What science says about entrepreneurs’ well-being: a conceptual structure review

Qué dice la Ciencia sobre el Bienestar Emprendedor: una Revisión de su Estructura Conceptual

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Abstract

Purpose – The aim of this study is to explore the evolution of research on entrepreneurs’ well-being (EWB) over the past three decades. We examined 525 scientific articles published in academic journals.

Design/methodology/approach – The methodology used included bibliometric indicators of activity based on terms and relationships for conceptual evolution through scientific maps, strategic diagrams and thematic trends.

Findings – The results revealed the most frequently used terms by researchers and how they have changed over time, as well as the trending topics and the most popular keywords. Co-word analysis provided a dynamic view of research evolution in this field, allowing the identification of the most relevant thematic areas and their evolution.

Practical implications – Entrepreneurial well-being extends beyond economic performance, influencing individuals, organizations and society, impacting sustainability, innovation, health and economic growth. This highlights the broader implications of well-being in entrepreneurial contexts. Additionally, proposed future research directions aim to enhance the scientific discipline, advancing understanding of entrepreneurial well-being.

Originality/value – This paper stands out for its original approach in addressing and synthesizing existing literature on entrepreneurs’ well-being. It offers practical and applicable insights, contributing concrete recommendations to enhance entrepreneurs’ well-being, bridging theory and action meaningfully.

Keywords Wellbeing, Entrepreneurship, Entrepreneurs’ well-being, Bibliometric analysis, Conceptual structure

Paper type Conceptual paper

JEL Classification — L26, I12

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Management area: Strategy and Entrepreneurship
Resumen

Propósito – El objetivo de este estudio es explorar la evolución de la investigación sobre el bienestar emprendedor (BE) en las últimas tres décadas. Examinamos 525 artículos científicos publicados en revistas académicas.

Diseño/metodología/enfoque – La metodología utilizada incluyó indicadores bibliométricos de actividad basados en términos y relaciones para la evolución conceptual a través de mapas científicos, diagramas estratégicos y tendencias temáticas.

Hallazgos – Los resultados revelaron los términos más frecuentemente utilizados por los investigadores y cómo han cambiado con el tiempo, así como los temas de tendencia y las palabras clave más populares. El análisis de co-palabras proporcionó una visión dinámica de la evolución de la investigación en este campo, permitiendo la identificación de las áreas temáticas más relevantes y su evolución.

Originalidad/valor – Ofrece percepciones prácticas y aplicables, contribuyendo con recomendaciones concretas para mejorar el bienestar de los emprendedores, vinculando de manera significativa la teoría y la práctica.

Palabras clave Bienestar, Emprendimiento, Bienestar emprendedor, Análisis bibliométrico, Estructura conceptual

Tipo de papel Trabajo de investigación

1. Introduction

While entrepreneurs play a crucial role in innovation, economic growth and the development of new businesses, entrepreneurship is an uncertain and emotionally demanding process (McMullen and Shepherd, 2006; Shepherd, 2011; Cardon et al., 2012; Cardon and Patel, 2015). Undoubtedly, entrepreneurship is a challenging effort that involves significant contradictions for an entrepreneur, affecting their well-being. For some entrepreneurs, effective decision-making in their actions can lead to success (Nikolaev et al., 2020; De Winnaar and Scholtz, 2020; Turnalar-Çetinkaya et al., 2022; Müller et al., 2023), while for others, especially in an environment characterized by uncertainty, it may not (Caliendo et al., 2022; Nguyen and Thi Thu Le, 2024). Uncertainty is subjective in the sense that different individuals may have varying levels of doubts in identical situations (Lipshitz and Strauss, 1997).

In this regard, it is not surprising that in recent years, there has been a growing trend in academia that promotes multidisciplinary work with the goal of connecting well-being with the business domain, both conceptually and empirically (Wiklund et al., 2017, 2019; Stephan, 2018; Shir et al., 2019; Pathak, 2020; Turnalar-Çetinkaya et al., 2022; Tay et al., 2023; Ambhore and Ofori, 2023; Chaudhry et al., 2024). From various definitions (see among others: Knight, 1964; Bird, 1988; Lumpkin and Dess, 1996; Shane and Venkataraman, 2000; McMullen and Shepherd, 2006; Uy et al., 2013; Daspit et al., 2023), it can be deduced that entrepreneurship involves taking risks, making decisions, seizing opportunities and acting creatively, proactively and innovatively in uncertain environments to achieve individual entrepreneurial goals. Entrepreneurs’ well-being is a concept within the entrepreneurship literature, although other disciplines have also conducted literature reviews on the topic (see Shir, 2015; Ma and Olayinka, 2018; Sánchez-García et al., 2018). In this regard, studies in economics, psychology, sociology and entrepreneurship have documented that entrepreneurs (self-employed or independent workers) have higher job satisfaction than employees (wage-earning or dependent workers), even after accounting for (Blanchflower and Oswald, 1998; Binder and Coad, 2013, 2016; Nikolova and Graham, 2014; Hessels et al., 2018; Sánchez-García et al., 2018) occupational differences, and skills (Hessels et al., 2017). Additionally, entrepreneurs tend to be happier (Stephan and Roesler, 2010; Uy et al., 2013; Baron et al., 2016; Larsson and Thulin, 2019). Satisfaction prevails over non-pecuniary benefits of engaging in interesting work and enjoying the autonomy that often comes with being your own boss (Hundley, 2001; Benz and Frey, 2008a, b). Higher levels of well-being can replenish the psychological resources of
entrepreneurs (their optimism, resilience and self-esteem) and energize them to persist in challenging tasks that others often deem impossible (Foo et al., 2009).

In academic research on entrepreneurship, there has been a growing exploration of the impact of well-being on entrepreneurs’ tasks (Foo et al., 2009, 2015; Foo, 2011; Hahn et al., 2012; Wach et al., 2021; Nikolaev et al., 2023). There are also numerous authors who analyze well-being as a significant business outcome (Wiklund et al., 2019). Other studies treat well-being as a resource or trigger for entrepreneurial action (Marshall et al., 2020), and some focus on documenting health risks associated with occupations that include entrepreneurship, often through epidemiological studies (Stephan, 2018).

Considering all of the above, there is no doubt that existing research in the field of entrepreneurship establishes a solid foundation for its continued development; however, information related to this topic currently lacks a structure that allows for a comprehensive understanding (Sánchez-García et al., 2018).

With the purpose of addressing this deficiency and providing an accurate overview of published research on EWB, this article aims to conduct a comprehensive review of scientific article production in this field using bibliometric analysis. Fundamentally, answers to the following research questions are provided: (1) What terms are most commonly used in the publications of EWB research groups? (2) Are there “trending topics”? Have research topics in the field of EWB changed over the years? (3) What is the conceptual structure through the analysis of co-occurrence networks of words, and how has it evolved? Once these objectives are achieved, we can guide research considering innovative and emerging topics and suggest new research directions. This study contributes theoretically and empirically to the understanding of the publication behaviors of EWB researchers.

The article is structured as follows: first, the methodology implemented to conduct the research is described. Subsequently, the results of the bibliometric analysis are presented and discussed. In the final section, conclusions, limitations, implications and future agenda are provided.

2. Methodology
Bibliometrics is the application of quantitative analysis and statistical procedures to publications. According to Zupic and Čater (2015), bibliometrics introduces a systematic, transparent and reproducible review process that allows for a better description, evaluation and tracking of published research. It has become a tool for evaluating the quality of the scientific judgment generation process and its impact on the environment, that is the quality and productivity of studies (Cobo et al., 2015). These methods have the potential to introduce a systematic, transparent and reproducible review process, as well as to complement and improve the quality of literature reviews by reducing researchers’ subjective bias (Cobo et al., 2011b).

The methodological design for the bibliometric analysis in this study consists of five stages (Figure 1). For this, the standard workflow proposed by Zupic and Čater (2015) was used: design, data collection, analysis, visualization and interpretation as a guide for developing the bibliometric analysis adapted to the objectives and scope of this work. In particular, it involves an analysis with activity indicators and is complemented with relational indicators.

Stage 1. Design. In order to minimize biases in this work, the guidelines of the PRISMA 2020 statement (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) (Page et al., 2021) were followed. Figure 2 outlines the phases of the work carried out and details the development process in its various phases according to the PRISMA statement.

Stage 2. Data Collection. To obtain a representative collection of articles related to EWB research, a bibliographic search was conducted on the Web of Science (WoS), specifically
Figure 1. Adaptation of the bibliometric analysis process

Source(s): Own elaboration based on Zupic and Čater (2015)

Figure 2. Workflow

Source(s): Own elaboration. Adapted according to PRISMA (2020)
in the Social Science Citation Index (SSCI), with no time limitations, and considering only English-language articles, following the previous PRISMA diagram. WoS was used because it aggregates high-impact literature from the Journal Citation Report (JCR). Researchers recognize that WoS has higher quality standards than other databases (Merigo et al., 2015; Lechuga-Sancho et al., 2020; Pranckutė, 2021; Ramos-Rodriguez et al., 2021; Martín-Navarro et al., 2023). Accordingly, this analysis was based on a keyword search. Firstly, a keyword search was conducted in the title, author keywords and abstract fields. Specifically, the search string "(wellbeing OR well-being) AND (entrepreneur* OR self-employ*)" was used. It should be noted that only research articles were considered, and other types of documents, such as review articles, book abstracts, conference proceedings, etc., were excluded.

Stage 3. Analysis. Calculations were performed using the Biblioshiny application, which provides a web interface for the R package Bibliometrix 3.0, following the approach proposed by Lechuga-Sancho et al. (2020). This open-source package has become a widely accepted and valuable tool for bibliometric analysis. With it, we processed the data collected from the population, which included all articles up to December 31, 2021, and obtained a total of 525 works. Subsequently, we conducted a comprehensive bibliometric analysis to provide a complete and detailed view of published research on EWB.

Stage 4. Visualization. The most common approach for visualizing bibliometric data today is network analysis Zupic and Cater (2015). In this work, a co-word network was represented, and thematic areas and their evolution were identified from the strategic diagrams of co-word analysis Zupic and Cater (2015).

Stage 5. Interpretation. The conceptual structure is characterized, which will allow us to analyze the so-called research front in the domain through networks of co-words of the most recent topics (Aria and Cuccurullo, 2017; Aparicio et al., 2019). First, through performance analysis, including specific productivity and frequency indicators, the most commonly used terms or concepts by researchers and how their use has evolved over time are identified. Second, trending topics, the latest author keywords, and the trending topics in EWB science are discovered. Third, through a co-occurrence analysis of co-words, thematic groups are identified. A strategic diagram is created to graphically illustrate current research topics, emerging topics and potential trends for future research. Finally, an analysis of thematic areas' evolution is performed to visualize their dynamics. Consequently, the interpretation of the findings provides a roadmap for further research in this field.

In order to depict the research topics and their thematic evolution, we used two instruments: the strategic diagram and the thematic network (Qin, 1999). Each of these themes is characterized by two measures (Coulter et al., 1998): centrality and density. Centrality assesses how extensively a network interacts with other networks, while density gauges the internal strength of the network. By leveraging these two metrics, we can visualize the research field as a collection of topics within a two-dimensional strategic diagram. According to Cascón Katchadourian et al. (2020) these research topics are categorized into four groups.

1. Motor themes: These are found in the upper right quadrant and present strong centrality and high density. These themes are well developed and important to the structure of the research field.

2. Highly developed yet isolated topics are situated in the upper left quadrant. These topics are highly specialized but peripheral, meaning they hold marginal significance for the field. While they are well-developed internally, their relationships with other external topics are very weak.
(3) Emerging or disappearing themes: They are located in the lower left quadrant and have a low density and centrality. They are underdeveloped and marginal topics.

(4) Cross-cutting and general themes: They are found in the lower right quadrant, they present basic themes, they are important themes for the research field, but they are not highly developed.

It’s important to mention that these terms were established based on varying publication numbers, as well as the indexing procedures utilized in WoS. It’s worth noting that the keywords from numerous documents published prior to the 2000s are not present in the database. Lastly, it’s crucial to clarify that the overall count of keywords (1,883) was lower than the cumulative count of keywords used in each subperiod, as certain keywords were repeated across multiple decades.

3. Results and discussion

The scientific production in the field of entrepreneurs’ well-being analyzed spans the last 30 years (1992–2021) and includes a total of 525 published research articles. It covers 293 journals, involves 1,327 authors, cites 28,867 references, includes 1,756 author keywords, 1,377 keywords plus, 100 single-authored documents, 2.69 authors per document and 22.57 citations per document. Regarding author collaboration, the notable indicator is a 31.91% international co-authorship rate. This analysis provides answers to questions about whether EWB research is merely a passing trend or an emerging research field. The exponential growth pattern in scientific production suggests the existence of a global critical mass of research on EWB in recent years.

3.1 Evolution of scientific production and citations on entrepreneurs’ well-being

Research on EWB follows a growing trajectory. Figure 3 shows the distribution of publications by year (blue) and citations (red), indicating that it is a recent and increasingly academically interesting topic. The highest number of annual publications was recorded in 2021 (121), the final year of the analyzed time frame. The majority of articles were published in the last three years, with 264 articles between 2019 and December 2021, accounting for

![Figure 3. Evolution of scientific production and citations in BE, 1992–2021](image_url)

**Source(s):** Own elaboration
50.29%. The last decade (2012–2021) represents 81.90% of the total volume of publications over the 30-year period studied, underscoring the significant scientific interest in this EWB field.

Regarding the distribution of citation counts achieved by these documents, as shown in Figure 3 (red), it indicates whether a document is more cited (more of interest) in some years than in others. Two periods can be observed: the first period is bullish and characterized by a very pronounced sawtooth pattern from 1992 to 2011, with the year 1996 standing out as it nearly doubles the next highest year, 1998, in total citations. The second period, from 2011 to 2021, marks a steady decline and remains relatively stable until the end. When we relate the number of documents published to the number of citations received, especially from 2011 onwards, a turning point is evident. Despite an exponential growth in the number of published articles, there has been a decline in the number of citations since that year. However, this pattern is actually coherent. It is logical that the most recent works have lower average citations for two reasons: first, due to dispersion, as there are fewer works per year in the initial period, albeit more significant in the field; and second, due to time, as works in the later period are exposed to scientific consumption for a shorter duration, resulting in greater dispersion.

Among the most productive authors on EWB, two groups stand out. Firstly, Patel and Shepherd each have six publications, followed by Vinberg, Wincent and Wolfe with four publications each.

Analyzing the geographical distribution of the articles, the country with the most publications is the USA, followed by the United Kingdom and Germany. In terms of total citations by country, these three countries maintain the same ranking. However, it is worth noting that some articles have been collaborated on by two or more countries, with the most frequent collaborations being between the USA and the United Kingdom, the USA and Canada and the United Kingdom and Germany.

The journals with the highest impact (measured by citations received and h-index) include the Journal of Business Venturing, ranking second in terms of production volume, while Sustainability takes the top spot. Following closely in second place for the highest number of citations are Entrepreneurship Theory and Practice and the Academy of Management Review.


3.2 Thematic areas assigned to the most influential works and their evolution
3.2.1 Word co-occurrence network. The word co-occurrence network of keywords reveals the thematic areas of literature on well-being and entrepreneurship (Figure 4). To be part of a main theme, documents must contain at least two keywords from the thematic network. The clustering algorithm used was “walktrap”, and the network design was done automatically by the application used. A keyword cleansing was performed to avoid trivial duplicates or words that could distort the results based on the defined objectives (search keywords from the collection were removed, as well as hyphens between words that meant the same, plurals
and singulars, synonyms and generic words, as well as erroneous characters). The selected normalization was by association, and isolated nodes were removed.

As shown in Figure 4, five main thematic cores or areas can be identified, with different colors defining each group, gathering related nodes under the label of the most central one. The node’s size represents the use of the keyword in the documents, meaning that the more authors use a keyword, the larger the node. Words closer to the center on the network map indicate more co-occurrences. Proximity increases as more keywords are used simultaneously by authors, resulting in closer and stronger connections.

The red cluster is represented by the keyword “gender”, which serves as the center of relationships and as the dominant word, bringing together multiple features such as “stress”, “resilience”, “development” and “coping”. This line of research relates the well-being of female entrepreneurs as the central dependent variable for studies and the factors influencing their relationship with economic development, as key players in the new economy (Welsh et al., 2016) and in rural and disadvantaged areas (Clissold et al., 2020). It also explores the distinct capabilities women use to cope with crisis situations. Resilience is studied as a determinant for successfully facing crises and emerging stronger from them, with significant differences in the independent variable “gender” in favor of women. The ability to reduce stress is studied as an improvement in the well-being of female entrepreneurs and significant differences compared to male entrepreneurs in coping. Empirical studies are conducted to demonstrate gender differences in both self-employed and salaried workers.

The yellow cluster represents the research stream that examines “social entrepreneurship” as a driver of growth, development and self-employment, linking it with variables such as “innovation” and “sustainability”. It distinguishes the characteristics of social and commercial entrepreneurs in their pursuit of individual and social well-being.
The green cluster represents the most current research stream and refers to “health”, “satisfaction”, “work”, “performance”, “profession”, “life” and “social support”. Both theoretical and empirical studies focus on health as an interdisciplinary field of research, gaining increasing importance in organizations and extending beyond the psychological, healthcare and medical domains. Job satisfaction, life satisfaction and social relationships are specific constructs of subjective and psychological well-being in entrepreneurship (Saarni et al., 2008; Stephan and Roesler, 2010; Seva et al., 2016; Ryff, 2019; Ha and Kim, 2021; Nikolova et al., 2021; Thomson and Huenefeld, 2021).

The blue group connects “happiness” with “life satisfaction”, the primary variable in the hedonic stream of subjective well-being, being the most studied and measured aspect in the field. Satisfaction in other aspects of life as a dependent variable is also widely analyzed in entrepreneurship, linking well-being with social and environmental aspects, both in the workplace, family and friends’ relationships. Happiness and unemployed individuals appear as the subject of comparative empirical studies with entrepreneurs (self-employed, entrepreneurs, salaried workers and micro and small businesses) (Tolbert et al., 2002; Lelkes, 2006; Binder and Coad, 2013; Naudé et al., 2014; Warr, 2018; Ryff, 2019; Larsson and Thulin, 2019; Bjornskov and Foss, 2020; Zhao et al., 2020; Nie et al., 2021; Ravina-Ripoll et al., 2021), finding significant differences between employed and unemployed individuals and across various professions, which leads to the connection with the well-being of employees/unemployed individuals through the independent variable “job” (profession) (green cluster).

The green group is the central one, giving it intense internal cohesion around the main theme. It has the highest intermediation with the keyword “health” (73), which is the number of times a node is found on the shortest path between other nodes. The keyword “health” acts as a bridge node between nodes in the network, having external links that connect them with other themes that aggregate production and impact in publications, such as “stress” in the red cluster (MacDonald et al., 2005; Tschirhart et al., 2019; Stier-Jarmer et al., 2020; Patel and Wolfe, 2021) and “covid-19” (Molino et al., 2020; Zandi et al., 2020) in the purple cluster, establishing links between these terms.

The purple cluster represents the current crisis caused by the pandemic and how it directly affects the “mental health” of entrepreneurial individuals or salaried workers (employees, entrepreneurs, managers and founders) and the impact of “covid-19” on humanity in various situations and aspects, especially on entrepreneurial individuals (individual) and entrepreneurship (ecosystem) (Esteban-Gonzalo et al., 2020; Raquel Hernandez-Sanchez et al., 2020). “Stress” (red group) and “covid-19” (purple) are connected to the green group through “health”.

Each cluster divides the literature on EWB into various research streams. “Social Entrepreneurship” has the highest centrality (0.5), which means that this keyword has served as a relevant center in the collaborative process, linking other keywords in the same cluster, such as “innovation” and “sustainability” (Dawson and Daniel, 2010; Parris and McInnis-Bowers, 2014; Bonfanti et al., 2016; Lehoux et al., 2018; Westman et al., 2019; Shepherd et al., 2020; Higgins-Desbiolles and Monga, 2021).

To answer the third question raised, specific analyses were carried out. First, the thematic areas that make up the conceptual structure of the field of EWB were identified through the strategic diagram. The evolution of these areas over time was explored with thematic trend analysis to determine the prominent research themes in EWB and their temporal development. The frequencies of keywords generated by authors over the entire study period were used as an indicator. These analyses allowed us not only to understand the historical importance of research in the field of EWB but also to envision potential future directions for this field.

3.2.2 Thematic trends. In Figure 5, the terms “work”, “profession”, “firms” and “India” stand out, in order of importance, due to their extended temporal usage. The words “subjective well-being”, “health”, “satisfaction”, “gender” and “social entrepreneurship” are noteworthy for being the most referenced among academics. Lastly, we highlight the terms
“covid-19”, “entrepreneurial education”, “education”, “resilience” and “income” as the most current, allowing us to predict the direction of research in this field in the future.

The analysis of keywords in the document collection reveals a wide variety of terms that have occurred at least five times. It is evident that terms closely related to entrepreneurship and well-being first appeared in 2015, labeled as “psychological well-being”. This coincides with the development of the primary well-being multidimensional models specifically the psychological well-being model led by Ryff (2019), which introduced an eudaimonic perspective to the field, offering a notable contrast to existing indicators focused on feeling good, happy, positive or satisfied with life (hedonic).

In 2004, the term “work” emerged, signaling the beginning of the link between well-being and entrepreneurship, with particular focus on the importance of work on productivity, performance and employee well-being. This theme reached its peak in 2012 with the most frequent occurrences (12), addressing additional variables beyond the economic aspects, such as the importance of individual resources for generating well-being through entrepreneurship. Other areas of interest included population health, empowerment of rural women, the impact of education level and homeownership, showing that higher education levels among entrepreneurs and homeownership were associated with higher economic satisfaction and well-being.

Through 2014, terms like “Job”, “development” and “economic development” gained prominence. These concepts were frequently used in theoretical and empirical studies, especially in comparisons between self-employed and salaried workers. Self-employed individuals reported higher levels of job satisfaction and life satisfaction because they encountered fewer negative workplace changes. This finding highlighted the importance of autonomy in achieving personal well-being as self-employed individuals (Kroeger and Weber, 2014; Merchant et al., 2014; Naudé et al., 2014; Spencer, 2014).

In 2016, the terms “sustainability” and “institution” were introduced alongside “India”. This represented global recognition of empirical studies and Indian universities concerning well-being entrepreneurship in rural and impoverished areas, emphasizing the need to empower women for the enhancement of human, social and environmental well-being in rural development (Gooptu, 2016; Khefacha and Belkacem, 2016; Hodgson, 2016; Kareiva and Fuller, 2016). This involved creating policies through community cooperation, establishing business networks and boosting the resilience and self-efficacy of entrepreneurs (Nguyen and
Strong family ties were also associated with increased subjective well-being for urban Indian entrepreneurs (Gooptu, 2016).

The year 2017 witnessed a significant focus on economic terms such as "performance", "income" and "unemployment" with a shift toward empirical studies. Well-being began to gain attention in the context of tourism, promoting domestic entrepreneurship in small businesses, particularly in rural areas and developing countries. These studies primarily focused on the UK (Page et al., 2017), Uganda (Adiyia et al., 2017), Poland (Wadle, 2017), Tel-Aviv, Israel (Sofer and Saada, 2017) and Italy (Del Vecchio and Passiante, 2017), introducing concepts like slow and smart tourism (Foley, 2017), linked to personal and community well-being and countering the effects of global capitalism. Entrepreneurial social enterprises were introduced as they aimed to receive public funding to provide social investments, such as training, employability support, employment opportunities and wage supplements. This approach aimed to improve social and individual well-being. Additionally, initiatives for female entrepreneurs contributed to gender equality and social change, promoting financial independence and other types of well-being (Sidorchuk et al., 2017; Van Aerden et al., 2017).

During the year 2018, terms like “satisfaction”, “happiness” and “innovation” gained importance. These terms were characteristic of hedonic well-being or subjective well-being, touching on life satisfaction, job satisfaction and happiness. A notable development was the exploration of a general conceptual framework for innovation and subjective well-being, paving the way for the “Theory of Well-being Innovation” (Engelbrecht, 2018). Social innovation was linked to higher job satisfaction and well-being, enhancing work outcomes and quality of life. Education played a significant role in fostering innovation and employment among entrepreneurs, where higher income and life purpose interacted to enhance well-being (Casini et al., 2018).

Throughout 2019, key themes included “social entrepreneurship”, “gender” and “stress”. Studies initially associated well-being with social entrepreneurship and later extended this association to commercial entrepreneurship (Kibler et al., 2019). Prosocial motivation was shown to positively impact the subjective well-being of social entrepreneurs but had a negative effect on commercial entrepreneurs. Social entrepreneurs played a vital role in improving the social and economic well-being of individuals and promoting environmental well-being. Research also delved into gender-related well-being issues, including the well-being of female salaried workers, financing their businesses and the impact of family financial resources on early-stage business performance. Microcredit initiatives and empirical studies in impoverished areas, such as India and Bangladesh, examined gender inequality in various occupations and the emotional experiences of work, revealing significant consequences for women’s quality of life (Bhuiyan and Ivlevs, 2019; Shahriar and Shepherd, 2019).

The role of stress among female entrepreneurs emerged in 2019, highlighting higher stress levels in female entrepreneurs, especially due to high financial needs and limited social support when starting their businesses (Chadwick and Raver, 2019).

In 2020, “health”, “social” and “resilience” became global research interests. A comparison of safety perceptions and workplace health between employees and entrepreneurs revealed that entrepreneurs perceived lower health and well-being in the workplace, especially in terms of mental well-being, making them more vulnerable to stress issues. Entrepreneurs, however, reported greater satisfaction with their health and overall life satisfaction, work, leisure time and income. The importance of entrepreneur well-being as a key factor in personal and financial business success was identified in the long run. Entrepreneurs needed to maintain and enhance their well-being to achieve positive long-term business outcomes. Resilience and the well-being-performance (profit) cycle were found to predict happiness. Fear of failure (Clissold et al., 2020; Games and Sari, 2020; Engel et al., 2021), financial...
performance and well-being of SMEs in times of climate disasters were linked to religiosity and organizational resilience, indicating their influence on entrepreneurship (Games and Sari, 2020).

Business networks helped entrepreneurs build resilience and self-efficacy, contributing to subjective well-being through the conservation of resource theory. Contextual resources in entrepreneurial work environments also influenced subjective well-being by improving personal psychological resources (Newman et al., 2018). Organizational resilience could be promoted through human resource management practices that improved employee well-being and adaptability to the changing work environment (Huang et al., 2019).

Gender played a role in the well-being and resilience of employees, with differences in security perceptions and emotional demands (Huang et al., 2019; Clissold et al., 2020). Entrepreneurial resilience tended to be stronger in less developed areas than well-developed ones, primarily due to the lack of entrepreneurial initiatives, empirically shown in the case of wealthier Romanian counties (Ignat and Constantin, 2020). A new scale of entrepreneurship emerged in 2020, assessing psychosocial risk factors with 15 items divided into four subscales: entrepreneurial attitude (4 items), management skills (3 items), entrepreneurial resilience (5 items) and financial health (3 items) (Vendrig et al., 2021).

In 2021, novel research topics arose due to the crisis caused by the pandemic. These included terms like “covid-19”, “education” and “entrepreneurship education” which appeared for the first time in 2020. covid-19 had a widespread impact on almost all countries, severely affecting the well-being of populations. Mental health morbidity and negative affect were particularly prominent among the Spanish population, including women, young people, those with higher education, those with fewer children, singles, students and the unemployed. Positive affect was more prevalent among women, highly educated individuals, those not living with elderly dependents, self-employed individuals, employees and those working outside their homes (Esteban-Gonzalo et al., 2020).

The pandemic’s impact was also felt by young workers, leading to reduced entrepreneurial intent and health problems, especially among those with lower socioeconomic status. It also disrupted their job situation and resulted in psychological distress (Hernández-Sánchez et al., 2020). Microbusiness entrepreneurs also faced challenges, impacting business operations and work–life balance (Vinberg and Danielsson, 2021).

The pandemic highlighted the importance of social networks and well-being support for employees and entrepreneurs. Students’ perceptions of covid-19 and the satisfaction of psychological needs were linked to entrepreneurial intent, mediated by proactivity and optimism. Factors associated with reduced covid-19 impact were identified (Capone et al., 2021). Human resource management played a crucial role during the crisis, helping employees cope with the altered work environment (Carnevale and Hatak, 2020; Agarwal, 2021). The pandemic emerged as an important environmental factor affecting the health prognosis of self-employed workers, as significant reductions in hours and income were directly related to reduced subjective well-being compared to salaried workers (Yue and Cowling, 2021).

In the case of the UK, support for well-being was asymmetric, favoring salaried employees (Yue and Cowling, 2021). The pandemic posed significant challenges to individuals’ connection with their workplaces, affecting their mental health and well-being, primarily due to extended remote work and its negative effects on work-life balance and well-being. Challenges included a lack of personal connections, an excess of work-related stressors, telecommuting stressors, work-family conflict and behavioral stress (Molino et al., 2020).

Other empirical studies showed a positive relationship between institutional trust and quality of life, as well as entrepreneurship and quality of life in subsistence contexts (refugees in Turkey), contributing to community, consumer and entrepreneurs’ well-being. Subsistence entrepreneurship was negatively associated with job satisfaction and subjective well-being in China. Changes in daily routines induced by lockdowns affected psychological well-being,
especially in terms of vitality and positive thoughts among Italian citizens (Molino et al., 2020; Capone et al., 2021).

Psychological outcomes during the covid-19 crisis included depression, perceived stress, sleep quality deterioration, fear, isolation and psychological trauma. Compassionate entrepreneurship emerged as a framework to clarify how digital innovation could be a response to crises for emerging entrepreneurs driven to alleviate suffering (Marmet et al., 2021).

Education in entrepreneurship was considered essential at all educational levels. In 2020, the exploration of entrepreneurial skills development programs for young people based on a capabilities approach is gaining popularity, which could promote livelihoods and multidimensional well-being that were already discussed in 2016 (Dejaeghere et al., 2016). Skills and competencies in entrepreneurship could be acquired, fostering educator well-being and achieving positive outcomes for student entrepreneurs (Maldonado Briegas et al., 2021). Entrepreneurship provided opportunities for creating new businesses and preserving psychological well-being to support entrepreneurial development (Ratten and Usmanij, 2021).

4. Conceptual structure of the EWB field
4.1 Areas and thematic evolution

The thematic evolution of the analyzed data collection describes four temporal subperiods. This segmentation is based on the researcher’s subjective judgment, taking into account how the research focus has evolved over the years. These four periods have been established by giving equal weight to the total number of works, coinciding in the analysis with some important milestones in the literature. The first subperiod spans from 1992 to 2014 (24.95%) with 131 articles, the second from 2015 to 2018 (24.76%) with 130 articles, the third from 2019 to 2020 (26.67%) with 140 articles and the last only in the year 2021, due to its significant influence on recent literature (23.62%) with 124 articles.

The strategic diagrams referring to each established subperiod are shown further in the text.

In the first subperiod (Figure 6), 11 main themes emerged over the 22 years it covers (24.95% of total production). Different terms related to EWB were used to describe the research domain. According to the strategic diagram, three groups of key themes emerged: “satisfaction”, “life” and “models” (subjective well-being models) with higher centrality and density. These were followed by the group “work”, “happiness” and “profession” with lower centrality and density, crossing the central line of transversal and basic themes. A third theme, “health”, “stress” and “pressure” had higher density and similar centrality. In the lower right quadrant, there were two basic and transversal themes related to terms like “development”, “economic development” and “institution”. The themes “objective” and “employment” had lost centrality and density. On the left, bordering the lower left quadrant, “empowerment” and “India” appeared as less relevant topics with some interest in this period, but on the decline (with low density and medium centrality). Emerging but isolated themes included “income” and more developed themes like “innovation”. At the border with niche themes were the themes “psychological well-being” and “coping”. Highly developed themes of the period but with low influence, characterized by high density but low centrality, were the terms “knowledge” and “businesses”. Almost reaching the border of key themes were “social capital”, “social entrepreneur” and “social responsibility”.

In the second subperiod, covering four years (2015–2018) (Figure 7), there were fewer themes, only nine. “Development”, “innovation” and “capability approach” emerged as the core themes. The theme of innovation, which was previously isolated as an emerging theme, consolidated in this period as an important and interesting theme, increasing its centrality and density. It was associated with development and the resource and capability approach. Three new themes, “risk”, “business” and “trust” were categorized as basic and transversal themes.
Figure 6. Strategic diagram (1992–2014)

Source(s): Own elaboration

Figure 7. Strategic diagram (2015–2018)

Source(s): Own elaboration
Themes with slightly higher centrality and higher density included “gender”, “happiness” and “life satisfaction” although with different thematic focus, as in this period, there was a decrease in density, and the direct analysis of “happiness” related to work decreased, instead focusing on comparative aspects of gender and subjective well-being. “Performance”, “business” and “social support” were other key themes (with high centrality and very low density) in this period. It was noted that themes in decline were related to “psychological well-being”, “health” and “job satisfaction”, themes that were previously central.

In the third subperiod (2019–2020) (Figure 8), a different distribution of themes was observed compared to the previous two-year period. Nine themes appeared over this span of two years. Two core themes “health”, “circular economy” and “innovation” emerged as important themes with higher centrality in this subperiod. Themes with lower centrality were “social”, “Ghana” and “employment”. Themes that remained basic were “gender”, along with new themes like “mental health”, “covid-19”, “stress”, “resilience” and “poverty”. These were novel terms during this timeframe due to the crisis situation caused by the pandemic. In the lower-left quadrant, themes with low centrality but moderate density, “quality of life” and “hospitality” were overlapped, along with “social entrepreneur” and “sustainability”. Along the border with the central and basic themes were terms related to “satisfaction”, “happiness” and “microcredits” which were in decline. The term “happiness” related to “satisfaction” appeared in previous periods, and in this period, the focus shifted from direct analysis of “happiness” at work to deeper comparative analyses of gender and subjective well-being, placing these topics in the basic theme category. In this quadrant, the themes “economic” and “inequality” with low centrality and moderate density were also found. Low-interest topics in the entrepreneurs’ well-being field (high density and low centrality) included three groups of themes, all with low centrality but varying degrees of development. These themes were “Bangladesh”, “food security” and “poverty” with higher density, and “social”, “employee well-being” and “entrepreneurial orientation” with lower density. Themes “depression” and “family businesses”.

**Source(s):** Own elaboration
bordering on declining or emerging themes, but isolated, were also in this quadrant. The analysis of the next subperiod would reveal whether these themes evolve or disappear.

In the fourth subperiod (Figure 9), there was a completely different thematic distribution. This one-year period represents 23.62% of the total production from 1992. New core themes emerged that had not appeared before, related to the crisis situation and the pandemic that characterized the years 2019–2020, with maximum centrality and density. These key themes included “stress,” “pandemic,” and “business decline,” which were crucial for the well-being of entrepreneurs and their businesses.

In the central and basic themes quadrant, with high centrality and low density, only one theme with a new term relationship not present in previous periods emerged: “covid-19”, “health” and “gender”. Emerging themes in this subperiod, which were previously core or basic themes, included “subsistence” and “employee”. Themes in decline, such as “life satisfaction” “subjective well-being” and “happiness” were noted. Highly developed but isolated themes in this period included “eudaimonic”, “hedonic” and “social” terms widely used to define two perspectives of subjective well-being: eudaimonic well-being and hedonic psychological well-being, as well as social well-being.

In view of the results, it can be concluded that the topics have evolved over time. After analyzing each subperiod separately, it is possible to review the temporal evolution of research topics in EWB in a single graph. Figure 10 uses the so-called Sankey diagram to show how different topics were connected and developed over the different subperiods. Different topics were weighted using a modified version of the Inclusion Index (Rip and Courtial, 1984), taking into account the occurrences per subperiod of each keyword appearing in a topic. It was discovered that basic scientific studies on well-being and entrepreneurship (health, gender, social, life and work satisfaction, as well as the distinction of entrepreneurs by necessity or opportunity) were areas of ongoing interest (Parasuraman et al., 1996; Parasuraman and Simmers, 2001; Seva et al., 2016; Ryff, 2019; Summers et al., 2021), while hot
topics (pandemic or covid-19, stress and crisis) were much more dynamic (Carnevale and Hatak, 2020). “Satisfaction” has remained a long-term theme over time as a fundamental measure of entrepreneurs’ well-being in the last three decades, acquiring different nuances and facets in different periods, such as “life satisfaction”, “job satisfaction”, “general satisfaction” or “self-satisfaction” (Van der Zwan et al., 2020). As a recommendation for future studies, keywords could include “happiness” as a synonym for well-being, “gender”, “health” and “life satisfaction”.

5. Conclusions
Although it is said that the phenomenon of well-being has been studied in the organizational world since before Aristotle, its academic interest has grown considerably in the last decade. Understanding how entrepreneurs experience well-being throughout the entrepreneurial process is essential for both the theory and practice of entrepreneurship. In fact, the reality is that only in the last 3 years, constructs specifically related to entrepreneurs’ well-being have been generated exponentially, representing more than 50% of publications since 1992. Therefore, this study examined the evolution of scientific research in EWB between 1992 and 2021, based on publications in the WoS database. While this analysis is not the initial endeavor to undertake a comprehensive and systematic review of academic EWB research, it employs different bibliometric tools compared to the ones used in the first study conducted by Sánchez-García et al. (2018), which was pioneering in using bibliometric tools in this domain. This work provides an update and also offers a dynamic perspective on the subject by establishing a current and organized conceptual framework. This offers researchers the opportunity to position their research within this evolving field and allows the identification of new research avenues for further advancement. The bibliometric review yielded objective indicators that revealed interesting characteristics of the research.

The evolution of productivity over time suggests a significant growth in the number of articles published since 2018. It identified three stages of research: an initial stage (1992–2006), a development stage (2007–2018) and a final stage, the expansive stage (2019–2021), which represents more than 50% of the total publications in the last three years.
Exploring the conceptual structure of the field through a co-word analysis revealed several thematic networks, specifically five interrelated clusters, mainly related to social entrepreneurship, innovation and sustainability; gender, stress, resilience, development and coping; health, work, profession, life and social support; happiness, life satisfaction and unemployment and covid-19 and mental health. In essence, the results of this work differ significantly from the most recent findings of Sánchez-García et al. (2018), who based their analysis on 373 works collected until 2017, just before a notable increase in research in the field of EWB occurred. They identified six clusters, mainly related to topics such as culture, education, innovation, sustainable development and small businesses; psychological well-being; social entrepreneurship and economic development; women and employment; self-employment; life satisfaction and economic growth and business management. However, it is important to note that this study does not support the dynamic perspective that has been demonstrated through the results obtained in this research when defining the conceptual structure of the Business and EWB field.

The analysis of the evolution of research in EWB in the literature revealed a notable change in the scientific landscape. There is a clear interest in addressing EWB from a holistic perspective, analyzing both individual and social aspects in a holistic way (Gevaert et al., 2021; Klapper et al., 2021; Summers et al., 2021).

It was found that basic scientific studies on well-being and entrepreneurship (health, gender, social, life and work satisfaction, as well as the distinction of entrepreneurs by necessity or opportunity) were areas of ongoing interest, while hot topics (pandemic or covid-19, stress and crisis) were much more dynamic. Over the last three decades, researchers have maintained a constant interest in the theme of “satisfaction” as a fundamental measure of EWB. Over different periods, this concept has acquired various nuances, including aspects such as “life satisfaction,” “job satisfaction,” “general satisfaction,” and even “self-satisfaction.”

The results of this bibliometric study align with the demands of future research, as proposed by Sánchez-García et al. (2018). These researchers suggest the need to examine whether re-educating entrepreneurs can positively influence their attitude and, therefore, their overall well-being. A change in mindset could have a significant impact on entrepreneurial behavior, as well as on how to approach business challenges (Uy et al., 2013; Lerman et al., 2021). It also invites a reconsideration of strategies to gain a competitive advantage in the market or improve one’s position in it by analyzing the factors that contribute to well-being. These can encompass hedonic aspects (Diener et al., 1999), eudaimonic aspects (Ryan et al., 1997; Ryan and Deci, 2001), holistic aspects (Ryff, 1999; Efrat et al., 2021; Pathak and Muralidharan, 2021) or those inherent to entrepreneurial activity, as argued by Shir (2015), all from a sustainable perspective.

The results also have important practical implications, as well-being is a priority in innovative and sustainable organizations, as well as for the formulation of socioeconomic policies and new academic approaches for both entrepreneurs and organizations in general in the areas of human resources, management, business organization and health. Among the recommendations of researchers for improving the well-being of entrepreneurs, two practical implications stand out that could be implemented as public policies. First, it is important to promote an appropriate entrepreneurial ecosystem, culture and climate that facilitates access to various sources of financing and other types of resources. These policies can reduce financial stress and, consequently, increase entrepreneurial well-being, as they enable entrepreneurs to use relevant technologies in their businesses, especially in the early stages of the entrepreneurial process. Second, the need for effective entrepreneurial education to train the essential entrepreneurial skills and capabilities required by small and medium sustainable enterprises in their various stages, both “soft” and “hard,” is emphasized (Ratten and Usmanij, 2021). Regarding health and preparation to face challenges and difficult
moments, it is imperative that entrepreneurs are aware of the importance of taking concrete measures in their daily lives (Lerman et al., 2021). This includes improving their sleep quality, paying attention to their nutrition, dedicating time to leisure and seeking effective emotional and work–life balance. Organizations should also allocate resources to the well-being and health of their employees, recognizing that, in addition to boosting productivity, these aspects contribute to fostering a favorable work environment, stimulating creativity and promoting innovation in companies.

Researching the involvement of entrepreneurs in achieving the Sustainable Development Goals (SDGs) as a key component of sustainable development, well-being, health, innovation, creativity and corporate social responsibility would be of general interest, and in particular, a comparative analysis could be conducted among the UN member countries (Pla-Julian and Guevara, 2019).

Another area of interest could be to analyze the economic aspects that motivate many entrepreneurs, such as acquiring wealth or fame, which aspirations and motivations an entrepreneur may have could be detrimental to their well-being. Discomfort is a topic that has not been addressed in the entrepreneurial field until now, or how unhappy entrepreneurs can become productive and happy entrepreneurs unproductive could be a niche for future research with significant impact on organizations and an opportunity to improve sustainable country policies (Bujacz et al., 2020).

A future methodological proposal in this research could be to conduct a deeper content analysis using textual analysis software (e.g. NVivo) of articles in each thematic group to provide a more in-depth discussion of each identified theme. Considering that in a content analysis, there are no restrictions on the file format as required by bibliometric software. It should be noted that this tool has the following limitations to consider: each keyword is associated with only one theme, and it is not possible to analyze themes for document categorization. It is not possible to jointly analyze the meta-information (Callon et al., 1991; Cobo et al., 2011a, b).

Finally, it is worth noting some limitations of the study. However, it must be recognized that all limitations are due to mandatory decisions to apply bibliometric techniques with Biblioshiny. First, methodological bias was introduced during the co-word analysis because it was necessary to group some keywords representing the same concept considering the authors’ criteria. Second, the diagrams and maps generated depended on the selected parameters. In this regard, different similarity measures and clustering algorithms could have been implemented. Experience in configuring the Biblioshiny program correctly was crucial to establish the best parameters to avoid the appearance of overly complex diagrams that are too difficult to analyze. This document allows readers to clearly understand the past, present and future of the topics discussed and to be addressed in EWB research. From a practical perspective, it is expected that this research will contribute to theory building, entrepreneurial decision-making, management education and policies to improve the country’s economy or sustainable community development.

References


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