




# “Entrepreneurial intention and innovation among students: A bibliometric analysis 2014–2024”

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# ENTREPRENEURIAL INTENTION AND INNOVATION AMONG STUDENTS: A BIBLIOMETRIC ANALYSIS 2014–2024

## Abstract

The objective of this study is to analyze the existing literature and highlight significant trends in the area of entrepreneurial intention and innovation among students. The data employed in this analysis were sourced from the Scopus database, covering 361 publications in English over the last ten years (from 2014 to 2024, as of the survey conducted on September 10, 2024). The method employed is bibliometric analysis with the support of the VOSViewer software. The findings show that the topic of entrepreneurial intention and innovation among students is a rather interesting subject, which has been widely published in reputable journals, particularly in the fields of education, training, and entrepreneurship. This topic has been extensively researched in Asian countries, with China standing out as the top contributor in terms of the number of publications. Through bibliometric analysis, this study has also identified four main research themes related to the topic of entrepreneurial intention and innovation among students. They are: (1) the effect of individual student characteristics on entrepreneurial intention; (2) the role of education and innovation in shaping students' entrepreneurial intentions; (3) utilizing the theory of planned behavior to explore factors influencing social entrepreneurial intentions among students in higher education; (4) the influence of entrepreneurship education on the development of students' entrepreneurial mindset and actions. Furthermore, this study has outlined nine promising future research directions that aim to enhance both the quantity and quality of studies on students' entrepreneurial intentions and innovation.

## Keywords

entrepreneurial intention, innovation, creativity, student, university, startup

## JEL Classification

L26, M13, A22, I20

## INTRODUCTION

The topic of entrepreneurship and innovation among students has attracted significant attention, particularly in developing countries and those undergoing digital transformation, as they create digital economies influenced by integration and globalization. Entrepreneurship and innovation are being incorporated into education, starting from high school and especially at the university level, to stimulate creativity, foster self-reliance and independence, and instill a sense of responsibility toward oneself, family, and society.

Numerous studies have investigated various facets of entrepreneurial intention, including the support offered by universities for student entrepreneurship (Saeed et al., 2018), the impact of factors like attitudes and creativity on entrepreneurial intention (Law & Breznik, 2017), as well as risk-taking, proactivity, and competitive aggressiveness, among other topics (Al-Mamary & Alshallaqi, 2022).

In addition to individual studies that delve into various aspects of student entrepreneurship, research that explores the overall trends of past studies and suggests future research directions through bibliometric

analysis techniques, supported by tools like VOSViewer, CiteSpace, and R studio, remains relatively limited. Notable studies following this research direction include those on entrepreneurship education (Anubhav et al., 2024; Wan & Lv, 2021; Kakouris & Georgiadis, 2016) and innovation among students (Li & Pu, 2023). However, research specifically focused on entrepreneurial intention and innovation among students using bibliometric analysis is still relatively scarce.

## 1. LITERATURE REVIEW

It is widely accepted that entrepreneurial intention involves the process of recognizing, assessing, and capitalizing on business opportunities (Shane & Venkataraman, 2000; Macko & Tyszka, 2009). This intention is frequently linked to the future creation of a business. According to Kuckertz and Wagner (2010), a person's entrepreneurial intention emerges from recognizing opportunities, leveraging available resources, and obtaining support from their surroundings to launch their own business. Meanwhile, Gupta and Bhawe (2007) suggested that entrepreneurial intention is a process centered on the planning and implementation of a business creation strategy. Research consistently views students currently attending universities and colleges as potential candidates for future entrepreneurial ventures. As a result, Schwarz et al. (2009) contended that students' entrepreneurial intention encompasses their ideas, which, with appropriate guidance from educational programs and mentors, can eventually result in the establishment of their own businesses.

Drucker (1999) concluded that the entrepreneurial process is always closely linked to innovation; in other words, innovation is the key tool in the formation of entrepreneurship. Innovation involves the creation of new, valuable, and practical products, services, ideas, methods, or processes (Woodman et al., 1993). Kinicki and Kreitner (2009) describe creativity as the act of utilizing imagination and expertise to generate a novel or distinctive idea, product, object, or process.

Innovative entrepreneurship, therefore, includes activities aimed at recognizing, evaluating, and capitalizing on opportunities to launch new products and services, adopt unique business practices, enter new markets, or utilize previously inaccessible sources of materials (Shane, 2003). Innovative entrepreneurship specifically involves establishing a new business that leverages the results of scientific and technological advancements (Barbara, 2013).

From the above analysis, it can be seen that students' innovative entrepreneurial intention refers to their awareness of the commitment and readiness to establish and lead new businesses based on advanced technology, with the goal of creating novel and innovative models or products that generate exceptional growth and breakthroughs in future competition. Furthermore, studies on students' entrepreneurial intention and creativity have been undertaken from various viewpoints in different countries around the globe.

Thus, the topic of students' entrepreneurial intentions and innovation has received considerable research attention over the years. However, studies employing bibliometric analysis remain quite limited. Only a few studies have utilized this method, such as the research by Ruiz-Alba et al. (2021).

Bibliometric analysis is a research approach that leverages bibliographic databases to examine citation and publication trends, helping to evaluate the scientific output and influence of researchers, institutions, or journals (Glänzel & Moed, 2002). Waltman et al. (2010) describe this approach as incorporating various analytical techniques.

Co-citation refers to the situation where two previously published documents are cited together by a later publication. This can indicate a quantitative relationship between the two earlier documents cited together. The strength of this relationship depends on the frequency with which the two documents are co-cited. The higher the number of co-citations, the stronger the relationship between the two documents. Co-citation analysis can be conducted by author, journal, or country (Anubhav et al., 2024). Meanwhile, co-occurrence analysis is a method used to investigate the relationship between words by examining their concurrent presence in documents (van Eck & Waltman, 2017).

Student's entrepreneurial intentions and innovation have long been a fascinating topic of interest

for many researchers. However, there is a growing need for more studies using bibliometric analysis to explore this area. This study aims to address that gap by evaluating the existing body of research and uncovering the key research directions within the field of student entrepreneurial intentions and innovation through a bibliometric approach.

## 2. METHODOLOGY

To establish the official sample size for the study, the study adhered to the research procedure outlined in Figure 1. In the Scopus database, a search filter was applied with the keywords (“Entrepreneurial intention” or “start up intention”) and (“\* innovation” or “\* creativity”) and “student\*” searched in the subject field (title/abstract/keywords). The search resulted in 391 articles in the database covering the period from 2014 to 2024 (as of the survey date on September 10, 2024). Following the review of the retrieved articles, the analysis targeted only those published in English and excluded

some Spanish-language publications, leaving a total of 361 documents. This dataset constitutes the official data for analysis in the study.

The initial analytical method includes descriptive statistical analysis of these 361 documents. The content of this analysis focuses on providing various information related to the publication landscape on the topic of “entrepreneurial intention and creativity among students,” such as publication and citation trends, national and author networks, document types and publishing journals, and reputable authors. This information is highly valuable as it offers readers a comprehensive overview of the current research on the subject.

Following the descriptive statistical analysis, co-citation and keyword analyses were carried out using VOSviewer 1.6.20. The aim of these analyses was to categorize documents cited from similar sources into common clusters, creating a system map that grouped all relevant research articles. The study then examined and labeled the primary

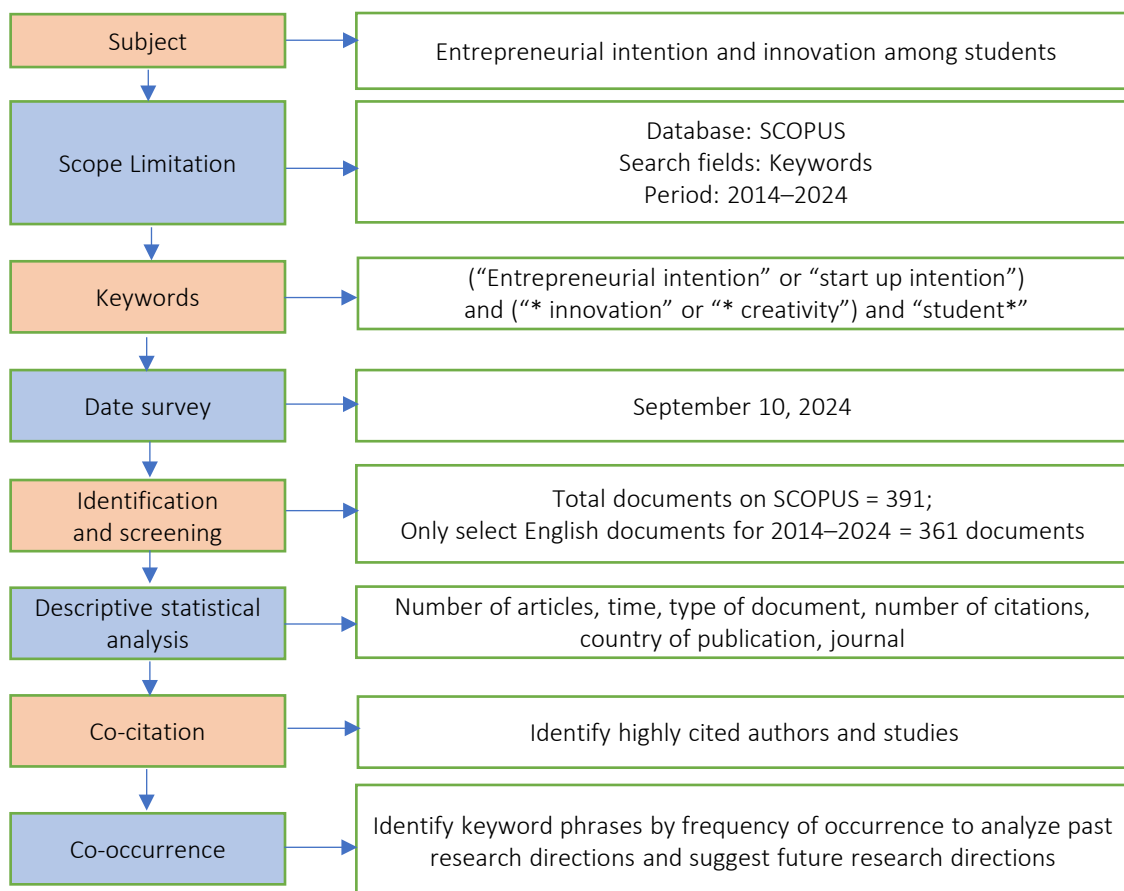


Figure 1. Research procedure

clusters based on the general themes of the documents within them. Additionally, keywords were categorized into the identified clusters, and an analysis of the keywords within each cluster was performed to propose avenues for future research.

### 3. RESULTS AND DISCUSSION

#### 3.1. Descriptive statistics

##### 3.1.1. Number of documents and citations

The data (Figure 2 and Table 1) indicate that the total number of articles related to the topic over the past decade is relatively modest (361 articles), averaging close to 15 articles per year. In comparison, the total citation count is 5,393, with an annual average of 539.3 citations and 14.9 citations per article. The year with the highest number of publications is 2023, while 2019 recorded the most citations during the 2014–2024 period. Additionally, the period with the highest growth in publications is from 2021 to 2023 (following the COVID-19 pandemic). Thus, it can be generally

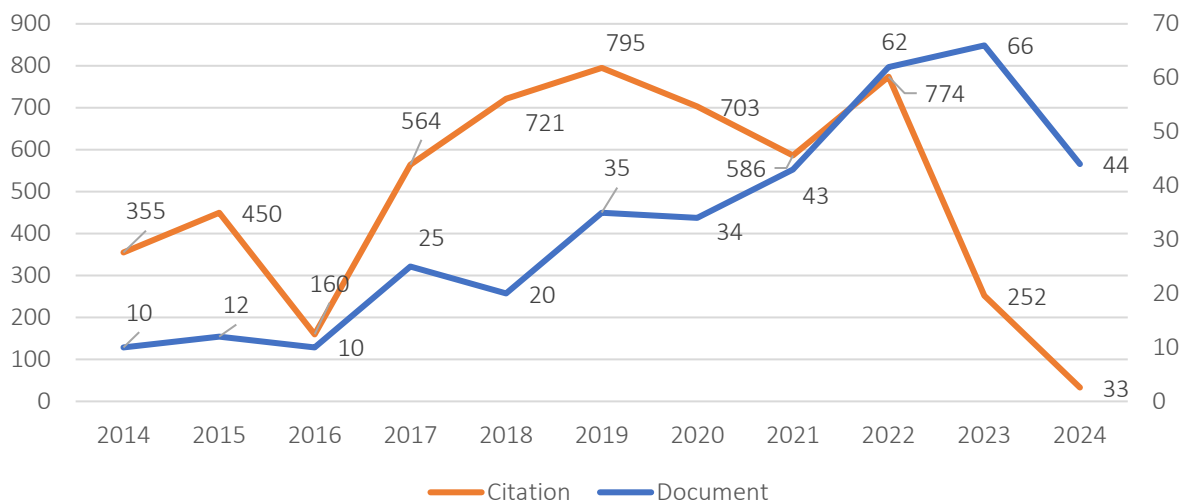
assessed that the topic of entrepreneurial intention and creativity among students has received attention and publications over the past 10 years. However, the publication and citation situation remains relatively limited, although there are signs of improvement since 2021, following the global COVID-19 pandemic.

##### 3.1.2. Central countries

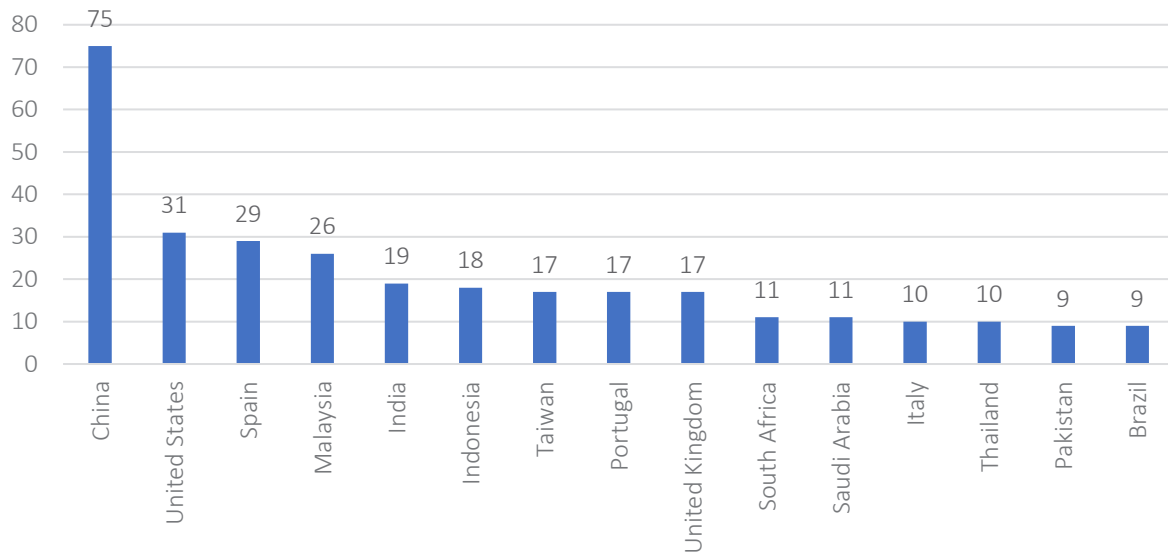
According to the analysis, the countries with the most publications related to the topic of entrepreneurial intention and creativity among students are quite diverse, with a significant concentration in Asia. Among these, China stands out with a significant number of publications, followed by the United States and Spain. The list of leading countries also features several Asian nations, including Malaysia, India, Indonesia, Taiwan, Thailand, Vietnam, and Pakistan. This highlights the strong presence of Asian countries in publishing research on the topic of entrepreneurial intention and creativity among students, establishing a foundation for the sustainable development of these nations. This is because students are seen as a key work-

**Table 1.** Some statistical indicators on the number of documents and citations

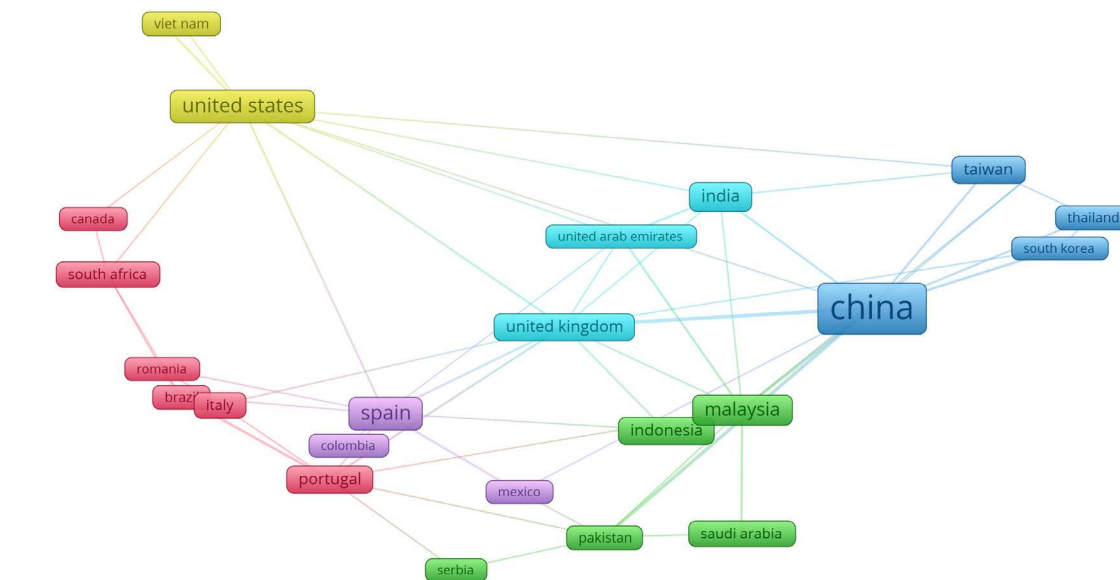
Indicators	Quantity/Ratio
Total number of publications in the period 2014–2024 (Sept 10, 2024)	361
Total number of citations 2014–2024 (Sept 10, 2024)	5393
Average citations/article	14.9/article
Average number of articles in the period 2014–2024 (Sept 10, 2024)	36.1 document/year
Average number of citations in the period 2014–2024 (Sept 10, 2024)	539.3 citations/year
The period with the greatest number of publications	2021–2023



**Figure 2.** Number of documents and citations



**Figure 3.** Statistics on the countries that have published the most on the topic



**Figure 4.** Network visualization map of the co-authorship by countries

force entering the labor market, well-trained in knowledge, skills, and responsibility (Figure 3).

Figure 4 presents the co-authorship network results using VOSviewer software and a minimum publication frequency of nine per country.

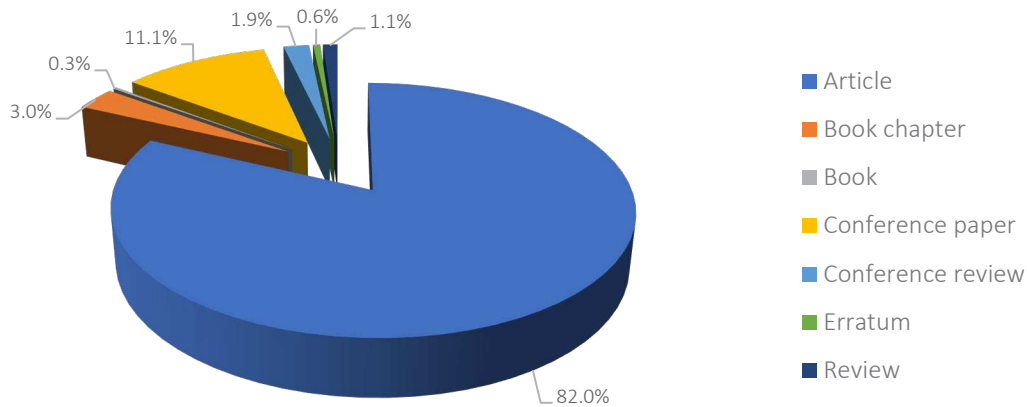
According to Figure 4, six clusters of co-authorship relationships between countries are formed. Cluster 1 includes six countries: Brazil, Canada, Italy, Portugal, Romania, and South Africa. Cluster 2 comprises five countries: Indonesia, Malaysia, Pakistan, Saudi Arabia, and Serbia. Cluster 3 includes five countries: China, Hong Kong, South

Korea, Taiwan, and Thailand. Cluster 4 consists of three countries: Germany, the United States, and Vietnam. Cluster 5 also consists of three countries: Colombia, Mexico, and Spain. Cluster 6 consists of three countries: India, the United Arab Emirates, and the United Kingdom.

**3.1.3. Types of documents**

According to Figure 5, 82% of the publications on the topic are presented as journal articles, accounting for 296 out of 361 documents. Following this are conference papers (11.1%), book chapters (3%), workshop reports (1.9%), review articles (1.1%), er-





**Figure 5.** Statistics by the type of published documents

ratum reports (0.6%), and books (0.3%). Thus, although the types of publications related to the topic of entrepreneurial intention and creativity among students are quite diverse in the Scopus database, they are primarily in the form of journal articles.

**3.1.4. Journals with the most publications**

The results shown in Table 2 clearly indicate that the topic of entrepreneurial intention and creativity among students has attracted publication interest from authors in various journals spanning diverse fields, including education, psychology, mathematics, management, and technology. The top 10 journals with the most publications are all reputable journals indexed in esteemed scientific databases like Scopus and WOS and published by distinguished publishers such as Emerald, Elsevier, Springer, Routledge, and Sage. This also serves as a reference for those interested in the topic to seek or publish related research in the future.

**3.1.5. Subject areas**

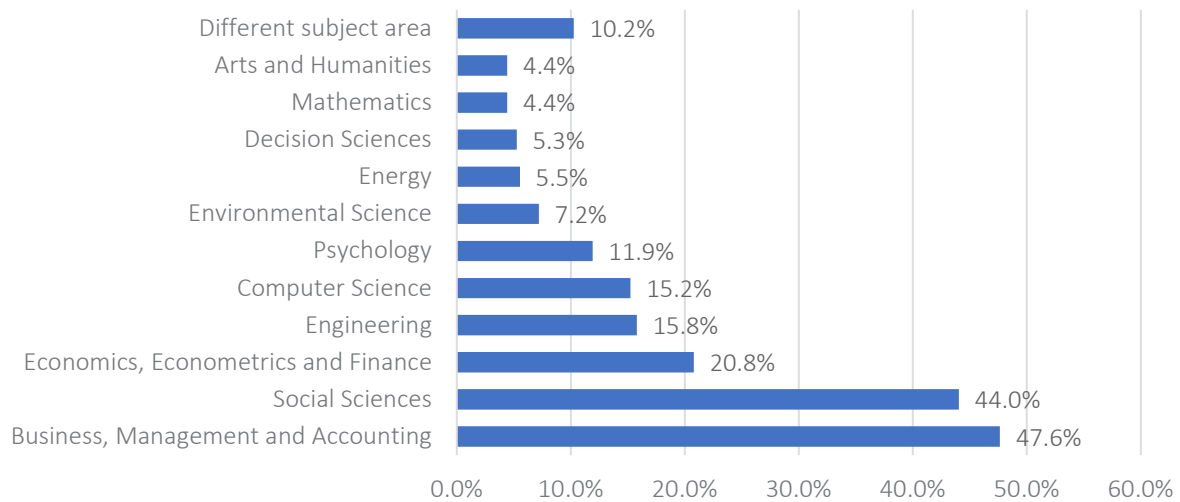
According to Figure 6, the fields of journals that publish research findings on the topic are quite varied, with the largest proportions found in business, management, and accounting (47.6%), social sciences (44%), and economics and finance (20.85%). This suggests that the topic of entrepreneurial intention and creativity among students is particularly prominent within the realms of business and management, as well as social sciences.

**3.2. Co-citation network**

Various quantitative software tools allow for network visualization analyses to explore highly cited and prominent works. This study uses VOSviewer 1.6.20 to perform co-citation analysis by authors. From the initial 361 articles, which involve 23,441 authors, and by applying the criterion of selecting articles cited at least 30 times, a final selection of

**Table 2.** Top 10 journals

Rank	Journal Title	Publisher	Journal Ranking	Documents	Percentage
1	Frontiers in Psychology	Frontiers	SSCI, Q2	31	1.0%
2	Sustainability	MDPI	SCIE, Q1	16	0.5%
3	Education and Training	Emerald	SSCI, Q1	9	0.3%
4	Administrative Sciences	MDPI	ESCI, Q2	9	0.3%
4	International Journal of Management Education	Emerald	SSCI, Q2	8	0.3%
5	Applied Mathematics and Nonlinear Sciences	Sciencedirect	Q3	7	0.2%
6	International Entrepreneurship and Management Journal	Springer	SSCI, Q1	5	0.2%
7	Studies in Higher Education	Routledge	SSCI, Q1	4	0.1%
8	Journal of Open Innovation Technology Market and Complexity	Elsevier	Q1	4	0.1%
9	Journal of Entrepreneurship Education	Allied Business Academies (out 2019)	Q3	4	0.1%
10	Industry and Higher Education	Sage	ESCI, Q2	4	0.1%



**Figure 6.** Analysis by the field of publication

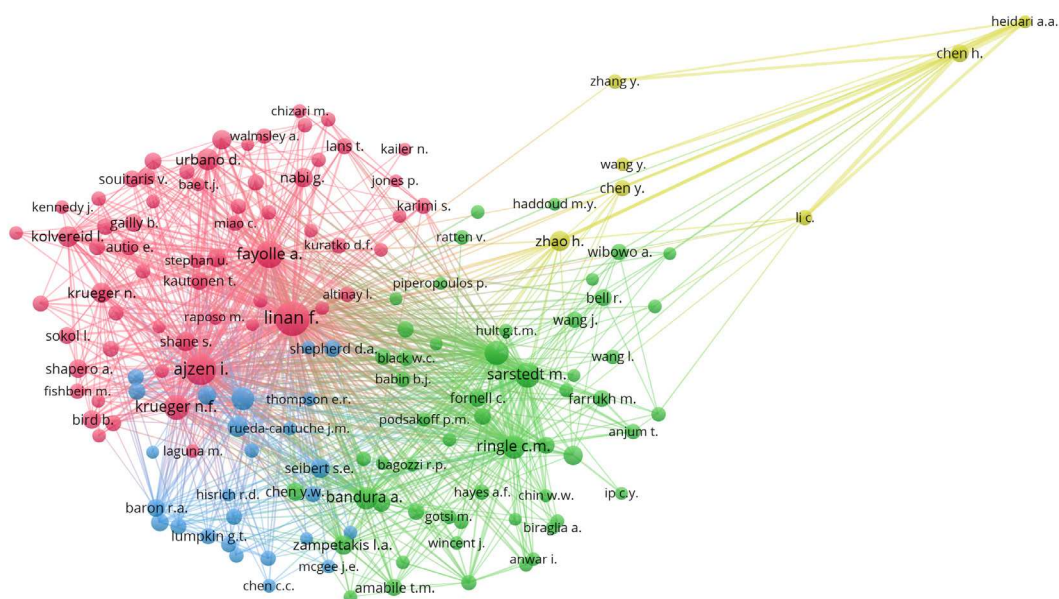
151 authors was made, divided into four groups (four clusters) in the network presented in Figure 7.

Figure 7 displays the VOSviewer visualization results illustrating the co-citation relationships among the four clusters. Cluster 1 (red) comprises 63 authors featuring frequently cited individuals like Linan F, Ajen I, and Krueger N.F. Cluster 2 (green) consists of 55 authors with prominent authors like Hair J.F., Sarstedt M., and Ringle C.M. Cluster 3 (blue) includes 26 authors with key figures like Carusd A.L. and Reilly M.D. Cluster 4 (yellow) has seven authors, with notable authors such as Chen H. and Zhao H. Combined with da-

ta from Scopus, the study selected 10 cited studies, listed in descending order as shown in Table 3.

### 3.3. Co-occurrence of author keywords

Based on data from the keyword system of the 361 articles analyzed using VOSviewer, with the condition that each keyword must appear at least five times, the results yielded 39 selected keywords for the final analysis, divided into three clusters as detailed in Figure 8. A comprehensive list of the keywords in each cluster is presented in Table 4.



**Figure 7.** Network of co-citation by authors

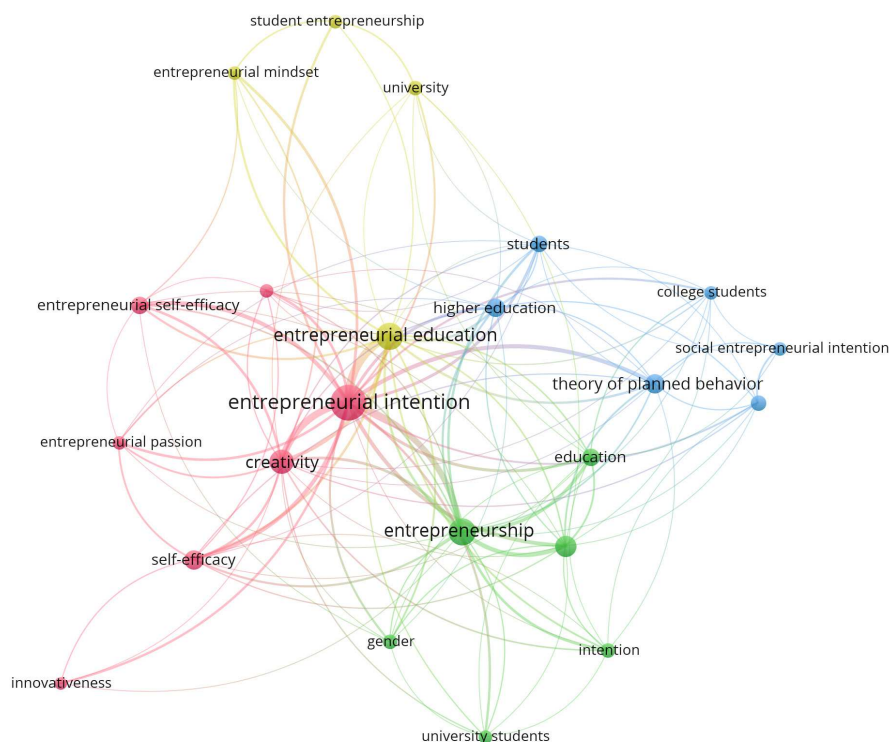


**Table 3.** Ten studies with the highest citations

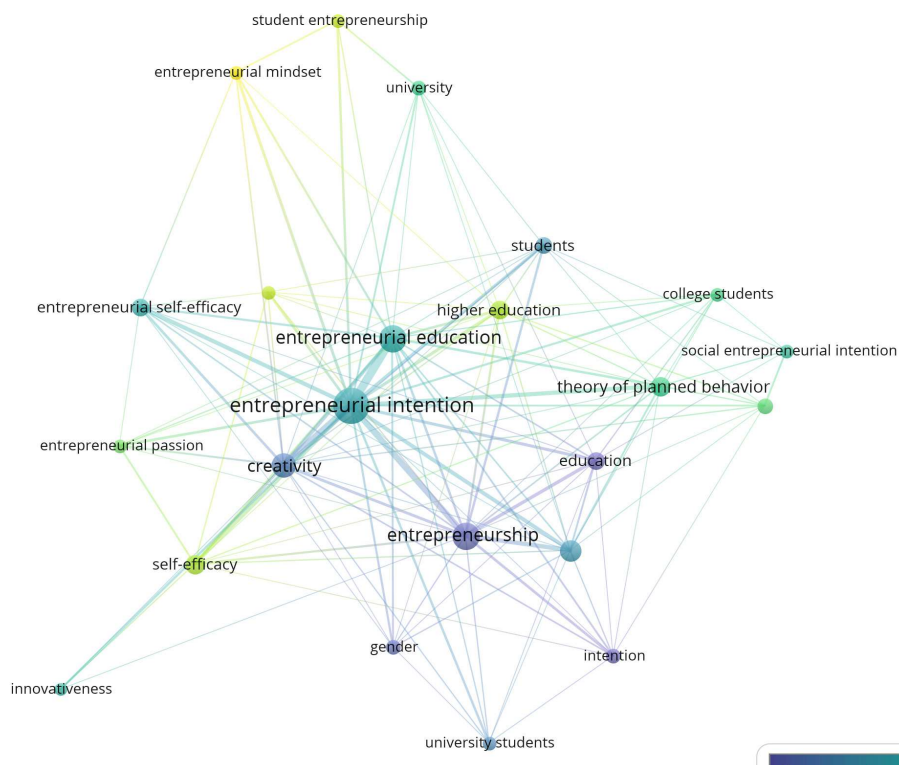
Documents	Total citations
'The role of perceived university support in the formation of students' entrepreneurial intention' (Saeed et al., 2018)	244
'Impact of entrepreneurship education on entrepreneurial intentions of university students in Egypt' (Hattab, 2014)	145
'Creativity, proactive personality, and entrepreneurial intention: the role of entrepreneurial alertness' (Hu et al., 2018)	132
'Entrepreneurial self-efficacy and intention: Do entrepreneurial creativity and education matter' (Shahab et al., 2019)	124
'The effect of curricular and extracurricular activities on university students' entrepreneurial intention and competences' (Arranz et al., 2017)	118
'Examining determinants of entrepreneurial intentions in Slovenia: applying the theory of planned behaviour and an innovative cognitive style' (Pejic Bach et al., 2018)	109
'Impacts of innovativeness and attitude on entrepreneurial intention: Among engineering and non-engineering students' (Law & Breznik, 2017)	94
'Investigating the relationship between educational support and entrepreneurial intention in Vietnam: The mediating role of entrepreneurial self-efficacy in the theory of planned behavior' (Maheshwari & Kha, 2022)	93
'A psychosocial study of self-perceived creativity and entrepreneurial intentions in a sample of university students' (Laguia et al., 2019)	93
'Impact of autonomy, innovativeness, risk-taking, proactiveness, and competitive aggressiveness on students' intention to start a new venture' (Al-Mamary & Alshallaqi, 2022)	87

**Table 4.** Statistics on keywords and frequency of appearance

Cluster	Keywords and frequency of appearance	Theme
1 (Red)	<b>Seven keywords:</b> entrepreneurial intention (193), creativity (53), entrepreneurial passion (9), innovativeness (7), entrepreneurial self-efficacy (17), self-efficacy (24)	Study of the factors related to the students themselves that influence entrepreneurial intention
2 (Green)	<b>Six keywords:</b> education (17), entrepreneurship (79), gender (10), innovation (33), intention (11), university students (9)	The influence of education and innovation on the development of students' entrepreneurial intentions
3 (Blue)	<b>Six keywords:</b> social entrepreneurial intention (9), college students (9), higher education (21), social entrepreneurship (12), students (15), theory of planned behavior (28)	Applying the theory of planned behavior to study the factors influencing students' social entrepreneurial intentions in higher education
4 (Yellow)	<b>Four keywords:</b> entrepreneurial education (77), entrepreneurial mindset (8), student entrepreneurship (9), university (11)	The impact of entrepreneurship education on the entrepreneurial mindset and startup activities of university students



**Figure 8.** Network of co-occurrence by keywords



**Figure 9.** Overlay visualization map

Among these four research clusters, as illustrated in Figure 9, the yellow cluster pertains to studies examining the influence of entrepreneurship education on university students' entrepreneurial mindset, self-efficacy, and startup intentions. This area of research has garnered considerable attention and publication in recent times.

The descriptive statistics and analysis clearly indicate that, over the past decade (2014–2024), the topic of entrepreneurial intention and creativity among students has been explored and published in the Scopus database, albeit with a relatively small number of publications. However, since the COVID-19 pandemic and the subsequent shifts in awareness and the effects of scientific technology, there has been a growing interest in this subject from researchers globally, especially from those in Asian countries, starting in 2021. Among these, China shows the greatest interest in research on entrepreneurial intention, as well as studies related to artificial intelligence and digital transformation. Recent studies have predominantly been published as scientific articles in reputable journals across

various fields, with a major focus on business, management, and social sciences, forming four research clusters.

First, the research direction emphasizes examining the personal factors that affect students' entrepreneurial intentions. The main keywords for this cluster are “creativity,” “entrepreneurial intention,” “entrepreneurial passion,” “entrepreneurial self-efficacy,” “innovativeness,” and “self-efficacy.” This is the research direction with the highest number of publications among the research clusters formed from the analysis. This suggests that this topic has garnered considerable attention from researchers both in the past and at present.

Among the various personal factors of students, creativity and innovation, self-efficacy, and entrepreneurial passion are frequently highlighted in research. Creative students not only view problems from new perspectives but also propose innovative, highly applicable solutions. Meanwhile, innovativeness helps students generate new ideas and adapt to rapidly changing business environments, increasing their chances of success in entrepreneurship. Self-efficacy is another crucial fac-

tor as it enables students to trust in their abilities, confidently face entrepreneurial challenges, and persist in their goals. This confidence enhances motivation and encourages students to continue their efforts even in the face of failure. Finally, entrepreneurial passion is a strong emotional drive that motivates students to pursue their entrepreneurial journey. This trait helps maintain energy and perseverance in realizing business ideas despite difficulties. When combined with creativity, self-efficacy, and innovativeness, entrepreneurial passion becomes a powerful motivator for students to not only develop ideas but also turn them into successful businesses. Notable studies in this direction include Ferreira-Neto et al. (2023) with students in Brazil, Neneh (2022) with students in South Africa, Bignetti et al. (2021) with students at universities in South America, and Li et al. (2020) with students in China. These studies generally aim to explore how personal factors impact entrepreneurial intention through the use of linear structural models. The main research method involves surveying university students with Likert scale questionnaires (5 or 7 points), along with data analysis tools like AMOS or SmartPLS.

Second, another research direction emphasizes the significance of education and innovation in shaping students' entrepreneurial intentions. The main keywords for this cluster are "education," "entrepreneurship," "gender," "innovation," "intention," and "university students". This research direction is also highly attractive and relevant because, in the context of the modern economy, education not only provides theoretical knowledge but also shapes thinking and creativity, thereby directly influencing students' entrepreneurial intentions. Entrepreneurship education is vital for providing students with the essential skills needed to launch a business. Entrepreneurship programs do not only offer knowledge about management, marketing, or finance but also encourage critical thinking, a spirit of innovation, and problem-solving skills. When students engage in entrepreneurship courses, they tend to develop stronger entrepreneurial intentions by recognizing potential opportunities in the market. Additionally, innovation is an indispensable factor in forming entrepreneurial intentions. Innovation helps students find creative solutions, meet market needs, or create new products and services. A learning environment that promotes innovative thinking will encourage

students to think disruptively and develop business ideas. When students are exposed to innovative thinking and learn how to deal with risks, they feel more confident in realizing their entrepreneurial ideas. Significant studies in this area include the research conducted by Marques et al. (2018), López-Delgado et al. (2019), Paray and Kumar (2020), and Ward et al. (2019).

Third, this next research direction involves utilizing the theory of planned behavior (TPB) to investigate the factors that affect students' social entrepreneurial intentions in higher education. Keywords for this cluster are "college students," "higher education," "social entrepreneurial intention," "social entrepreneurship," "students," and "theory of planned behavior."

In this research direction, the TPB is a significant theoretical framework employed to explain and predict individual behaviors, including social entrepreneurial intentions. This direction seeks to investigate and enhance the understanding of the factors influencing students' social entrepreneurial intentions, focusing on attitudes toward the behavior, subjective norms, and perceived behavioral control. Attitudes toward social entrepreneurship represent how students view the advantages and challenges associated with social entrepreneurship. They are likely to develop stronger entrepreneurial intentions if they believe that social entrepreneurship can provide community value and fulfill social contributions. Conversely, if students are concerned about risks or do not perceive personal benefits, their social entrepreneurial intentions may decrease. Subjective norms, or the influence of the surrounding environment, also play a crucial role. Family, friends, and even lecturers can impact students' entrepreneurial decisions. If students perceive social support, they will feel more confident in pursuing this goal.

Finally, perceived behavioral control pertains to students' confidence in their ability to oversee and manage entrepreneurial activities. If they believe they have sufficient resources, knowledge, and skills to overcome challenges, their social entrepreneurial intentions will be stronger. Significant studies in this area include the research conducted by Chang et al. (2021), Su et al. (2021), Chengalvala and Rentala (2017), Zaremohzzabieh et al. (2019), and Wach and Wojciechowski (2016).

Fourth, the final research direction focuses on the influence of entrepreneurial education on students' entrepreneurial mindset and actions. The main keywords for this cluster are "entrepreneurial education," "entrepreneurial mindset," "student entrepreneurship," and "university." This research direction highlights the importance of entrepreneurial education as a key factor in developing students' entrepreneurial mindset and motivating their entrepreneurial activities. Through entrepreneurial training programs, students gain not only fundamental business knowledge such as financial management, marketing, and business planning but also develop soft skills like leadership, communication, and risk management. More importantly, entrepreneurial education contributes to building an entrepreneurial mindset characterized by a readiness to innovate, a willingness to accept risks, and perseverance in pursuing goals.

When students engage in entrepreneurial education, they are more likely to develop creative thinking skills and seek new business opportunities. Entrepreneurial education programs often encourage students to enhance problem-solving skills and apply innovative ideas in practical settings. This not only enhances students' confidence in launching a business but also deepens their understanding of the market and the essential factors for achieving business success. Furthermore, entrepreneurial education also promotes practical entrepreneurial activities among students. Many universities now offer platforms such as business incubators, startup competitions, and internship opportunities with companies, helping students apply their knowledge in real-world contexts. Through these activities, students can develop business skills, build relationships with investors, and even start their own enterprises. Notable studies in this direction include research by Wardana et al. (2020), Rodriguez and Lieber (2020), Cui and Bell (2022), and Saptono et al. (2020).

Thus, bibliometric analysis techniques based on data retrieved from the Scopus system have clarified four main research directions identified to date through keywords from publications. Among these directions, the fourth research direction is considered particularly noteworthy in recent times. The findings of this study differ notably from those of Ruiz-Alba et al. (2021), which

was conducted over a 24-year period from 1993 up to July 8, 2016. Nevertheless, some similarities remain, as both studies acknowledge that entrepreneurial intention is linked to innovation and that factors such as entrepreneurial education, gender, perceptions, attitudes, and the TPB are key themes in research related to entrepreneurial intention.

Considering the current emphasis on leveraging scientific and technological advancements to propel the digital economy, fostering bilateral and multilateral cooperation for sustainable development, and addressing the impacts of climate change, this paper proposes a number of research directions for the near future related to entrepreneurial intention and creativity among university students. These include:

1. The effect of digital transformation on university students' innovative entrepreneurial intentions.
2. The contribution of the digital economy to the enhancement of entrepreneurial intentions among university students.
3. University students' entrepreneurial intentions within the framework of green economy and renewable energy.
4. The influence of global issues such as climate change on students' sustainable entrepreneurial intentions.
5. The influence of digital entrepreneurial education programs on students' entrepreneurial intentions within the context of the digital economy.
6. The effect of a culture of innovation and creative learning environments on students' entrepreneurial intentions.
7. The influence of international sustainable development initiatives on students' creative thinking and entrepreneurial intentions.
8. The influence of awareness of social responsibility on students' innovative entrepreneurial intentions.

9. The effect of education focused on sustainable development on students' innovative entrepreneurial intentions.

Therefore, utilizing bibliometric analysis techniques, this study has examined four current research directions and proposed nine new avenues

for future research on the topic of entrepreneurial intention and creativity among students. However, this study has limitations, such as not diversifying the data sources for analysis and relying solely on the Scopus database instead of integrating with other databases.

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## CONCLUSION

This study was conducted with the aim of evaluating the state of research and exploring the main research directions on the topic of student entrepreneurial intentions and innovation from 2014 to the survey date (September 10, 2024), based on Scopus data. The findings identified four key research directions and proposed nine potential future research directions while emphasizing the importance of factors influencing student entrepreneurial intentions and innovation. These factors include the students' personal characteristics, the support from stakeholders such as universities, businesses, and the community, and the role of education and training in universities. With the increasing trend of digital transformation, development of the digital economy, and sustainable development, alongside international collaboration and diversification, the topic of student entrepreneurial intentions and innovation will continue to be a fascinating area of interest, attracting attention and efforts from researchers in the future.

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