

Impact of Creativity on Students' Entrepreneurial Intention: Study Case on Jakarta

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ABSTRACT

Objective – This study examines the factors that affect individuals' entrepreneurial intention, especially among university students.

Methodology – The study employed a quantitative approach and applied descriptive analysis as a methodological approach to investigate the students' entrepreneurial intention using Smart-PLS software to test the hypotheses.

Findings – The results showed that entrepreneurial intention is positively and significantly influenced by attitude toward self-employment. Besides, this study confirmed significant effect of creativity on attitude toward self-employment, which later affect entrepreneurial intention.

Novelty – This study contributes to adding to the literature on the factors determining entrepreneurial intention and provides empirical support for university that encourage university students to practice entrepreneurship.

Keywords: *creativity; entrepreneurial intention; theory of planned behavior; university students*

JEL Classification: D91, I25, M13

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I. INTRODUCTION

Over the last 10 years from 2009 to 2019, the global unemployment rate has continued to decline from 6.5% to 5.5%, but it jumped to 6.9% in 2020 due to the pandemic covid-19 which led to a decrease in employment and working hours (World Bank, 2020; International Labour Organization, 2021). The pandemic impacted on the increase of the unemployment rate, the temporary layoff rate, and the decrease of employment quality in various sectors such as tourism, aviation, and import-export trade as the restrictions on community activities are applied (Dang & Nguyen, 2020; Sirah & Woldetensay, 2020; Kozicki & Gornikiewicz, 2020). In Indonesia, in 2020, there was a jump in the unemployment rate from 5.23% to 7.07% because the number of companies that closed the company and suffered losses, determined to lay off their employees (Badan Pusat Statistik, 2023; Ramadani et al., 2022). The lockdown regulations also contributed to the increase in the unemployment rate since layoff happened in a certain industry, such as hospitality, as many hotels were forced to close and cease operations to prevent the spread of the virus (Rahma & Arvianti, 2020; Malahayati et al., 2021).

According to the World Bank (2021), unemployment rates in Indonesia decreased again to 3.8% in 2021. This occurred as a result of government assistance in the form of energy subsidies such as electricity and fuel, as well as social protection to impoverished households, micro, small, and medium-sized businesses (MSMEs), and corporate finance, which contributed to economic recovery (Sumarno & Sanchez, 2021). In addition, the COVID-19 pandemic has pushed entrepreneurs to be more innovative, more creative, and

more technology savvy to produce solutions for their business activities during a crisis, which can contribute to Indonesia's economic development as well (Mahfud et al., 2022; Nurahmasari et al., 2023). Besides, adding value to the community in the form of independent business creativity has been done by social entrepreneurship through creating employment opportunities and enhancing the well-being of the surrounding community (Suherman et al., 2022). Hence, creating new jobs can help reduce the unemployment rate.

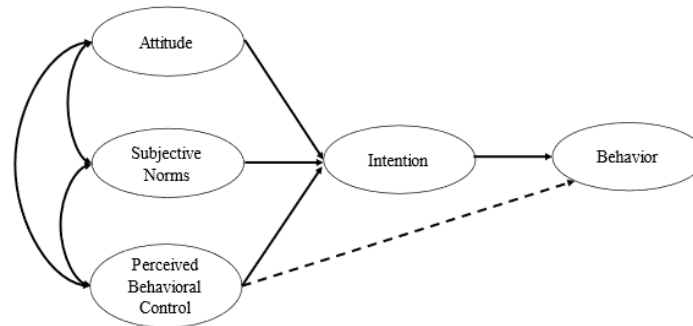


Figure 1. Theory of Planned Behavior

Besides, since entrepreneurship is related to uncertain situations like this pandemic era, individuals have the chances to hone and explore their abilities and knowledge, which is then followed by the creation phase (Magnani & Zucchella, 2018). Therefore, creativity has a significant role for entrepreneurs in identifying and exploiting the opportunities to start a new business (Anjum et al., 2021). Moreover, entrepreneurship can contribute to boosting the economy by encouraging innovation, creating jobs, and fostering competition (Nishimura & Tristan, 2011). Therefore, on the behalf of the importance of entrepreneurship and economic growth, it is essential to identify the factors that drive individuals to become entrepreneurs to encourage entrepreneurship (Chua & Bedford, 2015). Also, this study targeted university students in Jakarta area who are enrolling in business/economic and engineering majors as the popular faculty among students in Indonesia (Kemendikbud, 2020). Hence, this study tried to examine the determinants of entrepreneurial intention among university students in Jakarta, Indonesia.

II. LITERATURE REVIEW

Theory of Planned Behavior

Theory of planned behavior (TPB) defines the connections between attitude toward behavior, subjective norms, and behavioral control to decide behavioral intention and its impact on action (Qalati et al., 2022). Personal attitude refers to the individuals' self-perceptions of their own competence and capability to perform activities (Ajzen, 1991). In an entrepreneurial context, it can be the difference between concepts of personal desirability in becoming self-employed and the desire to work as an employee (Souitaris et al., 2007). The way individuals perceive the benefits and value of starting a business can influence their attitude toward entrepreneurship as an opportunity for personal career growth and a way to contribute to societal development (Wang et al., 2020; Lihua, 2022). Therefore, if individuals view the advantages and rewards of entrepreneurship as valuable, as well as getting exposure and knowledge to various aspect of entrepreneurship, they are more likely to express a strong desire or attitude to become entrepreneurs (Mwiya et al., 2017; Urban & Chantson, 2017).

Subjective norms refer to the perception regarding whether the majority of individuals within a family or society are likely to be in favor of or against a particular behavior (Ajzen, 1991). In entrepreneurial context, subjective norms reflect how individuals perceive influential people around them, who either encourage or discourage them from starting a new business (Doanh, 2021). Subjective norms encompass normative beliefs, which involve perceiving the likelihood of approval or rejection from influential individuals or groups, shaping the expected behavior for the individuals, and the motivation to comply, reflecting an individuals' willingness to conform to these norms and meet the expectations of significant referents (Morianio et al., 2012). Therefore, subjective norms can be a pressure that triggers or prevents individuals from the growth of entrepreneurial careers (Ruizalba Robledo et al., 2015).

Perceived behavior control (PBC) can be defined as individuals' belief regarding the level of ease and difficulty they perceive in handling a given situation (Ajzen, 1991). While considering entrepreneurs as a career choice, perceiving the easiness in engaging entrepreneurial activities seems to influence individuals' perception (Tsordia & Papadimitriou, 2015). Perceived behavior control is influenced by human capital, which encompasses factors such as the individual's professional skills, entrepreneurial skills, past experiences, and personal characteristics (Lihua, 2022). Hence, when presented with a particular opportunity, individuals with relevant education, experience, or exposure may view themselves as more competent to take advantage of the opportunity, thus motivating them to seize it (Mwiya et al., 2017). Perceived behavior control is not only about individuals' belief in their ability possess the necessary skills for starting and succeeding in a business but also the perception of having control over their actions to overcome the greater uncertainties, such as financial, technological, and legal, which commonly associated with new ventures (Miranda et al., 2017).

Creativity

In entrepreneurship, creativity is perceived as a process that involves the capacity to identify and seize opportunities, as well as to utilize and combine resources in novel ways within businesses (Corte & Gaudio, 2017). Creativity can be defined as a mental or social process that involves generating and exploring ideas through experimental and evaluative thinking, which results in original and valuable concepts and solutions (Heard et al., 2023). Besides, creativity entails the capability to recognize opportunities for inventing novel and beneficial products and services that can be possible to produce profit (Anjum et al., 2018). Individuals' experiences can help them to enhance their creative thinking skills, which allows them to improve their decision-making skill (Shahzad et al., 2021). Educational programs and practical assignments also can be valuable for individuals to enrich their creativity by improving their personal and analyzing skills for business opportunity (Caniëls & Motylska-Kuźma, 2023). Individuals' creativity enables them to cultivate belief in their own capabilities and develop the confidence that they are capable to perform under risky tasks of starting a new business (Nguyen et al., 2021). Moreover, individuals who possess a strong sense of creativity can maintain a positive mindset and a high self-confidence when engaging in entrepreneurial activities (Shi et al., 2020). Therefore, creative activities can help individuals to develop creative mindsets which leads to a positive attitude toward being entrepreneurs (Osmani et al., 2021) since creative thinking enables them to effectively commercialize or transform new ideas into marketable products through the process of product development (Jiatong et al., 2021).

Attitude toward Self-Employment

In general, attitude is the extent to which a person evaluates something favorably or unfavorably. While attitude toward start-up refers to the extent to which an individual has a favorable or unfavorable personal evaluation of being an entrepreneur, entrepreneurial attitude refers to the degree to which an individual has the knowledge, skills, and abilities (Ajzen, 1991). According to Al-Qadasi et al., (2021), the attitude toward self-employment refers to the anticipated efficacy of launching a new business or the outcomes of launching

a business. Entrepreneurship is a complex process for individuals in particular cultural and social contexts, whose positive and negative perceptions of entrepreneurship have a significant impact on their motivations to become entrepreneurs (Kaseorg & Raudsaar, 2013). If the economy supports entrepreneurship, it can provide potential and existing entrepreneurs with cultural and social support, financial and business assistance, and networking opportunities (Xavier, 2013). Seminars and entrepreneurship development programs can increase the number of students pursuing entrepreneurship as a career as the number of young people interested in entrepreneurship grows (Sukumar et al., 2022). Individuals' attitudes toward entrepreneurship and self-employment may be influenced by personal experience, family history, and training programs (Nandamuri, 2016; Hussain et al., 2018).

Entrepreneurial Intention

Intentions reflect the motivation behind a behavior and indicate the level of effort individuals are willing to put in to perform that behavior (Ajzen, 1991). In entrepreneurship, entrepreneurial intention refers to the self-confidence and future-oriented mindset of individuals who have a strong desire or plan to establish new businesses or engage in entrepreneurial activities. (Thompson, 2009; Krueger et al., 2000; Popescu et al., 2016). Entrepreneurial intention can be defined as an individual's willingness to start a new venture after graduation (Al-Qadasi et al., 2021). Entrepreneurial intention can be significantly influenced by education, training, and entrepreneurial attitudes (Ayalew & Zeleke, 2018). Besides, people with family background as entrepreneurs tend to have high intention to choose entrepreneurship as their career (Chaudhary, 2017; Ohanu & Ogbuanya, 2018). Moreover, the increase of exposure to success stories of science and technology start-ups through recent media coverage may boost young individuals' confidence in pursuing new business ventures (Dao et al., 2021). Personality of individuals, such as desire for success and challenge, creativity and experience with entrepreneurship also can impact on entrepreneurial intention since these things can be enhanced through creative thinking in education (Nguyen et al., 2019). Adequate university support including entrepreneurship courses and training that is more practical, and lecturers who have opportunities or experiences in entrepreneurship can assist students in learning more about entrepreneurship, improving their skills and ideas, which might inspire them to consider getting involved in entrepreneurship (Su et al., 2021). From the literature before, this study tried to examine the relationship among creativity, attitude toward self-employment, and entrepreneurial intention.

The Relationship between Creativity and Attitude toward Self-Employment

The concept of creativity is represented by the new ideas that are generated through the effective process of information (Biraglia & Kadile, 2016). Hence, the development and refinement of creativity over time can have a significant effect on one's creative self-efficacy, which in turn can impact both originality and the quality of problem-solving (Royston & Reiter-Palmon, 2017). Considering that the idea between creativity and entrepreneurship is almost similar, which is generating new solutions or approaches by identifying opportunity, people with high creativity can maintain a positive attitude and high self-confidence in entrepreneurial activities (Shi et al., 2020). Because people who perceive themselves to have a certain attribute such as creativity are more prone to develop more favorable attitudes toward creative activities such as entrepreneurship (Entrialgo & Iglesias, 2020). Therefore, this study will evaluate:

H1: Creativity positively influences attitude toward self-employment.

The Relationship between Creativity and Entrepreneurial Intention

In general, creativity refers to the intellectual activity to generate novel and original concepts that need to be learnt and work hard to continually improve ideas and solutions (Mazla et al., 2020). In entrepreneurship, creativity can be learnt and developed through some ways, such as communicating with

more people, reading more literature, challenging oneself, developing curiosity, and writing down any thoughts (Diawati et al., 2023). In addition to these methods, the interaction between people and their environments can generate creativity that relates to advancing novel and valuable ideas, such as the design of new products and services (Abdelfattah et al., 2022). Additionally, it revealed that people who believe that they possess creative ability had a strong desire to act entrepreneurially (Anjum et al., 2018). Also, people with higher levels of perceived creativity are more inclined to form entrepreneurial intentions (Biraglia & Kadile, 2016). Therefore, this study will evaluate:

H2: Creativity positively influences entrepreneurial intention.

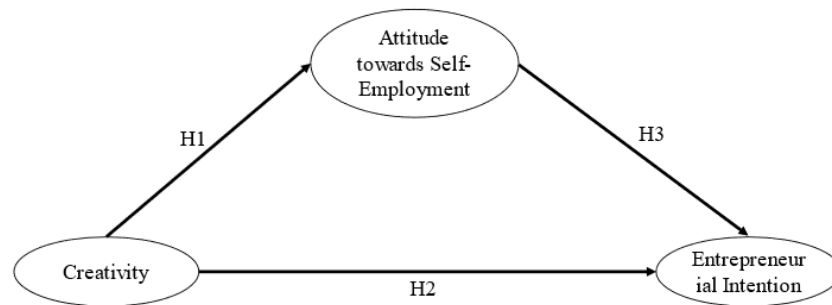


Figure 2. Proposed Conceptual Model

The Relationship between Attitude toward Self-Employment and Entrepreneurial Intention

In general, the more favorable the attitude with respect to the behavior, the stronger should be individuals' intention to perform the behavior (Ajzen, 1991). In entrepreneurial context, attitude refers to the personal interest and desirability to become self-employed (Law & Breznik, 2016). Besides, this attitude can be seen from motivation, such as the desire to engage potential fully, the freedom of choosing work time, and the variability of duties which is essential for personal growth and development (Kaseorg & Raudsaar, 2013). Compared to other relationships, including the one between subjective norm and intention, the attitude-intention relationship is noticeably greater (Pangaribuan et al., 2020). Hence, people with positive thought or perception toward entrepreneurship positively have a significant impact on their entrepreneurial intention (Alshebami et al., 2020; Agung et al., 2021). Therefore, this study will evaluate:

H3: Attitude toward self-employment positively influences entrepreneurial intention.

Research Framework

This study is designed to examine the relationship between creativity, attitude toward self-employment, and entrepreneurial intention. Therefore, the proposed conceptual framework developed in this study is shown in Figure 2.

III. METHODOLOGY

Data Collection

The study employed a quantitative approach and applied descriptive analysis as a methodological approach to investigate the students' entrepreneurial intention. The data was collected from January to June 2023 and distributed among business and engineering students in Jakarta using an online questionnaire. Besides, this study focuses on university students who are majoring in business and engineering in the Jakarta area since this area has college students about 700 thousand (Badan Pusat Statistik, 2022). However, since the data of Jakarta university students who enroll in those two majors is not available, this study's population is determined to be unknown. Furthermore, to determine the minimum sample size for this study,

this study applied Hair et al.'s (2018) formula to calculate the needed minimum required for the sample size. Also, this study's confidence level is 95%, meaning that the error tolerance (e) is 5%. Therefore, this study has a minimum sample size of 170 and gets 228 respondents from the survey.

Table 1. Measurement Items

Variables and Authors	Original Survey Items	Adapted Survey Items
Creativity (Zampetakis et al., 2011)	I think I am a very creative person	Saya pikir saya adalah orang yang sangat kreatif
	I can easily think a lot of different and useful ideas	Saya dapat dengan mudah memikirkan banyak ide yang berbeda dan berguna
	My family members are always thinking about new ideas for making their life easier	Anggota keluarga saya selalu memikirkan ide-ide baru untuk membuat hidup mereka lebih mudah
	I can freely talk to my family members about new ideas	Saya dapat dengan bebas berbicara dengan anggota keluarga saya tentang ide-ide baru
	In my university you learn that there is more than one solution to a problem	Di universitas saya, Anda belajar bahwa ada lebih dari satu solusi untuk suatu masalah
	In my university the faculty encourages students to produce new and useful ideas	Di universitas saya, fakultas mendorong saya sebagai mahasiswa untuk menghasilkan ide-ide baru dan berguna.
Attitude toward Self-Employment (Linan & Chen, 2009; Iakovleva & Kolvereid, 2009)	Being an entrepreneur implies more advantages than disadvantages to me	Menjadi wirausahawan menyiratkan lebih banyak keuntungan daripada kerugian bagi saya
	If I had the opportunity and resources, I would like to start a company	Jika saya memiliki kesempatan dan sumber daya, saya ingin memulai sebuah perusahaan
	Being an entrepreneur would entail great satisfactions for me	Menjadi wirausahawan akan memberikan kepuasan besar bagi saya
	A career as entrepreneur is attractive for me	Karier sebagai pengusaha menarik bagi saya
	I would rather own my own business than earn a higher salary employed by someone else	Saya lebih suka memiliki bisnis sendiri daripada mendapatkan gaji lebih tinggi yang dipekerjakan oleh orang lain
	I am willing to make significant personal sacrifices in order to stay in business	Saya bersedia melakukan pengorbanan pribadi yang signifikan untuk bertahan dalam bisnis
Entrepreneurship Intention (Nasar et al., 2019; Iakovleva & Kolvereid, 2009)	I am determined to create a company in the future	Saya bertekad untuk membuat perusahaan di masa depan
	After my graduation, I intend to create my own company or business	Setelah lulus, saya berniat untuk membuat perusahaan atau bisnis sendiri
	It is likely that I will start and run a small business in the relative near future	Kemungkinan saya akan memulai dan menjalankan bisnis kecil dalam waktu dekat
	I have a very serious thought about starting my own company	Saya memiliki pemikiran yang sangat serius untuk memulai perusahaan saya sendiri
	I intend someday to start my own company or business	Saya berniat suatu hari nanti untuk memulai perusahaan atau bisnis saya sendiri
	I will probably start and run my own business one day	Saya mungkin akan memulai dan menjalankan bisnis saya sendiri suatu hari nanti

As this study used questionnaire to collect data, the questionnaire items were constructed and adapted from previous literature review using 5-Likert scale to identify whether respondents agree, disagree, or neutral with the statements. The first variable is creativity, that used six measurement items developed by Zampetakis et al., (2011). Then, variable attitude toward self-employment applied six indicators adapted

from Liñán & Chen (2009) and Iakovleva & Kolvereid (2009). Last, variable entrepreneurial intention applied six measurement items also adopted from Nasar et al., (2019) and Iakovleva & Kolvereid (2009).

Variable Measurement

The online questionnaire was spread through online platforms, such as WhatsApp, LinkedIn, Instagram, and Twitter. Also, the respondents must be from Jakarta area and majoring management/business/economic and engineering. Besides, the questionnaire in the study was modified from past studies as shown in Table 1.

IV. RESULTS AND DISCUSSION

Validity and Reliability

After collecting the data, it is crucial to do reliability and validity test. Reliability test is done to see the level of consistency among measurements of variables measured (Hair et al., 2018) using Cronbach's Alpha. According to Hair et al. (2018), Cronbach's alpha value of 0.7 is generally accepted as the lower limit, with a potential range of 0.6 for exploratory research. When the Cronbach's alpha value is 0.7 or higher, it indicates acceptable internal consistency. A larger coefficient indicates stronger covariances between variables, suggesting that they might represent the same fundamental concept. Furthermore, to see the validity of indicators, which is how effective the construct validity represents the concepts being studied, Average variance Extracted is examined for all items in each construct. The AVE value is calculated by squaring the loadings of each indicator on a construct and taking the mean value. A standardized AVE value of 0.5 or higher, ideally 0.7 or higher, is considered indicative of strong convergent validity. The validity process may involve adding or removing specific items to establish acceptability or consistency. Table 2 shows the value of outer loadings, Cronbach's Alpha, composite reliability, and convergent validity.

Table 2. Validity and Reliability

Variables	Indicators	Outer Loadings	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Creativity	CR1	0.856	0.779	0.869	0.692
	CR2	0.938			
	CR3	0.680			
Attitude toward Self-Employment	ATSE1	0.511	0.871	0.903	0.615
	ATSE2	0.836			
	ATSE3	0.885			
	ATSE4	0.851			
	ATSE5	0.763			
	ATSE6	0.798			
Entrepreneurial Intention	EI1	0.889	0.920	0.940	0.759
	EI2	0.838			
	EI4	0.846			
	EI5	0.858			
	EI6	0.922			

Demographic Information

This study has four categorical data consisting of gender, age, major, and information whether respondents have taken entrepreneurship course. As shown in Table 3, the respondents are dominated by female.

Table 3. Demographic Information

Respondents' Data	Groups	No. of Respondents	Percentage
Gender	Male	112	49%
	Female	116	51%
Age	17-24 years old	221	97%
	<17 years old	7	3%
Major	Business	117	51%
	Engineering	111	49%
Entrepreneurship Course	Taken	215	94%
	Not Taken	13	6%

Descriptive Analysis

This section analyzes and discusses the descriptive analysis that consists of the mean, median, minimum value, maximum value, standard deviation, and the final mean value of each variable. As shown in Table 4, variable Creativity has three indicators with CR3 (4.10) having the highest average value, followed by CR2 (3.89) and CR1 (3.82). This variable has a median value of 4 as all the measurement items have the same value of median. All indicators have the minimum value of 1, except for CR3 that has minimum value of 2. Meanwhile, all items have the value of 5 as the maximum value. For the standard deviation, CR2 has the lowest value (0.80), followed by CR3 (0.81) and CR1 (0.89) that are getting higher respectively. The final average value of variable Creativity is 3.94, indicating that the respondents tend to show agreement with the statements reflected by the measurement items for the CR.

Table 4. Mean, Median, and SD Values

Variable	Measurement Items	Mean	Median	Standard Deviation	Final Mean Value
Creativity	CR1	3.82	4	0.89	3.94
	CR2	3.89	4	0.80	
	CR3	4.10	4	0.81	
Attitude toward Self-Employment	ATSE1	3.81	4	0.82	3.96
	ATSE2	4.22	4	0.70	
	ATSE3	4.17	4	0.82	
	ATSE4	4.00	4	0.86	
	ATSE5	3.68	4	1.12	
	ATSE6	3.87	4	0.83	
Entrepreneurial Intention	EI1	4.06	4	0.72	4.13
	EI2	4.01	4	0.78	
	EI4	4.08	4	0.86	
	EI5	4.18	4	0.69	
	EI6	4.33	4	0.79	

Furthermore, it is presented that the variable Attitude toward Self-Employment has six indicators with ATSE5 (3.68) as the smallest average value and ATSE2 (4.22) as the biggest average value. Besides, the mean values for the indicators ATSE1, ATSE6, ATSE4, and ATSE3 are 3.81, 3.87, 4.00, and 4.17, respectively. All the measurement items have the same median value of 4 and the same maximum value of 5. All indicators also have the same minimum value of 1, except for ATSE2 with the value of 2. The highest standard deviation value of this variable is ATSE5 (1.12), whereas the lowest standard deviation value is 0.70 of ATSE2. The final average value of variable Attitude toward Self-Employment is 3.96, indicating that the respondents tend to agree with the statements represented by the measurement items for the ATSE.

Moreover, the variable Entrepreneurial Intention has five measurement items. The lowest value of mean is 4.01 of indicator EI2, while the highest mean value is 4.33 of indicator EI6. The mean values of indicators EI1, EI4, and EI5 are 4.06, 4.08, and 4.18, respectively. The median value and the maximum value for all items are the same, which are 4 and 5, respectively. All measurement items have the same minimum value of 1, except for EI2 with the minimum value of 2. The smallest value of standard deviation is from indicator EI5 (0.69), whereas the biggest standard deviation value is from indicator EI4 (0.86). The final average value of variable Entrepreneurial Intention is 4.13, showing that the respondents tend to agree with the statements reflected by the measurement items for the EI.

Hypothesis Testing

Bootstrapping in SmartPLS is used to conduct hypothesis testing which results in T statistics and coefficient for each variable in the model. This study uses direct relationships between dependent (Entrepreneurial Intention) and independent variables (Creativity and Attitude toward Self-Employment). To determine whether the independent variables have an impact on the dependent variable, comparing T-statistics value with the value in the T table is required to be done.

Table 5. Hypothesis Testing

Path	β	<i>t</i> Statistics	<i>P</i> Values	Result
Creativity → Attitude toward Self-Employment	0.436	5.211	0.000	Significant
Creativity → Entrepreneurial Intention	0.065	0.794	0.428	Not Significant
Attitude to Self-Employment → Entrepreneurial Intention	0.569	5.853	0.000	Significant
Creativity → Attitude to Self-Employment → Entrepreneurial Intention	0.248	4.345	0.000	Significant

In this research, hypothesis 1 explores the relationship between students' creativity and their attitude toward self-employment. In Table 5, the *t* statistic value equals 5.211, which is higher than *t* table value of 1.971. Besides, the *P* value of this hypothesis is 0.000, indicating a lower value than 0.05 as the significance level. Hence, hypothesis 6 is supported. Furthermore, this hypothesis has a positive value of the original sample at 0.436, describing a positive relationship between creativity and attitude toward self-employment. Therefore, it can be concluded that students with higher levels of creativity are more favorable to be entrepreneurs.

Hypothesis 2 in this study assesses the impact of creativity on entrepreneurial intention of university students. As displayed in Table 5, the *t* statistic value of this hypothesis is 0.794, which is less than the *t* table value of 1.971. Also, the *P* value is 0.428, which is more than the significance level of 0.05. It means that hypothesis 7 is rejected in this study. Therefore, it explains that students' creativity does not impact or determine their intention to start a business.

Hypothesis 3 in this study investigates the relationship between attitude toward self-employment and the entrepreneurial intention among university students. According to Table 5, the value of *t* statistic is 5.853, which is higher than the *t* table value of 1.971. The *P* value for this hypothesis is 0.000, which is lower than the significance level of 0.05. It means that hypothesis 10 is accepted. Furthermore, the original sample value is 0.569, showing a positive relationship between attitude toward self-employment and entrepreneurial intention. Hence, it can be concluded that students with a higher level of attitude to be entrepreneurs have more intention to start a business.

V. CONCLUSION

After conducting data analysis, this study discovered several findings. First, this study revealed that H1, which assesses the effect of creativity on attitude toward self-employment, is supported. It means that students' creativity influences their attitude to be entrepreneurs. This finding supports the previous research stating that individuals' creativity can impact their attitude to be entrepreneurs (Entrialgo & Iglesias, 2020; Shi et al., 2020; Osmani et al., 2021). Creativity is about generating and exploring ideas through experimental and evaluative thinking to produce valuable concepts or solutions (Heard et al., 2023). It can be learnt and developed through some ways such as personal experiences, communicating with more people, and reading more literature (Diawati et al., 2023). In entrepreneurship, experiences related to entrepreneurial practice, knowledge, and skills can influence students' favorability to engage in more entrepreneurial activities (Nandamuri, 2016; Hussain et al., 2018).

Second, this study discovered that H2, which examines the impact of creativity on entrepreneurial intention, is rejected. It can be concluded that students' creativity does not significantly influence their intention to start a business. However, although creativity allows individuals to produce innovative, useful, and unique ideas, it still requires other factors, such as a strong motivation to turn idea into action (Saoula et al., 2023), also skills and knowledge necessary to successfully start and manage business (Liao et al., 2022). The lack of practical experiences and supportive environment in the creative development process can also hinder students' entrepreneurial intention (Zampetakis et al., 2011). Therefore, this result differs from previous findings (Biraglia & Kadile, 2016; Anjum et al., 2021; Abdelfattah et al., 2022).

Third, this study revealed that H3, which investigates the impact of attitude toward self-employment on entrepreneurial intention, is supported. It means that attitude toward self-employment has a significant impact on students' entrepreneurial intentions. This result is consistent with previous research (Law & Breznik, 2016; Hussain et al., 2018; Alshebami et al., 2020; Agung et al., 2021, Al-Qadasi et al., 2021) discovered that attitude toward self-employment significantly influences entrepreneurial intention. In this study, attitude toward self-employment is defined as the favorability or positive perception regarding entrepreneurship. Attitude toward entrepreneurship can be affected by students' creativity as this study found the indirect relationship between creativity, attitude toward self-employment, and entrepreneurial intention. It can be concluded that individuals who perceive creativity might have a positive attitude toward self-employment, which influences their intention to be entrepreneurs. Besides, even though risk-taking propensity does not directly influence entrepreneurial intention in this study, there is an indirect relationship between risk-taking propensity, attitude toward self-employment, and entrepreneurial intention. It describes that individuals' risk tendency allows them to have a positive attitude toward self-employment by gaining more entrepreneurial experiences, knowledge, and skills, which can influence their intention to start a business.

This study investigates how creativity and attitude toward self-employment influence entrepreneurial intention among university students in Jakarta, Indonesia. This study presents the direct effects of the determinants on students' entrepreneurial intention. The finding shows that creativity and attitude toward self-employment have a positive significant impact on entrepreneurial intention through direct effect. However, in this study creativity is not confirmed affecting students' entrepreneurial intention, contrasting with previous research (Anjum et al., 2020; Abdelfattah et al., 2022). Yet, the data analysis found that the indirect effect that link creativity and entrepreneurial intention through attitude toward self-employment. Therefore, it is important to increase the positive attitude toward entrepreneurship of students, such as favorability, skills, and knowledge to increase their entrepreneurial intention. It is in line with the TPB, suggesting that attitude toward behavior has a strong effect on behavior intention (Ajzen, 1991). Increasing students' attitude toward self-employment can be done through creative and practical educational programs, seminars, and training. This kind of activity can provide them with new insights, motivation, and

inspirations regarding entrepreneurial exposure and business activities (Ayalew & Zeleke, 2018; Dao et al., 2021). As their attitude toward entrepreneurship increases, it can impact their entrepreneurial intention positively (Alshebami et al., 2020; Al-Qadasi et al., 2021).

This study provides several theoretical implications. First, this study adds the literature regarding the attitude dimension in the theory of planned behavior as the most significant variable that impacts intention. This finding is in accordance with previous studies reported by Al-Mamary et al. (2020), Anjum et al. (2021), and Alshebami et al. (2020) stating that attitude toward entrepreneurship impact individuals' entrepreneurial intention. Second, this study examines university students who enrolled in business and engineering majors, specifically in the Jakarta area. Therefore, it can serve as a supporting reference for research with the same topic and area. This study provides managerial implications for universities to increase the students' entrepreneurial intention. As this study found indirect effect of creativity on entrepreneurial intention though attitude toward self-employment, this study suggests universities to provide entrepreneurship courses that incorporate more with experiential learning and real-world projects. Because it can help students to improve their creativity through new experiences (Caniëls & Motylska-Kuźma, 2023). Universities also should provide entrepreneurship programs that allow students to engage and collaborate with local businesses or startups so that they can gain entrepreneurship exposure. Therefore, it can impact their attitude toward entrepreneurship (Dao et al., 2021).

REFERENCES

- Abdelfattah, F., Al Halbusi, H., & Al-Brwani, R. M. (2022). Influence of self-perceived creativity and social media use in predicting E-entrepreneurial intention. *International Journal of Innovation Studies*, 6(3), 119–127. <https://doi.org/10.1016/j.ijis.2022.04.003>
- Agung, C. I., Loasari, F., Vinsensius, V., & Sihombing, S. O. (2021). Testing extended theory of planned behavior in predicting entrepreneurship intention: An empirical study. *Riset*, 3(1), 433–448. <https://doi.org/10.37641/riset.v3i1.78>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-t](https://doi.org/10.1016/0749-5978(91)90020-t)
- Al-Mamary, Y. H., Abdulrab, M., Alwaheeb, M. A., & Alshammari, N. G. (2020). Factors impacting entrepreneurial intentions among university students in Saudi Arabia: Testing an integrated model of TPB and EO. *Education + Training*, 62(7/8), 779–803. <https://doi.org/10.1108/et-04-2020-0096>
- Al-Qadasi, N., Zhang, G., & Al-Jubari, I. (2021). Attitude of youth toward self-employment: Evidence from university students in Yemen. *PLOS ONE*, 16(9). <https://doi.org/10.1371/journal.pone.0257358>
- Alshebami, A. S., Al-Jubari, I., Alyoussef, I. Y., & Raza, M. (2020). Entrepreneurial Education as a predictor of Community College of Abqaiq Students' entrepreneurial intention. *Management Science Letters*, 3605–3612. <https://doi.org/10.5267/j.msl.2020.6.033>
- Anjum, T., Farrukh, M., Heidler, P., & Díaz Tautiva, J. A. (2021). Entrepreneurial intention: Creativity, entrepreneurship, and University Support. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), 11. <https://doi.org/10.3390/joitmc7010011>
- Anjum, T., Ramzani, S. R., Farrukh, M., Raju, V., Nazar, N., & Shahzad, I. A. (2018). Entrepreneurial intentions of Pakistani students: The Role of Entrepreneurial Education, Creativity Disposition, Invention Passion & passion for founding. *Journal of Management Research*, 10(3), 76–100. <https://doi.org/10.5296/jmr.v10i3.13253>
- Ayalew, M. M., & Zeleke, S. A. (2018). Modeling the impact of entrepreneurial attitude on self-employment intention among engineering students in Ethiopia. *Journal of Innovation and Entrepreneurship*, 7(1), 8.

- Badan Pusat Statistik (2023). Jumlah dan Persentase Penduduk Bekerja dan Pengangguran 2020-2021. Badan Pusat Statistik. [Online]. Available: <https://www.bps.go.id/indicator/6/1953/2/jumlah-dan-persentase-penduduk-bekerja-dan-pengangguran.htm> (March 11, 2023).
- Biraglia, A., & Kadile, V. (2016). The role of entrepreneurial passion and creativity in developing entrepreneurial intentions: Insights from American homebrewers. *Journal of Small Business Management*, 55(1), 170–188. <https://doi.org/10.1111/jsbm.12242>
- Caniëls, M. C., & Motylska-Kuźma, A. (2023). Entrepreneurial intention and creative performance – the role of distress tolerance. *International Entrepreneurship and Management Journal*. <https://doi.org/10.1007/s11365-023-00863-4>
- Chaudhary, R. (2017). Demographic factors, personality and entrepreneurial inclination: A study among Indian university students. *Education+ Training*, 59(2), 171–187.
- Chua, H. S., & Bedford, O. (2015). A qualitative exploration of fear of failure and entrepreneurial intent in Singapore. *Journal of Career Development*, 43(4), 319–334. <https://doi.org/10.1177/0894845315599255>
- Corte, V. D., & Gaudio, G. D. (2017). Entrepreneurial creativity: Sources, processes and implications. *International Journal of Business and Management*, 12(6), 33. <https://doi.org/10.5539/ijbm.v12n6p33>
- Dang, H.-A. H., & Nguyen, C. V. (2020). Did a successful fight against the COVID-19 pandemic come at a cost? impacts of the outbreak on employment outcomes in Vietnam. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3751851>
- Dao, T. K., Bui, A. T., Doan, T. T., Dao, N. T., Le, H. H., & Le, T. T. (2021). Impact of academic majors on entrepreneurial intentions of Vietnamese students: An extension of the theory of planned behavior. *Heliyon*, 7(3), e06381. <https://doi.org/10.1016/j.heliyon.2021.e06381>
- Diawati, P., Ausat, A., & Augustin, J. (2023). Creativity: How to Develop an Entrepreneurial Attitude of Creativity. *Journal on Education*, 5(4), 11116-11122. Retrieved from <https://jonedu.org/index.php/joe/article/view/2036>
- Doanh, D. C. (2021). The moderating role of self-efficacy on the cognitive process of entrepreneurship: An empirical study in Vietnam. *Journal of Entrepreneurship, Management and Innovation*, 17(1), 147–174. <https://doi.org/10.7341/20211715>
- Entrialgo, M., & Iglesias, V. (2020). Entrepreneurial intentions among university students: The moderating role of creativity. *European Management Review*, 17(2), 529–542. <https://doi.org/10.1111/emre.12386>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2018). *Multivariate Data Analysis* (8th ed.). Cengage Learning EMEA.
- Heard, J., Krstic, S., & Richardson, S. (2023). Evidencing creativity in educational settings. *Journal of Creativity*, 33(1), 100046. <https://doi.org/10.1016/j.yjoc.2023.100046>
- Hussain, T., Hashmi, A., Gilani, M. (2018). Attitude toward entrepreneurship: An exploration of technology education students, *Bulletin of Education and Research*, 40(1), 131-139.
- Iakovleva, T., & Kolvereid, L. (2009). An integrated model of entrepreneurial intentions. *International Journal of Business and Globalisation*, 3(1), 66. <https://doi.org/10.1504/ijbg.2009.021632>
- International Labour Organization (2021). Slow jobs recovery and increased inequality risk long-term covid-19 scarring. [Online]. Available: https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_794834/lang--en/index.htm (March 11, 2023).
- Jiatong, W., Murad, M., Bajun, F., Tufail, M. S., Mirza, F., & Rafiq, M. (2021). Impact of entrepreneurial education, mindset, and creativity on entrepreneurial intention: Mediating role of Entrepreneurial Self-efficacy. *Frontiers in Psychology*, 12(724440). <https://doi.org/10.3389/fpsyg.2021.724440>
- Kaseorg, M., & Raudsaar, M. (2013). Students' Attitudes toward Entrepreneurship. *International Journal of Business and Management Studies*, 2(2), 31–43.

- Kemendikbud. (2020). Mahasiswa Berdasarkan Bidang. PDDikti Pangkalan Data Pendidikan Tinggi. <https://pddikti.kemdikbud.go.id/mahasiswa>
- Kozicki, B., & Gornikiewicz, M. (2020). Unemployment rate in Poland and USA during COVID-19 pandemic: A case study. *EUROPEAN RESEARCH STUDIES JOURNAL*, XXIII(Special Issue 3), 187–200. <https://doi.org/10.35808/ersj/1861>
- Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5–6), 411–432. [https://doi.org/10.1016/s0883-9026\(98\)00033-0](https://doi.org/10.1016/s0883-9026(98)00033-0)
- Law, K. M., & Breznik, K. (2016). Impacts of innovativeness and attitude on entrepreneurial intention: Among engineering and non-engineering students. *International Journal of Technology and Design Education*, 27(4), 683–700. <https://doi.org/10.1007/s10798-016-9373-0>
- Lihua, D. (2022). An extended model of the theory of planned behavior: An empirical study of entrepreneurial intention and entrepreneurial behavior in college students. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2022.627818>
- Liñán, F., & Chen, Y. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 33(3), 593–617. <https://doi.org/10.1111/j.1540-6520.2009.00318.x>
- Magnani, G., & Zucchella, A. (2018). Uncertainty in entrepreneurship and management studies: A systematic literature review. *International Journal of Business and Management*, 13(3), 98. <https://doi.org/10.5539/ijbm.v13n3p98>
- Mahfud, I., Arifin, M. Z., & Ulpah, M. (2022). Covid 19 pandemic on the growth of the entrepreneurship society in Indonesian community. *Priviet Social Sciences Journal*, 2(1), 30–34. <https://doi.org/https://doi.org/10.32479/pssj.11359>
- Malahayati, M., Masui, T., & Anggraeni, L. (2021). An assessment of the short-term impact of covid-19 on economics and the environment: A case study of Indonesia. *EconomiA*, 22(3), 291–313. <https://doi.org/10.1016/j.econ.2021.12.003>
- Mazla, M. I., Jabor, M. K., Tufail, K., Yakim, A. F., & Zainal, H. (2020). The roles of Creativity and Innovation in Entrepreneurship. *Advances in Social Science, Education, and Humanities Research*, 470, 213–217. <https://doi.org/10.2991/assehr.k.200921.035>
- Miranda, F. J., Chamorro-Mera, A., & Rubio, S. (2017). Academic entrepreneurship in spanish universities: An analysis of the determinants of entrepreneurial intention. *European Research on Management and Business Economics*, 23(2), 113–122. <https://doi.org/10.1016/j.iedeen.2017.01.001>
- Moriano, J. A., Gorgievski, M., Laguna, M., Stephan, U., & Zarafshani, K. (2012). A cross-cultural approach to understanding entrepreneurial intention. *Journal of Career Development*, 39(2), 162–185. <https://doi.org/10.1177/0894845310384481>
- Mwiya, B., Wang, Y., Shikaputo, C., Kaulungombe, B., & Kayekesi, M. (2017). Predicting the entrepreneurial intentions of university students: Applying the theory of planned behaviour in Zambia, Africa. *Open Journal of Business and Management*, 05(04), 592–610. <https://doi.org/10.4236/ojbm.2017.54051>
- Nandamuri (2016). An analysis of family occupational background as a construct of entrepreneurial orientation among youth, *Amity Journal of Entrepreneurship*. 1(1), 32-48.
- Nasar, A., Kamarudin, S., Rizal, A., Ngoc, V. T. B., & Shoaib, S. M. (2019). Short-term and long-term entrepreneurial intention comparison between Pakistan and Vietnam. *Sustainability*, 11(23), 6529. <https://doi.org/10.3390/su11236529>
- Nguyen, A. T., Do, T. H., Vu, T. B., Dang, K. A., & Nguyen, H. L. (2019). Factors affecting entrepreneurial intentions among youths in Vietnam. *Children and Youth Services Review*, 99, 186–193. <https://doi.org/10.1016/j.chilyouth.2019.01.039>

- Nguyen, T. T., Phan, H. T., & Pham, V. T. (2021). Impact of creativity on student entrepreneurial intention. *International Journal of Innovation*, 9(3), 646–663. <https://doi.org/10.5585/iji.v9i3.19659>
- Nishimura, J. S., & Tristan, O. M. (2011). Using the theory of planned behavior to predict nascent entrepreneurship. *Academia*, 46, 55–71.
- Nurahmasari, M., Silfiyah, S. N., & Pangaribuan, C. H. (2023). The Intention to Use Digital Banking Services among Gen Z in Indonesia based on the Technology Acceptance Model (TAM). *Jurnal Manajemen dan Bisnis Madani*, 5(1), 15-31.
- Ohanu, I. B., & Ogbuanya, T. C. (2018). Determinant factors of entrepreneurship intentions of electronic technology education students in Nigerian universities. *Journal of Global Entrepreneurship Research*, 8(1), 36.
- Osmani, M., El-Haddadeh, R., Hindi, N. M., & Weerakkody, V. (2021). The influence of creativity on the entrepreneurial intention of university female graduates: An SEM approach. *Industry and Higher Education*, 36(5), 556–567. <https://doi.org/10.1177/09504222211061231>
- Pangaribuan, C. H., Wijaya, D. P. E., Antari, K. Y., Sherisa, L. A., & Putra, C. A. (2020). Consuming organic instant noodle: Exploring environmental concern, health consciousness, and moral norm (Evidence from Indonesian consumers). *International Journal of Advanced Science and Technology*, 29(5), 6912-6927.
- Popescu, C., Bostan, I., Robu, I.-B., Maxim, A., & Diaconu (Maxim), L. (2016). An analysis of the determinants of entrepreneurial intentions among students: A romanian case study. *Sustainability*, 8(8), 771. <https://doi.org/10.3390/su8080771>
- Qalati, S. A., Qureshi, N. A., Ostic, D., & Sulaiman, M. A. (2022). An extension of the theory of planned behavior to understand factors influencing Pakistani households' energy-saving intentions and behavior: A mediated–moderated model. *Energy Efficiency*, 15(6), 40. <https://doi.org/10.1007/s12053-022-10050-z>
- Rahma, V. S., & Arvianti, G. F. (2020). The impacts of covid-19 pandemic in Indonesia and China's hotel industry: How to overcome it? *JELAJAH: Journal of Tourism and Hospitality*, 2(1), 55–64. <https://doi.org/10.33830/jelajah.v2i1.864>
- Ramadani, A. N., Sartika, D., & Herawaty, H. (2022). Increase in Unemployment Rates During the Covid-19 Pandemic. *Jurnal Ilmiah Ilmu Administrasi Dan Manajemen*, 15(3).
- Royston, R., & Reiter-Palmon, R. (2017). Creative self-efficacy as mediator between creative mindsets and creative problem-solving. *The Journal of Creative Behavior*, 53(4), 472–481. <https://doi.org/10.1002/jocb.226>
- Ruizalba Robledo, J. L., Vallespín Arán, M., Martín Sánchez, V., & Rodríguez Molina, M. Á. (2015). The moderating role of gender on entrepreneurial intentions: A TPB perspective. *Intangible Capital*, 11(1). <https://doi.org/10.3926/ic.557>
- Saoula, O., Shamim, A., Ahmad, M. J., & Abid, M. F. (2023). Do entrepreneurial self-efficacy, entrepreneurial motivation, and family support enhance entrepreneurial intention? the mediating role of Entrepreneurial Education. *Asia Pacific Journal of Innovation and Entrepreneurship*, 17(1), 20–45. <https://doi.org/10.1108/apjie-06-2022-0055>
- Shahzad, M. F., Khan, K. I., Saleem, S., & Rashid, T. (2021). What factors affect the entrepreneurial intention to start-ups? the role of entrepreneurial skills, propensity to take risks, and innovativeness in open business models. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(3), 173. <https://doi.org/10.3390/joitmc7030173>
- Shi, Y., Yuan, T., Bell, R., & Wang, J. (2020). Investigating the relationship between creativity and entrepreneurial intention: The moderating role of creativity in the theory of planned behavior. *Frontiers in Psychology*, 11(1209). <https://doi.org/10.3389/fpsyg.2020.01209>

- Sirah, E. S., & Woldetensay, W. A. A. (2020). Effect of covid-19 pandemic on unemployment rate and economic growth: The case of Ethiopia. *Research on Humanities and Social Sciences*, 10(13). <https://doi.org/10.7176/rhss/10-13-02>
- Souitaris, V., Zerbinati, S., & Al-Laham, A. (2007). Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? the effect of learning, inspiration and resources. *Journal of Business Venturing*, 22(4), 566–591. <https://doi.org/10.1016/j.jbusvent.2006.05.002>
- Su, Y., Zhu, Z., Chen, J., Jin, Y., Wang, T., Lin, C.-L., & Xu, D. (2021). Factors influencing entrepreneurial intention of university students in China: Integrating the perceived university support and theory of planned behavior. *Sustainability*, 13(8), 4519. <https://doi.org/10.3390/su13084519>
- Suherman, A., Tetep, T., Hamdani, N. A., Fatah, G. A., & Susanti, Y. (2022). Social Entrepreneurship as an effort for economic recovery during the COVID-19 pandemic. *Proceedings of the 6th Global Conference on Business, Management, and Entrepreneurship (GCBME 2021)*, 34–37. <https://doi.org/10.2991/aebmr.k.220701.009>
- Sukumar, D., Gayathri, K. S., & Preetha, R. (2022). Study on students attitude toward entrepreneurship with reference to final year postgraduate students of Ernakulam District. *International Journal of Health Sciences*, 11561–11569. <https://doi.org/10.53730/ijhs.v6ns3.8744>
- Sumarno, T. B., & Sanchez, L. (2021, September). How Indonesia can achieve both a COVID-19 recovery and its climate targets. *International Institute for Sustainable Development*. <https://www.iisd.org/system/files/2021-10/indonesia-achieve-covid-19-recovery-climate-targets.pdf>
- Thompson, E. R. (2009). Individual entrepreneurial intent: Construct clarification and development of an internationally reliable metric. *Entrepreneurship Theory and Practice*, 33(3), 669–694. <https://doi.org/10.1111/j.1540-6520.2009.00321.x>
- Tsordia, C., & Papadimitriou, D. (2015). The role of theory of planned behavior on entrepreneurial intention of Greek business students. *International Journal of Synergy and Research*, 4(1), 23–37. <https://doi.org/10.17951/ijsr.2015.4.1.23>
- Urban, B., & Chantson, J. (2017). Academic entrepreneurship in South Africa: Testing for entrepreneurial intentions. *The Journal of Technology Transfer*, 44(3), 948–980. <https://doi.org/10.1007/s10961-017-9639-z>
- Wang, J., Geng, J. N., and Xiao, Y. J. (2020). From intention to behavior: an integrated model of academic entrepreneurial behavior based on the 118 theory of planned behavior. *Foreign Econ. Manage.* 5(3). <https://doi.org/10.16538/j.cnki.fem.20200416.401>
- World Bank (2020). Unemployment, total (% of total labor force) (modeled ILO estimate). [Online]. Available: <https://data.worldbank.org/indicator/SL.UEM.TOTL.ZS?end=2021&start=1991> (March 11, 2023).
- Xavier, S. R., Kelley, D. J., Kew, J., Herrington, M., & Vorderwülbecke, A. (2013). *Global Entrepreneurship Monitor. 2012 Global Report*. Retrieved 10/02/2013 from <http://www.gemconsortium.org/docs/download/2645>.
- Zampetakis, L. A., Gotsi, M., Andriopoulos, C., & Moustakis, V. (2011). Creativity and entrepreneurial intention in young people. *The International Journal of Entrepreneurship and Innovation*, 12(3), 189–199. <https://doi.org/10.5367/ijei.2011.0037>