta-analyses", *Personality and Individual Differences*, Vol. 51 No. 3, pp. 222-230.
- [29] Mauer, R., Neergaard, H. and Linstad, A. (2017), "Self-efficacy: conditioning the entrepreneurial mindset", in Carsund, A. and Brännback, M. (Eds), Revisiting the Entrepreneurial Mind: Inside the Black Box: An Expanded Edition, Springer International Publishing, Cham, pp. 293-317.
- [30] Suratno, Ekawarna & Ade Kusmana, (2019). The Analysis of the Effect of Entrepreneurship Education, Perceived Desirability, and Entrepreneurial Self-Efficacy on University Students' Entrepreneurial Intention. *Universal Journal of Educational Research* 7(11): 2507-2518, 2019. <http://www.hrpub.org>. DOI: 10.13189/ujer.2019.071131
- [31] Wiratmo, M. (2018). *Pengantar Kewiraswastaan*. Yogyakarta: Penerbit Andi.

- [32] Griffin, R. W., & Moorhead, G. 2013. *Organizational Behavior: Managing People and Organizations, Ninth Edition*. Mason: South-Western.
- [33] Setyawan, B. 2015. *Peluang usaha*. Yogyakarta: Pustaka Baru Press.
- [34] Handaru, Agung Wahyu, Dkk. 2014, "Membangun Intensi Berwirausaha Melalui *Adversity Quotient*, *Self Efficacy*, Dan *Need For Achievement*", *jurnal ekonomi*, vol.17, No,2, hlm.155-166.
- [35] Davidsson, P. and Wiklund, J. (1999), "Suitable approaches for studying small firm growth: the role of entrepreneurship and small and medium enterprises", Proceedings of the 44th ICSB World Conference, June, 20-23, Napoles.
- [36] Davidsson, P. (1989), *Continued Entrepreneurship and Small Firm Business*, Stockholm School of Economics, Stockholm.
- [37] Beverland, M. and Lockshin, L. (2001), "Organizational life cycles in small New Zealand wineries", *Journal of Small Business Management*, Vol. 39 No. 4, pp. 354-362.
- [38] Anabela Dinis, Covilhã, Portugal, Arminda do Paco, Joao Ferreira, Ma'rio Raposo and Ricardo Gouveia Rodrigues, (2013), Psychological characteristics and entrepreneurial intentions among secondary students. *Education & Training Vol. 55 No. 8/9, 2013, pp. 763-780. DOI 10.1108/ET-06-2013-0085*.
- [39] Allen P. Bem. (2003), *Personality Theories: Development, Growth And Diversity, 4th Edition*. United States of America, Pearson Education Inc.
- [40] Rapii, Muhammad dan Juaini, Muhammad. (2015). Analisis Pengaruh Locus Of Control, Self Efficacy Dan Need For Achievement Terhadap Intensi Berwirausaha Pada Mahasiswa Program Studi Pendidikan Ekonomi. *Jurnal Educatio. 10 (1), 131-146*.
- [41] Primandaru, Noormalita. 2017. Analisis Faktor-Faktor Yang Berpengaruh Pada Minat Berwirausaha Mahasiswa. *Jurnal Ekonomi. 13(1), 68-78*.
- [42] Ninik, Widyastuti. 2015, "Hubungan Antara *Locus Of Control* Internal Dengan Kematangan Karir Pada Siswa Smk N 1 Bantul", *Jurnal Psikologi*, vol.12, No, 2, hlm.82-89.
- [43] Kuip, I. and Verheul, I. (2003), "Early development of entrepreneurial qualities: the role of initial education", EIM Business & Policy Research, SCALES-paper N200311, Zoetermeer
- [44] Brockhaus, R.H. (1980), "Risk taking propensity of entrepreneurs", *Academy of Management Journal*, Vol. 23 No. 3, pp. 509-520.
- [45] Brockhaus, R.H. and Horwitz, P.S. (1986), "The psychology of the entrepreneur", in Sexton, D.L. and Smilor, R.W. (Eds), *The Art and*

Science of Entrepreneurship, Ballinger, Cambridge, MA, pp. 25-48.

- [46] Robinson, P.B., Stimpson, D.V., Huefner, J.C. and Hunt, H.K. (1991), "An attitude approach to the prediction of entrepreneurship", *Entrepreneurship: Theory and Practice*, Vol. 15 No. 4, pp. 13-31.
- [47] Koh, H.C. (1995), "Factors associated with entrepreneurial inclination: An empirical study of business undergraduates in Hong Kong", *Journal of Small Business Entrepreneurship*, Vol. 12 No. 2, pp. 29-41.
- [48] Harris M.L., and Gibson S.G. (2008a), "Examining the entrepreneurial attitudes of US business students", *Education + Training*, Vol. 50 No. 7, pp. 568-581.
- [49] Keat, O.Y., Selvarajah, C., and Meyer, D. (2011), "Inclination towards entrepreneurship among university students: An empirical study of Malaysian university students", *International Journal of Business and Social Science*, Vol. 2 No. 4, March, pp. 206-220.
- [50] Messick, S. (1988), "Validity", in Linn, R.L. (Ed.), *Educational Measurement*, 3rd ed., American Council on Education/Orix Press, New York, NY, pp. 33-48.
- [51] Leech, N.L., Barrett, K.C. and Morgan, G.A. (2005), *SPSS for Intermediate Statistics: Use and Interpretation*, 2nd ed., Lawrence Erlbaum Associates Publishers, Mahwah, NJ.
- [52] Andy, F. (2005), *Discovering Statistic Using SPSS*, 2nd ed., SAGE Publications, London.
- [53] Nizma, Cut dan Siregar, Arfianti Dina. 2018. Analisis Pengaruh Locus Of Control, Need For Achievement dan Risk Taking Terhadap Intensi Berwirausaha Alumni Mahasiswa Jurusan Akuntansi Politeknik Negeri Medan. *Jurnal Ekonomi dan Bisnis*. 19 (1), 30-37.
- [54] Afifah, Hanifati Sofia. (2015). *Pengaruh Pengaruh need for achivement, locus of control dan sikap siswa terhadap Intensi berwirausaha siswa SMK Negeri 1 Surakarta*. Surakarta: Pascasarjana Universitas Sebelas Maret.
- [55] Setyawan, B. 2015. *Peluang usaha*. Yogyakarta: Pustaka Baru Press.
- [56] Scott, C., Murray, G., Mertens, C. and Dustin, E. (1996), "Student self-esteem and the school system: perceptions and implications", *The Journal of Educational Research*, Vol. 89 No. 5, pp. 286-293.
- [57] Bakotic, D. and Kruzic, D. (2010), "Students' perceptions and intentions towards entrepreneurship: the empirical findings from Croatia", *The Business Review*, Vol. 14 No. 2, pp. 209-215.
- [58] Robinson, P.B., Stimpson, D.V., Huefner, J.C. and Hunt, H.K. (1991), "An attitude approach to the prediction of entrepreneurship", *Entrepreneurship:*

Theory and Practice, Vol. 15 No. 4, pp. 13-31.

- [59] Neck, H.M. and Greene, P.G. (2011), "Entrepreneurship education: known worlds and new frontiers", *Journal of Small Business Management*, Vol. 49 No. 1, pp. 55-70.
- [60] Jusoh, R., Ziyae, B., Asimiran, S. and Kadir, S.A. (2011), "Entrepreneur training needs analysis: implications on the entrepreneurial skills needed for successful entrepreneurs", *The International Business & Economics Research Journal*, Vol. 10 No. 1, pp. 143-148.
- [61] Somuncuoglu, Y. and Yildirim, A. (1999), "Relationship between achievement goal orientations and use of learning strategies", *The Journal of Educational Research*, Vol. 92 No. 5, pp. 267-277.

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Criteria to be rated	Excellent	Acceptable	Unsatisfactory	NA
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		X		
4. INTRODUCTION	Excellent	Acceptable	Unsatisfactory	NA
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5. THE REVIEW OF THE LITERATURE	Excellent	Acceptable	Unsatisfactory	NA
<p>Is the review of the literature up-to-date and comprehensive?</p> <p>Does it address the need for the manuscript?</p> <p>Are the references accurate and in agreement with the statements made in the manuscript?</p> <p>Are the references primary or secondary? The references should generally be the original studies rather than narrative or other reviews or journal supplements.</p> <p>Comments: The author provides some up-date literature and address the need for the manuscript</p>		X X X X		



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6. METHODS	Excellent	Acceptable	Unsatisfactory	NA
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7. FINDINGS	Excellent	Acceptable	Unsatisfactory	NA



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<p>Do findings respond to the purpose of the study, and are presented systematically?</p> <p>Are findings supported with sufficient and relevant quotations, examples, tables, and diagrams?</p> <p>Is the description of the findings consistent with the study methodology (e.g., authors refer to the specific group, time period, or other key details in describing the study findings, so that readers understand the findings clearly)?</p> <p>Comment: Findings respond to the purpose of the study, and are presented systematically. The findings also supported with sufficient and relevant quotations and tables, unfortunately the table's format was not following the IRJE format.</p>		X		
		X		
		X		
8. DISCUSSION	Excellent	Acceptable	Unsatisfactory	NA
<p>Does the discussion briefly review the principal findings of the current study?</p> <p>Are findings are discussed with a reference to relevant and recent literature?</p> <p>If applicable, do the authors provide possible explanations why the results of the present study do not comport with findings from other relevant studies?</p> <p>Are theoretical implications and practical significance of the study discussed?</p> <p>Comments: Findings are discussed with a reference to relevant and recent literature</p>		X		
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		X		
9. CONCLUSION AND IMPLICATIONS	Excellent	Acceptable	Unsatisfactory	NA
<p>Does the conclusion succinctly but completely sum up the key takeaway points of the study? Does the conclusion match the objective?</p> <p>Are implications for further implementations, suggestions for further research, and limitations of the current study provided?</p> <p>Comments: Conclusions and implications for further implementations are provided. Theoretical implications and practical significance of the study are</p>		X		
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also discussed. Implications for further implementations, suggestions for further research, and limitations of the current study are provided.				
10. CLARITY AND ACCURACY	Excellent	Acceptable	Unsatisfactory	NA
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DISCLOSURE STATEMENT	Excellent	Acceptable	Unsatisfactory	NA
Does author provide a conflict of interest statement? (e.g. No potential conflict of interest was reported by the authors)				X
REFERENCES	Excellent	Acceptable	Unsatisfactory	NA
Are in-text citations and references following the APA referencing system? Comments: The author(s) needs to revise both in-text citation and references.			X	

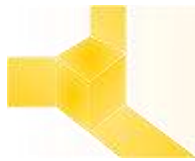
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Analysis ~~on~~ the Effect of Need for Achievement and Locus of Control on Student's Entrepreneurial Intentions

Comment [A1]: See IRJE guidelines for the title

Ekawarna
Yusdi Anra
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Seri Romios
Tarnak
FKIP Universitas Jambi

ABSTRACT

Purpose - this study aimed to analyze the Student Entrepreneurial Intentions model based on their psychological characteristics. Furthermore, this study sought to explain whether the Need for Achievement (N-Ach) and Locus of Control (LoC) of students ~~has an~~ influence ~~on~~ their Entrepreneurial Intentions (EI).

Design / methodology / approach - this study adopted an inferential research design. This was a cross-sectional study because the data in this study were collected at one point in time. The sample of Jambi University FKIP students ~~were chosen which~~ was dominated by men (63.14%), and 81.78 percent of respondents aged less than 20 years. Data were collected through a questionnaire and analyzed using statistical correlation software between variables and linear regression models between independent variables and dependent variables to ensure the relationship between psychological characteristics and EI.

Findings - results indicated that ~~there was~~ positive influence on psychological characteristics and EI. N-Ach and LoC positively influence EI, both partially and jointly.

Research limitations / implications - First, this study used a self-report questionnaire, which carried an opportunity for response bias. Second, the sample only included students from one Faculty. In addition, the sample size was ~~low~~ not big. Therefore, the model needs further development through the incorporation of behavioral characteristics. This will allow understanding of whether behavioral theories and traits are conflicting or complementary.

Originality / value - The results of the study reinforce the idea that psychological characteristics (trait approach) affect EI. The results of this study provide important evidence to improve entrepreneurship education for students in tertiary institutions.

Comment [A2]: Please follow the rule of journal. Make it succinct

Keywords: Need for Achievement, Locus of Control, and Entrepreneurial Intentions

1. Introduction

Comment [A3]: The background is well-presented. The author includes strong rational and gap of the study. However, it is advised to outline, if possible, the research question.

One of the challenges in developing a country is ~~dealing with~~ the problem of unemployment. Data from the Central Statistics Agency (BPS) of the Republic of Indonesia shows that unemployment in Indonesia is still very high. The number of unemployed people in Indonesia in August 2017 reached 5.50% of the total population of 264,000,000 people. One alternative to solve~~ing~~ the problem of unemployment is by empowering the community and educat~~ed~~~~ing~~ groups through entrepreneurship programs, which are expected to be able to contribute in the absorption of labor so as to reduce unemployment and state burdens (Adnyana, Agung, and Purnami, 2016: 25).~~[1]~~ Today, entrepreneurship is seen as a key factor in the economy and sustainable development. This contributes to ~~the growth~~~~ing~~ of the country's competitiveness in its national and international markets, overcoming unemployment as a solution to today's growing problems, and encouraging entrepreneurs in bringing innovative ideas to market and achieving their personal growth (Acs and Szerb, 2010).~~[2]~~

Higher education institutions are expected to be able to prepare ~~for~~ a better future for young generation by developing intellectual competencies and skills so that the younger generation can carry out self-actualization. This shows that in addition to educational support, concepts and business development support are equally important in encouraging students to have entrepreneurial intentions (Saeed, Yousafzai, Yani-De-Soriano & Muffatto, 2015).~~[3]~~ The aim of offering entrepreneurship education at universities is not only to encourage students to start their own businesses but also to make them more creative and innovative (Schmitz et al., 2017).~~[4]~~

Higher education also plays a role in producing human resources who have entrepreneurial spirit and attitude in overcoming the problem of unemployment by creating jobs (Genesca` et al., 2003).~~[5]~~ Entrepreneurial Intentions arises because of its contribution to economic growth, rejuvenation of productive structures, re-launching of certain regions, dynamics of innovative processes and job creation (Schiavone, 2011).~~[6]~~ Education at the university seeks to shape attitudes, skills, knowledge and competencies to students in order to develop their professional careers. Education, research and community service are known as tri dharma ~~that are~~ used as the main mission in the administration of higher education in Indonesia. But the progress of society and the influence of globalization have added a further mission, namely economic development, to the university domain (Stauvermann and Kumar, 2017).~~[7]~~ Aligning all of these missions is crucial to build~~ing~~ an entrepreneurial university (Ribeiro et al., 2010),~~[8]~~ where entrepreneurship can be seen as the center of economic and community progress (Sanz et al., 2017).~~[9]~~ Other experts have also recognized that entrepreneurship in the educational environment has a significant impact on Entrepreneurial Intentions (Martínez-Climent et al., 2018; ~~[10]~~ Kabok et al., 2017).~~[11]~~ Thus, universities must now include this entrepreneurship education in their curriculum, because it can have direct and indirect effects on skills development, which in turn has a positive effect on Entrepreneurial Intentions (Clara Gieure et al., 2019).~~[12]~~ At ~~the University of Jambi~~ Jambi university, ~~in~~ particularly at the Faculty of Teacher Training and Education has included an entrepreneurial course in its curriculum. As one of the main subjects that must be taken by students, ~~e~~Entrepreneurship

courses not only to provide a theoretical foundation on the concept of entrepreneurship but **also** to form the mindset of students to become entrepreneurs. This means that the University has prepared students to start a new business through the integration of experience, skills and knowledge that are essential infor developing and expanding a new business venture. The existence of entrepreneurship courses can also increase the desire of students to choose entrepreneurship as a career choice other than career choices to become private employees, civil servants, or what is BUMN? BUMN employees, which can significantly direct students towards Entrepreneurial Intentions.

From an academic perspective, many studies have examined entrepreneurship and the factors that drive or attract entrepreneurs to start a business. However, as stated by Turker and Sonmez Selçuk (2009), the majority of studies focus on established entrepreneurs ~~113~~ and little is known about young adults and the factors that drive them to start businesses (Henderson and Robertson, 2000). ~~114~~ Referring to the theory of planned behavior (TPB), which suggests that entrepreneurship is not only intentional but also pre-planned (Kirby and Ibrahim, 2011). ~~115~~ This study analyzes the effect of need for achievement and locus of control both individually and jointly on student entrepreneurial intentions. This study enriches research based on the TPB model by considering the entrepreneurial skills or abilities of students, which are obtained at the university. Thus, the model presented here contribute~~ed~~ to the literature by including the role of entrepreneurship education as well as the skills and abilities acquired by students. This paper show~~ed~~ that education might have an indirect effect on the development of entrepreneurial skills. But in turn it will foster Entrepreneurial Intentions. In this context, the purpose of this research is to analyze the entrepreneurial intentions of students and the factors of psychological characteristics, which influence their intention to become entrepreneurs.

2. Literature Review and Hypothesis

2.1 Entrepreneurial Intentions (EI)

In recent years, entrepreneurship has ~~been~~ become a major aspectthing for job creation and economic growth. Government and educational institutions' interest shows an increase in promoting entrepreneurship. Many universities consider that investing in entrepreneurship education is pivotalvery important for social and economic development in society (Garrido-Lopez et al., 2018). ~~116~~ Such education can help to develop students' knowledge, skills and intentions to start a business (Ilonen et al., 2018). ~~117~~ Theory of Planned Behavior (TPB; Ajzen, 1991) ~~118~~ suggests that intention is a strong predictor of behavior (Ajzen et al., 2009). ~~119~~ If it is applied to entrepreneurship, intention is influenced by general attitudes or entrepreneurial perceptions, normative evaluation of being an entrepreneur, and the feasibility of conducting entrepreneurial behavior (Krueger, 2017). ~~120~~ However, ~~according to~~ Shapero's (1982) Entrepreneurial Event Model (EEM) proposes that entrepreneurial intentions ~~are dependent~~ on the perception of entrepreneurial desires and eligibility and the tendency of individuals to act. ~~121~~ ~~According to~~ Schlaegel and Koenig (2014) ~~argued that it seems that~~ between the two models overlap. ~~122~~

Comment [A4]: In what way they are overlapped?
Further explanation is required.

Entrepreneurial Intentions can be interpreted as the initial step of the process of establishing a business that is generally long-term in nature. It is a motivating factor that influences individuals to pursue entrepreneurial results. Intention is a determination to carry out certain activities or produce certain conditions in the future. Entrepreneurial Intentions are the desires that exist in a person to show entrepreneurial behavior (Farida ~~&and~~ Mahmud, 2015). ~~[23]~~ Intention is the best predictor of a person's entrepreneurial behavior ~~as. Because of that intention~~ it is ~~very important~~ the reason for students to become entrepreneurs (Vemmy, 2012). ~~[24]~~ This means that the term Entrepreneurial Intentions is defined as the desire that exists in a person to display entrepreneurial behavior that can be seen from the desire of individuals to be able to take risks, take advantage of opportunities, become a creative and independent person and be able to process existing resources.

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Intention is a critical first step to ~~start~~ing and ~~to running~~ your own business (Krueger, 2017). ~~[25]~~ Characteristics, factors and processes that lead to intention have an impact on the initial formation and subsequent direction of new ventures (Bird, 2015). ~~[26]~~ Various factors have been identified as influencing entrepreneurial intentions, including personality dimensions, need for achievement, need for autonomy, innovation, stress tolerance, risk taking, resilience and locus of control (Ahmed et al., 2010; ~~[27]~~ Brandstätter, 2011 ~~[28]~~). Self-efficacy is also consistently related to Entrepreneurial Intentions (Mauer et al., 2017). ~~[29]~~ Previous research also found that Entrepreneurship Education positively and significantly affect~~ed~~ Perceived Desirability, Entrepreneurial Self-Efficacy and Entrepreneurial Intentions. Perceived Desirability and Entrepreneurial Self-Efficacy positively and significantly affect~~ed~~ Entrepreneurial Intentions (Suratno, Ekawarna & Ade Kusmana, 2019). ~~[30]~~

Comment [A5]: This paragraph is like the collection of "chunks" of information. It is required for the author state his voice by providing summary/conclusion of the related quotations.

2.2 Need for Achievement (N-Ach)

Based on McClelland's motivation theory, need for achievement is defined as the desire to do something better or more efficiently than what has been done before. McClelland (~~year?~~) said that in some businesses the need to excel is so strong that it is more motivated than to achieve profit. To maximize satisfaction, individuals with a high need for achievement tend to set goals ~~to achieve for themselves which is a challenge but can be achieved.~~ Although these individuals do not avoid risks completely, they assess risks very carefully. Individuals who are motivated by need for achievement do not want to fail and will avoid tasks that involve too much risk. Individuals with low need for achievement generally avoid challenges, responsibilities, and risks (Wiratmo, 2018). ~~[31]~~ Need for achievement can also be interpreted as a desire to complete a task with a target more effectively. Individuals who have a high need for achievement tend to set quite difficult goals and make more risk in the decisions making (Griffin and Moorhead, 2013:46). ~~[32]~~

Comment [A6]: Check the clarity of sentence

Setyawan (2015) argued that the level of need for achievement will make someone able to overcome all obstacles, produce high quality work, and can compete to be the best. ~~[33]~~ ~~With the need for achievement will make someone able to overcome all obstacles, produce high quality work, and can compete to be the best.~~ In fact, students admit that it is still difficult to find

Comment [A7]: Redundant. Better to omit the second sentence.

ideas for entrepreneurship, ~~less capital to become entrepreneurs, afraid of failure and less confident to succeed and do not dare to be entrepreneurs because they do not have the capital and are afraid of the risk of failure, because they have formed a mindset of failure in entrepreneurship with the risk of entrepreneurship and they feel less confident that they can succeed if entrepreneurship~~ (Handaru, Agung Wahyu, 2014). ~~[34]~~ Davidsson and Wiklund (1999) state that need for achievement is not an important cause of entrepreneurial behavior. According to ~~these~~ writers, the concept of need for achievement is unclear in its definition, and has problems in measurement. ~~[35]~~ However, ~~several~~ other researchers have found a relationship between need for achievement and entrepreneurial behavior (Davidsson, 1989), ~~[36]~~ and consider this need for achievement as an important factor (Beverland & Lockshin, 2001). ~~[37]~~ Likewise, the results of Anabe Dinis, et al., (2013) showed that there was an influence between (some) psychological characteristics on entrepreneurial intentions. The propensity to risk negatively influences entrepreneurial intentions, meanwhile self-confidence and the need for achievement positively influences entrepreneurial intentions. ~~[38]~~ From the description put forward a hypothesis:

H1: N-Ach affects EI.

2.3 Locus of Control (LoC)

Locus of control refers to the extent to which people expect that reinforcement ~~(reinforcement)~~ and other things derived from their behavior depends on their behavior or personal characteristics (Allen, 2003). ~~[39]~~ Someone who considers good and bad events to be the result of what they do is called an internal locus of control. Whereas individuals who consider events in life based on external forces that control such as the result of luck, chance, fate or the strength of others are called external locus of control. Someone with internal locus of control has responsibility for the actions and accepts responsibility for the results. Whereas someone with an external locus of control tends to blame others or says what happened is the result or result of other events originating from outside themselves.

Correspondingly Rapi and Juaini (2015) suggest that as an event experienced by someone as a reward or reinforcement, it can be stated that each individual has a different locus of control and also causes different reactions in each individual. Locus of control is generally defined as a description of one's beliefs about the source of behavior and is one of the factors that determine individual behavior ~~and also locus of control is defined as a description of one's beliefs about the source of behavior.~~ ~~[40]~~ Locus of control is a personality dimension that explains that individuals' 'behaviour' influenced by expectations about themselves. When someone perceives that locus of control is within themselves, they will produce greater achievements in their lives because they feel their potential can really be utilized so that they become more creative and productive. This shows that the locus of control is a person's beliefs about the existence of his control, and how much control he has on the successes and failures he experiences and the situations or events that exist in his life.

Comment [A8]: Handaru, Agung & Wahyu OR Handaru & Wahyu?)

According to Primandaru (2017) one of the factors related to the success of entrepreneurship is the locus of control. Locus of control is a person's belief about the existence of self - control, and how much control he/she has over the successes and failures he/she had experienced and the situations or events that exist in his/her life. ~~[44]~~ Confidence here is a belief in need for achievement. Locus of control is an individual's beliefs about the relationship between behavior and the consequences it has (Ninik, 2015). ~~[42]~~

Comment [A9]: Redundant. See the last sentence of the previous paragraph. If possible, paraphrase is required or combine this paragraph with previous paragraph because they have same information.

Locus of control represents the extent to which individuals believe that their achievement depends on their own behavior. Appropriate individuals consider that the achievement of goals or objectives depends more on their own abilities and actions, not the luck or efforts of others (Kuip ~~&and~~ Verheul, 2003). ~~[43]~~ Longitudinal studies by Brockhaus (1980) showed ~~ed~~ the existence of a positive correlation between orientation to the locus of control and entrepreneurial success. ~~[44]~~ In other studies, Brockhaus and Horwitz (1986) reinforced ~~d~~ how locus of control ~~couldan~~ distinguish successful entrepreneurs from unsuccessful entrepreneurs. ~~[45]~~ Robinson et al. (1991) stated ~~s~~ that internal control leads to positive entrepreneurial attitudes and most students who obtain entrepreneurial learning can develop a higher level of control and self-efficiency. ~~[46]~~ From the description put forward a hypothesis:

H2: LoC has an effect on EI.

H3: LoC and N-Ach affect EI

3. Methods

3.1. Research Design

This study aimed to analyze the effect of need for achievement (N-Ach), and locus of control (LoC), on Entrepreneurial Intentions (EI) in the context of Jambi University Students in Indonesia. Thus, this study adopted inferential research designs. This was a cross-sectional study as the data in this study was collected at one point of time.

Comment [A10]: This section is generally okay. I would suggest to write the setting of the study in pseudonym.

Comment [A11]: I suggest the author to write the setting of research in pseudonym. The author may use "one of universities in Jambi"

3.1.1. Participants

Participants of this empirical study were students of ~~the Teaching and Education Faculty~~ Faculty of Teacher Training and Educational Sciences (FKIP), Universitas Jambi ~~of the University of Jambi~~, Indonesia, coming from 6 study programs (Economic Education, English Education, Educational Administration, Elementary School Teacher Education, Pancasila and Citizenship Education, and Biology Education) who have implemented an entrepreneurial curriculum. Respondents ~~are were~~ students who have contracted Entrepreneurship courses, students who have attended entrepreneurship learning and practice courses, and students who passed ~~have graduated from contracting~~ entrepreneurship courses. Of the 575 eligible students, a sample of 236 students (54.31% male-45.69% female) was selected, who were willing to collaborate to voluntarily participate by filling out an online questionnaire. Participants were guaranteed anonymity and were welcome to leave their contact number if they were wished to participate in a follow-up study.

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3.1.2. Study Measures

The instrument for measuring all research variables in this study adopted the Entrepreneurial Intention Questionnaire (EIQ) Version 2.05, from F. Liñán & M.J. Rodríguez. The number of the themes and scales were adapted to the needs of on-line data collection and characteristics of students in Indonesia. After adaptation, the items were translated into Indonesian.

Entrepreneurial Intentions: All items were measured using a 5-point Likert scale with response options ranging from 1 (strongly disagree) to 5 (strongly agree). An example of an item was EI-1: I want to open my own business field after graduating from college, EI-10: I like to find information about the business world, especially from people who are experienced. The Cronbach's alpha for the scale was 0. 877.

Need for Achievement: All items were measured using a 5-point Likert scale with response options ranging from 1 (strongly disagree) to 5 (strongly agree). Sample items included N-Ach-1: I like challenging but high-risk work, N-Ach-10: I need feedback for every job I do. The Cronbach's alpha for the scale was 0.838.

Locus of Control. All items were measured using a 5-point Likert scale with response options ranging from 1 (strongly disagree) to 5 (strongly agree). Sample items included LoC-1: I have confidence in the ability to realize my dreams in entrepreneurship, LoC-10: I need family support to motivate me in entrepreneurship. The Cronbach's alpha for the scale is 0.843.

3.2. Data Analysis

Using statistical software, data were analyzed to determine whether there is a relationship between variables. Following the accepted standards adopted by several researchers (Koh, 1995; Harris & Gibson, 2008; Keat et al., 2011), we measured the correlation between variables and linear regression models between independent variables and variables dependent.

4. Results

4.1. Sample Characteristics

Characteristics of the sample are presented in Table 1. The sample is dominated by men (63.14%). As many as 81.78 percent of respondents were less than 20 years old, and 68.64 percent of them did not have a family business background. Most respondents (78.39%) had attended special entrepreneurship training.

Tabel 1. Summary of descriptive statistic sample characteristics

	Variable	Obs.	Number	Percentage	Cumulative
Gender	Male	149	236	63.14	63.14
	Female	87		36.86	100
Age	<20	193	236	81.78	81.78
	>21	43		18.22	100
Family background	Entrepreneur	76	236	31.36	31.36
	Non-Entrepreneur	160		68.64	100
Entrepreneur Training	Yes	185	236	78.39	78.39
	Never	51		21.61	100

4.2. Validity and Reliability

Validity was obtained by looking at the correlation between constructs or factors. Items must correlate more strongly with their own constructs than with others, indicating that they are

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regarded by respondents as their own theoretical constructs (Messick, 1988). ~~the~~ The results in Table 2 showed the correlation matrix between the predictor constructors. All constructs, EI, N-Ach, and LoC, correlate strongly with their own constructs. All variables have a positive and significant correlation. Leech et al. (2005) suggest that reliability is an indicator of the extent to which item differences, measurements, or judgments are mutually consistent, as an ongoing process in which one item provides evidence to support conformity, meaningfulness; and the specific use of conclusions made from scores about individuals from the sample and given context. ~~The~~ The approach used to test two important assumptions is Cronbach's alpha - because it is believed to be the most common measurement of reliability scale (Andy, 2005). ~~Under~~ Under these conditions, alpha values ranged from 0.877 to 0.838 (Table 2). Therefore, surveys can be considered reliable.

Table 2. Summary of test validity & reliability results

Variable	Item	Correlation		Status	Reliability	
		r	Sig.		Alpha Construct	Status
Entrepreneurial Intentions	EI-1	.827877**	.000	Valid	.877	Reliable
	EI-2	.828417**	.000			
	EI-3	.828417**	.000			
	EI-4	.828417**	.000			
	EI-5	.828417**	.000			
	EI-6	.828417**	.000			
	EI-7	.828417**	.000			
	EI-8	.828417**	.000			
	EI-9	.828417**	.000			
	EI-10	.828417**	.000			
Need for Achievement	N-Ach-1	.838287**	.000	Valid	.838	Reliable
	N-Ach-2	.838287**	.000			
	N-Ach-3	.838287**	.000			
	N-Ach-4	.838287**	.000			
	N-Ach-5	.838287**	.000			
	N-Ach-6	.838287**	.000			
	N-Ach-7	.838287**	.000			
	N-Ach-8	.838287**	.000			
	N-Ach-9	.838287**	.000			
	N-Ach-10	.838287**	.000			
Locus of Control	LoC-1	.838287**	.000	Valid	.838	Reliable
	LoC-2	.838287**	.000			
	LoC-3	.838287**	.000			
	LoC-4	.838287**	.000			
	LoC-5	.838287**	.000			
	LoC-6	.838287**	.000			
	LoC-7	.838287**	.000			
	LoC-8	.838287**	.000			
	LoC-9	.838287**	.000			
	LoC-10	.838287**	.000			

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4.3. Hypothesis Testing

The correlation matrix presented in Table 3 showed that there ~~is~~ was a positive relationship between the predictor variables and the dependent variable. The correlation coefficient between N-Ach and EI is 0.792, LoC and EI is 0.741 indicating everything is positive and significant. Table 3 correlation coefficients only showed the relationship between variables, but ~~did~~ not give an indication of the direction of causality. Therefore, to determine the direction of quality, the hypothesis ~~was~~ tested by applying linear regression. With the help of the SPSS release 22.0 application, the results ~~are~~ were presented in Table 4.

Table 3. Summary matrix correlations

		Entrepreneurial Intentions
Need for Achievement	Pearson Correlation	.792**
	Sig. (2-tailed)	.000
	N	216
Locus of Control	Pearson Correlation	.741**
	Sig. (2-tailed)	.000
	N	216
Entrepreneurial Intentions	Pearson Correlation	1
	Sig. (2-tailed)	.000
	N	216

** Correlation is significant at the 0.01 level (2-tailed).

Comment [A15]: See APA style for table format

Table 4. Summary hypothesis test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	6.247	1.479		2.840	.005
Need for Achievement	.589	.088	.793	18.533	.000
2 (Constant)	12.121	1.939		6.229	.002
Locus of Control	.238	.010	.741	16.887	.000
3 (Constant)	4.133	1.402		3.739	.003
Need for Achievement	.554	.088	.589	7.789	.000
Locus of Control	.233	.086	.738	3.149	.003

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Based on Table 4, it showed that the direction of causality between variables is positive and significant, indicating that all proposed hypotheses are accepted. This means that there is a positive and significant influence between N-Ach on IE, as well as LoC on IE. Based on the results of the analysis of the study obtained a coefficient so that it can form the equation $Y = 6.233 + 0.589X_1 + 0.238X_2 + e$. From the multiple linear regression equation, a constant of 6.233 is obtained, meaning that if the EI variable is influenced by the two independent variables (N-Ach and LoC) then the magnitude of EI is 6.233. The magnitude of the regression coefficient for the N-Ach variable of 0.589 is positive, meaning that when N-Ach has increased or added by one unit will cause an increase in EI of 0.589 with the assumption that the LoC is fixed or the same. Then the LoC regression coefficient of 0.238 is positive, meaning that at this time the LoC has increased or added by one-unit will cause an increase in EI of 0.238 with the assumption that N-Ach is fixed or the same.

5. Discussion and Conclusions

This study explained the influence of psychological characteristics on EI, the results indicated that there is a significant positive effect between N-Ach on EI, LoC on EI which means the higher N-Ach funds or LoC, then the resulting EI will also be higher. The results of this study are in line with research by Nizma and Siregar (2018) who found LoC, N-Ach and risk taking as variables that have a significant effect on EI. ~~(53)~~ LoC has a direct positive effect on EI (Afifah, 2015). ~~(54)~~ N-Ach enables someone to overcome all obstacles, produce high quality work, and can compete to be the best. In this case the meaning will increase EI. Besides personality characteristics such as N-Ach is one of the personality characteristics of someone who will encourage someone to have an EI (Setyawan, 2015). ~~(55)~~ Because basically also LoC is a belief that an individual has about the cause or factor of an event in life whether it is a success or a failure in achieving a hope or a desire. These factors can come from within themselves such as behavior or effort that has been done and other factors can be due to luck, or opportunity factors.

These two findings ~~make it clear~~ emphasized that to increase the level of entrepreneurial intentions, efforts must focus on two different directions: first, making

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entrepreneurship become an attractive career for students, for example, by presenting entrepreneurs as role models, emphasizing the benefits of entrepreneurship, developing a culture that supports entrepreneurship. ~~and, Secondly,~~ developing entrepreneurial abilities and confidence. Regarding this latter aspect, given that psychological characteristics are closely related to self-esteem, it is important to note that special efforts are needed to strengthen this aspect in entrepreneurial learning, because as mentioned by Scott et al. (1996), as students get older, their self-esteem decreases. ~~{56}~~

This finding is also in line with ~~the conclusions study conducted by~~ Bakotic and Kruzic (2010) ~~study, in which: according to this these researchers, it was concluded~~ that the entrepreneurship education program contribute~~d to increasing in~~ increasing perceptions about important aspects of entrepreneurship, as well as creating a realistic vision of entrepreneurial problems. Thus, the researcher advocate~~d~~ the need for permanent education for students, which must focus on developing additional competencies and skills needed ~~later~~ in the market context ~~later on.~~ ~~{57}~~ Regarding the relationship between psychological characteristics and entrepreneurial intentions, ~~our results~~ the findings of this study indicated that there was ~~a~~ relationship ~~does exist~~. In addition, many studies support a positive correlation between orientation to LoC and entrepreneurship (De Vries, 1977; Begley and Boyd, 1987; Beverland and Lockshin, 2001; Brockhaus, 1980; Brockhaus and Horwitz, 1986; Robinson et al., 1991). Likewise, the evidence from the literature review suggest~~ed~~ how entrepreneurs are significantly more innovative than non-entrepreneurs (Robinson et al., 1991). ~~{58}~~

The purpose of this study explain~~ed~~ the understanding of whether students have entrepreneurial characteristics and whether these characteristics are related to entrepreneurial intentions. ~~Our results~~ The findings indicate~~d~~ that students have entrepreneurial characteristics at a fairly high level, such as innovation, locus of control, need of achievement and tolerance for ambiguity, but this has nothing to do with the intention to start a business. Previous studies have shown that these characteristics are important features of entrepreneurs and must be incorporated into entrepreneurship education (Neck ~~& and~~ Greene, 2011; ~~{59}~~ Jusoh et al., 2011 ~~{60}~~). Bearing this in mind, the challenge for educators at this stage is to preserve, or enhance, these psychological characteristics, while simultaneously making students more confident, more aware about, and more interested in entrepreneurial careers. In other words, it is necessary to develop motivation to become an entrepreneur (including specific motivational characteristics such as locus of control and self-efficacy beliefs) as ~~a~~ key aspect~~s~~ in developing an entrepreneurial curriculum, because, as mentioned by Somuncuoglu and Yildirim (1999), motivation is the driving force for student learning goals. ~~{61}~~

6. Limitations and Recommendation for Further Research

In interpreting the results of the study, we can point out some limitations regarding methodological aspects. First, this study use~~d~~ a self-report questionnaire, which brings opportunities for response bias. Second, the sample only included students from one Faculty. In addition, the sample size is relatively small. These two factors suggest several precautions in the generalization of our results. Furthermore, it should also be noted ~~that~~ the measurement scale used needs to be retested for future studies. Discriminatory validity is not clear on all indicators,

with some of them showing high cross-loadings in other constructions. There are also some limitations associated with entrepreneurial intentions. Because, some authors in the line of behavioral research (eg Gartner, 1989) stated that behavioral characteristics are more important than psychological characteristics, because entrepreneurship is more related to actions that result from behavior, and behavior is more easily changed than personality. However, other writers assume that there is actually a relationship not only between both behavior and entrepreneurship but also between psychological and behavioral characteristics. This relationship ~~is~~ ~~was~~ not ~~considered~~ included in this ~~work~~ study.

Based on the explanation above, ~~directions~~ recommendation for future research may need to be proposed. Considering methodological aspects, this study must be replicated by including more Faculties and more students as respondents to ensure generalization of the results. Future research should also consider the limitations of the other methodologies mentioned above to improve the reliability and validity of the results. Regarding the content aspect, the model must be developed through the incorporation of other types of variables, specifically those related to behavioral characteristics. This will enrich the study of the relationship between psychological characteristics, behavioral characteristics and entrepreneurial intentions.

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REFERENCES

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- [1] Adnyana, I Gusti Lanang Agung, dan Ni Made Purnami. 2016, "Pengaruh Pendidikan Kewirausahaan, *Self Efficacy* dan *Locus of Control* pada Niat Berwirausaha" *e-jurnal Manajemen Unud*, Vol. 5, No, 2, hlm. 160-118.
- [2] Acs, Z.J. and Szerb, L. (2010), "The global entrepreneurship and development index (GEDI)", Paper presented at the *Summer Conference on "Opening up Innovation: Strategy, Organization and Technology"*, Imperial College London Business School, 16-18 June.
- [3] Saeed, S., Yousafzai, S. Y., Yani-De-Soriano, M., & Muffatto, M. (2015). The role of perceived university support in the formation of students' entrepreneurial intention. *Journal of Small Business Management*, Vol. 53 No. 4, pp. 1127-1145.
- [4] Schmitz, A., Urbano, D., Dandolini, G.A., de Souza, J.A. and Guerrero, M. (2017), "Innovation and entrepreneurship in the academic setting: a systematic literature review", *International Entrepreneurship and Management Journal*, Vol. 13 No. 2, pp. 369-395.
- [5] Genesca, E., Urbano, D., Capelleras, J.L., Guallarte, C. and Verge's, J. (Coord.) (2003), *Creacio'n de empresas-entrepreneurship. Homenaje al profesor Jose' Mari'a Veciana Verge's*, Universitat Auto'noma de Barcelona, Servei de Publicacions, Barcelona.
- [6] Schiavone, F. (2011), "Strategic reactions to technology competition: a decision-making model", *Management Decision*, Vol. 49 No. 5, pp. 801-9.
- [7] Stauvermann, P.J. and Kumar, R.R. (2017), "Enhancing growth and

welfare through debt-financed education”, *Economic research-Ekonomska istraživanja*, Vol. 30 No. 1, pp. 207-222.

- [8] Ribeiro, D., Roig, S. and Tansky, J. (2010), “Linking entrepreneurship and human resources in globalization”, *Human Resource Management*, Vol. 49 No. 2, pp. 217-223.
- [9] Sanz, R., Peris, J.A. and Escámez, J. (2017), “Higher education in the fight against poverty from the capabilities approach: the case of Spain”, *Journal of Innovation & Knowledge*, Vol. 2 No. 2, pp. 53-66.
- [10] Martínez-Climent, C., Zorio-Grima, A. and Ribeiro-Soriano, D. (2018), “Financial return crowdfunding: literature review and bibliometric analysis”, *International Entrepreneurship and Management Journal*, Vol. 14 No. 3, pp. 527-553.
- [11] Kabók, J., Radišić, S. and Kuzmanović, B. (2017), “Cluster analysis of higher-education competitiveness in selected European countries”, *Economic research-Ekonomska istraživanja*, Vol. 30 No. 1, pp. 845-857.
- [12] Clara Gieure, Maria del Mar Benavides-Espinosa, Salvador Roig-Dobón, (2019). "Entrepreneurial intentions in an international university environment", *International Journal of Entrepreneurial Behavior & Research*, Permanent link to this document:<https://doi.org/10.1108/IJEBR-12-2018-0810>
- [13] Turker, D. and Sonmez Selçuk, S. (2009), “Which factors affect entrepreneurial intention of university students?”, *Journal of European Industrial Training*, Vol. 33 No. 2, pp. 142-159.
- [14] Henderson, R. and Robertson, M. (2000), “Who wants to be an entrepreneur? Young adult attitudes to entrepreneurship as a career”, *Career Development International*, Vol. 5 No. 6, pp. 279-287.
- [15] Kirby, D.A. and Ibrahim, N. (2011), “The case for (social) entrepreneurship education in Egyptian universities”, *Education+ Training*, Vol. 53 No. 5, pp. 403-415.
- [16] Garrido-Lopez, M., Hillon, Y.C., Cagle, W. and Wright, E. (2018), “Project-based strategic management education: a client perspective on key challenges”, *Journal of Small Business Strategy*, Vol. 28 No. 2, pp. 68-79.
- [17] Ilonen, S., Heinonen, J. and Stenholm, P. (2018), “Identifying and understanding entrepreneurial decision-making logics in entrepreneurship education”, *International Journal of Entrepreneurial Behavior and Research*, Vol. 24 No. 1, pp. 59-80.
- [18] Ajzen, I. (1991), “The theory of planned behavior”, *Organizational Behavior and Human Decision Processes*, Vol. 50 No. 2, pp. 179-211.

- [119] Ajzen, I., Csasch, C. and Flood, M. (2009), "From intentions to behavior: implementation intention, commitment, and conscientiousness", *Journal of Applied Social Psychology*, Vol. 39 No. 6, pp. 1356-1372.
- Krueger, N. (2017), "Entrepreneurial intentions are dead: long live entrepreneurial intentions", in Carsund, A. and Brännback, M. (Eds), *Revisiting the Entrepreneurial Mind: Inside the Black Box: An Expanded Edition*, Springer International Publishing, Cham, pp. 13-34.
- [121] Shapero, A. (1982), "Social dimensions of entrepreneurship", in Kent, C., Sexton, D. and Vesper, K. (Eds), *The Encyclopedia of Entrepreneurship*, Prentice-Hill, Englewood Cliffs, NJ, pp. 72-90.
- [122] Schlaegel, C. and Koenig, M. (2014), "Determinants of entrepreneurial intent: a meta-analytic test and integration of competing models", *Entrepreneurship Theory and Practice*, Vol. 38 No. 2, pp. 291-332.
- [123] Farida, Ida dan Mahmud. 2015, "Pengaruh *Theory od Planned Behavior* terhadap Intensi Berwirausaha", *Jurnal Ilmiah STIE MDP*, Vol. 5, No. 1, September, hlm 37-46. *Economic Education Analysis Journal* Vol.5, No, 1, Januari, hlm. 273-289.
- [124] Vemmy, Caecilia, S. 2012. "Faktor-Faktor Yang Mempengaruhi Intensi Berwirausaha Siswa Smk" *Jurnal Pendidikan Vokasi*, 2 (1), 117-126.
- [125] Krueger, N. (2017), "Entrepreneurial intentions are dead: long live entrepreneurial intentions", in Carsund, A. and Brännback, M. (Eds), *Revisiting the Entrepreneurial Mind: Inside the Black Box: An Expanded Edition*, Springer International Publishing, Cham, pp. 13-34.
- [126] Bird, B. (2015), "Entrepreneurial intentions research: a review and outlook", *International Review of Entrepreneurship*, Vol. 13 No. 3, pp. 143-168.
- [127] Ahmed, I., Nawaz, M., Ahmad, Z., Shaukat, M., Usman, A., Wasim-ul-Rehman and Ahmed, N. (2010), "Determinants of students' entrepreneurial career intentions: evidence from business graduates", *European Journal of Social Sciences*, Vol. 15 No. 2, pp. 14-22.
- [128] Brandstätter, H. (2011), "Personality aspects of entrepreneurship: a look at five meta-analyses", *Personality and Individual Differences*, Vol. 51 No. 3, pp. 222-230.
- [129] Mauer, R., Neergaard, H. and Linstad, A. (2017), "Self-efficacy: conditioning the entrepreneurial mindset", in Carsund, A. and Brännback, M. (Eds), *Revisiting the Entrepreneurial Mind: Inside the Black Box: An Expanded Edition*, Springer International Publishing, Cham, pp. 293-317.
- [130] Suratno, Ekawarna & Ade Kusmana, (2019). *The Analysis of the Effect of Entrepreneurship Education, Perceived Desirability, and Entrepreneurial*

Self-Efficacy on University Students' Entrepreneurial Intention. *Universal Journal of Educational Research* 7(11): 2507-2518, 2019. <http://www.hrpub.org>. DOI: 10.13189/ujer.2019.071131

- [31] Wiratmo, M. (2018). *Pengantar Kewiraswastaan*. Yogyakarta: Penerbit Andi.
- [32] Griffin, R. W., & Moorhead, G. 2013. *Organizational Behavior: Managing People and Organizations, Ninth Edition*. Mason: South-Western.
- [33] Setyawan, B. 2015. *Peluang usaha*. Yogyakarta: Pustaka Baru Press.
- [34] Handaru, Agung Wahyu, Dkk. 2014, "Membangun Intensi Berwirausaha Melalui *Adversity Quotient*, *Self Efficacy*, Dan *Need For Achievement*", *jurnal ekonomi*, vol.17, No,2, hlm.155-166.
- [35] Davidsson, P. and Wiklund, J. (1999), "Suitable approaches for studying small firm growth: the role of entrepreneurship and small and medium enterprises", *Proceedings of the 44th ICSB World Conference*, June, 20-23, Napoles.
- [36] Davidsson, P. (1989), *Continued Entrepreneurship and Small Firm Business*, Stockholm School of Economics, Stockholm.
- [37] Beverland, M. and Lockshin, L. (2001), "Organizational life cycles in small New Zealand wineries", *Journal of Small Business Management*, Vol. 39 No. 4, pp. 354-362.
- [38] Anabela Dinis, Covilhã, Portugal, Arminda do Paco, Joao Ferreira, Mário Raposo and Ricardo Gouveia Rodrigues, (2013), Psychological characteristics and entrepreneurial intentions among secondary students. *Education & Training Vol. 55 No. 8/9, 2013, pp. 763-780*. DOI 10.1108/ET-06-2013-0085.
- [39] Allen P. Bem. (2003), *Personality Theories: Development, Growth And Diversity, 4th Edition*. United States of America, Pearson Education Inc.
- [40] Rapii, Muhammad dan Juaini, Muhammad. (2015). Analisis Pengaruh Locus Of Control, Self Efficacy Dan Need For Achievement Terhadap Intensi Berwirausaha Pada Mahasiswa Program Studi Pendidikan Ekonomi. *Jurnal Educatio*. 10 (1), 131-146.
- [41] Primandaru, Noormalita. 2017. Analisis Faktor-Faktor Yang Berpengaruh Pada Minat Berwirausaha Mahasiswa. *Jurnal Ekonomi*. 13(1), 68-78.
- [42] Ninik, Widyastuti. 2015, "Hubungan Antara *Locus Of Control* Internal Dengan Kematangan Karir Pada Siswa Smk N 1 Bantul", *Jurnal Psikologi*, vol.12, No, 2, hlm.82-89.
- [43] Kuip, I. and Verheul, I. (2003), "Early development of entrepreneurial qualities: the role of initial education", *EIM Business & Policy Research*,

SCALES-paper N200311, Zoetermeer

- [44] Brockhaus, R.H. (1980), "Risk taking propensity of entrepreneurs", *Academy of Management Journal*, Vol. 23 No. 3, pp. 509-520.
- [45] Brockhaus, R.H. and Horwitz, P.S. (1986), "The psychology of the entrepreneur", in Sexton, D.L. and Smilor, R.W. (Eds), *The Art and Science of Entrepreneurship*, Ballinger, Cambridge, MA, pp. 25-48.
- [46] Robinson, P.B., Stimpson, D.V., Huefner, J.C. and Hunt, H.K. (1991), "An attitude approach to the prediction of entrepreneurship", *Entrepreneurship: Theory and Practice*, Vol. 15 No. 4, pp. 13-31.
- [47] Koh, H.C. (1995), "Factors associated with entrepreneurial inclination: An empirical study of business undergraduates in Hong Kong", *Journal of Small Business Entrepreneurship*, Vol. 12 No. 2, pp. 29-41.
- [48] Harris M.L., and Gibson S.G. (2008a), "Examining the entrepreneurial attitudes of US business students", *Education + Training*, Vol. 50 No. 7, pp. 568-581.
- [49] Keat, O.Y., Selvarajah, C., and Meyer, D. (2011), "Inclination towards entrepreneurship among university students: An empirical study of Malaysian university students", *International Journal of Business and Social Science*, Vol. 2 No. 4, March, pp. 206-220.
- [50] Messick, S. (1988), "Validity", in Linn, R.L. (Ed.), *Educational Measurement*, 3rd ed., American Council on Education/Orix Press, New York, NY, pp. 33-48.
- [51] Leech, N.L., Barrett, K.C. and Morgan, G.A. (2005), *SPSS for Intermediate Statistics: Use and Interpretation*, 2nd ed., Lawrence Erlbaum Associates Publishers, Mahwah, NJ.
- [52] Andy, F. (2005), *Discovering Statistic Using SPSS*, 2nd ed., SAGE Publications, London.
- [53] Nizma, Cut dan Siregar, Arfianti Dina. 2018. Analisis Pengaruh Locus Of Control, Need For Achievement dan Risk Taking Terhadap Intensi Berwirausaha Alumni Mahasiswa Jurusan Akuntansi Politeknik Negeri Medan. *Jurnal Ekonomi dan Bisnis*. 19 (1), 30-37.
- [54] Afifah, Hanifati Sofia. (2015). *Pengaruh Pengaruh need for achivement, locus of control dan sikap siswa terhadap Intensi berwirausaha siswa SMK Negeri 1 Surakarta*. Surakarta: Pascasarjana Universitas Sebelas Maret.
- [55] Setyawan, B. 2015. *Peluang usaha*. Yogyakarta: Pustaka Baru Press.
- [56] Scott, C., Murray, G., Mertens, C. and Dustin, E. (1996), "Student self-esteem and the school system: perceptions and implications", *The Journal of Educational Research*, Vol. 89 No. 5, pp. 286-293.

- [57] Bakotic, D. and Kruzic, D. (2010), "Students' perceptions and intentions towards entrepreneurship: the empirical findings from Croatia", *The Business Review*, Vol. 14 No. 2, pp. 209-215.
- [58] Robinson, P.B., Stimpson, D.V., Huefner, J.C. and Hunt, H.K. (1991), "An attitude approach to the prediction of entrepreneurship", *Entrepreneurship: Theory and Practice*, Vol. 15 No. 4, pp. 13-31.
- [59] Neck, H.M. and Greene, P.G. (2011), "Entrepreneurship education: known worlds and new frontiers", *Journal of Small Business Management*, Vol. 49 No. 1, pp. 55-70.
- [60] Jusoh, R., Ziyae, B., Asimiran, S. and Kadir, S.A. (2011), "Entrepreneur training needs analysis: implications on the entrepreneurial skills needed for successful entrepreneurs", *The International Business & Economics Research Journal*, Vol. 10 No. 1, pp. 143-148.
- [61] Somuncuoglu, Y. and Yildirim, A. (1999), "Relationship between achievement goal orientations and use of learning strategies", *The Journal of Educational Research*, Vol. 92 No. 5, pp. 267-277.

Comment [A19]: Revise the reference following The IRJE format

Analyzing the Effect of Need for Achievement and Locus of Control on Student Entrepreneurial Intentions

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Abstract

This study aimed to analyze the student entrepreneurial intentions model based on their psychological characteristics. More specifically, this study sought to explain whether the Need for Achievement (N-Ach) and Locus of Control (LoC) of students had an effect on Entrepreneurial Intentions (EI). An inferential research design with a cross-sectional study was adopted to collect the data. Students from faculty of teacher training and education, one public university in Jambi, were involved as the sample of the study. 63.14% of male students were selected by using a simple random sampling strategy, dominated by 81.78% of respondents aged less than 20 years. Data were collected through questionnaires and were analyzed by using the statistical correlation software and linear regression models to ensure the relationship between psychological characteristics and EI. The results indicated that there was a positive effect on psychological characteristics and EI on Student Entrepreneurial Intentions. N-Ach and LoC positively affected EI, both partially and jointly. Due to the limited instrument used in this study, only a self-reported questionnaire, which carried an opportunity for the response bias, and involved male students from a faculty in one public university in Jambi. Therefore, this model needs a further development through the incorporation of behavioral characteristics by involving larger samples allowing us understand on whether behavioral theories and traits are conflicting or complementary.

Keywords

Entrepreneurial intentions, locus of control, need for achievement

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Introduction

One of the challenges in developing a country is to deal with the problem of unemployment. Data from the Central Statistics Agency (BPS) of the Republic of Indonesia show that the level of unemployment in Indonesia is still very high. The number of unemployed people in Indonesia in August 2017 reached 5.50% of the total population, 264,000,000 people. An alternative way to solve the problem of unemployment is by empowering the community and educated groups through entrepreneurship programs, which are expected to be able to contribute in the absorption of labor to reduce unemployment and state burdens (Adnyana, Agung, & Purnami, 2016). Today, entrepreneurship is seen as a key factor in economic and sustainable development. This contributes to growing the country's competitiveness in its national and international markets, overcoming unemployment as a solution to today's growing problems, and encouraging entrepreneurs in bringing innovative ideas to market and achieving their personal growth (Acs & Szerb, 2010).

Higher education institutions are expected to be able to prepare for a better future by developing intellectual competencies and skills so that the younger generation can carry out self-actualization. This shows that in addition to educational support, concepts and business development support are equally important in encouraging students to have entrepreneurial intentions (Saeed, Yousafzai, Soriano, & Muffatto, 2015). The aim of offering entrepreneurship education at universities is not only to encourage students to start their own businesses but also to make them more creative and innovative (Schmitz et al., 2017).

Higher education also plays a role in producing human resources who have entrepreneurial spirit and attitude in overcoming the problem of unemployment by creating jobs (Genesca` et al., 2003). Entrepreneurial Intentions arise because of its contribution to economic growth, rejuvenation of productive structures, re-launching of certain regions, dynamics of innovative processes and job creation (Schiavone, 2011). Education at the university seeks to shape attitudes, skills, knowledge and competencies to students in order to develop their professional careers. Education, research, and community service are Tridharma used as the main mission in the administration of higher education in Indonesia. Meanwhile, the progress of society and the effect of globalization have added a further mission to the university domain named as economic development (Stauvermann & Kumar, 2017). Aligning all of these missions is a crucial issue to build an entrepreneurial university (Ribeiro et al., 2010), where entrepreneurship can be seen as the center of economic and community progress (Sanz et al., 2017). Other experts have also recognized that entrepreneurship in the educational environment has a significant impact on Entrepreneurial Intentions (Kabok et al., 2017; Martínez-Climent et al., 2018). Thus, universities should now include entrepreneurship education in their curriculum; because it can have direct and indirect effects on skills development; which in turn has a positive effect on Entrepreneurial Intentions (Clara Gieure et al., 2019).

One public university in Jambi, in particular the faculty of teacher training and education has included an entrepreneurial course in its curriculum. As one of the main subjects that must be taken by students, entrepreneurship course not only provides a theoretical foundation on the concept of entrepreneurship but also forms the mindset of students to become entrepreneurs. This means that the university has prepared students to start a new business through the integration of experience, skills, and knowledge that are essential for developing and expanding a new business venture. The existence of Entrepreneurship course can also increase the desire of students to choose entrepreneurship as a career choice to become private employees, civil servants, or state-owned enterprises (BUMN) employees, which can significantly direct students towards entrepreneurial intentions.

From an academic perspective, many studies have examined entrepreneurship and the factors that drive or attract entrepreneurs to start a business. However, as stated by Turker and Selçuk (2009), the majority of studies focused on established entrepreneurs, and little is known about young adults and the factors that drive them to start businesses (Henderson & Robertson, 2000). Referring to the theory of planned behavior (TPB), it suggests that entrepreneurship is about not only intentional but also pre-planned (Kirby & Ibrahim, 2011). This study analyzed the effect of need for achievement and locus of control both individually and jointly on student entrepreneurial intentions. This study enriched research based on the TPB model by considering the entrepreneurial skills or abilities of students, which is obtained at the university. Thus, the model presented here contributes to the literature by including the role of entrepreneurship education as well as the skills and abilities acquired by students. This study showed that education might have an indirect effect on the development of entrepreneurial skills. But in turn it will foster Entrepreneurial Intentions. In this context, the purpose of this research was to analyze the entrepreneurial intentions of students and the factors of psychological characteristics, which influence their intention to become entrepreneurs. This study wanted to test the following hypotheses: (1) H₁: N-Ach influences EI, (2) H₂: LoC influences EI, and (3) H₃: LoC and N-Ach influence EI.

Literature Review

Entrepreneurial intentions (EI)

In recent years, entrepreneurship has been a major thing for job creation and economic growth. Government and educational institutions' interest show an increase in promoting entrepreneurship. Many universities consider that investing in entrepreneurship education is very important for social and economic development in society (Garrido-Lopez et al., 2018). Such education can help to develop students' knowledge, skills, and intentions to start a business (Ilonen et al., 2018). Theory of Planned Behavior (Ajzen, 1991) suggests

that intention is a strong predictor of behavior (Ajzen et al., 2009). If applied to entrepreneurship, intention is affected by general attitudes or entrepreneurial perceptions, normative evaluation of being an entrepreneur, and the feasibility of conducting entrepreneurial behavior (Krueger, 2017). However according to Shapero's (1982), Entrepreneurial Event Model (EEM) proposes that entrepreneurial intentions are dependent on the perception of entrepreneurial desires and eligibility and the tendency of individuals to act. Entrepreneurial Intentions can be interpreted as the initial step of the process of establishing a business that is generally long-term in nature. It is a motivating factor that influences individuals to pursue entrepreneurial results. Intention is a determination to carry out certain activities or produce certain conditions in the future. Entrepreneurial Intentions are the desires that exist in a person to show entrepreneurial behavior (Farida & Mahmud, 2015). Intention is the best predictor of a person's entrepreneurial behavior. Intention is very important for students to become entrepreneurs (Vemmy, 2012). This means that Entrepreneurial Intentions is defined as the desire that exists in a person to display entrepreneurial behavior that can be seen from the desire of individuals to be able to take risks, take advantage of opportunities, become a creative and independent person and be able to process existing resources.

Intention is a critical first step to starting and running your own business (Krueger, 2017). Characteristics, factors, and processes that lead to intention have an impact on the initial formation and subsequent direction of new ventures (Bird, 2015). Various factors have been identified as influencing entrepreneurial intentions including personality dimensions, need for achievement, need for autonomy, innovation, stress tolerance, risk taking, resilience and locus of control (Ahmed et al., 2010; Brandstätter, 2011). Self-efficacy is also consistently related to Entrepreneurial Intentions (Mauer et al., 2017). Previous research also found that Entrepreneurship Education positively and significantly affects perceived desirability, entrepreneurial self-efficacy and entrepreneurial intentions. Perceived desirability and entrepreneurial self-efficacy positively and significantly affects entrepreneurial intentions (Suratno, Ekawarna, & Kusmana, 2019).

Need for achievement (N-Ach)

Based on McClelland's (1961) motivation theory, need for achievement is defined as the desire to do something better or more efficiently than what has been done before. McClelland (1961) said that in some businesses, the need to excel is so strong and it is more motivated than to achieve profit. To maximize satisfaction, individuals with a high need for achievement tend to set goals for themselves that is a challenge but can be achieved. Although these individuals do not avoid risks completely, they assess risks very carefully. Individuals who are motivated by need for achievement do not want to fail and will avoid tasks that involve too much risk. Individuals with low need for achievement generally avoid challenges, responsibilities, and risks (Wiratmo, 2018).

Need for achievement can also be interpreted as a desire to complete a task with a target more effectively. Individuals who have a high need for achievement tend to set quite

difficult goals and make more risk in the decisions making (Griffin & Moorhead, 2013). Setyawan (2015) argues that the level of need for achievement will make someone able to overcome all obstacles, to produce high quality work, and to compete to be the best. In fact, students admit that it is still difficult to find ideas for entrepreneurship, and do not dare to be entrepreneurs because they do not have the capital and are afraid of the risk of failure, because they have formed a mindset of failure with the risk of entrepreneurship and they feel less confident that they can succeed. Davidsson and Wiklund (1999) state that need for achievement is not an important cause of entrepreneurial behavior. According to them, the concept of need for achievement is unclear in its definition, and has problems in measurement. However, several other researchers have found a relationship between need for achievement and entrepreneurial behavior (Davidsson, 1989), and consider this need for achievement an important factor (Beverland & Lockshin, 2001). Likewise, the research results of Dinis et al. (2013) showed that there was an influence between (some) psychological characteristics on entrepreneurial intentions. The propensity to risk negatively affects entrepreneurial intentions; meanwhile self-confidence and the need for achievement positively affect entrepreneurial intentions.

Locus of control (LoC)

Locus of control refers to the extent to which people expect that reinforcement and other things depend on their behavior or personal characteristics (Allen, 2003). Someone who considers good and bad events to be the result of what they do is called as an internal locus of control. Whereas, individuals who consider events in life based on external forces that control such as the result of luck, chance, fate, or the strength of others are called as an external locus of control. Someone with an internal locus of control has responsibility for the actions and accepts responsibility for the results. Whereas, someone with an external locus of control tends to blame others or say what happened is the result of other events originating from outside themselves.

Correspondingly, Rapi and Juaini (2015) suggest that as an event experienced by someone as a reward or reinforcement, it can be stated that each individual has a different locus of control and also causes different reactions in each individual. Locus of control is one of the factors that determine individual behaviors and it is defined as a description of one's beliefs about the source of behavior. As a personality dimension, it explains that individuals who behave are influenced by expectations about themselves. When someone perceives that locus of control is within him or her, he or she will produce greater achievements in their lives because they feel their potential can be utilized so that they become more creative and productive. This shows that the locus of control is a person's beliefs about the existence of his control, and how much control he has on the successes and failures he experiences and the situations or events that exist in his life.

According to Primandaru (2017), one of the factors related to the success of entrepreneurship is the locus of control. Locus of control is a person's belief about the existence of self - control, and how much control he/she has over the successes and failures

he/she has experienced and the situations or events that exist in his/her life. Confidence here is a belief in need for achievement. Locus of control is an individual's beliefs about the relationship between behavior and the consequences it has (Ninik, 2015). Locus of control represents the extent to which individuals believe that their achievement depends on their own behavior. Appropriate individuals consider that the achievement of goals or objectives depends more on their own abilities and actions, not the luck or efforts of others (Kuip & Verheul, 2003). Longitudinal studies by Brockhaus (1980) show the existence of a positive correlation between orientation to the locus of control and entrepreneurial success. In other studies, Brockhaus and Horwitz (1986) reinforce how locus of control can distinguish successful entrepreneurs from unsuccessful entrepreneurs. Robinson et al. (1991) states that internal control leads to positive entrepreneurial attitudes and most students who obtain entrepreneurial learning can develop a higher level of control and self-efficiency.

Methodology

Research design, respondents, and locale of the study

This study aimed to analyze the effect of need for achievement (N-Ach), locus of control (LoC), on Entrepreneurial Intentions (EI) in one public university in Jambi, Indonesia. Thus, this study adopted inferential research designs. This was a cross-sectional study as the data in this study were collected at one point of time. Respondents of this study were students of the teacher training and education faculty in one public university in Jambi from six study programs included economic education, English education, educational administration, elementary school teacher education, *pancasila* and citizenship education, and biology education that have implemented an entrepreneurial curriculum.

Respondents were students who had taken entrepreneurship courses, had attended entrepreneurship learning and practice courses, and had graduated from taking entrepreneurship courses. Of the 575 eligible students, a sample of 236 students (54.31% male students and 45.69% female students) was selected. They were willing to collaborate to voluntarily participate by filling out an online questionnaire. Participants were guaranteed anonymity and were welcome to leave their contact number if they were wished to participate in a follow-up study.

Data collection and analysis

The instrument for measuring all research variables in this study adopted the Entrepreneurial Intention Questionnaire (EIQ) Version 2.05, from Liñán and Rodríguez (2015). The number of the themes and scales were adapted to the needs of on-line data collection and characteristics of students in Indonesia. After adaptation, the items were translated into Indonesian.

Entrepreneurial Intentions. All items were measured by using a 5-point Likert scale with response options ranging from 1 (strongly disagree) to 5 (strongly agree). An example of an

item was EI-1; I want to open my own business field after graduating from college, EI-10; I like to find information about the business world, especially from people who experienced. The Cronbach's alpha for the scale was 0.877.

Need for Achievement. All items were measured by using a 5-point Likert scale with response options ranging from 1 (strongly disagree) to 5 (strongly agree). Sample items included N-Ach-1; I like challenging but high-risk work, N-Ach-10; I need feedback for every job I do. The Cronbach's alpha for the scale was 0.838.

Locus of Control. All items were measured by using a 5-point Likert scale with response options ranging from 1 (strongly disagree) to 5 (strongly agree). Sample items included LoC-1; I have confidence in the ability to realize my dreams in entrepreneurship, LoC-10; I need family support to motivate me in entrepreneurship. The Cronbach's alpha for the scale was 0.843.

Using statistical software, data were analyzed to determine whether there is a relationship between variables. Following the accepted standards adopted by several researchers (Harris & Gibson, 2008; Koh, 1995; Keat et al., 2011), we measured the correlation between variables and linear regression models between independent variables and variables dependent.

Findings

Sample characteristics

Characteristics of the sample were presented in Table 1. The sample was dominated by men (63.14%). As many as 81.78 percent of respondents were less than 20 years old, and 68.64 percent of them did not have a family business background. Most respondents (78.39%) had attended special entrepreneurship training.

Tabel 1. *Summary of descriptive statistic sample characteristics*

Variables		Obs	Number	Percentage	Cumulative
Merge	Male	149	236	63.14	63.14
	Female	87		36.86	100
Age	<20	193	236	81.78	81.78
	>21	43		18.22	100
Family Background	Entrepreneur	74	236	31.36	31.36
	Non- Entrepreneur	162		68.64	100
Entrepreneur Training	Ever	185	236	78.39	78.39
	Never	51		21.61	100

Validity and reliability

Validity was obtained by looking at the correlation between constructs or factors. Items must correlate more strongly with their own constructs than with others, indicating

that they are regarded by respondents as their own theoretical constructs (Messick, 1988). The results in Table 2 show the correlation matrix between the predictor constructors. All constructs, EI, N-Ach, and LoC, correlated strongly with their own constructs. All variables had a positive and significant correlation.

Leech et al. (2005) suggest that reliability is an indicator of the extent to which item differences, measurements, or judgments are mutually consistent, as an ongoing process in which one item provides evidence to support conformity, meaningfulness; and the specific use of conclusions made from scores about individuals from the sample and given context. The approach used to test two important assumptions is Cronbach's alpha - because it is believed to be the most common measurement of reliability scale (Andy, 2005). Under these conditions, alpha values ranged from 0.877 to 0.838 (Table 2). Therefore, surveys can be considered reliable.

Table 2. *Summary of test validity and reliability results*

Variable	Item	Correlation			Reliability	
		r	Sig.	Status	Alpha Cronbach	Status
Entrepreneurial Intention	EI-1	.52798**	.000	Valid	.877	Reliable
	EI-2	.53735**	.000			
	EI-3	.59642**	.000			
	EI-4	.61462**	.000			
	EI-5	.54417**	.000			
	EI-6	.60242**	.000			
	EI-7	.58284**	.000			
	EI-8	.64538**	.000			
	EI-9	.63203**	.000			
	EI-10	.59129**	.000			
Need for Achievement	N-Ach-1	.48158**	.000	Valid	.838	Reliable
	N-Ach-2	.47964**	.000			
	N-Ach-3	.50718**	.000			
	N-Ach-4	.53347**	.000			
	N-Ach-5	.56567**	.000			
	N-Ach-6	.49506**	.000			
	N-Ach-7	.55858**	.000			
	N-Ach-8	.51407**	.000			
	N-Ach-9	.50674**	.000			
	N-Ach-10	.58763**	.000			
Locus of Control	LoC-1	.52505**	.000	Valid	.843	Reliable
	LoC-2	.48161**	.000			
	LoC-3	.55542**	.000			
	LoC-4	.55195**	.000			
	LoC-5	.59111**	.000			
	LoC-6	.61937**	.000			
	LoC-7	.57797**	.000			
	LoC-8	.49716**	.000			
	LoC-9	.57611**	.000			
	LoC-10	.49134**	.000			

*significant at 0.05, **significant at 0.01

Hypothesis testing

The correlation matrix presented in Table 3 shows that there was a positive relationship between the predictor variables and the dependent variable. The correlation coefficient between N-Ach and EI was 0.792, LoC and EI was 0.741 indicating everything was positive and significant. Table 3 correlation coefficients only show the relationship between variables, but did not give an indication of the direction of causality. Therefore, to determine the direction of quality, the hypothesis was tested by applying linear regression. With the help of the SPSS release 22.0 application, the results were presented in Table 4.

Table 3. *Summary matrix correlations*

		Entrepreneurial Intentions
Need for Achievement	Pearson Correlation	.792**
	Sig. (20tailed)	.000
	N	236
Locus of Control	Pearson Correlation	.741**
	Sig. (20tailed)	.000
	N	236
Entrepreneurial Intentions	Pearson Correlation	1
	Sig. (20tailed)	.000
	N	236

Table 4. *Summary hypothesis test*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. error	Beta		
1 (Constant)	9.845	3.479		2.830	.005
Need for Achievement	.880	.044	.792	19.850	.000
2 (Constant)	12.321	3.939		3.128	.002
Locus of control	.840	.050	.741	16.897	.000
3 (Constant)	6.233	3.602		1.730	.085
Need for Achievement	.654	.084	.589	7.789	.000
Locus of control	.270	.086	.238	3.149	.002

Based on Table 4, it shows that the direction of causality between variables was positive and significant, indicating that all proposed hypotheses were accepted. This meant that there was a positive and significant influence between N-Ach on IE, as well as LoC on IE. Based on the results of the analysis of the study obtained a coefficient so that it can form the equation $Y = 6.233 + 0.589X_1 + 0.238X_2 + e$. From the multiple linear regression equation, a constant of 6.233 was obtained, meaning that if the EI variable was affected by the two independent variables (N-Ach and LoC) then the magnitude of EI is 6.233. The magnitude

of the regression coefficient for the N-Ach variable of 0.589 was positive, meaning that when N-Ach has increased or added by one unit, it would cause an increase in EI of 0.589 with the assumption that the LoC was fixed or the same. Then the LoC regression coefficient of 0.238 was positive, meaning that at this time the LoC has increased or added by one-unit would cause an increase in EI of 0.238 with the assumption that N-Ach was fixed or the same.

Discussion

This study explained the effect of psychological characteristics on EI; the results indicated that there was a significant positive effect between N-Ach on EI, LoC on EI which meant that the higher N-Ach funds or LoC, then the resulting EI would also be higher. The results of this study were in line with research by Nizma and Siregar (2018) who found LoC, N-Ach, and risk taking as variables that had a significant effect on EI. LoC had a direct positive effect on EI (Afifah, 2015). N-Ach enables one to overcome all obstacles, produce high quality work, and can compete to be the best. In this case, the meaning will increase EI. Besides, personality characteristics such as N-Ach are one of the personality characteristics of someone who will encourage someone to have an EI (Setyawan, 2015). Basically, LoC is a belief that an individual has about the cause or factor of an event in life whether it is a success or a failure in achieving a hope or a desire. These factors can come from within themselves such as behavior or effort that has been done and other factors can be due to luck, or opportunity factors.

These two results make it clear that to increase the level of entrepreneurial intentions, efforts must focus on two different directions: first, making entrepreneurship become an attractive career for students, for example, by presenting entrepreneurs as role models, emphasizing the benefits of entrepreneurship, developing a culture that supports entrepreneurship and, secondly, develop entrepreneurial abilities and confidence. Regarding this latter aspect, given that psychological characteristics are closely related to self-esteem, it is important to note that special efforts are needed to strengthen this aspect in entrepreneurial learning, because as mentioned by Scott et al. (1996), as students get older, their self-esteem decreases.

This result was also in line with the conclusions by Bakotic and Kruzic (2010). According to these researchers, the entrepreneurship education program contributes to increasing perceptions about important aspects of entrepreneurship, as well as creating a realistic vision of entrepreneurial problems. Thus, the researcher advocates the need for permanent education for students, which should focus on developing additional competencies and skills needed later in the market context. Regarding the relationship between psychological characteristics and entrepreneurial intentions, our results indicated that a relationship did exist. In addition, many studies support a positive correlation between orientation to LoC and entrepreneurship (Begley & Boyd, 1987; Beverland & Lockshin, 2001; Brockhaus, 1980; Brockhaus & Horwitz, 1986; de Vries, 1977; Robinson et al., 1991).

Likewise, the evidence from the literature review suggests how entrepreneurs are significantly more innovative than non-entrepreneurs (Robinson et al., 1991).

The purpose of this study explained the understanding of whether students had entrepreneurial characteristics and whether these characteristics were related to entrepreneurial intentions. The results indicated that students had entrepreneurial characteristics at a fairly high level, such as innovation, locus of control, need of achievement and tolerance for ambiguity, but this had nothing to do with the intention to start a business. Previous studies have shown that these characteristics are important features of entrepreneurs and should be incorporated into entrepreneurship education (Jusoh et al., 2011; Neck & Greene, 2011). Bearing this in mind, the challenge for educators at this stage is to preserve or to enhance these psychological characteristics, while simultaneously making students more confident, more aware about, and more interested in entrepreneurial careers. In other words, it is necessary to develop motivation to become an entrepreneur (including specific motivational characteristics such as locus of control and self-efficacy beliefs) as a key aspect in developing an entrepreneurial curriculum, because, as mentioned by Somuncuoglu and Yildirim (1999), motivation is the driving force for student learning goals.

Conclusion, Limitations, and Further Research

The results indicated that there was a positive effect on psychological characteristics and EI on Student Entrepreneurial Intentions. N-Ach and LoC positively affected EI, both partially and jointly. In interpreting the results of the study, we can point out some limitations regarding methodological aspects. First, this study used a self-report questionnaire, which brings opportunities for response bias. Second, the sample only included students from one Faculty. In addition, the sample size was relatively small. These two factors suggested several precautions in the generalization of our results. Furthermore, it should also be noted that the measurement scale used needs to be re-tested for future studies. Discriminatory validity was not clear on all indicators, with some of them showing high cross-loadings in other constructions. There were also some limitations associated with entrepreneurial intentions. Because, some authors in the line of behavioral research carried out by Gartner (1989) stated that behavioral characteristics were more important than psychological characteristics, because entrepreneurship is more related to actions that result from behaviors, and behavior is more easily changed than personality. However, other researchers assume that there is actually a relationship not only between both behavior and entrepreneurship but also between psychological and behavioral characteristics. This relationship is not considered in this work.

Based on the previous explanation, directions for future research may need to be proposed. Considering methodological aspects, this study should be replicated by including more faculties and more students as respondents to ensure generalization of the results. Future research should also consider the limitations of the other methodologies mentioned to improve the reliability and validity of the results. Regarding the content aspect, the model should be developed through the incorporation of other types of variables, specifically those

related to behavioral characteristics. This will enrich the study of the relationship between psychological characteristics, behavioral characteristics and entrepreneurial intentions.

References

- Acs, Z. J., & Szerb, L. (2010). The global entrepreneurship and development index (GEDI). Paper presented at the *Summer Conference on Opening up Innovation: Strategy, Organization and Technology*, Imperial College London Business School, 16-18 June.
- Adnyana, I., Agung, G. L., & Purnami, N. M. (2016). Pengaruh pendidikan kewirausahaan: *Self-efficacy* dan *locus of control* pada niat berwirausaha. *E-jurnal Manajemen Unud*, 5(2), 160-118.
- Afifah, H. S. (2015). *Pengaruh need for achievement, locus of control dan sikap siswa terhadap Intensi berwirausaha siswa SMK N 1 Surakarta*. Surakarta: Pascasarjana Universitas Sebelas Maret.
- Ahmed, I., Nawaz, M., Ahmad, Z., Shaukat, M., Usman, A., Wasim-ul-Rehman, & Ahmed, N. (2010). Determinants of students' entrepreneurial career intentions: Evidence from business graduates. *European Journal of Social Sciences*, 15(2), 14-22.
- Ajzen, I., Csasz, C., & Flood, M. (2009). From intentions to behavior: implementation intention, commitment, and conscientiousness. *Journal of Applied Social Psychology*, 39(6), 1356-1372.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Allen, P. B. (2003). *Personality theories: Development, growth and diversity*. United States of America, Pearson Education Inc.
- Andy, F. (2005). *Discovering statistic using SPSS, 2nd ed*. London: SAGE Publications.
- Bakotic, D., & Kruzic, D. (2010). Students' perceptions and intentions towards entrepreneurship: The empirical findings from Croatia. *The Business Review*, 14(2), 209-215.
- Beverland, M., & Lockshin, L. (2001). Organizational life cycles in small New Zealand wineries. *Journal of Small Business Management*, 39(4), 354-362.
- Bird, B. (2015). Entrepreneurial intentions research: A review and outlook. *International Review of Entrepreneurship*, 13(3), 143-168.
- Brandstätter, H. (2011). Personality aspects of entrepreneurship: A look at five meta-analyses, *Personality and Individual Differences*, 51(3), 222-230.
- Brockhaus, R. H., & Horwitz, P. S. (1986). The psychology of the entrepreneur, in Sexton, D. L. and Smilor, R.W. (Eds), *The Art and Science of Entrepreneurship*, Ballinger, Cambridge, MA, pp. 25-48.
- Brockhaus, R. H. (1980). Risk taking propensity of entrepreneurs. *Academy of Management Journal*, 23(3), 509-520.
- Davidsson, P., & Wiklund, J. (1999). Suitable approaches for studying small firm growth: The role of entrepreneurship and small and medium enterprises. *Proceedings of the 44th ICSB World Conference, June, 20-23, Napoles*.

- Davidsson, P. (1989). *Continued entrepreneurship and small firm business*. Stockholm Scholl of Economics, Stockholm.
- Farida, I., & Mahmud. (2015). Pengaruh *Theory of Planned Behavior* terhadap intensi berwirausaha. *Jurnal Ilmiah STIE MDP*, 5(1), 37-46.
- Garrido-Lopez, M., Hillon, Y. C., Cagle, W., & Wright, E. (2018). Project-based strategic management education: A client perspective on key challenges. *Journal of Small Business Strategy*, 28(2), 68-79.
- Genesca`, E., Urbano, D., Capelleras, J.L., Guallarte, C. and Verge`s, J. (Coord.) (2003), *Creacio´n de empresas-entrepreneurship*. Homenaje al profesor Jose´ Mari´a Veciana Verge´s, Universitat Auto`noma de Barcelona, Servei de Publicacions, Barcelona.
- Gieure, C., Benavides-Espinosa, & Roig-Dobón, (2019). Entrepreneurial intentions in an international university environment. *International Journal of Entrepreneurial Behavior and Research*. Retrieved from: <https://doi.org/10.1108/IJEBr-12-2018-0810>
- Griffin, R. W., & Moorhead, G. (2013). *Organizational behavior: Managing people and organizations, 9th Edition*. Mason: South-Western.
- Harris, M. L., & Gibson S. G. (2008). Examining the entrepreneurial attitudes of US business students. *Education Plus Training*, 50(7), 568-581.
- Henderson, R., & Robertson, M. (2000). Who wants to be an entrepreneur? Young adult attitudes to entrepreneurship as a career. *Career Development International*, 5(6), 279-287.
- Ilonen, S., Heinonen, J., & Stenholm, P. (2018). Identifying and understanding entrepreneurial decision-making logics in entrepreneurship education. *International Journal of Entrepreneurial Behavior and Research*, 24(1), 59-80.
- Jusoh, R., Ziyae, B., Asimiran, S., & Kadir, S. A. (2011). Entrepreneur training needs analysis: Implications on the entrepreneurial skills needed for successful entrepreneurs. *The International Business and Economics Research Journal*, 10(1), 143-148.
- Keat, O.Y., Selvarajah, C., & Meyer, D. (2011). Inclination towards entrepreneurship among university students: An empirical study of Malaysian university students. *International Journal of Business and Social Science*, 2(4), 206-220.
- Kirby, D. A., & Ibrahim, N. (2011). The case for social entrepreneurship education in Egyptian universities. *Education Plus Training*, 53(5), 403-415.
- Koh, H. C. (1995). Factors associated with entrepreneurial inclination: An empirical study of business undergraduates in Hong Kong. *Journal of Small Business Entrepreneurship*, 12(2), 29-41.
- Kuip, I, & Verheul, I. (2003). Early development of entrepreneurial qualities: The role of initial education. *EIM Business and Policy Research, SCALES-paper N200311, Zoetermeer*.
- Krueger, N. (2017). Entrepreneurial intentions are dead: Long live entrepreneurial intentions, in Carsund, A. and Brännback, M. (Eds), *Revisiting the Entrepreneurial Mind: Inside the Black Box: An Expanded Edition*, Springer International Publishing, Cham, pp. 13-34.

- Liñán, F., & Rodríguez-Cohard, J. (2015). Assessing the stability of graduates' entrepreneurial intention and exploring its predictive capacity. *Academia Revista Latinoamericana de Administración*, 28(1), 77-98.
- Martínez-Climent, C., Zorio-Grima, A., & Ribeiro-Soriano, D. (2018). Financial return crowdfunding: literature review and bibliometric analysis. *International Entrepreneurship and Management Journal*, 14(3), 527-553.
- Mauer, R., Neergaard, H., & Linstad, A. (2017). Self-efficacy: Conditioning the entrepreneurial mindset, in Carsund, A. and Brännback, M. (Eds), *Revisiting the Entrepreneurial Mind: Inside the Black Box: An Expanded Edition*, Springer International Publishing, Cham, pp. 293-317.
- Neck, H. M., & Greene, P. G. (2011). Entrepreneurship education: Known worlds and new frontiers. *Journal of Small Business Management*, 49(1), 55-70.
- Nizma, C., & Siregar, A. D. (2018). Analisis pengaruh locus of control, need for achievement dan risk taking terhadap intensi berwirausaha alumni mahasiswa jurusan akuntansi politeknik negeri Medan. *Jurnal Ekonomi dan Bisnis*, 19(1), 30-37.
- Primandaru, N. (2017). Analisis faktor-faktor yang berpengaruh pada minat berwirausaha mahasiswa. *Jurnal Ekonomi*, 13(1), 68-78.
- Rapi, M., & Juaini, M. (2015). Analisis pengaruh *locus of control*, *self-efficacy* dan *need for achievement* terhadap intensi berwirausaha pada mahasiswa program studi pendidikan ekonomi. *Jurnal Education*, 10(1), 131-146.
- Ribeiro, D., Roig, S., & Tansky, J. (2010). Linking entrepreneurship and human resources in globalization. *Human Resource Management*, 49(2), 217-223.
- Robinson, P. B., Stimpson, D. V., Huefner, J. C., & Hunt, H. K. (1991). An attitude approach to the prediction of entrepreneurship. *Entrepreneurship: Theory and Practice*, 15(4), 13-31.
- Saeed, S., Yousafzai, S. Y., Soriano, M., & Muffatto, M. (2015). The role of perceived university support in the formation of students' entrepreneurial intention. *Journal of Small Business Management*, 53(4), 1127-1145.
- Sanz, R., Peris, J.A. and Escámez, J. (2017). Higher education in the fight against poverty from the capabilities approach: the case of Spain. *Journal of Innovation & Knowledge*, 2(2), 53-66.
- Schiavone, F. (2011). Strategic reactions to technology competition: A decision-making model. *Management Decision*, 49(5), 801-809.
- Schmitz, A., Urbano, D., Dandolini, G. A., de Souza, J. A., & Guerrero, M. (2017). Innovation and entrepreneurship in the academic setting: A systematic literature review. *International Entrepreneurship and Management Journal*, 13(2), 369-395.
- Scott, C., Murray, G., Mertens, C., & Dustin, E. (1996). Student self-esteem and the school system: perceptions and implications. *The Journal of Educational Research*, 89(5), 286-293.
- Setyawan, B. (2015). *Peluang usaha*. Yogyakarta: Pustaka Baru Press.

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- Shapero, A. (1982). Social dimensions of entrepreneurship, in Kent, C., Sexton, D. and Vesper, K. (Eds).
- Somuncuoglu, Y., & Yildirim, A. (1999). Relationship between achievement goal orientations and use of learning strategies. *The Journal of Educational Research*, 92(5), 267-277.
- Stauvermann, P. J., & Kumar, R. R. (2017). Enhancing growth and welfare through debt-financed education. *Economic Research-Ekonomska istraživanja*, 30(1), 207-222.
- Suratno, Ekawarna, & Kusmana, A. (2019). The analysis of the effect of entrepreneurship education, perceived desirability, and entrepreneurial self-efficacy on university students' entrepreneurial intention. *Universal Journal of Educational Research*, 7(11), 2507-2518.
- Turker, D., & Selçuk, S. S. (2009). Which factors affect entrepreneurial intention of university students?. *Journal of European Industrial Training*, 33(2), 142-159.
- Vemmy, C. S. (2012). Faktor-Faktor Yang Mempengaruhi Intensi Berwirausaha Siswa SMK. *Jurnal Pendidikan Vokasi*, 2(1), 117-126.
- Wiratmo, M. (2018). *Pengantar kewiraswastaan*. Yogyakarta: Penerbit Andi.
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