RELISE

THE ROLE OF BUSINESS INCUBATORS IN PROMOTING INNOVATION AND ENTREPRENEURSHIP: A PROSPECTIVE AND SYSTEMATIC REVIEW[1]

O PAPEL DAS INCUBADORAS DE EMPRESAS NA PROMOÇÃO DA INOVAÇÃO E EMPREENDEDORISMO: UMA REVISÃO PROSPECTIVA E SISTEMÁTICA

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ABSTRACT

Incubators bring together resources, infrastructure and support that guarantee the development and growth of innovative companies, mainly at an early stage, by offering infrastructure, training, management support and guidance to entrepreneurs. The objective was to carry out a bibliometric survey of works related to the role of business incubators in promoting innovation and entrepreneurship. Specifically, the objective was to quantify the years with the most publications, the magazines, languages, countries of the authors and predominant areas of study; and, carry out a systematic review with the most recent works obtained from the bibliometric analysis. Methodologically, a search was carried out in two databases (Scopus and Web of Science), with a time frame between 2014 and 2024. For the systematic review, the most recent articles with open access publications available in the 3 most prominent journals on the Web of Science were selected, which was identified with the most published works. The results showed an increase in publications from 2017 onwards, with English as the predominant language and American authors with more participation in the articles. In the analysis of the selected articles, the importance of business incubators in promoting innovative entrepreneurship was observed, in addition to pointing out crucial tools for their success, such as the availability of tangible and intangible resources. The work provides support that guides other researchers

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on current journals, authors and publications to begin research on the topic, as 10 open access articles published between 2020 and 2023 were analyzed and which address the relevance and instruments for promoting sustainable enterprises.

Keywords: business incubation, innovative ventures, innovation habitats, scientific production, bibliometrics.

RESUMO

As incubadoras reúnem recursos, infraestrutura e suporte que garantem o desenvolvimento e crescimento de empresas inovadoras, principalmente em estágio inicial, através da oferta de infraestrutura, treinamentos, suporte gerencial e orientação aos empreendedores. O objetivo foi realizar um levantamento bibliométrico de trabalhos relacionados ao papel das incubadoras de empresas na promoção da inovação e empreendedorismo. Especificamente objetivou-se quantificar os anos com mais publicações, as revistas, idiomas, países dos autores e áreas de estudo predominantes; e, realizar uma revisão sistemática com os trabalhos mais recentes obtidos da análise bibliométrica. Metodologicamente foi realizada uma busca em duas bases (*Scopus* e *Web of Science*), com recorte temporal entre 2014 e 2024. Para a revisão sistemática foram selecionados os artigos mais recentes com publicações de acesso aberto disponíveis nas 3 revistas que mais se destacam na *Web of Science*, que foi identificada com mais trabalhos publicados. Os resultados apontaram um crescimento nas publicações a partir de 2017, tendo o inglês como língua predominante e autores estadunidenses com mais participações nos artigos. Na análise dos artigos selecionados observou-se a importância das incubadoras de empresas na promoção do empreendedorismo inovador, além de apontar ferramentas cruciais para o sucesso delas, como disponibilidade de recursos tangíveis e intangíveis. O trabalho fornece subsídios que norteiam demais pesquisadores sobre periódicos, autores e publicações atuais para iniciar pesquisas sobre a temática, uma vez que foram analisados 10 artigos de acesso aberto publicados entre 2020 a 2023 e que abordam a relevância e instrumentos para se promover empreendimentos sustentáveis.

Palavras-chave: incubação de empresas, empreendimentos inovadores, habitats de inovação, produção científica, bibliometria.

INTRODUCTION

The world today is characterized by rapid technological and economic changes, where innovation and entrepreneurship emerge as essential drivers for economic growth and competitiveness (Audretsch, 2014). In this context, business incubators arise as strategic actors in the innovation and entrepreneurship ecosystem, offering support and resources to innovative startups in the early stages of business development (Amezcua et al., 2013).

Incubators are part of innovation habitats, which are environments that bring together resources, infrastructure, and support to promote the development and growth of innovative companies through the provision of infrastructure, training, managerial support, and guidance to entrepreneurs so they can develop ideas and transform them into enterprises capable of ensuring their continuity in the market (Aranha, 2016), thus being important by providing a favorable means for experimentation, learning, and growth.

They are capable of creating support networks that facilitate access to financial, human, and technological resources necessary for the success of startups (Bruneel et al., 2012). It is also added that entrepreneurship and innovation are considered driving forces for economic growth and social development (Drucker, 2014), and in this sense, incubators emerge as a means to promote these two elements, offering support to startups and emerging ventures in the development of their innovative ideas (Bøllingtoft, 2012).

According to Aaboen et al. (2017), business incubators have been recognized as catalysts for startups and small businesses, providing a range of resources including physical space, mentoring, training, and access to networks. However, a deeper understanding is still needed of how these elements assist entrepreneurs in building innovative and successful businesses.

In this sense, the guiding research question is: what are the main trends, the journals with the most publications, the countries of origin of the authors, and

the predominant thematic areas in the scientific literature about the role of business incubators in the development of new businesses and innovation? As a research premise, it is believed that there is an annual growth in the number of publications and that Brazil figures among the main countries in terms of researcher nationality. Furthermore, works focused on management and/or business areas are expected to stand out the most. It is also assumed that such works mainly emphasize that business incubators are vital to promoting innovation and entrepreneurship, providing a favorable environment for the development of innovative ideas, offering technical, financial, and strategic guidance to entrepreneurs, and indicating tools to make this possible.

The general objective was to conduct a bibliometric survey of works related to the role of business incubators in promoting innovation and entrepreneurship. The specific objectives are to quantify the years with the most publications in the analyzed time interval, the journals, languages, authors' countries, and predominant study areas; and to perform a systematic review of the most recent works obtained from the bibliometric analysis.

A study like this is relevant because conducting a bibliometric study on the connection between business incubators and the promotion of entrepreneurship makes it possible to map the recent literature on the topic, providing valuable insights that help guide future research, identify emerging trends, and support decision-making by different stakeholders. The systematic review fills a gap left by other studies already developed, such as those by Oliveira et al. (2017) or Silvestro, Santos, and Teixeira (2022), who limited themselves to only a bibliometric survey in their studies and did not delve into the contents of the counted articles.

This work is organized as follows: first, there is this introduction, followed by the literature review that shows the role of business incubators and their importance for ventures in early stages. Then the methodology used to conduct

the research is presented. Next are the results and discussion, starting with the bibliometric analysis, followed by the systematic review of the works addressing the function of incubators in promoting entrepreneurship. Finally, the concluding remarks are made, and the references used throughout the article are listed.

THE IMPORTANCE OF INCUBATORS FOR INNOVATIVE VENTURES

Business incubators contribute significantly to the promotion of innovation and entrepreneurship by providing the necessary support and resources for the launch and growth of startups and small businesses (Hackett; Dilts, 2004). These favorable environments created by incubators have been fundamental to the survival and success of startups worldwide (Aernoudt, 2004).

The participation of incubators is essential to stimulate creativity, as they create a supportive space for the conception and implementation of innovative proposals. They provide infrastructure, financial support, business guidance, and contacts with potential investors and customers (Bøllingtoft; Ulhøi, 2005). This way, early-stage companies can dedicate themselves exclusively to refining their solutions without worrying about bureaucratic or logistical issues.

Additionally, accelerators play a significant role in stimulating entrepreneurship. They encourage people to start their own ventures by providing a protected space where they can validate their ideas before entering the competitive market (Schwartz; Hornych, 2010). Moreover, accelerators foster an entrepreneurial mindset by connecting entrepreneurs with specialized mentors and creating networking opportunities.

However, despite the clear benefits of business incubators, some studies indicate that they are not always effective in fostering innovation and entrepreneurship. As pointed out by Hackett and Dilts (2004), incubators can become overly protective, preventing companies from facing market challenges. Furthermore, some incubators may fail to provide adequate resources or the

necessary support for the success of the ventures.

In the current economic scenario, business acceleration programs play an essential role in promoting entrepreneurship and creativity. Through these actions, startups and small institutions receive financial, logistical, and strategic assistance, simplifying their daily activities (Zouaghi et al., 2018).

Business incubators have a decisive importance in stimulating innovation and entrepreneurship, creating a favorable place for interaction and collaboration among various participants in the business ecosystem (Ratinho, Henriques, 2010). Additionally, these spaces offer access to financial, material, and intangible resources, which are essential elements for the growth of emerging startups (Schwartz; Hornych, 2010).

Besides this, incubators contribute decisively to the promotion of entrepreneurship by providing strategic support and business consulting. These organizations can help entrepreneurs mitigate risks associated with creating new companies (Fayolle; Redford, 2014). Incubators also play an instrumental role in developing business skills and building commercial relationships (Scillitoe; Chakrabarti, 2010).

Standing out as an effective mechanism to foster innovation and entrepreneurship, incubators provide a variety of services such as physical space, administrative support, consulting, financing, and networking, as pointed out by Mian, Lamine, and Fayolle (2016). These benefits are especially valuable for startups facing financial and operational challenges.

The contribution of incubators to the expansion of the business ecosystem is substantial. The survey conducted by Bruneel et al. (2012) reveals that incubated institutions perform better in terms of employment growth and survival compared to non-incubated ones. This study suggests that the services offered by incubators are indispensable for the success of startups.

However, there is evidence indicating that the effectiveness of incubators

can vary according to several factors. Schwartz and Hornych (2010) note that the results of incubation programs can be influenced by factors such as the nature of the industry, the quality of incubator management, and the economic environment in which the incubator operates. Despite these potential limitations, there is growing consensus in the literature that incubators play an essential role in supporting innovative entrepreneurship. As observed by Aerts, Matthyssens, and Vandenbempt (2007), incubators promote a favorable scenario for new inspirations and experimentation, which are key factors for innovation.

Finally, it is crucial to emphasize that the success of accelerators is intrinsically linked to the excellence of the services offered. Therefore, it is essential that these entities adopt an entrepreneur-focused approach and continuously seek improvements in their internal practices (Hackett; Dilts, 2004).

METHODOLOGY

Research modality

The methodology of this study consists of a bibliometric analysis, which, according to Silva, Durante, and Biscoli (2017), aims to list, systematize, and evaluate scientific works in an established knowledge area with the intention of identifying trends. This study sought to identify the main research areas, languages, and years with the most publications, countries of origin of the authors, prominent journals, and was conducted using the Scopus and Web of Science journal databases.

Data collection and analysis process

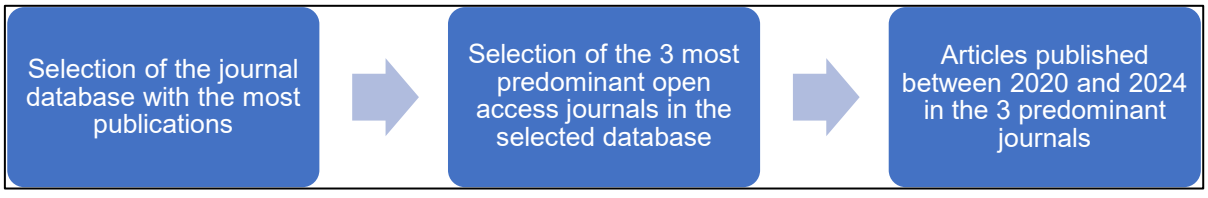
The search was conducted in May 2024 using the following keyword combinations: Incubator AND Startup; Incubator AND New companies; Incubator AND Promoting innovation; Incubator AND Infrastructure. These descriptors

were entered into the search fields for titles, abstracts, and keywords in the respective databases. Inclusion criteria considered only articles published between 2014 and 2024.

Subsequently, a systematic literature review was carried out on the role of business incubators in promoting innovation and entrepreneurship, using some of the works found in the bibliometric search. For this, open-access articles published from 2020 onwards were selected. According to Grant and Booth (2009), a systematic review is a rigorous and transparent approach to evaluating a large volume of information and providing a coherent synthesis of the evidence. The analysis focused on identifying the main mechanisms through which incubators support entrepreneurs and contribute to the creation of innovative businesses.

The bibliometric data analysis was conducted using Excel spreadsheet software (version 2016), as well as for generating the graphs presented in the study. For the systematic review, a more in-depth investigation of the content of the selected works was performed. To this end, the articles were filtered according to Flowchart 1:

Flowchart 1 – Screening for selection of articles for the systematic review



Source: Author (2024).

RESULTS AND DISCUSSION

Bibliometric analysis

In Table 1, the number of works published in each database according to the keyword combinations can be observed. It shows that the database with the highest number of articles is Web of Science.

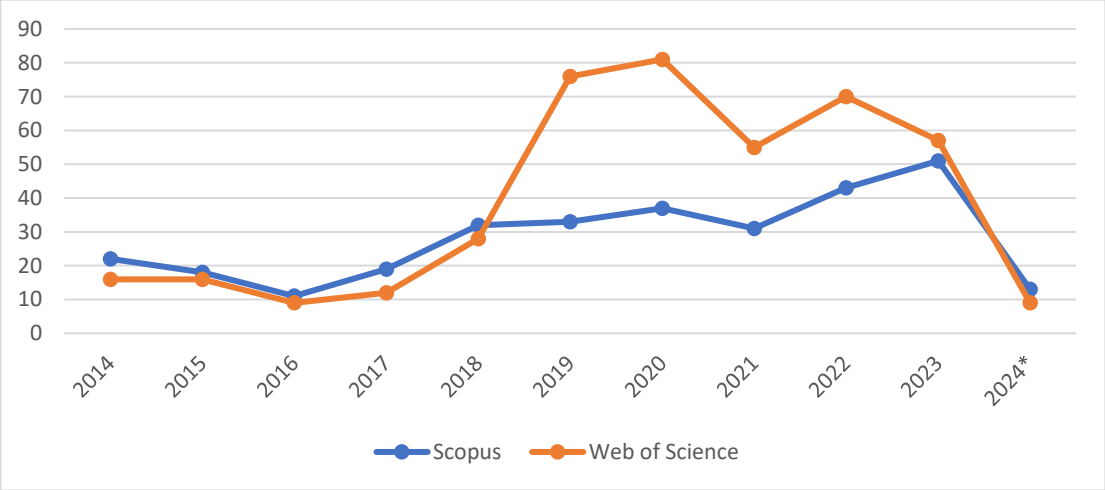
Table 1 – Number of articles found in journal databases between 2014 and 2024

Descriptors	*Scopus*	*Web of Science*
Incubator AND Startup	176	164
Incubator AND New companies	10	83
Incubator AND Promoting Innovation	5	105
Incubator AND Infrastructure	119	92

Source: Research data (2024).

Regarding the years analyzed, it was observed that in both the Scopus and Web of Science databases there was an increase in the number of publications between 2017 and 2022, with a slight decline in 2021, as shown in Graph 1.

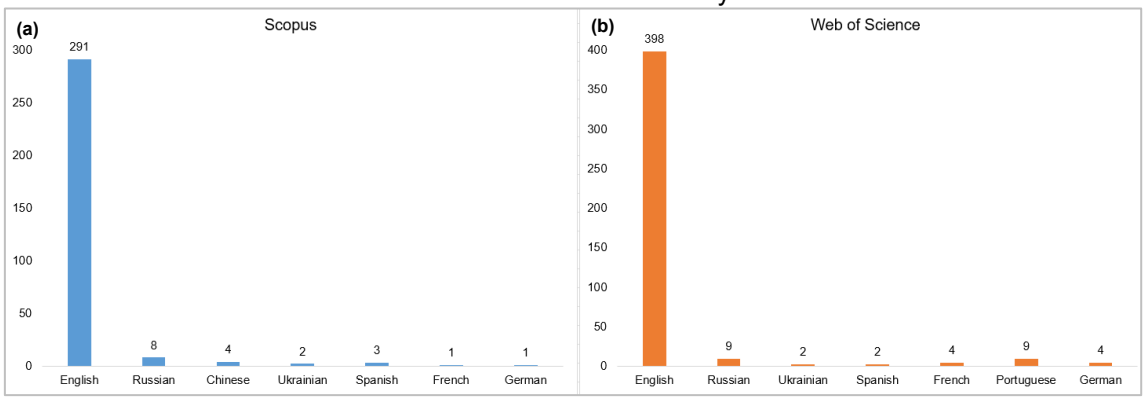
Graph 1 – Number of publications in the scopus and web of science databases between 2014 and 2024 for the researched keywords



Source: Research data (2024).
* The decline in 2024 is justified by the fact that the research was conducted early in the year.

In Graph 2, it is identified that English is the most commonly used language in both consulted databases, representing 93.9% (Scopus) and 93.0% (Web of Science) of the total articles found in the survey. This can be explained by the fact that these are two databases with predominantly English research, in addition to English being the most widely spoken language in the world, which contributes to greater visibility of the research conducted, increasing the chances of being seen and cited by other authors.

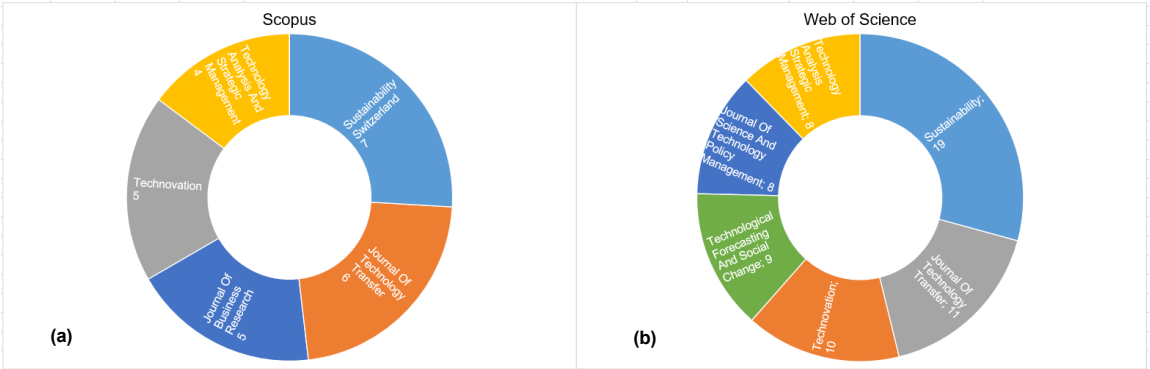
Graph 2 – Most frequent languages in publications in the Scopus (a) and Web of Science (b) databases for the researched keywords



Source: Research data (2024)

Regarding the journals with the most publications on the researched keywords, it was found that in Scopus the following journals stand out: *Sustainability Switzerland* (with 7 articles); *Journal of Technology Transfer* (with 6); *Technovation* and *Journal of Business Research* (both with 5); *Technology Analysis and Strategic Management* (with 4). In the Web of Science, the leading journals were: *Sustainability* (with 19); *Journal of Technology Transfer* (with 11); *Technovation* (with 10); *Technological Forecasting and Social Change* (with 9); and *Technology Analysis Strategic Management* and *Journal of Science and Technology Policy Management* (both with 8). The other journals with higher frequencies of published articles can be seen in Graph 3.

Graph 3 – Predominant journals of publications in the Scopus (a) and Web of Science (b) databases for the researched keywords



Source: Research data (2024).

The journal *Technovation* stands out for being among the three most frequently appearing journals in both consulted databases. This can be explained by visiting the journal's website, which states in its focus and scope that it publishes articles related to technological innovation, especially when it comes to trends and technological advances; capital for the development and commercialization of new products; management of technological innovation in medium and large organizations; appropriate organizational structures and practices; and investment strategies related to science- or technology-based startups (Technovation, 2024). These thematic areas are attractive to authors conducting research on business incubators. This journal has the highest number of published works according to other bibliometric studies related to business incubators (Albort-Morant; Ribeiro-Soriano, 2015; Carmo; Carneiro, 2016; Marques et al., 2016; Silvestro; Santos; Teixeira, 2022), demonstrating that it is a relevant journal for authors wishing to publish research about the role and importance of business incubators for innovative ventures.

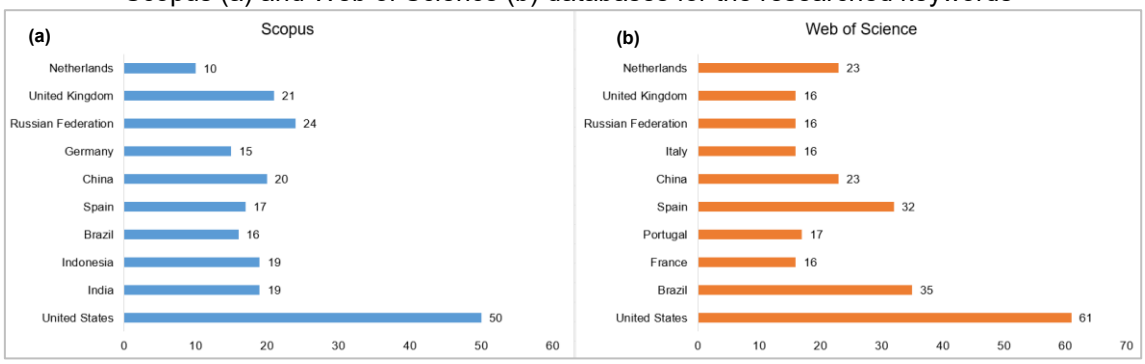
The *Journal of Technology Transfer* also appears as a leading journal in the bibliometric study conducted by Oliveira et al. (2017) on incubators and performance indicators in the Scopus database, for the period 1997–2017. It also ranks second in the analyses by Marques et al. (2016) and Carmo and Carneiro (2016). This is another important journal that covers entrepreneurship and innovation, as well as topics related to the relationship between the external environment and organizations (governments, public agencies, companies, universities) and their innovation processes (The Journal of Technology Transfer, 2024).

Considering the countries of origin of the authors who published the articles included in this survey, the United States of America stands out as the leading country in both databases. Additionally, in Scopus, Russia (24 articles) and the United Kingdom (21 articles) stand out, while in the Web of Science,

Brazil (35 articles) and Spain (32 articles) are prominent, indicating these countries as places where authors have sought to address the theme of promoting entrepreneurship with the help of business incubators. The other countries forming the top 10 ranking are shown in Graph 4.

In studies by Albort-Morant and Ribeiro-Soriano (2015) and Silvestro, Santos, and Teixeira (2022), the United States also ranks first, which is not surprising, as the country is considered a pioneer in the incubator movement and was where the first studies on the topic were published (Azevedo; Teixeira, 2018).

Graph 4 – Ranking of the top 10 countries of origin of authors with the most publications in the Scopus (a) and Web of Science (b) databases for the researched keywords



Source: Research data (2024).

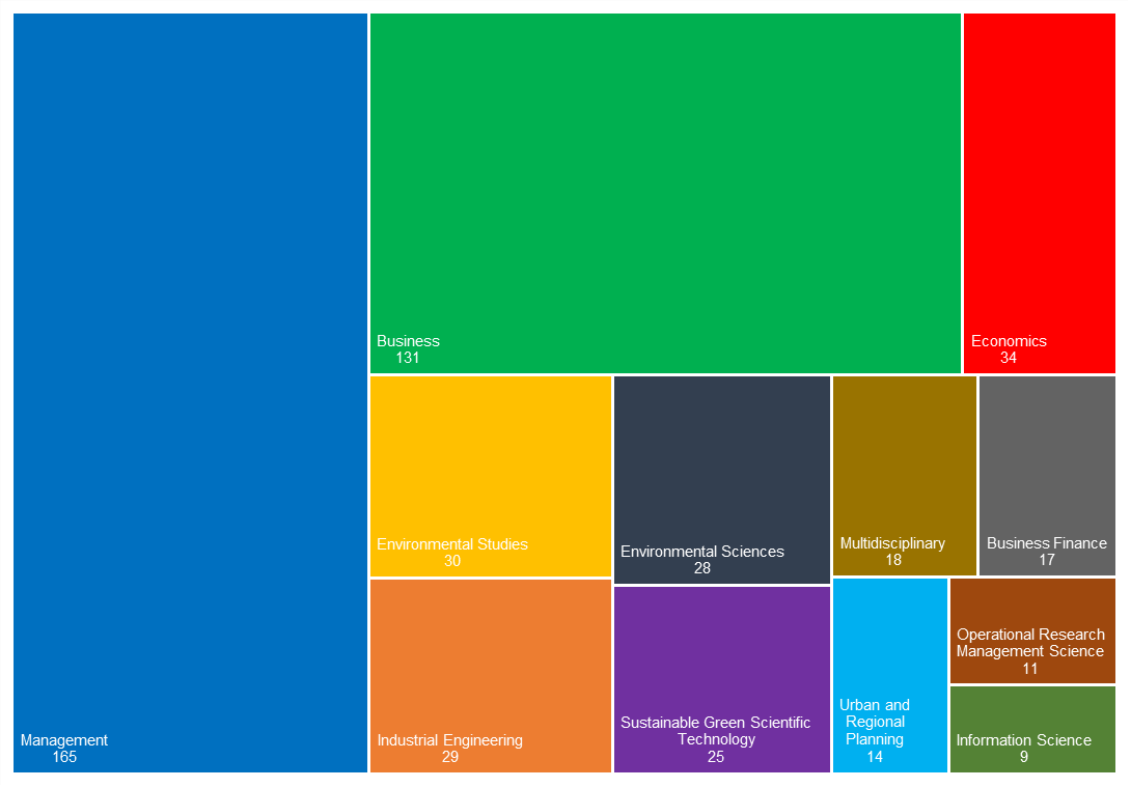
The research in the databases also allows identifying the main subjects or study areas of the works related to the searched keywords. In Graph 5, there is a diagram known as a treemap, which uses rectangles of different sizes to group numerical values for each category - the larger the rectangle, the higher the numerical value. It can be seen that the most prominent subjects in the Scopus database are: *Business, Management, and Accounting* (with 183 publications), *Social Sciences* (with 96), *Economics, Econometrics, and Finance* (with 68), and *Engineering* (with 59). In a study on incubators by Oliveira et al. (2017), it was also found that Business, Management, and Accounting stands out as the primary area.

Graph 5 – Ranking of the top 10 thematic areas with the most publications in the Scopus Database for the researched keywords

Source: Research data (2024).

The Graph 6 indicates the areas with the most prominence in the Web of Science, with *Management* (with 165 articles), *Business* (with 131), and *Economics* (with 34) being the top 3.

Graph 6 – Ranking of the 10 thematic areas with the most publications in the Web of Science database for the searched descriptors



Source: Research data (2024).

Although they have different names, these thematic areas are similar to those that stand out in the top positions in the survey conducted in the Scopus database.

Systematic review

After data collection in the bibliometric research, it was observed that the database with the highest number of publications for the descriptors used was the Web of Science (Table 1). Therefore, articles present in this database were selected, and the three journals with the most published works according to this survey were considered (Sustainability, Journal of Technology Transfer, and Technovation – Graph 2), with the analysis period between 2020 and 2024.

Chart 1 presents the main information regarding the publications analyzed after screening. Although there was an attempt to filter articles among the three previously mentioned journals, it was noted that Sustainability is the only one that makes all works available through open access, unlike the others, which do this only for some. For this reason, there is a greater number of publications belonging to this journal, with eight out of a total of 10 articles.

Chart 1 – Selected articles after screening and main findings regarding the relationship between business incubators and the promotion of entrepreneurship

Author(s) and year / Title / Journal	**Main contributions**
Chen, Yan e Wang (2023) / **How can the digital economy boost the performance of entrepreneurs? A large sample of evidence from China's business incubators** / *Sustainability*	The study examines the direct and indirect effects of the development of the digital economy on the performance of incubated companies in China and presents new theoretical perspectives and empirical evidence that discuss and validate the positive impact of the digital economy on entrepreneurship and demonstrate the important value of incubators in the digital age. In addition, it contributes to the construction of a new theoretical framework on the theme, expanding research on entrepreneurship in the context of the digital economy and guiding digital economy and entrepreneurship policies, as well as the business management of incubators and entrepreneurs.
Guan e Jin (2023) / **Does the type of funding affect innovation? Evidence from incubators in China** / *Sustainability*	The article empirically studies the impact of types of funds on innovation in incubators and their mechanisms, using data from China from 2015 to 2019 and the fixed-effect model. According to the research, incubation funds, venture capital, and tax subsidies can significantly promote innovation in incubators, with venture capital being the most substantial driver.
Vaz, Teixeira e Carvalho (2022) / **Comfortable but Not Brilliant: Exploring the Incubation Experience of Founders of Technology-Based Startups** / *Sustainability*	It explores the aspects perceived by startup founders in Portugal as value creators or limitations to the development of technology-based ventures. The research identified that entrepreneurs consider intangible resources (such as mentoring sessions, workshops, training, webinars, and other events) and social and relational aspects as the most enriching dimensions of their incubation experiences. Events where knowledge about marketing, finance, business management, pitch preparation, investment funds, fundraising, and patent registration are shared are considered very important by the interviewees. Among the limiting factors are the irregular frequency of sessions with mentors and the change of mentors during critical phases of their business projects, as these aspects introduced delays in the development of their startups' activities.

continues

Chart 1 – Selected articles after screening and main findings regarding the relationship between business incubators and the promotion of entrepreneurship - continuation

Author(s) and year / Title / Journal	Main contributions
Habiburrahman *et al*. (2022) / **Determination of critical factors for success in business incubators and startups in East Java** / *Sustainability*	It sought to analyze the critical factors that can affect the success of incubators and startups. The factors analyzed were: synergistic products; processes; innovation management; communication; culture; experience; information technology; innovation skills; functional skills; and implementation skills. As a result, incubators and startups agree on such factors to build the success of their businesses, but differences were identified in the scale of their priorities.
Esteban Escobar (2022) / **Business Incubators and Survival of Startups in Times of COVID-19** / *Sustainability*	The work indicated through a statistical analysis methodology based on the application of structural equation modeling that different tools, actions, advice, and services offered by business incubators were fundamental for the continuity of the entrepreneurial ecosystem in Spain during Covid-19, from the beginning of confinement to the time of the study. Among the tools used, the following stand out: providing entrepreneurs with large-scale workspaces; extending their stay time; increasing training actions to cover them in risk situations; media advertising; and management advice.
Li, Liang e Yan (2022) / **Too Much of a Good Thing? The Impact of Government Subsidies on Incubator Services: Empirical Evidence from China** / *Sustainability*	It was verified that government subsidies significantly stimulate the improvement of incubation services in China; however, this relationship only holds within a certain range of subsidy intensity.
Van Rijnsoever e Eveleens (2021) / **Money Don't matter? How incubation experience affects start-up entrepreneurs' resource valuation** / *Technovation*	The article shows, using data from 935 entrepreneurs in North America and Western Europe, that early-stage entrepreneurs often do not have the capacity to properly evaluate resources and initially prefer that incubators provide tangible resources, such as funding and office space, but there is a tendency to change when incubated over time, as they learn to value intangible resources, since the incubation experience contributes to the entrepreneur's ability to value resources, as well as increases the appreciation of most intangible resources offered by incubators.
Bajwa *et al*. (2021) / **Co-Producing Knowledge Innovation through Thematic Incubators for Disaster Risk Reduction and Sustainable Development in India** / *Sustainability*	The work explores the concept of thematic incubation for disaster risk reduction, climate change, and sustainable development and it was perceived that this type of incubation was identified as fundamental to ensuring the effective use of resources and is the appropriate tool to obtain knowledge products and services based on scientific research linked to the local context. In addition, the multilateral thematic incubator promotes a collaborative vision of well-being and provides better solutions for locally identified needs. The concept of thematic incubators can be explored for global issues and challenges, including those related to human rights aspects, corruption, cyber fraud, human trafficking, etc., to find local and contextualized solutions.

continues

Chart 1 – Selected articles after screening and main findings regarding the relationship between business incubators and the promotion of entrepreneurship - continuation

Author(s) and year / Title / Journal	Main contributions
Li *et al*. (2020) / **Role of business incubators as a tool for entrepreneurship development: the mediating and moderating role of business start-up and government regulations.** / *Sustainability*	It was verified through statistics that incubators are effective in playing a mediating role in providing networking services, capital support, and training programs to individuals and entrepreneurs, being important for the development of entrepreneurship. In addition, critical resources necessary to improve the quality of business incubators were identified.
Van Weele *et al*. (2020) / **Gimme shelter? Heterogeneous preferences for tangible and intangible resources when choosing an incubator** / *The Journal of Technology Transfer*	It identified that preferences for resources offered by incubators to startups are heterogeneous, with the existence of three classes with distinct choice profiles: (1) “ambitious and balanced spin-offs,” who consider all incubator attributes in decision making; (2) “innovation-oriented funding seekers,” who base their choice mainly on the funding provided by the incubator; and (3) “self-made individualists,” who disfavour networking, training, and coaching. The first group bases their choices more on intangible resources (business knowledge or support networks to improve performance, for example) as a means to enhance their performance but also recognizes the importance of tangible resources (such as funding and office space). The second group better fits the empirically observed preferences for tangible resources.

Source: Research data (2024)

The analysis of the selected articles demonstrates the importance of business incubators in promoting entrepreneurship, as well as pointing out crucial tools for their success, such as the availability of incubation resources, venture capital, and fiscal and government subsidies, as highlighted by Guan and Jin (2023) and by Li, Liang, and Yan (2022).

Other works emphasize the relevance of intangible resources, such as mentoring, workshops, seminars, and lectures on relevant topics about business management, marketing, finance, investment funds, fundraising, and patent registration (Van Rijnsoever; Eveleens, 2021; Van Weele et al., 2020; Vaz; Teixeira; Carvalho, 2022). Tangible resources (such as financing and the provision of infrastructure like office spaces) are also relevant for incubated companies (Van Weele et al., 2020). Furthermore, both types of resources can be crucial for maintaining business activities during times of crisis, as in the case

presented by Esteban Escobar (2022), who addressed the role of incubators during the Covid-19 pandemic in Spain.

Finally, the work of Chen, Yan, and Wang (2023) addresses the positive impacts of the digital economy for entrepreneurs, as well as the relevance of incubators in this new era. Bajwa et al. (2021) bring the concept of thematic incubation as a means to achieve corporate sustainability to meet global development agendas through innovation, products, and services that address needs or demands in a more local context.

FINAL CONSIDERATIONS

This work was able to quantify, based on the survey in two databases (Scopus and Web of Science), the scientific contributions related to business incubators and their relationship with startups, as well as their role in promoting innovation and contributing to the establishment and continuity of early-stage ventures. Regarding the proposed objectives, it was possible to identify that the years between 2019 and 2022 were the period with the highest number of publications (with the increase starting as early as 2017), and that English was the most used language in the articles.

Among the journals in Scopus, the highlights are: Sustainability Switzerland; Journal of Technology Transfer; Technovation; and Journal of Business Research. In the Web of Science, they were: Sustainability; Journal of Technology Transfer; and Technovation. This survey can serve as a guide for researchers who wish to read or publish new works on the subject addressed in this research.

Considering the authors' origin, there was a predominance of Americans, which can be explained by the country's relevance as a pioneer in the implementation of incubators and publications on the topic. Among the thematic areas observed in the databases, most published articles were classified in

Scopus under “Business, Management and Accounting” and in Web of Science under “Management” and “Business.”

The objective of carrying out a systematic review with the most recent works obtained from the bibliometric analysis, addressing the role of business incubators in promoting innovation and entrepreneurship, was also achieved, given that 10 open-access articles published between 2020 and 2023 were analyzed.

Finally, the assumption that business incubators play a crucial role in promoting innovation and entrepreneurship by providing a supportive environment for the development of innovative ideas and offering technical, financial, and strategic guidance to entrepreneurs was confirmed through the analysis of the articles selected for the systematic review, as they pointed out means by which incubators enable the market establishment of innovative ventures, such as the existence of tangible and intangible resources, the relevance of tax subsidies, as well as incubation funds and venture capital as tools capable of boosting ventures present in these innovation environments.

As a suggestion for future research, it is possible to extend the time period covered by the bibliometric research, as well as to expand the search to other academic databases (such as Google Scholar, Science Direct, and Scielo, for example), which should broaden the state of the art on business incubators and include more studies in other languages. The use of tools such as IraMuteq or VOSviewer software can contribute to a more comprehensive analysis, pointing out through clusters how certain research approaches converge or diverge in their content.

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