

AN EMPIRICAL STUDY ON ENTREPRENEURIAL INTENTIONS OF PROSPECTIVE STARTUP STUDENTS IN INDONESIAN STATE UNIVERSITIES

UM ESTUDO EMPÍRICO SOBRE AS INTENÇÕES EMPREENDEDORAS DE ESTUDANTES FUTUROS CRIAR STARTUPS EM UNIVERSIDADES ESTADUAIS INDONÉSIA

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Abstract

This study aimed to assess the entrepreneurial intention model of students influenced by psychological capital, mentoring, and entrepreneurship education in Indonesian state universities. A quantitative survey approach was employed, involving individuals participating in the Entrepreneurial Student Development Program (P2MW). The sample population comprised 258 students from 53 universities in Indonesia. Data analysis was conducted using the Partial Least Squares (PLS) method to examine

Resumo

Este estudo teve como objetivo avaliar o modelo de intenção empreendedora de estudantes influenciados por capital psicológico, mentoria e educação empreendedora em universidades estaduais indonésias. Foi empregada uma abordagem quantitativa por meio de pesquisa, envolvendo indivíduos participantes do Programa de Desenvolvimento de Estudantes Empreendedores (P2MW). A população amostral foi composta por 258 estudantes de 53 universidades na Indonésia. A análise dos dados



the role of psychological capital, mentoring, and entrepreneurship education in influencing entrepreneurial intentions. The findings revealed that psychological capital had a positive and significant effect on entrepreneurial intentions. However, mentoring and entrepreneurship education do not directly influence entrepreneurial intentions. Notably, mentoring and entrepreneurship education positively and significantly affected the enhancement of entrepreneurial intentions through psychological capital. These findings have several important academic and professional implications for understanding the university students' entrepreneurial intention model. Additionally, this study offers a framework for formulating strategies to support key performance indicators of universities, particularly in producing entrepreneurial graduates who are in high demand in Indonesia.

Keywords: Entrepreneurial Intentions. Psychological Capital. Mentoring. Entrepreneurship Education. Job Creation.

foi conduzida utilizando o método de Mínimos Quadrados Parciais (PLS) para examinar o papel do capital psicológico, da mentoria e da educação empreendedora na influência das intenções empreendedoras. Os resultados revelaram que o capital psicológico teve um efeito positivo e significativo sobre as intenções empreendedoras. No entanto, a mentoria e a educação empreendedora não influenciam diretamente as intenções empreendedoras. Notavelmente, a mentoria e a educação empreendedora afetaram positiva e significativamente o aumento das intenções empreendedoras por meio do capital psicológico. Essas descobertas têm várias implicações acadêmicas e profissionais importantes para a compreensão do modelo de intenção empreendedora de estudantes universitários. Além disso, este estudo oferece uma estrutura para a formulação de estratégias para apoiar indicadores-chave de desempenho das universidades, particularmente na formação de graduados empreendedores que são altamente requisitados na Indonésia.

Palavras-chave: *Intenções Empreendedoras. Capital Psicológico. Mentoria. Educação Empreendedora. Geração de Empregos.*

1 INTRODUCTION

Indonesia is currently facing increased demand for new entrepreneurs. As of 2022, the entrepreneurial population has reached its lowest point, standing at 3.47%—approximately 8.2 million people out of the total population. This figure is significantly below the entrepreneurship growth rates of neighboring countries such as Malaysia and Singapore, and economic powerhouses such as China and the United States. The scarcity of entrepreneurs highlights the slow pace of Indonesia's economic growth, which was further exacerbated by the lingering effects of the COVID-19 pandemic.

In response, Indonesia strives to boost its entrepreneurial population, targeting 1.5 million new entrepreneurs by incorporating at least 500,000 annually. This initiative is supported by the Presidential Regulation (Perpres) No. 2 of 2022, which focuses on developing national entrepreneurship and sets a target entrepreneurship ratio of 3.95% by 2024. Higher education institutions have been identified as key facilitators in fostering new entrepreneurs. The government provides various incentives through university

entrepreneurship programs organized by the Ministry of Education and Culture, specifically for students. These initiatives include the Student Entrepreneurship Program (PMW), Entrepreneurial Student Development Program (P2MW), and Indonesian Student Entrepreneurship Program (PKMI). These programs aim to nurture young entrepreneurs in universities and encourage the development of innovative solutions to meet societal needs (Saputra et al., 2020). However, the cultivation of entrepreneurial initiatives in higher education institutions has been slower than that in industrial partners, especially in addressing the challenges of the volatility, uncertainty, complexity, and ambiguity (VUCA) era. Despite concerted efforts, universities are yet to significantly instill an entrepreneurial mindset among students (Hashim et al., 2022).

The Ministry of Education and Culture's Regulation No. 3/M/2021 on Key Performance Indicators (KPI) underscores the government's directive for universities to produce quality graduates, particularly entrepreneurs. Universities are tasked with preparing graduates to secure employment or entrepreneurship roles within six months of graduation, earning an income exceeding 1.2 times the regional minimum wage (UMR). Graduates are encouraged to take on roles as founders or co-founders of companies, or work as freelancers.

Entrepreneurship programs in universities, such as P2MW, aim to equip students with the knowledge, skills, and entrepreneurial spirit needed to compete in prestigious events such as the Indonesian Student Entrepreneurship (KMI) Expo. However, data on student participation in national entrepreneurship initiatives over the past three years (2020–2022) reveals a concerning trend. Although 1,437 teams actively participated in P2MW, this number dropped to 568 teams when transitioning to participation in the National KMI Expo. The decline is even more pronounced in national startup competitions, where participation fell to 88 teams. This disparity suggests a waning student interest in entrepreneurship competitions, despite the available opportunities.

The limited enthusiasm for entrepreneurship among university students and alumni is closely linked to their entrepreneurial intentions. Entrepreneurial intention refers to a direct antecedent of behavior that deliberately guides actions when opportunities arise (Ajzen & Fishbein, 2000). According to the theory of planned behavior, three key factors influence entrepreneurial intentions: attitude, subjective norms, and perceived behavioral control.

Krueger et al. (2000) emphasize that positive individual attitudes toward entrepreneurial activities significantly enhance entrepreneurial intentions. The more positively individuals view entrepreneurial endeavors, the greater their desire to become an entrepreneur. Additionally, subjective norms shaped by the social environment, including family, peers, and university culture, play a significant role. A supportive social environment positively influences decision-making processes and increases entrepreneurial intentions (Shwetzter et al., 2019). Finally, perceived behavioral control, which reflects an individual's confidence in accessing resources and opportunities, also determines entrepreneurial intentions. The greater the perceived control, the stronger the entrepreneurial drive (Ajzen, 1991). Studies have shown that psychological, social, and human capital factors influence entrepreneurial intention. Psychological capital represents "who you are," social capital pertains to "who you know," and human capital relates to "what you know" (Luthans & Youssef, 2004).

Psychological capital, characterized by hope, self-efficacy, resilience, and optimism (HERO), is crucial for shaping entrepreneurial intentions (Bhandari et al., 2024; Luthans, 2012). Research indicates that psychological capital significantly impacts individuals' desire to become entrepreneurs and enhances the effectiveness of entrepreneurial behavior (Samoedra & Febriani, 2013). Studies by Zhao et al. (2020) and Contreras et al. (2017) further highlight the strong relationship between psychological capital, particularly self-efficacy, and entrepreneurial intentions.

Social capital supported by universities also fundamentally aids entrepreneurial activities. Defined as interpersonal relationships between individuals and their social environment (Luthans & Youssef, 2004), university social capital is fostered through mentoring. A mentor, typically an experienced individual in a related field, provides informal learning and training to develop students' entrepreneurial skills (Wise & Feld, 2015). Studies show that mentoring significantly influences students' desire to become entrepreneurs (Al Issa et al., 2024; Baluku et al., 2019).

Universities also contribute to human capital through entrepreneurship education. Such education equips students with the relevant knowledge and skills to create new ventures, fostering confidence in their abilities (Hoang et al., 2020). Entrepreneurship courses, whether elective or mandatory, promote students' entrepreneurial aspirations. Studies have demonstrated the significant influence of entrepreneurship education on students' interest in entrepreneurship (Banha, 2022; Hussain & Norashidah, 2015),

although its impact varies depending on the teaching methods, faculty competence, and policy implementation within universities (Nguyen et al., 2019; Banha, 2022).

This study contributes to higher education's efforts to achieve key performance targets by fostering students' entrepreneurial intentions through PsyCap, mentoring, and entrepreneurship education.

2 HYPOTHESIS DEVELOPMENT

2.1 Psychological capital and entrepreneurial intentions

Previous studies have shown that psychological capital significantly influences entrepreneurial intentions. Contreras et al. (2017) stated that psychological capital indicators—hope, self-efficacy, resilience, and optimism—significantly impact students' entrepreneurial intentions. These results were consistent with those of Ephrem et al. (2019) and Zhao et al. (2020), who reported similar findings. According to Margaça et al. (2021), resilience, as a component of psychological capital, influences entrepreneurial intention. Similarly, Baluku et al. (2019) explained that indicators of psychological capital, such as self-efficacy and optimism, significantly affect entrepreneurial intentions.

2.2 Hypothesis 1: psychological capital has a positive and significant impact on entrepreneurial intentions

2.2.1 Mentoring and entrepreneurial intentions

Numerous studies have shown that mentoring greatly affects people's intentions to start their own businesses. These outcomes are consistent with those reported by Sihombing and Natalia (2018) and Baluku et al. (2019). Baluku et al. (2019) also discovered a positive correlation between entrepreneurial intentions and self-efficacy, optimism, and mentoring. Interestingly, the correlation between these variables was higher among senior students than among wage workers and stronger among German respondents than among East African respondents. Cho et al. (2020) claimed that expert mentoring for entrepreneurs significantly improves entrepreneurial intentions, representing people's desire to pursue future business endeavors. Entrepreneurial self-

efficacy, which includes the capacity to plan and carry out entrepreneurial tasks successfully, is positively affected by this mentorship. Additionally, a strong positive correlation between mentoring and entrepreneurial intentions was found by Hahn and Ha (2021). Ayodele et al. (2020) showed how entrepreneurial mentoring influences entrepreneurial intentions and role models, and mentors positively impact entrepreneurial intentions.

2.3 Hypothesis 2: mentoring has a positive and significant impact on entrepreneurial intentions

2.3.1 Entrepreneurship education and entrepreneurial intentions

Chen et al. (2015) find that entrepreneurship education does not effectively enhance entrepreneurial intentions. After one semester, the students' intentions decreased, although not significantly. This could be attributed to the realization through entrepreneurship education that starting a business is a challenging endeavor, leading students to reconsider entrepreneurship as a viable career option. Similarly, Do Paço et al. (2013) found that entrepreneurial intentions were significantly lower among girls attending business schools, where entrepreneurship education was integrated at all curriculum levels. Although entrepreneurship education fosters new business creation, it is insufficient to ensure successful entrepreneurship. Conversely, other studies such as those by Küttim et al. (2014), Paray and Kumar (2020), Sesen (2013), Shirokova et al. (2018), and Yukongdi and Lopa (2017) have shown that entrepreneurship education positively affects entrepreneurial intentions.

2.4 Hypothesis 3: entrepreneurship education has a positive and significant impact on entrepreneurial intentions

2.4.1 Mentoring and psychological capital

Sihombing and Natalia (2018) reported no relationship between mentoring and student self-confidence. However, studies by Baluku et al. (2019, 2021) showed that mentoring influences self-efficacy and optimism. St-Jean and Tremblay (2020) explain

that self-confidence is triggered by mentoring. According to the social learning theory, a mentor's motivation is the most significant factor in increasing self-confidence (self-efficacy) within a mentoring relationship (Hu et al., 2021). Mentors help mentees develop self-confidence by sharing their experiences and providing opportunities to evaluate and improve their business skills through comparisons. Hu et al. (2021) also stated that mentors assist students with functional and professional support (e.g., consultation and feedback) as well as psychosocial and emotional support (e.g., friendship, role modeling, acceptance, and confirmation). This social support enables mentees to undertake more challenging tasks and is persevere in difficult times. Additionally, Nabi et al. (2019) emphasized that mentors address emotion-based concerns, such as financial fears, helping mentees build PsyCap.

2.5 Hypothesis 4: mentoring has a positive and significant impact on psychological capital

2.5.1 Entrepreneurship education and psychological capital

Nowiński et al. (2019) asserted that entrepreneurship education is essential for developing entrepreneurial abilities. Through interactions between teachers and students and through practical experiences, this education imparts knowledge and promotes psychological fortification. According to Luthans and Youssef-Morgan (2017), psychological capital is a situation-influenced attribute that is essential to entrepreneurial mindsets. According to St-Jean and Audet (2009), affective learning in entrepreneurship education significantly impacts psychological capital by promoting resilience, self-confidence, and entrepreneurial self-image. However, Sihombing and Natalia (2018) noted that in some situations, there is no relationship between psychological capital and entrepreneurship education.

2.6 Hypothesis 5: entrepreneurship education has a positive and significant impact on psychological capital

2.6.1 Mentoring, psychological capital, and entrepreneurial intentions

Baluku et al. (2019) highlighted that mentoring, mediated by psychological capital components, such as self-efficacy and optimism, impacts entrepreneurial intentions. Gimmon (2014) reported that students with no prior entrepreneurial experience benefit from mentoring, which improves their ability to prepare business plans and enhances their satisfaction with professional guidance. Walmsley and Nabi (2020) suggested that mentoring remains valuable for providing knowledge on markets, products, and finance. However, it is less optimal for teaching the startup process and emotional aspects of entrepreneurship. Elliott et al. (2020) showed that developing an entrepreneurial identity through mentoring plays a vital role in enhancing self-efficacy and entrepreneurial intentions, particularly for female mentees.

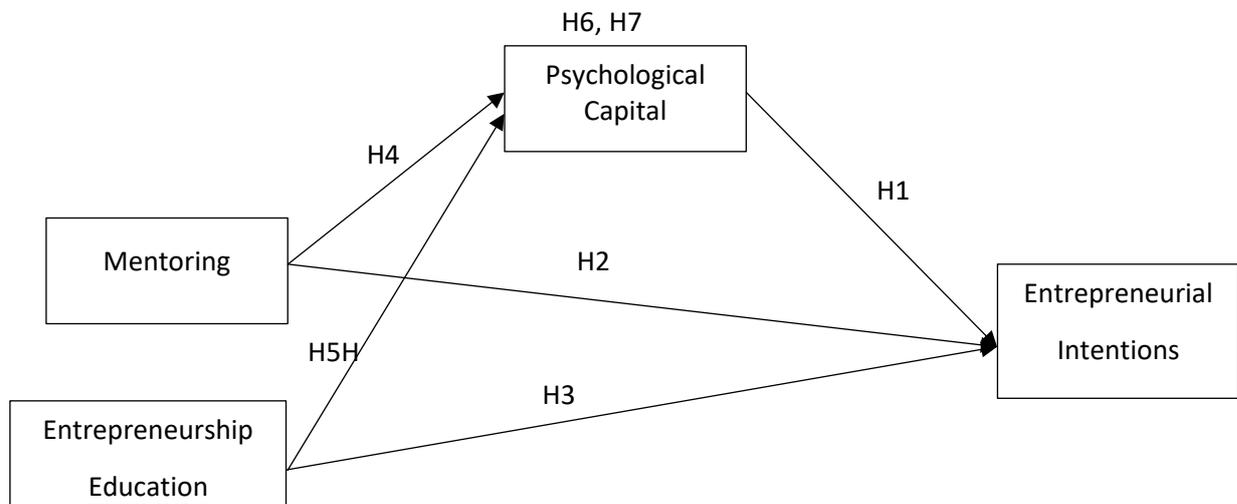
2.7 Hypothesis 6: psychological capital mediates the relationship between mentoring and entrepreneurial intentions

2.7.1 Entrepreneurship education, psychological capital, and entrepreneurial intentions

Entrepreneurship education has a positive effect on entrepreneurial intentions, with self-efficacy serving as a mediator of PsyCap. Education encourages entrepreneurial intentions by providing relevant knowledge and methods for individuals to start new businesses (Hoang et al., 2020). According to Nowiński et al. (2019), entrepreneurship education improves self-efficacy and indirectly influences entrepreneurial intentions. This effect can be enhanced by focusing on business idea generation and resource acquisition.

2.8 Hypothesis 7: psychological capital mediates the relationship between entrepreneurship education and entrepreneurial intentions

The theoretical model is depicted in Figure 1.

Figure 1*Theoretical Model***3 METHOD****3.1 Instrument**

The data for this study were collected through observations, interviews, and scaling. The scales were developed based on theoretical concepts related to psychological capital, mentoring, entrepreneurship education, and entrepreneurial intentions. The instruments were measured using a Likert scale ranging from one to six. Entrepreneurial intentions were measured using indicators derived from previous studies (Ajzen, 1991; Thompson, 2009), specifically, attitude, perceived behavioral control, and subjective norms. PsyCap was assessed using indicators from Luthans and Youssef (2007), including hope, self-efficacy, resilience, and optimism. Entrepreneurship education was measured using constructs adapted from previous studies (Laguía González et al., 2019; Piperopoulos & Dimov, 2014), encompassing theoretical, practical, and infrastructural aspects. The mentoring instrument was adapted from the mentoring functions identified by St-Jean (2011): reflection, assurance, motivation, trusted person, integration, information support, confrontation, guidance, and modeling.

3.2 Sample and data collection

The sample population consisted of 678 students who received capital assistance through the Entrepreneurial Student Development Program (P2MW) at 53 state universities in Indonesia. Respondents were selected through random sampling, with the sample size determined using the Slovin formula, resulting in 258 participants for analysis.

3.3 Data analysis technique

Data gathered in this study were examined using descriptive and causal analyses. A descriptive analysis was conducted to encapsulate respondents' perceptions of the assessed factors. An analysis of causality was performed to evaluate the study's hypotheses concerning the interrelations among the variables. All assessments utilized structural equation Modelling based on Variants or Partial Least Squares (PLS).

4 RESULT

4.1 Respondent characteristics

The majority of respondents were female, comprising 62% of the total population, compared to 38% of males. Gender dominance in the P2MW sector was influenced by interest, particularly in the food and beverage industry, which was more popular among females. In terms of academic departments, 56% of the respondents were from exact faculties, while 45% were from non-exact faculties. The Faculty of Education accounted for the largest proportion of respondents (24%), followed by the Faculties of Economics and Business (23%), Science and Technology (16%), and engineering (12%). Other factors included health (8%), agriculture (8%), Law, Social Sciences, and Political Sciences (7%), Animal Husbandry (1%), Fisheries and Marine Sciences (1%), and forestry (1%).

Regarding semester levels, students in semesters 5 and 7 were the most represented, comprising 39% and 36% of the respondents, respectively. This indicates that final-year students showed greater interest in and opportunities to start new

businesses in preparation for graduation. From a social perspective, 71% of the respondents reported having peers involved in business activities, highlighting the significant influence of peer networks in encouraging entrepreneurship. Additionally, 89% of the respondents had participated in training programs, and 98% reported receiving programmatic and infrastructural support from their universities. Furthermore, 69% of the respondents had prior work experience, suggesting that a combination of higher education and work experience enhanced their readiness to initiate entrepreneurial ventures.

4.2 Validity and reliability of measuring instruments

The reliability and validity of the study's variables were assessed using Cronbach's Alpha and Average Variance Extracted (AVE). Cronbach's alpha values for psychological capital (0.908), mentoring (0.929), entrepreneurship education (0.786), and entrepreneurial intentions (0.764) all exceeded the threshold of 0.7, indicating high reliability. The AVE values for psychological capital (0.784), mentoring (0.638), entrepreneurship education (0.701), and entrepreneurial intentions (0.679) surpassed the validity threshold of 0.5, confirming the construct validity. Composite Reliability (CR) scores for these constructs further demonstrated reliability, with values for psychological capital (0.936), mentoring (0.941), entrepreneurship education (0.875), and entrepreneurial intentions (0.864) exceeding the acceptable threshold.

4.3 Causality analysis

Causality analysis was conducted using Partial Least Squares (PLS) with a reflective measurement model. The structural model showed that psychological capital, mentoring, and entrepreneurship education collectively explained 66% of the variance in entrepreneurial intention ($R^2 = 0.660$, adjusted $R^2 = 0.656$). PsyCap was also influenced by mentoring and entrepreneurship education, with an R^2 value of 0.597 (adjusted $R^2 = 0.594$), indicating that these variables explained 59% of the variance.

Hypothesis testing has revealed varied results. Psychological capital significantly and positively influences entrepreneurial intention (t-statistic = 12.467, $p = 0.000$). However, mentoring (t-statistic = 1.889, $p = 0.060$) and entrepreneurship education (t-

statistic = 0.568, $p = 0.571$) did not directly influence entrepreneurial intentions. Despite this, mentoring significantly contributed to psychological capital (t-statistic = 6.294, p-value = 0.000) and entrepreneurship education had a similar positive effect (t-statistic = 7.421, p-value = 0.000).

4.4 Psychological capital as a mediator

The mediating role of PsyCap was confirmed using bootstrapping. Psychological capital mediated the relationship between mentoring and entrepreneurial intentions (path coefficient t-value = 5.337, $p = 0.000$), and between entrepreneurship education and entrepreneurial intentions (path coefficient t-value = 6.312, p-value = 0.000). These findings underscore the importance of psychological capital as both a predictor and mediator in enhancing the effectiveness of mentoring and entrepreneurship education. The results highlight that fostering psychological capital is crucial for strengthening entrepreneurial ecosystems within universities and for increasing students' entrepreneurial intentions.

5 DISCUSSION

This study aimed to investigate the impact of mentoring, entrepreneurship education, and psychological capital on the entrepreneurial intentions of students in higher education. In line with earlier research, the results show that psychological capital significantly influences entrepreneurial intention (Contreras et al., 2017; Ephrem et al., 2019; Zhao et al., 2020). According to Baluku et al. (2019), psychological capital encourages optimistic and positive attitudes, which in turn stimulate behavioral intentions and entrepreneurial desires. This emphasizes the importance of building psychological capital as a starting point for students who want to start their own business. Although this idea has been thoroughly studied in organizational settings (Luthans et al., 2008; Meyers & Woerkom, 2017), little is known about how it is specifically applied in entrepreneurship, which suggests that more research in this field is necessary.

Mentoring did not have a significant direct effect on entrepreneurial intention, contradicting previous studies (Ayodele et al., 2021; Baluku et al., 2019; Han-Jun Cho et al., 2020). While students viewed mentoring activities positively, several factors hindered

their effectiveness, such as time constraints, role ambiguity, and potential conflicts of interest among internal mentors (Ewing, 2021). Furthermore, lack of attention to mentor quality and compatibility with mentees resulted in suboptimal outcomes. Universities should address these issues by implementing rigorous mentor screening, providing comprehensive mentor training, and leveraging external practitioners and professionals as mentors. External mentors can bring industry expertise and objective insights, bolstering students' self-confidence and entrepreneurial identity (Ewing, 2021). Additionally, peer mentoring can be explored as a means to foster collaboration and entrepreneurial identity among students, creating a supportive learning community (Elliott et al., 2020).

The absence of a significant relationship between entrepreneurship education and entrepreneurial intentions is consistent with the findings of Chen et al. (2015) and Fayolle and Gailly (2015), who attributed this to the lack of standardization in entrepreneurship education. Differences in teaching methods and knowledge areas further dilute their impacts (Glavam, 2018). Currently, entrepreneurship education in higher education institutions focuses largely on traditional concepts, offering limited practical experience or partnerships with startup companies. Providing students with hands-on opportunities, such as internships and collaborations with the business world, can bridge the gap between theoretical knowledge and real-world applications, thus fostering entrepreneurial intentions more effectively (Cao & Ngo, 2019).

However, mentoring demonstrated a positive influence on psychological capital, reinforcing the findings of Baluku et al. (2019, 2021) and Hu et al. (2021). Mentors helped mentees build self-efficacy and optimism by providing practical examples and social support, thus enabling them to navigate challenging tasks and develop resilience. Similarly, entrepreneurship education positively influenced psychological capital by fostering affective learning, which boosted self-confidence and reduced feelings of isolation among aspiring entrepreneurs (St-Jean & Audet, 2009). These results emphasize the role of psychological capital as a critical mediator, bridging the relationship between mentoring, entrepreneurship education, and entrepreneurial intentions.

Psychological capital serves as a key mechanism in shaping entrepreneurial intentions, as validated by its mediating role in this study. Mentoring enhances psychological resources such as self-efficacy and optimism, which are essential for entrepreneurial action (Carter & Youssef-Morgan, 2019). Similarly, entrepreneurship

education indirectly influences entrepreneurial intentions by enhancing psychological capital, particularly self-efficacy (Nowiński et al., 2019). This underscores the need to incorporate PsyCap into educational and mentoring frameworks to strengthen students' entrepreneurial capabilities.

The findings also highlight the practical implications of fostering a robust entrepreneurial ecosystem in higher education. Universities must prioritize the development of psychological capital by integrating reflective practices, tailored mentorship, and interventions that focus on resilience and optimism. Mentoring programs should be strengthened through peer and professional mentors accompanied by structured evaluation mechanisms. For entrepreneurship education, universities should emphasize experiential learning by incorporating real-world opportunities such as internships and partnerships with industry professionals. These efforts could help bridge the gap between theory and practice, ultimately enhancing students' entrepreneurial intentions.

This study contributes to the theoretical understanding of entrepreneurial intentions, particularly in the context of students aspiring to become start-up founders. By emphasizing the roles of psychological capital, mentoring, and entrepreneurship education, the findings provide a roadmap for developing a supportive entrepreneurial ecosystem in universities. Such ecosystems must integrate psychological, human, and social capital to optimize students' entrepreneurial potential, aligning with Khuong and Van's (2022) assertions. Future research should continue to explore the interplay between these variables to refine strategies for nurturing entrepreneurial talent in higher education.

6 CONCLUSION, LIMITATIONS, AND FUTURE RESEARCH

In conclusion, psychological capital has a more significant impact on fostering entrepreneurial intentions than mentoring and entrepreneurship education. This finding underscores the critical role of psychological capital in shaping the entrepreneurial aspirations of students, particularly those aiming to become startup founders at Indonesian public universities. Strengthening psychological capital should be a primary focus for entrepreneurship program managers as it catalyzes the effectiveness of mentoring and entrepreneurship education. By prioritizing the development of attributes such as hope, self-efficacy, resilience, and optimism, universities can create an environment conducive to entrepreneurial success. Integrating psychological capital into

entrepreneurial activities is essential to enhance students' entrepreneurial intentions and ensure the overall success of entrepreneurship initiatives.

To achieve these goals, universities must design entrepreneurship programs that explicitly aim to bolster psychological capital (Zhang et al., 2024). This can be achieved through a combination of innovative curricula, skill-building workshops, and mentoring activities that emphasize reflective practices, problem-solving, and experiential learning. Thus, enhancing the quality of mentoring programs is critical. Universities should rigorously select and train mentors, including peer mentors and external practitioners, with entrepreneurial expertise. Such mentors can provide practical insights and personalized guidance, helping students to build confidence and refine their entrepreneurial skills. Regular evaluations and feedback mechanisms should be established to improve the quality and relevance of mentoring programs continuously.

Entrepreneurship education, while vital, must evolve beyond traditional theoretical approaches to offer more hands-on experience. Universities should foster partnerships with start-up companies and industry leaders to provide internships, real-world projects, and practical workshops that bridge the gap between academic learning and entrepreneurial practice. Such practical exposure can significantly enhance students' confidence and capabilities in launching their ventures. Expanding the scope of this research to include private universities across Indonesia would provide a more comprehensive understanding of entrepreneurial intentions in various institutional settings, offering insights that are broadly applicable.

Despite its contributions, this study had several limitations. First, the focus was restricted to state universities, which may not fully capture the diverse dynamics and challenges faced by students in private universities and other educational contexts in Indonesia. Future research should broaden the scope to include private universities and vocational institutions to develop a more holistic understanding of entrepreneurial intention. Second, the study employed a quantitative methodology that, while robust, may not fully capture students' nuanced experiences and perceptions. Employing a mixed-methods approach in future research could provide richer insights by combining the generalizability of quantitative data with the depth of the qualitative findings. Third, this study did not assess the longitudinal impact of psychological capital, mentoring, and entrepreneurship education on entrepreneurial intentions. A longitudinal design can better evaluate the sustained effects of these variables over time. Finally, cultural and regional

differences within Indonesia might influence the effectiveness of entrepreneurship programs, suggesting a need for future studies to explore localized contexts to tailor interventions effectively.

By addressing these limitations and implementing recommended strategies, universities can create a robust entrepreneurial ecosystem that supports aspiring entrepreneurs' psychological, practical, and technical development. This holistic approach strengthens entrepreneurial intentions and contributes to the broader goal of fostering innovation and economic growth across Indonesia.

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Authors' Contribution

Both authors contributed equally to the development of this article.

Data availability

All datasets relevant to this study's findings are fully available within the article.

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