

Original Article

The Effect of Self-Efficacy on Entrepreneurial Success: A Study of Entrepreneurial Intentions as Mediators

¹Hendra Wiyanto, ²Carunia Mulya Firdausy, ³Otto Randa Payangan, ⁴Haris Maupa, ⁵Syarifuddin Sulaiman

^{1,2}Faculty of Economics and Business, Tarumanagara University, Jakarta, Indonesia.

^{3,4}Faculty of Economics and Business, Hasanuddin University, Makassar, Indonesia.

⁵Faculty of Economics and Business, Universitas Muhammadiyah Makassar, Makassar, Indonesia.

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Abstract: *Entrepreneurs who come from universities are active in start-up projects; this trend encourages universities to consider entrepreneurship as a viable career alternative for students. The purpose of this research is to analyze the contribution of self-efficacy to entrepreneurial success mediated by entrepreneurial intention. A quantitative research approach was conducted at Pelita Harapan University and Bina Nusantara University in DKI Jakarta, Indonesia. The focus of the study is on factors influencing entrepreneurial success among undergraduate students enrolled in entrepreneurship courses. The research encompasses a population of undergraduate students, with a sample size of 228 individuals distributed across both universities. The primary method of data collection employed in this study is a questionnaire, and the data is measured using a Likert scale. The analytical framework utilized for this research is the Structural Equation Model (SEM). The results of the study show that self-efficacy has a positive and significant effect on entrepreneurial intentions and that entrepreneurial intentions have a positive and significant effect on entrepreneurial success. The results also show that entrepreneurial intentions partially mediate the effect of self-efficacy on entrepreneurial success, meaning that self-efficacy influences entrepreneurial success both directly and indirectly through entrepreneurial intentions. The results imply that self-efficacy is a crucial factor in fostering entrepreneurship among students. The study contributes to the literature on entrepreneurship by examining the impact of self-efficacy on entrepreneurial success, using entrepreneurial intentions as mediators. The study also provides practical and policy implications for universities, educators, policymakers, and practitioners who are involved in designing and delivering entrepreneurship support programs for students and graduates.*

Keywords: *Self-Efficacy, Entrepreneurial Intentions, Entrepreneurial Success, Students.*

I. INTRODUCTION

In the contemporary landscape of education and employment, fostering an entrepreneurial mindset among students has become a global imperative (Oulhou & Ibourk, 2023; Wardana et al., 2020; Yadav & Bansal, 2021). Entrepreneurship not only serves as a driver of economic growth but also cultivates essential skills such as creativity, adaptability, and resilience (Maupa et al., 2023; Maupa & Sulaiman, 2016; Sulaiman & Maupa, 2020). Recognizing the importance of preparing students for the challenges of an ever-evolving professional landscape, educational institutions have increasingly integrated entrepreneurship education into their curricula (Amjad et al., 2020). However, despite these efforts, understanding the multifaceted factors that contribute to students' entrepreneurial success remains a complex and evolving area of research.

The notion of students' entrepreneurial success extends beyond the mere establishment of businesses; it encompasses a spectrum of achievements, including the ability to innovate, adapt to market changes, and contribute meaningfully to the economy (Liu et al., 2023; Sousa-Filho et al., 2023; Sulaiman, 2022). As students navigate the entrepreneurial landscape, they encounter diverse challenges, ranging from access to resources and mentorship to the development of a robust entrepreneurial mindset (Petrylaite & Rusk, 2020). Students' entrepreneurial success refers to the achievement of desired outcomes and goals by students who engage in entrepreneurial activities, such as starting or running a business, creating or innovating a product or service, or solving a social or environmental problem. Students' entrepreneurial success can be measured by various indicators, such as profitability, growth, sustainability, satisfaction, recognition, or social impact (Glosenberget al., 2022; Munawar et al., 2023).

The significance of students' entrepreneurial achievements lies in their ability to encourage and inspire fellow students to follow their own entrepreneurial goals, in addition to making a positive impact on the social and economic advancement of their nations. Previous studies have explored the factors that influence students' entrepreneurial success, such as personal traits, skills, attitudes, motivations, intentions, behaviors, education, support, environment, and culture (Barkhatov et al., 2016; Hatthakijphong & Ting, 2019; Maczulskij & Viinikainen, 2023; Ritz et al., 2019; Stich et al., 2020a). However, there is no



consensus on the definition, measurement, and determinants of students' entrepreneurial success and the results are often inconsistent and context-dependent. Therefore, there is a need for more empirical research on students' entrepreneurial success, especially in different settings and contexts, such as emerging markets like Indonesia, where entrepreneurship education and support are still developing and evolving (McDonald et al., 2018).

Self-efficacy and entrepreneurial intentions stand out as key determinants that shape the entrepreneurial journey of students (Adebusuyi et al., 2022). Self-efficacy, rooted in Bandura's Social Cognitive Theory, refers to an individual's belief in their ability to execute tasks and achieve desired outcomes (Adebusuyi et al., 2022). Entrepreneurial intentions, on the other hand, encompass the conscious and planned commitment to engage in entrepreneurial activities (Litzky et al., 2020). Investigating the dynamic interplay between self-efficacy, entrepreneurial intentions, and students' entrepreneurial success are essential for tailoring effective educational interventions and support systems (Al-Ghazali & Afsar, 2021). Despite the recognized significance of self-efficacy and entrepreneurial intentions in influencing entrepreneurial outcomes, a comprehensive understanding of how these factors interact in shaping students' entrepreneurial success remains limited. The existing literature provides valuable insights into the individual roles of self-efficacy and entrepreneurial intentions, but a nuanced exploration of their interdependence is lacking. Addressing this gap is crucial, especially in the context of private university students in Jakarta. Therefore, the research problem revolves around deciphering the intricate relationships between self-efficacy, entrepreneurial intentions, and students' entrepreneurial success in this specific setting. The purpose of this research is to analyze the contribution of self-efficacy to entrepreneurial success mediated by entrepreneurial intention.

II. LITERATURE REVIEW

A) *Self-Efficacy in Entrepreneurship*

Central to the entrepreneurial process is the psychological construct of self-efficacy, which reflects an individual's belief in their capacity to successfully initiate and direct entrepreneurial activity (Fuller et al., 2018). Self-efficacy is a fundamental concept that has gained prominence in entrepreneurship research. The entrepreneurial context places special demands on individuals, requiring self-confidence, resilience, and a proactive approach to problem-solving (Saptono et al., 2021). Experts have determined that entrepreneurial self-efficacy significantly influences various aspects of the entrepreneurial process. High self-efficacy contributes to the formation of strong entrepreneurial intentions. This motivational aspect is very important because it influences individuals to transform their aspirations into concrete plans to engage in entrepreneurial activities (Le et al., 2023). Self-efficacy is closely related to the ability to recognize opportunities, which is an important aspect of entrepreneurial intentions. Entrepreneurs with high self-efficacy will find it easier to identify and pursue opportunities, thereby encouraging the formation of entrepreneurial intentions (Glosenberget al., 2022).

Entrepreneurs with high self-efficacy have a greater likelihood of starting and maintaining their businesses successfully. This can be seen from the positive correlation between self-efficacy and the actual founding of a new business. Self-efficacy contributes to the entrepreneur's resilience and adaptability in facing challenges (Hameli & Ordun, 2022). This adaptability is critical to overcoming obstacles and ensuring continued success in a dynamic entrepreneurial environment. The relationship between self-efficacy, entrepreneurial intentions, and success is not linear; instead, they form an interactive dynamic. While self-efficacy influences individual intentions and success, entrepreneurial intentions mediate the impact of self-efficacy on actual entrepreneurial behavior and outcomes (Naz et al., 2020). Based on this description, the hypothesis of this research is as follows.

H1: Self-efficacy affects entrepreneurial intentions and entrepreneurial success

B) *Entrepreneurial Intentions*

Entrepreneurial intention, representing an individual's conscious and planned commitment to engage in entrepreneurial activities, is an important antecedent to entrepreneurial action (Meoli et al., 2020). The link between entrepreneurial intentions and entrepreneurial success is fundamental to understanding the entrepreneurial process. The Theory of Planned Behavior posits that intentions are a strong predictor of behavior, indicating that the formation and strength of entrepreneurial intentions significantly influence the likelihood of engaging in entrepreneurial activities. Entrepreneurs who have clear and strong intentions to start a business are more likely to translate these intentions into action, thereby leading to the establishment of a new business (Aboobaker & D., 2020). Intention also plays a role in entrepreneurial persistence, influencing commitment to overcome challenges and continue entrepreneurial efforts in the face of adversity. Students' entrepreneurial accomplishments are important because they can motivate and inspire other students to pursue their own entrepreneurial aspirations and contribute positively to the social and economic development of their countries. (Donaldson et al., 2023). Educational programs can influence the formation and strength of entrepreneurial intentions, which in turn has an impact on entrepreneurial success (Sousa-Filho et al., 2023).

The relationship between entrepreneurial intentions and entrepreneurial success has been widely studied in the literature, and the results show that there is a positive and significant relationship between the two (Bhatti et al., 2021);

González-Serrano et al., 2023; Maheshwari, 2022; Uddin et al., 2022). Entrepreneurial success is the achievement of the results and goals desired by the entrepreneur, such as profitability, growth, sustainability, satisfaction, recognition, or social impact (Laguía et al., 2019). Attitudes towards entrepreneurship refer to positive or negative evaluations of starting a business. Subjective norms are the perceived expectations of others—friends, family, peers, or role models—about social pressure or support. Perceived behavioral control quantifies the degree of ease or difficulty associated with starting a business. Entrepreneurial intentions then influence entrepreneurial behavior, such as opportunity recognition, business creation, and business management. Entrepreneurial behavior ultimately leads to entrepreneurial success, which can be measured by various indicators, such as financial, operational, strategic, personal and social results. This description leads to the following hypothesis for this research.

H2: Entrepreneurial intentions affect entrepreneurial success

C) Entrepreneurial Success

Entrepreneurial success is important for students because it can inspire and motivate them to pursue their entrepreneurial aspirations, as well as contribute to their personal and professional development and the economic and social development of their communities (Glosenberget al., 2022). The relationship between self-efficacy, entrepreneurial intentions, and entrepreneurial success is a complex and dynamic interaction that shapes an individual's entrepreneurial journey (Hatthakijphong & Ting, 2019). High levels of self-efficacy empower individuals with confidence and belief in their abilities to face entrepreneurial challenges. Entrepreneurs who consider themselves capable and effective in carrying out entrepreneurial tasks are more likely to form strong entrepreneurial intentions (Xia et al., 2023).

Entrepreneurial intention represents an individual's conscious and planned commitment to engage in entrepreneurial activities, reflecting their motivation to translate aspirations into concrete actions. Entrepreneurial intention acts as a mediating mechanism between self-efficacy and entrepreneurial success. Individuals with strong entrepreneurial intentions are more likely to translate their confidence in their abilities into actionable steps toward entrepreneurship. Entrepreneurs with strong entrepreneurial intentions are more likely to start and establish a business (Munawar et al., 2023). The commitment and motivation embedded in intention encourage individuals to overcome obstacles and take the necessary steps to start and run a business. Strong entrepreneurial intent contributes to adaptability and resilience (Stich et al., 2020b). Entrepreneurs who face challenges will be better able to survive and find creative solutions if their intentions are firmly established. This description implies the following hypothesis for this research.

H3: Self-efficacy affects entrepreneurial success mediated by entrepreneurial intention

Entrepreneurial intentions and entrepreneurial success are based on the grand theory of Social Cognitive Career Theory (SCCT), which explains three main components that influence entrepreneurial success: self-efficacy, outcome expectations, and goals (Adebusuyi et al., 2022; Lent et al., 2017; Pérez-López et al., 2019). Self-efficacy is the conviction that one can carry out a certain task or realize a particular objective. The expected benefits or outcomes from completing a task or reaching a goal are known as outcome expectations. A goal is a personal intention or plan to perform a task or achieve a goal. Self-efficacy, outcome expectations, and goals interact with each other and with personal and environmental factors to shape entrepreneurial success. SCCT proposes that self-efficacy and outcome expectations influence the formation and strength of entrepreneurial goals, which in turn influence the initiation and persistence of entrepreneurial behavior, such as opportunity recognition, venture creation, and venture management (Yeh et al., 2021). Entrepreneurial behavior then leads to entrepreneurial outcomes. Entrepreneurial outcomes, in turn, provide feedback and reinforcement for self-efficacy and the dynamic process of entrepreneurial success (Simarasl et al., 2022).

SCCT has been empirically tested and supported by numerous studies in different contexts and settings. Therefore, other studies have expanded and modified the SCCT model by adding or replacing several variables or constructs, such as entrepreneurial intention. Several studies aim to provide a more comprehensive and differentiated understanding of entrepreneurial success based on SCCT and to identify the main factors and mechanisms that mediate or moderate this success (Pérez-López et al., 2019). Entrepreneurial success based on SCCT is a complex and diverse phenomenon involving various factors and processes at different levels of analysis. Based on a literature review of self-efficacy, entrepreneurial intention, and entrepreneurial success, as well as support from grand theory, the conceptual framework of this paper are presented as follows.



Figure 1: Conceptual Framework

III. METHODOLOGY

This research will adopt a cross-sectional research design. Cross-sectional research allows for an examination of self-efficacy, entrepreneurial intentions, and entrepreneurial success at a certain point in time, thereby providing a picture of the interrelationships between these three things. A quantitative approach will be used to collect numerical data on self-efficacy, entrepreneurial intentions, and entrepreneurial success, facilitating statistical analysis to examine the relationship between the two. Research locations at Pelita Harapan University and Bina Nusantara University in DKI Jakarta, Indonesia. This research covers a population of undergraduate students, with a sample size of 228 people spread across both universities. Stratification will involve categorizing students based on their academic year to ensure representation at different stages of their academic journey. A structured questionnaire will be the main research instrument. The questionnaire will consist of validated scales to measure self-efficacy, entrepreneurial intentions, and entrepreneurial success. Advanced statistical methods, particularly Structural Equation Modeling (SEM), will be employed to analyze the data. A thorough investigation of the mediating function of entrepreneurial purpose in the link between self-efficacy and entrepreneurial achievement is made possible by SEM's ability to examine intricate connections between latent variables.

IV. RESULTS AND DISCUSSION

A) Descriptive Statistical Analysis of Variables

Based on the mean value, an interpretation of the respondents' answers was carried out using five Likert scale categories. Each scale has a rating level from negative to positive contained in the questionnaire answer choices. The results of statistical descriptive analysis for each variable are as follows.

Table 1: Distribution of the Variables Self-Efficacy, Entrepreneurial Intentions, and Entrepreneurial Success

Variable	Indicators	Mean
Self-Efficacy	I am confident that I can successfully identify new business opportunities	3.32
	I am confident that I can successfully create new products	3.93
	I believe I can think creatively	3.82
	I am confident that I can successfully commercialize new ideas or developments	3.91
Entrepreneurial Intentions	I am ready to do anything to become an entrepreneur	3.92
	My professional goal is to become an entrepreneur	3.90
	I will make every effort to start and run my own company	3.91
	I am determined to create a company in the future	4.02
	I have very serious plans to start a business.	3.90
Entrepreneurial Success	I have a strong intention to start a business someday	3.94
	I am personally satisfied with my life and business	3.99
	I am enthusiastic/passionate about my business	4.00
	I continue to develop existing business opportunities	3.96
	I achieved the business goals I wanted to achieve by founding at least one business	3.90

A high score on the self-efficacy variable indicates a high level of self-confidence. A high level of self-efficacy indicates that the majority of respondents have strong self-confidence in certain abilities or skills, but there is still room for improvement. Respondents have quite good self-confidence in the indicators measured. They feel competent and confident in executing certain tasks or situations. A high score on the entrepreneurial intention variable indicates a high level, meaning that the majority of respondents tend to have a strong desire to be involved in entrepreneurial activities or start a business. Respondents not only have intentions but also the possibility of having strong beliefs or a solid basis for realizing their entrepreneurial desires. Entrepreneurial intentions can show that respondents tend to take concrete action in developing business ideas or starting a business. A high score on the entrepreneurial intention variable indicates a high level that respondents generally consider themselves successful in entrepreneurship, which reflects positive achievements in various aspects of business, such as finance, growth, or sustainability. The majority of respondents felt they achieved certain goals or measures of success in the context of entrepreneurship, which could involve achieving sales targets, profits or other business achievements.

B) Outer Model Evaluation

The outer loading values obtained by each indicator in this study are shown in Table 2 below.

Table 2: Outer Loading Value of Research Variables

Variable	Indicators	Mean
Self-Efficacy	0.858	Valid
	0.872	Valid
	0.910	Valid
	0.865	Valid
Entrepreneurial Intentions	0.764	Valid
	0.837	Valid
	0.872	Valid
	0.887	Valid
	0.861	Valid
	0.853	Valid
Entrepreneurial Success	0.861	Valid
	0.790	Valid
	0.877	Valid
	0.742	Valid

Based on the outer loading value obtained by each measurement instrument for each variable in this research model, it is stated that each instrument describes the variable it represents well. No instrument obtained an outer loading value below 0.7, indicating that each instrument could describe the latent variable it represented well. Based on the PLS Algorithm output for the indicators in the following table, the AVE value and AVE squared value are obtained as in Table 3 below.

Table 3: Average Variance Extracted (AVE), Composite Reliability (CR), and Cronbach's Alpha (CA)

Variable	AVE	CR	CA
Self-Efficacy	0.769	0.930	0.899
Entrepreneurial Intentions	0.717	0.938	0.921
Entrepreneurial Success	0.672	0.891	0.836

Based on the outer loading value obtained by each measurement instrument for each variable in this research model, it is stated that each instrument describes the variable it represents well. No instrument obtained an outer loading. The AVE values for all variables meet the required values, namely above 0.5. The lowest AVE value is found in the entrepreneurial success variable with a value of 0.672. The data from this research can be stated to have met the requirements of the convergent validity test. The composite reliability test results show a value of > 0.7, and Cronbach's alpha shows a value of > 0.6, which means the value of all instruments, is reliable.

C) Structural Equation Model

The test results of all hypotheses based on the structural equation model are presented in Table 4 below.

Table 4: Hypothesis test results

Path	Std. Coeff	T-value	P-value
Self-efficacy → Entrepreneurial intentions	0.581	14.635	0.000
Self-efficacy → Entrepreneurial success	0.206	5.212	0.000
Entrepreneurial intentions → Entrepreneurial success	0.752	23.073	0.000
Self-efficacy → Entrepreneurial intentions → Entrepreneurial success	0.437	13.900	0.000

Based on hypothesis testing, it shows that H1 (self-efficacy affects entrepreneurial intentions and entrepreneurial success) is accepted based on a t-value of 14.635 > 1.960 and a p-value of 0.000 < 0.050, self-efficacy contributes significantly to entrepreneurial intentions. The t-value is 5.212 > 1.960, and the p-value is 0.000 < 0.050; self-efficacy contributes significantly to entrepreneurial success. The positive coefficient value between self-efficacy on entrepreneurial intentions and entrepreneurial success shows a unidirectional relationship. The contribution of self-efficacy to entrepreneurial intentions is greater than self-efficacy to entrepreneurial intentions and entrepreneurial success. H2 (entrepreneurial intentions affect entrepreneurial success) is accepted based on a t-value of 23.073 > 1.960 and a p-value of 0.000 < 0.050; entrepreneurial intentions contribute significantly to entrepreneurial success. H2 is the path with the greatest contribution to the entrepreneurial success model. The positive coefficient value between entrepreneurial intentions and entrepreneurial success shows a unidirectional relationship. H3 (self-efficacy affects entrepreneurial success mediated by entrepreneurial intention) is accepted based on a t-value of 13,900 > 1.960 and a p-value of 0.000 < 0.050; self-efficacy significantly mediates entrepreneurial

success through entrepreneurial intention. The positive coefficient value between self-efficacy and entrepreneurial success through the mediation of entrepreneurial intention shows a unidirectional relationship.

D) Discussion

Our research reveals a strong positive correlation between self-efficacy and entrepreneurial success. Entrepreneurs who report higher levels of self-efficacy tend to achieve greater success in their ventures. However, the journey from self-efficacy to entrepreneurial success is multifaceted, involving intermediary factors such as entrepreneurial intentions. Entrepreneurial intention emerges as an important mediator in the relationship between self-efficacy and entrepreneurial success. When individuals develop confidence in their ability to successfully carry out entrepreneurial tasks (self-efficacy), they tend to develop strong intentions to engage in entrepreneurial activities. This intention, in turn, acts as a driving force, channeling individual efforts and actions toward entrepreneurial success.

The interaction between self-efficacy and entrepreneurial intention is dynamic. Higher self-efficacy not only directly contributes to greater success but also indirectly influences success through cultivating ambitious entrepreneurial intentions. This complex relationship underscores the importance of cultivating self-efficacy in entrepreneurship education and training programs, as this has the potential to determine subsequent success. Our findings have significant implications for the design and implementation of entrepreneurship education and training initiatives. Educators and policymakers must focus not only on imparting technical skills but also on maintaining and enhancing students' self-efficacy beliefs. By cultivating a sense of competence and confidence in their abilities, future entrepreneurs will be more likely to develop strong entrepreneurial intentions, which will ultimately result in higher levels of success in their ventures.

Entrepreneurial intention emerges as a transformative catalyst that translates self-efficacy into real entrepreneurial success. Individuals with high self-efficacy not only have ambitious intentions but also actively turn these intentions into concrete actions. This process involves identifying and exploiting opportunities, persevering in the face of challenges, and demonstrating adaptive and innovative behavior—all important components of entrepreneurial success. One of the main findings of this research is the strong positive correlation between self-efficacy and entrepreneurial success. Individuals who report higher levels of self-efficacy consistently demonstrate higher levels of entrepreneurial success. This is consistent with Bandura's social cognitive theory, which holds that people who have a high sense of their own abilities are more likely to set difficult objectives, keep going in the face of setbacks, and succeed in the end. The relationship between self-efficacy and entrepreneurial success is revealed by this research, which highlights the mediation function of entrepreneurial intention. Rather than a direct and linear relationship, our findings suggest that the impact of self-efficacy on success is channeled in part through the cultivation and realization of entrepreneurial intentions. These mediating mechanisms provide a different understanding of how psychological factors contribute to entrepreneurial outcomes.

E) Theoretical Contribution

This research is based on the theoretical framework of Social Cognitive Career Theory (SCCT), which proposes that self-efficacy, outcome expectations, and goals influence the formation and strength of entrepreneurial intentions, which in turn influence the initiation and persistence of entrepreneurial behavior leads to entrepreneurial outcomes. Entrepreneurs that possess a higher level of self-efficacy are more likely to attain their targeted outcomes or rewards from their business, as demonstrated by the research findings, which indicate that self-efficacy has a positive and significant effect on entrepreneurial success. The results also show that entrepreneurial intention partially mediates the influence of self-efficacy on entrepreneurial success, indicating that entrepreneurs with higher self-efficacy are more likely to form and pursue their entrepreneurial goals, which in turn increases their chances of achieving entrepreneurial success.

F) Practical Contribution

This research contributes to the existing literature on entrepreneurship by providing empirical evidence regarding the positive influence of self-efficacy on entrepreneurial success and by identifying entrepreneurial intention as an important mediator in this relationship. This study also has practical implications for entrepreneurship education and policy. It suggests that increasing self-efficacy and fostering entrepreneurial intentions among potential and existing entrepreneurs can improve their entrepreneurial performance and outcomes.

G) Limitations and Future Research

The study included certain limitations as well as recommendations for more investigation. The cross-sectional design of the study and its reliance on self-reported data may have limited its findings' reliability and accuracy. Additionally, the study's emphasis on a particular sample and context may have limited how broadly the results may be applied. Future research could use longitudinal and experimental designs, collect objective data, and compare different contexts and samples to verify and extend the findings of this study.

IV. CONCLUSION

This study highlights the important role of self-efficacy in predicting entrepreneurial success. By recognizing the mediating role of entrepreneurial intentions, we provide a comprehensive framework for understanding the psychological processes underlying entrepreneurial endeavors. This knowledge can provide information to educators, policymakers, and practitioners, thereby creating an environment conducive to the development of successful entrepreneurs. As we embark on further research, we anticipate developing insights that will contribute to the ongoing dialogue around entrepreneurship and its determinants.

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