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The Influence of Entrepreneurship Education on Entrepreneurial Intention: A Literature Review

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ABSTRACT

Entrepreneurship education has become a strategic instrument in fostering entrepreneurial intention among university students globally. This literature review examines the influence of entrepreneurship education on entrepreneurial intention through the lens of the Theory of Planned Behavior (TPB). A systematic review of 15 selected empirical studies published between 2015-2025 was conducted, focusing on diverse educational contexts across Asia, Europe, Africa, and South America. The findings reveal that entrepreneurship education significantly and positively influences entrepreneurial intention, with this relationship mediated by TPB components (attitude, subjective norms, and perceived behavioral control) and entrepreneurial self-efficacy. Moderating factors include prior entrepreneurial experience, academic major, gender, and psychological capital. The study provides practical implications for curriculum development and policy-making in entrepreneurship education, while highlighting the need for context-specific approaches. Future research should explore longitudinal effects and the role of digital entrepreneurship education in shaping entrepreneurial intentions.

Keyword: Entrepreneurship Education, Entrepreneurial Intention, Theory of Planned Behavior, Self-efficacy, Literature Review

ABSTRAK

Pendidikan kewirausahaan telah menjadi instrumen strategis dalam menumbuhkan intensi berwirausaha di kalangan mahasiswa secara global. Tinjauan literatur ini mengkaji pengaruh pendidikan kewirausahaan terhadap intensi berwirausaha melalui perspektif Theory of Planned Behavior (TPB). Tinjauan sistematis terhadap 15 studi empiris terpilih yang dipublikasikan antara tahun 2015-2025 dilakukan, dengan fokus pada konteks pendidikan yang beragam di Asia, Eropa, Afrika, dan Amerika Selatan. Temuan menunjukkan bahwa pendidikan kewirausahaan berpengaruh signifikan dan positif terhadap intensi berwirausaha, dengan hubungan ini dimediasi oleh komponen TPB (sikap, norma subjektif, dan kontrol perilaku yang dipersepsikan) serta efikasi diri kewirausahaan. Faktor-faktor moderasi meliputi pengalaman kewirausahaan sebelumnya, jurusan akademik, gender, dan modal psikologis. Studi ini memberikan implikasi praktis bagi pengembangan kurikulum dan pembuatan kebijakan dalam pendidikan kewirausahaan, sekaligus menyoroti kebutuhan akan pendekatan yang spesifik konteks. Penelitian masa depan perlu mengeksplorasi efek longitudinal dan peran pendidikan kewirausahaan digital dalam membentuk intensi berwirausaha.

Keyword: Pendidikan Kewirausahaan, Intensi Berwirausaha, Theory of Planned Behavior, Efikasi Diri, Tinjauan Literatur



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1. Introduction

Entrepreneurship has been widely recognized as a key driver of economic growth, innovation, and job creation across countries. In the context of an increasingly competitive and dynamic global economy, fostering an entrepreneurial mindset among young people has become a strategic priority for many nations. Entrepreneurship education in higher education institutions is regarded as one of the most effective mechanisms for developing students' entrepreneurial interest and capabilities [1], [2].

Entrepreneurial intention is considered a strong predictor of actual entrepreneurial behavior and has become a central focus in contemporary entrepreneurship research [3]. Understanding the factors that influence entrepreneurial intention is therefore essential for designing effective educational interventions. The Theory of Planned Behavior (TPB), developed by Ajzen, has emerged as the dominant theoretical framework for explaining the formation of entrepreneurial intention, emphasizing the roles of attitude toward behavior, subjective norms, and perceived behavioral control [4], [5].

Although numerous studies have examined the relationship between entrepreneurship education and entrepreneurial intention, empirical findings remain mixed depending on geographical context, curriculum design, and student characteristics [6], [7]. Some studies report a strong positive effect [8], [9], while others find weaker effects or relationships mediated by additional variables [10]. This diversity of findings indicates the need for a systematic literature review to identify general patterns and contextual factors that influence the effectiveness of entrepreneurship education.

Research Questions

Based on the background above, the research questions of this study are as follows:

1. How does entrepreneurship education influence students' entrepreneurial intention based on empirical literature review?
2. What mechanisms mediate the relationship between entrepreneurship education and entrepreneurial intention?
3. What factors moderate the relationship between entrepreneurship education and entrepreneurial intention?

Research Objectives

This study aims to:

1. Systematically analyze the effect of entrepreneurship education on students' entrepreneurial intention based on selected empirical literature.
2. Identify mediating mechanisms that explain the relationship between entrepreneurship education and entrepreneurial intention.
3. Identify moderating factors that influence the strength of the relationship between entrepreneurship education and entrepreneurial intention.

2. Literature Review

2.1 Entrepreneurship education

Entrepreneurship education is defined as a formal learning process aimed at developing entrepreneurial knowledge, skills, and attitudes among learners [1]. Entrepreneurship education not only focuses on the transfer of knowledge related to starting and managing a business but also emphasizes the development of an entrepreneurial mindset, including creativity, innovation, risk-taking, and opportunity recognition abilities [11].

In the context of higher education, entrepreneurship education can be implemented through various formats, including compulsory or elective courses, business incubation programs, entrepreneurship competitions, and project-based learning approaches [2], [12]. The effectiveness of entrepreneurship education largely depends on curriculum design, teaching methods, and the support of the entrepreneurial ecosystem within the university environment [13].

2.2 Entrepreneurial Intention

Entrepreneurial intention refers to an individual's cognitive commitment to starting a new business or becoming an entrepreneur [3]. Intention is considered the strongest predictor of planned behavior and has been empirically validated as a direct antecedent of actual entrepreneurial actions [4]. In the entrepreneurship literature, entrepreneurial intention is viewed as the outcome of a complex cognitive process influenced by personal, social, and contextual factors [14].

The measurement of entrepreneurial intention typically includes dimensions such as the desire to start a business, the seriousness of business planning, and the commitment to implementing business plans within a specific time frame [5]. Understanding the factors that shape entrepreneurial intention is essential for designing effective interventions to promote entrepreneurial behavior [15].

2.3 Theory of Planned Behavior (TPB)

The Theory of Planned Behavior (TPB), developed by Ajzen, is the most widely used theoretical framework in entrepreneurial intention research [4], [5]. TPB posits that behavioral intention is determined by three main factors: (1) attitude toward the behavior, referring to an individual's positive or negative evaluation of performing a particular behavior; (2) subjective norms, which reflect an individual's perception of social pressure to perform or not perform a specific behavior; and (3) perceived behavioral control, defined as an individual's perception of the ease or difficulty of performing a particular behavior [4].

In the entrepreneurial context, TPB explains that entrepreneurial intention is influenced by positive attitudes toward entrepreneurship, social support from family and peers, and individuals' beliefs in their ability to succeed as entrepreneurs [8], [9]. Numerous studies have validated the applicability of TPB in predicting entrepreneurial intention across diverse cultural and educational contexts [1], [3], [5].

2.4 Previous Studies

Research on the impact of entrepreneurship education on entrepreneurial intention has expanded rapidly over the past two decades. Early studies generally indicated that participation in entrepreneurship education programs increases students' entrepreneurial intention [10]. However, more recent research suggests that this relationship is more complex and is mediated by various psychological and contextual factors [1], [8].

Wang et al. [1] found that entrepreneurial self-efficacy mediates the relationship between entrepreneurship education and entrepreneurial intention, with psychological capital acting as a moderator. Studies conducted in countries such as Malaysia [6], Indonesia [9], China [7], and Saudi Arabia [5] consistently demonstrate that the components of TPB (attitude, subjective norms, and perceived behavioral control) mediate the effect of entrepreneurship education on entrepreneurial intention.

Several important moderating factors have also been identified. Entrialgo and Iglesias [11] found that entrepreneurship education moderates the relationship between the antecedents of entrepreneurial intention. Duong [12] showed that academic field of study moderates the effectiveness of entrepreneurship education, with non-business students exhibiting greater increases in entrepreneurial intention. Other factors such as gender [7], prior entrepreneurial experience [13], and education level [14] have also been found to act as moderators.

3. Method

3.1 Research Design

This study employs a systematic literature review (SLR) method to analyze the effect of entrepreneurship education on entrepreneurial intention. This approach is selected because it enables a comprehensive synthesis of empirical findings across multiple studies, thereby identifying general patterns, mediating mechanisms, and moderating factors that influence the relationship between the two variables.

3.2 Search Strategy and Article Selection Criteria

The literature search was conducted using major academic databases and relevant keywords, including "entrepreneurship education," "entrepreneurial intention," "Theory of Planned Behavior," and their combinations. The inclusion criteria were as follows:

1. Empirical studies published in peer-reviewed journals or reputable conference proceedings;
2. Studies that explicitly examine the relationship between entrepreneurship education and entrepreneurial intention;
3. Studies employing quantitative methods with samples of higher education students;
4. Articles published between 2015 and 2025; and
5. Articles available in English.

The exclusion criteria included:

1. Conceptual or theoretical articles without empirical data;
2. Qualitative studies or single-case studies;
3. Studies that do not specifically measure entrepreneurial intention as the outcome variable; and
4. Articles that are not accessible in full text.

3.3 Selection and Analysis Procedure

The article selection process was conducted in several stages. First, the initial search yielded 125 potentially relevant articles. Second, title and abstract screening reduced the number to 50 relevant articles. Third, full-text review and methodological quality assessment resulted in 30 articles that met the inclusion criteria. Fourth, for the purposes of this article, which emphasizes quality over quantity, 15 of the most influential and representative studies were selected based on the following criteria:

1. Quality of the publication outlet;
2. Strength of methodological design;
3. Diversity of geographical and educational contexts;
4. Theoretical contribution; and
5. Citation count.

Data analysis was conducted by extracting key information from each selected article, including research context, sample size, theoretical framework, measured variables, analytical methods, main findings regarding the direct relationship between entrepreneurship education and entrepreneurial intention, mediating mechanisms, and moderating factors. A narrative synthesis was then performed to identify common patterns and differences across the selected studies.

4. Result and Discussion

4.1 Characteristics of the Reviewed Studies

Of the 15 studies reviewed, the majority employed the Theory of Planned Behavior (TPB) as the primary theoretical framework [1], [3], [4], [5], [8], [9]. These studies were conducted across diverse geographical contexts, including Asia (China [7], Malaysia [6], Indonesia [9], [14], Saudi Arabia [5], Vietnam [10], India [15]), Europe (Spain [11], Greece [13]), Africa (Nigeria [10]), and South America (Brazil [2]). Sample sizes ranged from 221 to 1,010 respondents, with most studies using undergraduate students as research participants.

The analytical methods predominantly applied were Structural Equation Modeling (SEM) or Partial Least Squares-SEM (PLS-SEM), which allow for the simultaneous testing of direct, mediating, and moderating relationships [1], [5], [8]. Several studies also employed hierarchical regression analysis to examine moderating effects [11], [12].

4.2 Direct Effect of Entrepreneurship Education on Entrepreneurial Intention

The main findings of this literature review indicate that entrepreneurship education has a positive and significant effect on students' entrepreneurial intention across various contexts. Wang et al. [1] reported a total effect of entrepreneurship education on entrepreneurial intention of $\beta = 0.351$ ($p < 0.001$) based on a sample of 757 students in China. A study conducted in Malaysia by Mahmood et al. [6] also confirmed a significant positive relationship, with social science students exhibiting higher entrepreneurial intention compared to science and technology students.

In Indonesia, Astuti et al. [9] found that entrepreneurship education had a direct and significant positive effect on entrepreneurial intention among students of the Faculty of Economics and Business. Similar findings were reported by Peng et al. [7] in a study of 1,010 vocational education students in Shanghai, showing that entrepreneurship education positively shaped students' entrepreneurial intention.

In the Saudi Arabian context, Aliedan et al. [5] found that university educational support had a significant direct positive impact on entrepreneurial intention ($\beta = 0.23$, $p < 0.01$) among a sample of 390 fourth-year students. A study in Nigeria by Ajike et al. [10] also confirmed that participants in entrepreneurship education programs demonstrated higher entrepreneurial intention than non-participants.

However, several studies indicated that the direct effect of entrepreneurship education on entrepreneurial intention was not always significant or strong when mediating variables were included in the model [10]. This suggests that entrepreneurship education may exert its influence through indirect mechanisms rather than through direct effects alone.

4.3 Mediating Mechanisms: The Role of TPB and Entrepreneurial Self-Efficacy

One of the most consistent findings of this literature review is that the components of the Theory of Planned Behavior (TPB) mediate the relationship between entrepreneurship education and entrepreneurial intention. Astuti et al. [9] found that entrepreneurship education indirectly influenced entrepreneurial intention

through perceived behavioral control. This study demonstrated that entrepreneurship education enhances students' beliefs in their ability to succeed as entrepreneurs, which in turn increases entrepreneurial intention.

Aliedan et al. [5] found that university educational support positively affected all three TPB components: subjective norms ($\beta = 0.51$, $p < 0.001$), personal attitude ($\beta = 0.38$, $p < 0.001$), and perceived behavioral control ($\beta = 0.39$, $p < 0.001$), which subsequently influenced entrepreneurial intention. These findings confirm that entrepreneurship education operates by shaping positive attitudes toward entrepreneurship, increasing perceived social support, and strengthening self-confidence.

Ajike et al. [10] also found that attitudes toward entrepreneurship, subjective norms, and perceived behavioral control mediated the relationship between entrepreneurship education and entrepreneurial intention among Nigerian students. This study highlights the importance of integrating TPB components into the design of entrepreneurship education curricula.

Beyond TPB components, entrepreneurial self-efficacy was identified as a key mediator. Wang et al. [1] found that entrepreneurial self-efficacy mediated the relationship between entrepreneurship education and entrepreneurial intention, with psychological capital acting as a moderator. This finding suggests that entrepreneurship education enhances students' confidence in their ability to solve entrepreneurial problems, which subsequently increases entrepreneurial intention.

Tsaknis et al. [13] found that changes in perceived behavioral control positively influenced increases in entrepreneurial intention after students completed a sustainability-oriented entrepreneurship course. This study emphasizes that strengthening students' confidence and knowledge through practical skills is fundamental to developing a sustainable entrepreneurial mindset.

4.4 Moderating Factors

This literature review identifies several factors that moderate the relationship between entrepreneurship education and entrepreneurial intention. First, academic field of study was found to be an important moderator. Duong [12] found that educational field moderated the relationship between entrepreneurship education and entrepreneurial intention, with varying effects across academic disciplines. Chang et al. [3] reported that entrepreneurship education strengthened the positive effects of attitude toward behavior and perceived behavioral control on social entrepreneurial intention, particularly among non-business students.

Second, prior entrepreneurial experience was identified as a moderating factor. Entrialgo and Iglesias [11] found that entrepreneurship education moderated the relationship between the antecedents of entrepreneurial intention, with different effects depending on individuals' prior entrepreneurial experience. This finding suggests that students with previous entrepreneurial experience may benefit differently from entrepreneurship education compared to those without such experience.

Third, gender was found to act as a moderator in several studies. Peng et al. [7] identified significant gender differences, with male students exhibiting higher path coefficients in relation to entrepreneurial intention compared to female students. This finding indicates the need for gender-sensitive approaches in entrepreneurship education design.

Fourth, education level also played a moderating role. Farahdiba et al. [14] found that entrepreneurship education at the diploma level demonstrated an interesting moderating role, both strengthening and weakening the relationships between predictors of entrepreneurial intention. This suggests that the effectiveness of entrepreneurship education may vary depending on students' education level.

Fifth, psychological capital emerged as an important moderator. Wang et al. [1] found that psychological capital moderated the relationship between entrepreneurial self-efficacy and entrepreneurial intention. Students with high psychological capital—comprising optimism, hope, resilience, and self-efficacy—exhibited a stronger relationship between entrepreneurship education and entrepreneurial intention.

4.5 Educational Context and Practical Implications

The findings of this literature review offer important practical implications for the development of entrepreneurship education curricula. First, entrepreneurship education should be designed not only to transfer business knowledge but also to shape positive attitudes toward entrepreneurship, enhance perceived social support, and strengthen students' self-confidence [5], [9], [10].

Second, entrepreneurship education should integrate experiential learning and practical skill development to enhance students' entrepreneurial self-efficacy [1], [13]. Active teaching methods—such as business simulations, entrepreneurial projects, and interactions with practicing entrepreneurs—are likely to be more effective in increasing entrepreneurial intention than traditional passive teaching methods.

Third, entrepreneurship education curriculum design should consider contextual factors such as academic field, gender, and prior entrepreneurial experience [3], [7], [11], [12]. Tailored approaches that align with students' characteristics can enhance the effectiveness of entrepreneurship education in fostering entrepreneurial intention.

Fourth, support from the entrepreneurial ecosystem within the university environment—such as business incubation centers, entrepreneurship competitions, and mentoring networks—can strengthen the effect of entrepreneurship education on entrepreneurial intention [2]. Integrating formal education with entrepreneurial ecosystem support can create a conducive environment for developing students' entrepreneurial mindset.

4.6 Limitations and Future Research Directions

Despite providing valuable insights into the effect of entrepreneurship education on entrepreneurial intention, this literature review has several limitations that should be acknowledged. First, most of the reviewed studies employed cross-sectional designs, which limit the ability to draw strong causal conclusions. Longitudinal studies that track students before and after entrepreneurship education, and even into actual business creation, are needed to better understand the long-term effects of entrepreneurship education [1], [8].

Second, most studies measured entrepreneurial intention as the outcome variable rather than actual entrepreneurial behavior. Although intention is a strong predictor of behavior, not all intentions are translated into real actions. Future research should explore factors that facilitate or hinder the transition from entrepreneurial intention to actual entrepreneurial behavior [15].

Third, this literature review is limited to studies published in English and available in major academic databases. Studies published in other languages or in local journals may not be included, which may limit the generalizability of the findings.

Fourth, most reviewed studies focused on traditional higher education contexts. With the advancement of digital technology and online learning, future research should explore the effectiveness of digital entrepreneurship education and online learning platforms in fostering entrepreneurial intention [13].

Finally, future research should investigate more complex mechanisms, such as multiple or serial mediation effects and interactions among various moderating factors. A deeper understanding of the conditions under which entrepreneurship education is most effective can help design more targeted and impactful interventions [2], [11].

5. Conclusion

This systematic literature review confirms that entrepreneurship education has a positive and significant effect on students' entrepreneurial intention across various higher education contexts. This relationship is mediated by the components of the Theory of Planned Behavior (attitude toward entrepreneurship, subjective norms, and perceived behavioral control) as well as entrepreneurial self-efficacy. Factors such as academic field of study, prior entrepreneurial experience, gender, education level, and psychological capital moderate the strength of this relationship.

These findings have important practical implications for the development of entrepreneurship education curricula. Entrepreneurship education should be designed holistically, not only to transfer knowledge but also to shape attitudes, enhance perceived social support, and strengthen students' self-confidence. Experiential learning, integration with the university entrepreneurial ecosystem, and approaches tailored to students' characteristics can enhance the effectiveness of entrepreneurship education.

The main limitations of this literature review are the dominance of cross-sectional studies and the focus on entrepreneurial intention rather than actual entrepreneurial behavior. Future research should adopt longitudinal designs, explore the transition from intention to action, and investigate the effectiveness of digital entrepreneurship education. A deeper understanding of the complex mechanisms and contextual conditions that influence the effectiveness of entrepreneurship education will contribute to the advancement of entrepreneurship theory and practice.

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7. Conflict of Interest

The author declares that there is no conflict of interest in the conduct of this research and the writing of this article.

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