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The Effect of Entrepreneurship Education and Creativity on Students' Entrepreneurial Intention : The Perspective of Effectuation and Cognitive Flexibility Theory

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Abstract: This study aims to examine the impact of entrepreneurship education and creativity on students' entrepreneurial intention through the perspective of Effectuation Theory and Cognitive Flexibility Theory. The research used a quantitative approach to analyze structural equation modeling (SEM) and Partial Least Square (PLS). Respondents were drawn from 100 university students in Subang Regency, Indonesia, through an online questionnaire. The findings of this study showed positive and significant evidence between entrepreneurship education, creativity, and students' entrepreneurial intention. Through the Effectuation and Cognitive Flexibility Theory principles, students could develop the entrepreneurial attitude, adaptability, and creative thinking necessary to run their own businesses. Entrepreneurship education helps them understand business opportunities, utilize existing resources, and cope with uncertainty.

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Introduction

In the era of globalization and rapid technological development, a country's success in achieving sustainable economic growth depends on a strong business and entrepreneurial sector (Ausat, 2023). To achieve this goal, it is essential to encourage entrepreneurial spirit among students. Students, as the younger generation, have the potential to become successful entrepreneurs and drive innovation and economic growth.

The significance of entrepreneurship education has been acknowledged as a crucial element in molding the entrepreneurial mindset, expertise, and proficiencies necessary for initiating and expanding a business (Cui et al., 2021). Entrepreneurship education allows individuals to acquire the essential skills required for initiating, administering, and expanding a business (Miço & Cungu, 2023). Within this context, higher education institutions play a significant role in fostering students' inclination and preparedness to participate in entrepreneurial endeavors. Providing entrepreneurship education to students can facilitate their comprehension of business principles, administration, funding and cultivate a proactive,

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inventive, and value-creation-oriented mindset (Amalia & von Korflesch, 2021). Proficiency in these competencies can enhance an individual's or student's capacity to manage a business efficiently (Glackin & Phelan, 2020). Furthermore, the role of creativity is crucial in achieving success as an entrepreneur. Creativity is the capacity to produce novel and inventive concepts and distinct approaches to surmount diverse obstacles business owners encounter (Diawati et al., 2023). The cultivation of creativity allows students to foster and enhance their creative abilities. Individuals are instructed to engage in creative thinking, recognize novel prospects, and confront obstacles through inventive resolutions (Anderson et al., 2014). In business, creativity plays a pivotal role in developing distinctive products or services, setting one apart from rivals, and generating supplementary benefits for patrons (Schulze et al., 2022). Individuals with a heightened degree of creativity can identify novel prospects and generate inventive entrepreneurial ideas (Williams et al., 2021).

Previous studies have revealed mixed results regarding the effect of entrepreneurship education and creativity on students' entrepreneurial intentions. Some studies found a positive effect, while others showed a negative effect. Raza & Ramzan (2018) studied entrepreneurship education in Pakistan and found that entrepreneurship education significantly positively affects students' entrepreneurial intentions. According to their research findings, students who receive entrepreneurship education have a higher level of interest in becoming entrepreneurs than those who do not attend entrepreneurship education programs. Moreover, a study was carried out by Liñán and Fayolle in 2015. The research conducted a comparative analysis of the impact of entrepreneurship education on the entrepreneurial interest and mindset of engineering and business students. The findings indicate that the provision of entrepreneurship education had a noteworthy and favorable impact on the inclination towards entrepreneurship and adopting an entrepreneurial mindset among the two cohorts of students. The present study's results corroborate those of a prior investigation that established the positive impact of entrepreneurship education on students' entrepreneurial intentions. However, the extent of this effect may differ depending on the specific context and methodology of the entrepreneurship education program, as noted by van der Zwan et al. (2010), in contrast to the findings of Kantis et al. (2004) in their research conducted in Argentina, which suggested that entrepreneurship education may have a detrimental impact on student's entrepreneurial intention. The findings of this study indicate that despite being exposed to enhanced entrepreneurship education, students' inclination toward participating in entrepreneurial endeavors declined. The phenomenon could potentially be attributed to variables such as heightened risk aversion and a diminished perception of viable entrepreneurial prospects.

It is not only entrepreneurship education that can positively or negatively impact students' entrepreneurial intentions. The creativity factor also found mixed results when examined for its contribution to increasing students' entrepreneurial intention. Zhao & Seibert (2006) examined the effect of creativity on entrepreneurial intention and found that creativity significantly positively affects students' entrepreneurial intention. In addition, this study also found that entrepreneurial self-efficacy mediated the relationship between creativity and entrepreneurial intention. However, these findings are inconsistent with a study that found that creativity significantly negatively affects students' entrepreneurial intention when considering these mediating factors (Gielnik et al., 2015).

When referring to the previous research above, there are still inconsistent results. It means there is a gap to be re-examined in different objects and samples, thus making the current research more original. Suppose we refer to the phenomenon on a local scale where this research was conducted, namely Subang Regency, West Java. In that case, it will be more

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interesting to discuss creativity and entrepreneurship education which have implications for student intentions in entrepreneurship. That is because entrepreneurship education and student creativity in Subang Regency have experienced significant developments in recent years, such as entrepreneurship education programs. Several universities and educational institutions in Subang Regency offer entrepreneurship education programs, either in the form of undergraduate, diploma, or entrepreneurship training programs. These programs aim to develop the knowledge, skills, and attitudes required to become an entrepreneur. In Subang Regency, business incubators and entrepreneurship centers provide facilities and support for students who want to develop their business ideas. It includes mentorship, guidance, and access to business networks and other resources.

In addition, speaking about the reality of student creativity in Subang Regency, many universities offer programs focusing on creative fields such as art, design, music, and film. These programs allow students to develop and apply creative skills in various industries. Not only that, in Subang Regency, many competitions and creativity competitions are held for students. These competitions encompass various fields, including graphic design, photography, fine arts, and screenwriting. These competitions afford students the chance to refine their creative skills and receive acknowledgment for their accomplishments.

It is imperative to acknowledge that the actuality of entrepreneurship education and student ingenuity in Subang Regency may exhibit variability across academic institutions, curricula, and regional demarcations. Furthermore, the advancement of entrepreneurship education and student creativity in Subang Regency may be impeded by various obstacles, including but not limited to inadequate resources, insufficient industry connections, and divergent pedagogical approaches. Therefore, it is essential to conduct further research and refer to local sources such as academic research and other related resources to get updated and more detailed information about the reality of entrepreneurship education and student creativity in Subang Regency. Judging from the urgency, very few academics still research student entrepreneurship in Subang Regency.

One of the theories that discuss Entrepreneurship Education is "Effectuation Theory." This theory was developed by a professor named (Sarasvathy, 2001). Effectuation Theory focuses on how entrepreneurs think, act, and make decisions in the face of uncertainty in the business environment. According to Effectuation Theory, entrepreneurs not only focus on planning and predicting the future but also on using existing resources and involving others to achieve their goals. According to Sarasvathy (2001), this theory suggests that entrepreneurs use five principles of effectuation in developing new ventures:

1) *Establishment Principle*: Entrepreneurial endeavors typically commence with identifying available resources, including but not limited to knowledge, skills, social networks, and capital. Subsequently, they conceive a commercial concept predicated on the resources mentioned above.
2) *Continuous Principle*: Entrepreneurial individuals undertake strategic actions to enhance the likelihood of attaining their objectives. Individuals modify their strategies in response to changing circumstances and take advantage of favorable circumstances that present themselves during their endeavors.
3) *Adjustment Principle*: Entrepreneurs involve others in their business journey. They work with partners, customers, and other relevant parties to build mutually beneficial relationships and develop solutions.
4) *Application Principle*: Entrepreneurs act on their knowledge and take concrete steps to realize their goals. They learn through action and combine practical knowledge with theoretical knowledge.

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Effectuation Theory shifts the entrepreneurship paradigm from a traditional planning approach focusing on prediction and analysis to a more adaptive and creative approach (Perry et al., 2012). This theory provides valuable insights into entrepreneurship development and entrepreneurship education by emphasizing entrepreneurial thinking skills, flexibility, collaboration, and decision-making based on uncertain circumstances.

Furthermore, one theory that discusses student creativity is the "Cognitive Flexibility Theory" developed by (Sawyer, 2006). This theory suggests that creativity can be enhanced through the development of cognitive flexibility, which is the ability to quickly switch and adapt between different mindsets, concepts, and perspectives. According to Sawyer (2006), in Cognitive Flexibility Theory, students with high cognitive flexibility have an advantage in generating new ideas and creative solutions in the learning context. Here are some key points in this theory:

1) *Multiple Representations*: This theory emphasizes the importance of being able to see a problem or concept from multiple points of view and being able to understand it in multiple representations such as words, pictures, graphs, or symbols. Individuals who possess cognitive flexibility can seamlessly transition between various representations, thereby facilitating a more comprehensive comprehension of the subject matter.
2) *Cognitive Restructuring*: Cognitive flexibility pertains to the capacity of students to modify or alter pre-existing cognitive frameworks. Individuals possess the capacity to decompose complex concepts or predicaments into more manageable components, amalgamate disparate notions, or identify latent correlations that may not be immediately apparent. It enables individuals to perceive and produce alternative solutions.
3) *Task Switching*: The theory underscores the significance of students' capacity to transition between diverse tasks expeditiously. Individuals who possess strong cognitive flexibility can effectively allocate their attention across various tasks or problems without becoming entrenched in a singular inflexible mindset.
4) *Cognitive Inhibition*: Cognitive flexibility encompasses the capacity to transition between tasks and the aptitude to suppress or regulate extraneous or diverting cognitive processes or reactions. Individuals possessing this skill have the capacity to discern and eliminate extraneous data, directing their concentration toward pertinent material.

Within the realm of education, the cultivation of cognitive flexibility may be fostered through diverse pedagogical approaches that promote adaptable cognition, such as collaborative discourse that incorporates multiple viewpoints, intricate problem-solving, examination of heterogeneous information sources, and the utilization of innovative modeling methodologies (Rahayuningsih et al., 2020). The theory of Cognitive Flexibility offers a valuable perspective for comprehending how enhancing cognitive flexibility skills can contribute to promoting student creativity (Ritter & Mostert, 2017). Enhancing cognitive flexibility can enable students to exhibit greater ingenuity and adeptness in tackling intricate educational and practical predicaments.

The provision of entrepreneurship education has a substantial affirmative impact on the entrepreneurial inclination of students. Entrepreneurship education programs equip students with comprehensive knowledge, skills, and comprehension of entrepreneurial facets, including business planning, innovation, risk management, and creativity (Doan, 2022). According to Rembulan et al. (2023), this phenomenon facilitates the acquisition of self-assurance, drive, and preparedness to participate in entrepreneurial pursuits. Within the realm

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of entrepreneurship education, scholars have posited that students are allowed to acquire knowledge and skills of the pragmatic aspects of initiating and overseeing a commercial enterprise (Raharjo et al., 2023). The individuals partake in hands-on instruction, analysis of real-life scenarios, simulated business exercises, and communication with seasoned business owners. This procedure amplifies the comprehension of individuals regarding the complexities and possibilities linked with entrepreneurship and inspires them to utilize their acquired knowledge and expertise to initiate their enterprise.

According to Satriadi et al. (2022), students who receive a robust entrepreneurship education possess a comprehensive understanding of business procedures, specialized skills in recognizing prospects, and an enhanced comprehension of risk mitigation. These factors establish a strong basis for cultivating enthusiasm and drive toward entrepreneurship. According to Diawati et al. (2023), the acquisition of entrepreneurship education is conducive to cultivating a proactive mindset, an innovative orientation, and critical and creative thinking abilities, all of which are critical components in the initiation and administration of a business. Entrepreneurship education is a significant determinant of students' entrepreneurial intention as it equips them with the requisite knowledge, skills, and attitudes to navigate the complexities and prospects of the business environment effectively. The rise in students' entrepreneurial inclination is anticipated to stimulate economic expansion, generate employment opportunities, and fortify the entrepreneurial milieu within the community.

The presence of creativity has a noteworthy and favorable impact on the entrepreneurial inclination of students. According to Nikolopoulou (2018), creativity refers to the capacity to produce novel concepts, devise innovative solutions to issues, and identify prospects within difficult circumstances. Creativity is a crucial element in the realm of entrepreneurial interest, as it enables individuals to generate distinctive business concepts, distinguish themselves from rivals, and devise innovative strategies to navigate the dynamic and challenging business landscape (Li et al., 2022). Individuals with a heightened degree of creativity are more likely to exhibit innovation in the development of novel products or services, recognition of untapped market prospects, and the formulation of imaginative marketing tactics (Ausat, Risdwiyanto, et al., 2023). According to Isaksen (2023), the ability to think creatively enables individuals to perceive business opportunities in areas that may not be readily apparent to others. This skill allows individuals to think beyond conventional boundaries and approach problem-solving from a unique perspective. This fosters the entrepreneurial inclination of students to implement their own business concepts (Anjum et al., 2022).

In addition, creativity also plays an essential role in the business innovation process. Creative students can combine existing knowledge, skills, and resources in new and unconventional ways (Ritter et al., 2020). They are able to find new ways to generate added value and fulfill evolving market needs. In entrepreneurship, creativity helps students face challenges, find new solutions, and adapt quickly to changes in the business environment (Adam & Alarifi, 2021). Thus, creativity has a significant positive influence on students' entrepreneurial intentions. The ability to think creatively and innovatively broadens their view of business potential and motivates them to take steps to realize those ideas. Creativity also helps them face challenges, overcome obstacles, and develop unique solutions in running their business. This study aims to examine the impact of entrepreneurship education and creativity on students' entrepreneurial intention through the perspective of Effectuation Theory and Cognitive Flexibility Theory.

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Research Method

The study used a quantitative approach, as it involves gathering numerical and statistical information to meet scientific standards that are empirical, objective, measurable, rational, and methodical, as noted by Igwenagu (2016). The present investigation considers entrepreneurship education and creativity as exogenous variables, whereas students' entrepreneurial intention is regarded as endogenous. This study's rationale for incorporating entrepreneurship education and creativity factors as exogenous variables is closely linked to this particular condition. The answer is simple: in Effectuation Theory and Cognitive Flexibility Theory, the entrepreneurial perspective is considered more adaptive to provide valuable insights into developing entrepreneurship and entrepreneurship education by emphasizing entrepreneurial thinking skills, flexibility, collaboration, and decision-making based on uncertain circumstances. In addition, cognitive flexibility makes students more innovative and able to face complex challenges in learning and daily business practice. Students in Subang Regency can use these two constructs to foster interest in entrepreneurship and help them become successful entrepreneurs.

Thus, students increasingly realize that there are essential aspects of running a business today, namely being adaptive to advances in business concepts and how to respond to them, such as participating in electronic commerce to improve performance and competitive advantage. It can be known through the perspective of the two main predictor constructs. Furthermore, purposive sampling was used, with unique criteria such as gender, year class, and subject/program of study, as shown in Table 1. The next criterion was the location where the students were educated, namely in Subang Regency. It is due to the researcher's observation that more research on entrepreneurship education and student creativity still needs. Does it impact their interest in becoming entrepreneurs and starting a business as soon as possible? Therefore, to avoid bias and enrich the treasures of entrepreneurship knowledge and prove that with education, a person will be able to think critically to capture modern business opportunities to become entrepreneurs, as explained in the introduction chapter, this study needs to be conducted.

On the other hand, this research wants to prove that the increase in business insight through learning and association can change the way students think to be more advanced because a lot of experience and knowledge is absorbed. Thus, they must be more flexible in improvising with the process of today's business concepts or art, incredibly adaptive, and flexible in seeing opportunities. Consequently, the utilization of purposive sampling in research was attributed to the fact that its primary objective was to identify samples that conform to the researcher's predetermined criteria, including undergraduate students in the 2019-2022 batch, students who had been provided with entrepreneurship lecture material, active in internal and external campus entrepreneurship organizations, because in the author's view, someone would be motivated to become an entrepreneur if they had insight and relationships.

A Likert scale online survey was conducted on the unit of analysis, university students in Subang Regency, from April to May 2023. A total of 112 respondents were obtained. However, 12 were excluded from the study due to needing to meet the requirements. Consequently, the study utilised a sample size of 100 individuals as participants. Table 1 presents a summary of the attributes of the participants who took part in the survey. Notably, the author scrutinised the Google spreadsheet form and identified the respondents who participated in the online questionnaire as the primary unit of analysis. As anticipated, all the questionnaire respondents satisfied the research criteria by being university students. In addition, the study's data and hypotheses were analysed using the SEM-PLS (Structural

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Equation Model-Partial Least Squares) statistical method, with the assistance of SmartPLS 3.2 software. The SEM-PLS analysis involves two distinct categories of relationships, specifically the outer model that encompasses the evaluation of convergent validity, discriminant validity, and reliability. In addition, the inner model can be assessed by analysing R-square and Q-square and hypothesis testing.

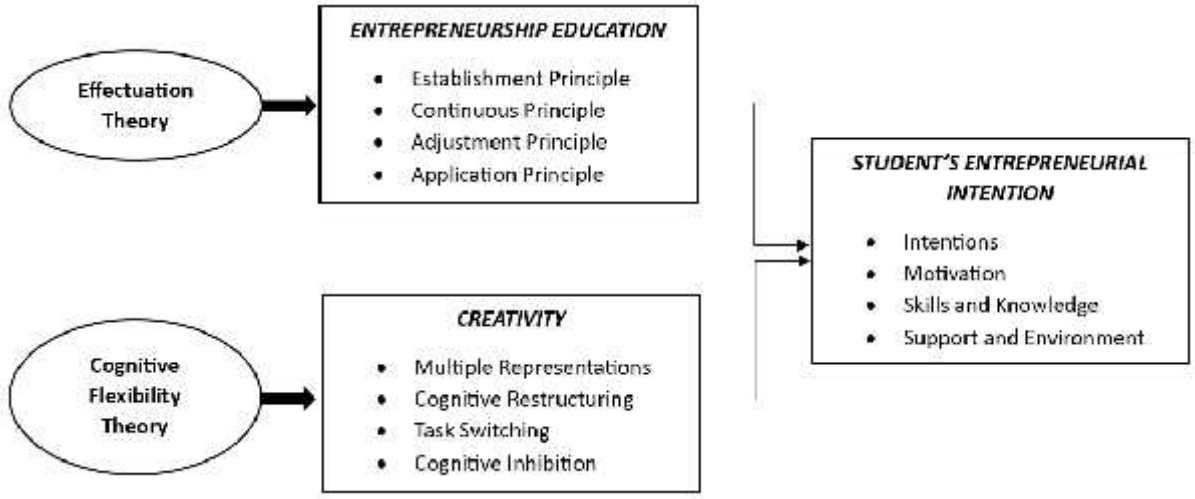

Figure 1. Research Framework

Table 1. Characteristics of the Respondents

Demographic		Frequency	Percentage
Institution	Universitas Subang	57	57%
	STIE Sutaatmaja	13	13%
	STAI Miftahul Huda	5	5%
	Universitas Mandiri	19	19%
	Etc	6	6%
	Total	100	100%
Year Class	2019	12	12%
	2020	42	42%
	2021	38	38%
	2022	8	8%
	Total	100	100%
Gender	Male	66	66%
	Female	34	34%
	Total	100	100%
Age	17-23 years	57	57%
	24-30 years	32	32%
	31-37 years	7	7%
	>37 years	4	4%
	Total	100	100%
Subject	Business Administration	30	30%
	Public Administration	17	17%
	Finance Administration	10	10%
	Accounting	12	12%
	Management	26	26%
	Economics	5	5%
Location	Subang	100	100%

The data in Table 1 illustrates the characteristics of the 100 selected respondents. Among them, 66 were male, and 34 were female. In terms of year of university entry, 12 respondents entered in 2019, 42 in 2020, 38 in 2021, and 8 in 2022. The respondents came

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from various study programmes, with 30 people from the business administration study programme, 5 people from the economics study programme, 26 people from the management study programme, 17 people from the Business Administration study programme, 12 people from the accounting study programme, and 10 people from the financial administration study programme. These results showed that students in business study programmes had greater entrepreneurial intentions during their entrepreneurship education and creativity levels. In terms of campus location, 100 respondents came from campuses located in Subang Regency, meaning that this research followed the research criteria in the study sample.

Results and Discussion

Outer Model

Using convergent validity, discriminant validity, and reliability testing, this study demonstrates the first step of the SEM-PLS analysis: testing the outer model.

Convergent Validity

The idea is that a strong correlation should exist between two or more construct measures (indicators). Because the loading factor value for each essential construct manifest variable is greater than 0.70 (Hair et al., 2011), convergent testing using SmartPLS 3.2.9 demonstrates that the reflexive indicator is true. All construct indicators in Table 2 have loading factor values greater than 0.70, demonstrating the validity and convergent validity, as shown by the results.

Discriminant Validity

It is calculated by dividing the construct correlation by the square root of the AVE (Average Variance Extracted). According to the criteria for discriminant validity (Hair et al., 2011), an instrument is considered valid if its AVE square value is larger than the correlation value between constructs. The results, as shown in Table 3, support the model's validity.

Table 2. Measurement Model Analysis

Variable	Item	Factor Loading	Cronbach's Alpha	Composite Reliability	AVE
Entrepreneurship Education (X1)	X1.1	0,714	0,859	0,894	0,678
	X1.2	0,840			
	X1.3	0,818			
	X1.4	0,828			
Creativity (X2)	X2.1	0,752	0,837	0,889	0,656
	X2.2	0,882			
	X2.3	0,772			
	X2.4	0,792			
Student's Entrepreneurial Intention (Y1)	Y1.1	0,869	0,859	0,893	0,683
	Y1.2	0,839			
	Y1.3	0,731			
	Y1.4	0,817			

Table 3. Discriminant Validity

Var/Ind	X1	X2	Y1
X1.1	**0,795**	0,542	0,431
X1.2	**0,831**	0,413	0,456
X1.3	**0,809**	0,482	0,459
X1.4	**0,839**	0,718	0,712
X2.1	0,505	**0,743**	0,639
X2.2	0,553	**0,893**	0,634
X2.3	0,533	**0,793**	0,489
X2.4	0,593	**0,783**	0,702
Y1.1	0,669	0,659	**0,869**

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Var/Ind	X1	X2	Y1
Y1.2	0,446	0,604	**0,829**
Y1.3	0,466	0,517	**0,792**
Y1.4	0,557	0,736	**0,811**

Inner Model

This research showed how to proceed with the SEM-PLS analysis by assessing the inner model with R-squared, Q-squared, and hypothesis testing.

R-Square

R-squared was used to calculate the relative importance of external and endogenous constructs. Table 4 below shows the R-squared results. In this scenario, R2 equals 0.644. The variables related to entrepreneurship education and creativity account for 64.4% of the variance in students' intentions to start their businesses, whereas other factors contributed 35.6%. Therefore, according to Hair et al. (2011), SEM models are considered moderate-strong if their R2 (R-squared) value is larger than 0.50.

Q2 Predictive Relevance

Q2 is utilised as a sanity check on the underlying structure (Predictive Relevance). Models are considered sufficiently good and predictive if Q2 exceeds 0 (Hair et al., 2011). The formula for determining Q2 is as follows:

$Q^2 = 1 – (1 – R1^2)$
$Q^2 = 1 – (1 – 0,644)$
$Q^2 = 1 – 0,356$
$Q^2 = 0,644$

Calculation Q^2 has a value of 0.644. It is possible to evaluate the performance of the model and the estimating parameters by looking at the value of Q^2 (Hair et al., 2011).

Hypothesis Testing

The hypothesis was stated had a positive correlation if the value was path coefficient greater than 0.1 and significant at the P-value less than 0.05 or T-value greater than 1.96 (Hair et al., 2011) and (Ausat & Peirisal, 2021). Table 5 below shows the results of hypothesis testing.

Table 4. R-Square Test

No	Variable	R-Square
1	Y1	0,644

Table 5. Hypothesis Testing Results

Hypothesis	Path Coefficient	T-Value	P-Value	Result
X1->Y1	0,237	2,269	0,025	Positive Significant
X2->Y1	0,628	6,578	0,000	Positive Significant

Table five above shows that entrepreneurship education positively and significantly impacts students' entrepreneurial intention. It means that the first hypothesis is accepted. This study's findings correlate with previous research results that found similar facts (Liu et al., 2022). The perspective used in this explanation was effectuation theory, which emphasises entrepreneurial actions and decision-making based on available resources. The following explains the principles of effectuation theory and how entrepreneurship education contributes to students' entrepreneurial intention.

The first was the establishment principle (X1.1). This principle in effectuation theory showed that entrepreneurs use existing resources to form business opportunities. Entrepreneurship education helps students understand the potential and business opportunities around them (Othman et al., 2020). Through this education, students learn to look at business opportunities from different perspectives, identify market needs, and assess

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the resources they have to capitalise on these opportunities (Dwivedi et al., 2021). According to Ness (2015), fostering a creative attitude, cultivating innovative thinking, and developing the capacity to identify opportunities in situations others may overlook are essential skills. Furthermore, the principle of continuity (X1.2). The principle of continuity in effectuation theory underscores the significance of persistent action and adjustment in business advancement. According to Almeida et al. (2021), providing entrepreneurship education to students facilitates the acquisition of leadership competencies, strategic planning abilities, and the capacity to execute ongoing actions aimed at business development. Students acquire the ability to be proactive in pursuing opportunities, engage in calculated risk-taking, and exhibit prompt responsiveness in the presence of changes and obstacles. According to Salun et al. (2021), entrepreneurship education facilitates the development of adaptive leadership skills and the capacity to respond to market fluctuations.

The adjustment principle (X1.3) was the third principle. As mentioned earlier, the principle places significant emphasis on the crucial nature of adjusting to the resources at one's disposal and utilizing them efficiently. The provision of entrepreneurship education facilitates the process of resource identification and comprehension among students, encompassing extant knowledge, competencies, social connections, and financial assets (Ausat, Al Bana, et al., 2023). Through this education, students learn to optimize their resources to start and grow their businesses (Manafe et al., 2023) and (Zen et al., 2023). They are also taught to seek mutually beneficial partnerships and utilize relationships with relevant stakeholders. Fourth is the application principle. This principle suggests that entrepreneurs act by focusing on actions they can control rather than predicting an uncertain future. Entrepreneurship education helps students develop the mental attitude and practical skills to deal with uncertainty. Students learn to take the initiative, deal with failure quickly, and learn from their experiences (Harahap, Ausat, et al., 2023).

In addition, the logical reason for this first hypothesis finding is that entrepreneurship education certainly provides students with opportunities to learn from practical experience and real case studies. Through business simulations, internships or incubation programmes, students can apply their acquired knowledge and skills in real business situations. It helps them understand the challenges faced in running a business, strengthens their perseverance, and improves their ability to make effective decisions. Overall, entrepreneurship education with the effectuation theory approach provides positive and significant results on students' entrepreneurial intentions. Students become more prepared and motivated to run their businesses through the establishment, continuous adjustment, and application of principles. They acquire the knowledge, skills, and mental attitude necessary to identify, develop, and capitalize on business opportunities. Entrepreneurship education also helps them to face challenges, adapt to change, and take controlled risks.

Furthermore, table five above also shows that creativity positively and significantly impacts students' entrepreneurial intention. It means that the second hypothesis is accepted. The findings of this study correlate with previous research results that found similar facts (Nguyen et al., 2021). In this context, the explanation will be based on the perspective of Cognitive Flexibility Theory, which emphasises an individual's ability to change thinking, overcome cognitive barriers, switch between tasks, and inhibit irrelevant thinking. The following explains the four concepts in Cognitive Flexibility Theory and how creativity contributes to students' entrepreneurial intention.

The first is about multiple representations (X2.1). This concept in Cognitive Flexibility Theory shows one's ability to understand, use, and combine different types of thinking and understanding in solving problems. In entrepreneurship, this ability allows

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students to see business opportunities from various perspectives and apply creative thinking to develop innovative solutions. Creative students can generate new ideas, consider various options, and utilise diverse knowledge and experiences to broaden their view of business potential (Weng et al., 2022). The second is cognitive restructuring (X2.2). This construct refers to an individual's ability to change thoughts and mindsets. In entrepreneurship, this ability allows students to let go of conventional or limited thinking about business and expand their understanding of existing opportunities and potential. Creative students can restructure their thinking about business, identify unmet needs, and find new ways to solve problems. They can see opportunities in places that are invisible to others and create new ideas that can pave the way to a successful business.

Third was task switching (X2.3). Task switching is the ability to switch between tasks or situations flexibly and effectively. In entrepreneurship, creative students can switch their attention and mental resources efficiently between different aspects of the business (Wang et al., 2022). They can adjust to different demands, face changing challenges, and balance various roles and responsibilities in running a business. This ability allows students to remain adaptive and responsive to changes in the dynamic business environment. Fourth is cognitive inhibition (X2.4). This construct is the ability to inhibit or suppress irrelevant or distracting thoughts. In entrepreneurship, this ability allows students to focus on relevant information and eliminate cognitive barriers hindering creativity and innovation. Creative students are able to control distractions (Harahap, Suherlan, et al., 2023) and (Cahyono et al., 2023).

Applying Cognitive Inhibition helps them develop more innovative and effective solutions. They can filter out irrelevant or distracting information, discard conventional boundaries of thought, and free themselves from limiting paradigms. Thus, they can create unique ideas and see new opportunities in the business environment. Creativity has a positive and significant result on students' entrepreneurial intention through the perspective of Cognitive Flexibility Theory. Using Multiple Representations allows students to see business opportunities from various perspectives. Cognitive Restructuring helps them expand their understanding of business and find new ways to solve problems. Task Switching allows them to adapt to different business demands. Lastly, Cognitive Inhibition allows them to inhibit irrelevant thinking and focus on creative and innovative solutions.

Education that strengthens creativity through the development of Multiple Representations, Cognitive Restructuring, Task Switching, and Cognitive Inhibition can significantly boost students' entrepreneurial intention. Through this approach, students can develop the skills necessary to identify business opportunities, think out of the box, overcome obstacles, and make innovative decisions in a changing environment.

Conclusion

Based on the explanation of the research findings above, entrepreneurship education and creativity development had positive and significant results on students' entrepreneurial intention, especially from the perspective of Effectuation Theory and Cognitive Flexibility Theory. Through the principles in these two theories, including the principle of formation, the principle of continuity, the principle of adjustment, the principle of application, and multiple representations, cognitive restructuring, task switching, and cognitive inhibition, students can develop an entrepreneurial attitude, adaptability, and creative thinking needed to run their own business. Entrepreneurship education helps them understand business opportunities, utilise existing resources, and cope with uncertainty. Meanwhile, the development of creativity opens the door to innovative ideas, flexible decision-making, and flexible thinking in the face of business challenges. Therefore, the theoretical contribution that can be

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conveyed is a better understanding of the effect of entrepreneurship education and creativity on students' entrepreneurial intention through Effectuation Theory and Cognitive Flexibility Theory.

This research provides a stronger theoretical foundation to explain this relationship and a deeper understanding of the factors influencing students' entrepreneurial intention. In addition, it contributes to the entrepreneurship education approach: This research provides valuable insights for developing more effective entrepreneurship education programmes. By strengthening the understanding of the principles of Effectuation Theory, educational institutions can design more targeted programmes to develop students' entrepreneurial interests and skills.

Recommendation

This study makes a critical recommendation that academic institutions, particularly administrators and educators, should follow. Campus administrators and instructors must help academic institutions start entrepreneurship education. The tertiary curriculum should include entrepreneurship education. Start teaching entrepreneurship basics like opportunity discovery, company plan creation, risk management, and finance. It will help students develop practical effectuation skills. Create a creative environment. Create a creative learning environment. Create innovation laboratories, co-working spaces, or collaboration areas encouraging student idea-sharing, conversation, and problem-solving. Innovative exercises, practical scenarios, and authentic assignments can teach effectuation concepts and flexible thinking. Higher education institutions can teach entrepreneurship and foster students' creativity within effectuation and cognitive flexibility by adopting the above approaches. Universities may foster successful and influential entrepreneurs by teaching innovative and adaptive thinking and change management.

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