Predicting Entrepreneurship Learning Factors on Entrepreneurial Intent in Student Universities

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Abstract: This study aims to examine the determinants of entrepreneurial learning that depend on entrepreneurial intentions in college students in Lampung, Indonesia. The survey was born with an online questionnaire from June until July 2021. Data were processed using SmartPLS 3.2.7. The data analysis found significant direct and indirect effects. The constructing indicators can predict latent variables with a recommended value of more than 0.7. We also found that this research contributes additional conceptual framework theories for lecturers teaching entrepreneurship learning and decision-makers in universities to focus more on developing entrepreneurship education curricula.

Keywords: predicting, entrepreneurship learning, factors, entrepreneurial intent, student universities.

预测大学生创业意向的创业学习因素

摘要：本研究旨在检验印度尼西亚楠榜大学生创业学习的决定因素，这些决定因素取决于创业意图。该调查诞生于2021年6月至2021年7月的在线问卷调查。使用SmartPLS 3.2.7处理数据。数据分析发现了显著的直接和间接影响。构建指标可以预测潜在变量，推荐值大于0.7。我们还发现，这项研究为教授创业学习的讲师和大学的决策者提供了额外的概念框架理论，从而更加专注于开发创业教育课程。

关键词：预测，创业学习，因素，创业意向，学生大学。

1. Introduction

The importance of entrepreneurship can improve the welfare of society in the 21st century and has become a hot topic of discussion. Entrepreneurs are the main actors in economic development to innovate or create new combinations for innovation [1]. Based on 2020 data, the total number of university graduates still unemployed reached 7.07%. Meanwhile, in Lampung Province, there is 4.67% [2]. Entrepreneurship learning aims to make students have an entrepreneurial intention after graduating from university. College graduates should need to be guided, nurtured, and supported. They are not only intended to be job seekers but are capable and ready to become job creators.

Entrepreneurship learning must open a mindset to foster entrepreneurial intent [3]. With this, instilling an entrepreneurial spirit in higher education is one of the efforts to reduce the number of educated movements because university graduates are expected to become entrepreneurs by opening their jobs [4]. Therefore, various efforts have been made to instill the mindset of students so that they desire to become an entrepreneur as a career choice. Moreover, this, of course, needs to develop various competencies related to entrepreneurship [5]. Unfortunately, however, student entrepreneurship interest is still low [6].

The intention to do entrepreneurship is the initial stage of the long process of establishing a business [7]. Entrepreneurial interest is influenced by several factors, including (1) socio-demographic, gender, and parental occupation, (2) attitudes, economic opportunities and challenges, and self-confidence, and (3) contextual factors, namely social support and academic support, and the environment [8].
determinants of entrepreneurship are also determined by the need for achievement, creativity, pedagogy, skill development, and critical thinking [9]. From several theories, it can be seen that several variables can affect entrepreneurial intentions. Furthermore, the attitude needs for achievement and innovation variables.

The influence of a person’s actions on intentions is described in [35]. In other words, it is explained how to build a relationship between attitudes and behavior. A person’s attitude towards behavior explains that the person has evaluations of good and bad focused in one’s mind [35]. An attitude is a form of individual response or internal reaction in the form of emotional (affective) responses, cognitive responses, and conative responses (behavioral tendencies towards an object) [10], which examines the influence of student attitudes on entrepreneurial intention.

Many studies have confirmed the relationship between creativity and starting a business, such as the novelty of ideas [11]. These new ideas exemplify the traits of creativity that direct entrepreneurial activity to start new ventures [12]. Furthermore, creativity is critical in starting a business because it contributes to designing products and providing services [13].

Entrepreneurial intention is the most important predictor for individuals starting a business [14]. Many studies have examined the factors that influence entrepreneurial intentions from various perspectives. Studies examining entrepreneurial characteristics have identified age, gender, educational level, personality traits, entrepreneurial knowledge and abilities, desire for achievement, adventurous spirit, and value orientation as essential factors in cultivating entrepreneurs [14, 15]. Meanwhile, other proactive personality factors also influence entrepreneurial intentions, such as narcissism, psychopathy, and Machiavellianism [16]. From the perspective of the entrepreneurial environment, these studies have identified that family education factors, market accessibility, entrepreneurial orientation from the government and related incentive policies and training services, and regional entrepreneurial atmosphere are fundamental factors in influencing student intentions [17, 18].

The research gap in this study is that very few researchers still use the creativity variable as mediation in increasing student entrepreneurial intention. Some research includes [19] high creativity to start a business can affect the success of a new business. Creativity and entrepreneurship are closely related, where creativity is essential in entrepreneurial activities [20]. This research contributes to a conceptual model of entrepreneurial learning in higher education. In addition, the government also called for advice on ‘mass entrepreneurship and innovation’ in optimizing the service environment to increase the proportion of employment and student entrepreneurship. In this context, the role of universities in Indonesia should be to start offering courses and services on innovative entrepreneurship training. The intended activities can be entrepreneurship programs, competitions, and sandbox simulations to increase entrepreneurial intentions among students. Therefore, this paper aims to see how the determinants of entrepreneurial learning affect the formation of entrepreneurial intentions and explain the relationship between achievement needs and attitudes towards entrepreneurial intentions through creativity.

2. Literature Review and Hypothesis Development

2.1. Entrepreneurial Intent

Entrepreneurial intent can be defined as a state of mind that focuses attention on all activities related to entrepreneurship [15, 21]-[22]. Interest in entrepreneurship is often considered a reliable indicator in predicting future entrepreneurial behavior, including behavior that is difficult to observe [22]-[23]. The study of entrepreneurial intention represents several factors related to one’s interest in creating a new business, including personality traits and external and contextual factors [24]-[25], one of which is the motivation for achievement [26]-[27]. According to McClelland’s theory (1961), the reason for achievement is someone who carries out entrepreneurial efforts driven by a desire to obtain achievements and awards from others for their accomplishments [19]. Therefore, students with high achievement needs tend to encourage someone to have a strong desire to pursue the field of entrepreneurship [28]-[29]. Another factor that also supports the formation of entrepreneurial intentions is creativity.

An entrepreneur will be successful when the entrepreneur has high achievement [30]. The need for achievement also positively affects creativity [31]. We propose the first hypothesis that the condition for achievement positively affects creativity. Motivation refers to a person’s desire to work on complex challenges and make risky decisions to succeed in entrepreneurship [32]. According to [33], the need for achievement is a driving factor and vital characteristic behind a person’s actions that affect entrepreneurial behavior. Motivation is also achieved as a desire to do the best, become a successful person, and perform according to competence [21]. We aim to motivate students to have a strong desire to explore entrepreneurial activities that are ultimately interested in becoming entrepreneurs [34].

2.2. Hypotheses

In this research, we build the following hypotheses:

H1: The need for achievement has a positive on entrepreneurial intention.

H2: The need for achievement has a positive on creativity.
Control of perceived behavior is to see the extent to which ability makes the most crucial determinant of Bandura’s perceived self-efficacy [36], [37], [38]. Creativity has become the focus of long-time activity, and many studies have confirmed the relationship between innovation and starting a business, such as novelty and ideas [11]. These new ideas exemplify the traits of creativity that direct entrepreneurial activity to start new ventures [12]. Moreover, creativity is critical in starting a business because it contributes to design.

Creativity theory defines four determinants of creativity (4P): process, product, person, and place [39]. Creativity theory defines four determinants of creativity (4P): process, product, person, and place [40]. Furthermore, behavioral planning theory (TBP) explains that it can determine a person’s attitude to be more positive in starting a business [31].

H3: Attitude has a positive on creativity.
H4: Attitude has a positive influence on self-efficacy.
H5: Attitude has a positive on creativity.
H6: Creativity has a positive impact on self-efficacy.
H7: Creativity has a positive on entrepreneurial intention.
H8: Self-efficacy has a positive on entrepreneurial intention.

3. Methodology

The approach applied in this research is a quantitative approach with the type of explanatory research. On the other hand, this study aims to see how the determinants of entrepreneurial learning affect students’ entrepreneurial intentions. Independent variables are achievement motivation and attitudes mediated by creativity variables—respondents from several private universities in Lampung, Indonesia. We took 225 students for the research sample. This type of research was a survey using random sampling, and then research questionnaires were collected online from June 2021 until July 2021.

The questionnaires consisted of four sections. For example, entrepreneurial Intention Questionnaire in managing [41], need for achievement questionnaire [42], attitude [43], and creativity [44]. A trial of the research instrument was carried out on 50 students from a private university in Lampung Province. Table 1 shows the research instrument.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Dimension</th>
<th>Items</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Intention</td>
<td>Feelings of interest in entrepreneurship</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Feelings of pleasure in entrepreneurship</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Attitude</td>
<td>Autonomy and authority</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Creativity</td>
<td>Intellectual and artistic value</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Orientation to work and achievement</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Perseverance</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Independence</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self-confidence</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>entrepreneurial activities</td>
<td>High motivation for entrepreneurship</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Desire to be flourishing in entrepreneurship</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Readiness to take risks</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
4. Results and Discussion

We analyzed 290 samples using Smart-PLs with a two-stage structural equation approach. This step is used to test the research hypotheses. The technical analysis here acts as confirmatory factor analysis. The goal is to confirm the reliability and validity of the constructs in the model used and to see if the construct follows the empirical data. Therefore, the two structural equation models are used to test the research hypothesis (Figure 2).

Statistical analysis in this study aims to know how achievement needs and attitudes towards entrepreneurial intentions through student creativity. Before testing the hypothesis, first tested outer loading, validity, and reliability of the measuring instrument used. Figure 2 shows the final external loading results, and Table 2 shows the composite reliability and average variance extract (AVE) values. These results are included in the validity test, and the value of Cronbach’s alpha is the reliability test result. Based on the results of these calculations, it can be ascertained that the scale used was valid and reliable.

Table 2 shows the value of composite reliability and rho (Henseler A), which shows the extent to which constructing indicators can predict latent variables with a recommended value of more than 0.7 [45].

<table>
<thead>
<tr>
<th>Variable</th>
<th>Rho</th>
<th>Cronbach’s Alpha</th>
<th>Composite Reliability</th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need For Achievement</td>
<td>0.898</td>
<td>0.730</td>
<td>0.847</td>
<td>0.549</td>
</tr>
<tr>
<td>Attitude</td>
<td>0.782</td>
<td>0.812</td>
<td>0.888</td>
<td>0.726</td>
</tr>
</tbody>
</table>

The next step is discriminant validity analysis using Fornell-Larcker criteria. The condition that must be good in this analysis is that the square root of each value of the AVE construct must be higher than the construct correlation with other latent variables [46] (Table 3). Discriminant validity was used to measure
instruments that cannot function properly. Other variables indicated the low correlation between the level of interest and different construction measures. This validity assumed that items on the measurement scale of certain variables had a higher correlation among other things on that variable compared to the correlation between certain variable items and items from other constructs, which are theoretically uncorrelated [45].

Table 3 showed that achievement motivation has a positive and significant relationship with creativity, seen from the CR value of 12.063 and p < 0.05. The study results align with [31], which explains that achievement motivation affects one’s creativity. Creativity is higher than motivation. The more ideas are trying to achieve a goal with a lot of also looking at pictures, increasing a person’s choice to do or produce something to make it creative. In addition to achievement motivation, an attitude has a significant positive relationship with creativity. Achievement motivation on entrepreneurial intention substantially affects creativity attitudes and can build a person’s positive attitude towards entrepreneurial behavior.

Data obtained in this research were analyzed using the Partial Least Square (PLS) method. In addition, the data analysis process in this study uses Smart. PLS Version 3.2.6 used the bootstrap method. Table 4 shows the test hypotheses based on the path. The analysis and special, indirect effects are intended to measure the extent to which the direct and indirect effects of two variables (namely achievement motivation and attitude) on the interest in entrepreneurship through the creativity possessed by students. The hypothesis is accepted if the CR value is > 1.995; t > 1.96 and p < 0.05.

Table 4 Path analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Original Sample</th>
<th>Median Sample</th>
<th>Standard Deviation</th>
<th>T Statistics</th>
<th>P-Values</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFA -&gt; Attitude</td>
<td>0.412</td>
<td>0.412</td>
<td>0.147</td>
<td>2.803</td>
<td>0.005</td>
<td>Accepted</td>
</tr>
<tr>
<td>NFA -&gt; Creativity</td>
<td>0.632</td>
<td>0.632</td>
<td>0.093</td>
<td>6.783</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>Attitude -&gt; Creativity</td>
<td>0.380</td>
<td>0.380</td>
<td>0.104</td>
<td>3.668</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>Attitude -&gt; Self Efficacy</td>
<td>0.067</td>
<td>0.065</td>
<td>0.090</td>
<td>0.743</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>Creativity -&gt; Entrepreneurial Interest</td>
<td>0.226</td>
<td>0.271</td>
<td>0.154</td>
<td>1.472</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>Creativity -&gt; Self-Efficacy</td>
<td>0.881</td>
<td>0.875</td>
<td>0.066</td>
<td>13.42</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>Self-Efficacy -&gt; Entrepreneurial Interest</td>
<td>0.322</td>
<td>0.787</td>
<td>0.055</td>
<td>2.234</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

Path analysis also produced a determinant coefficient (R2), where the combined effect between achievement motivation and attitude was 57.7%. In contrast, the combined product of achievement motivation, philosophy, and creativity on entrepreneurial interest is 58.1%. Therefore, based on the results of hypothesis testing, it can say that the seven conditions are accepted.

Achievement motivation also turns out to be very influential on students’ interest in entrepreneurship which is in line with the results of research that states that motivation affects a person’s success in entrepreneurship [47] states that the individual’s personality pattern determines a person’s work interest. In comparison, entrepreneurial success is influenced by his personality level. Motivation is the achievement of one of the individual personality patterns that affect entrepreneurial interest [48] also explained that achievement motivation is a decisive driving factor behind individual behavior that can be observed and determines entrepreneurial behavior. A person’s attitude has a significant positive relationship with entrepreneurial interest.

According to the theory of planned behavior, attitude is an antecedent that affects one’s interest and is one of the determining factors for success in entrepreneurship. Entrepreneurial intentions are also influenced by creativity. The research results indicate a significant positive relationship between creativity and interest in entrepreneurship. Creativity is essential in entrepreneurial activities, and entrepreneurship itself is relative. Creativity initiates interest in original ideas when starting a new business and producing new products [49]. People with high creativity will explore and try many ideas to create new or more innovative products, which is needed when someone is trying to start something new. Creativity on entrepreneurial intention is under the research results [50]. The higher
a person’s invention, the higher the effort to create new businesses, and their implementation is more effective.

In the concept of entrepreneurship, achievement motivation refers to a person’s desire to undertake complex challenges and dare to make risky decisions to succeed in entrepreneurship [32]. Based on various studies, achievement motivation positively affects one’s entrepreneurial interest. This study indicates that creativity significantly mediates the relationship between achievement motivation and interest in entrepreneurship. Achievement motivation on entrepreneurial intention creativity is in line with [19], which explains that someone with high creativity can influence someone to excel in beginning a new venture. Previous studies have also shown that attitudes significantly affect a person’s interest in entrepreneurship [10]. Furthermore, the perspective on entrepreneurial intention mediating the role of creativity is in line with the research results [31], which explain that the higher one’s intention, the more positive one’s attitude toward starting a venture.

5. Conclusion
The research results indicate a significant positive relationship between creativity and interest in entrepreneurship. Attitude is one of the determinants of a person’s success in entrepreneurship. People with high creativity can influence someone to excel in starting a new business.

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