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# Research on Entrepreneurial Well-Being Before and After the COVID-19: A Bibliometric Analysis

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## **ABSTRACT**

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The aim of this study is to explore the evolution of research on entrepreneurial well-being over the past three decades. A total of 961 academic articles published in peer-reviewed journals were analyzed using bibliometric tools, namely VOSviewer and Bibliometrix, to assess and visualize the bibliographic data. The findings identify key researchers and collaboration networks, while a keyword analysis tracks the evolution of key terms over time. A comparative analysis of research themes before and after the COVID-19 pandemic highlights significant shifts in focus. Furthermore, an examination of the changing antecedents of entrepreneurial well-being uncovers evolving factors that shape well-being in the entrepreneurial context. Finally, the study identifies the most influential researchers, journals, countries, and institutions, offering valuable insights into the development of this research domain. A key contribution lies in the comparative analysis of research themes and antecedents before and after the COVID-19 pandemic, revealing a paradigmatic shift from macroeconomic concerns to psychological, emotional, and social dimensions of well-being. By quantitatively synthesizing developments across disciplines, this work contributes to a deeper understanding of how entrepreneurial well-being is conceptualized, studied, and evolving in the post-pandemic era.

Keywords: Bibliometric Analysis, Entrepreneurial Well-being, VOSviewer, Bibliometrix

## 1. Introduction

Although entrepreneurs play a vital role in innovation, economic growth and the development of new businesses, the process of entrepreneurship itself is filled with uncertainty and significant emotional pressure [1, 2]. Undoubtedly, entrepreneurship is a highly challenging endeavor, often accompanied by various contradictions that may impact the mental and physical well-being of entrepreneurs [3]. Entrepreneurial well-being - defined as the entrepreneur's experience of satisfaction, emotional balance, psychological functioning, and social functioning throughout the processes of venture planning, founding, growth, and operation - has emerged as a critical lens for

understanding entrepreneurial resilience, perseverance, and long-term success [4].

The early research on entrepreneurial well-being primarily focused on two dimensions: subjective well-being and psychological well-being. Subjective well-being refers to entrepreneurs' subjective perceptions and evaluations of their happiness levels, encompassing life satisfaction and affect balance. This construct reflects entrepreneurs' cognitive judgments and affective responses toward their life circumstances [5]. Psychological well-being represents a state of subjective vitality or psychological thriving, characterized as entrepreneurs' perceived "optimal experience and functioning". It comprises six core components: self-acceptance, personal growth, purpose in life, environmental mastery, autonomy, and positive relationships [4]. Recent scholarly developments have increasingly argued that entrepreneurs' well-being partially originates from their perceptions of social connectedness and relational quality. Previous studies have predominantly focused on entrepreneurs' affective states, life satisfaction, and individual functioning attainment, while neglecting the organizational and societal contexts in which entrepreneurs' feelings, cognitions, and behaviors are embedded - essentially overlooking the social dimension of well-being [6]. Consequently, scholars propose that entrepreneurial well-being should incorporate social well-being as a third critical dimension. Social well-being is operationalized through measures of perceived social support satisfaction and adaptation to societal environments [7].

In recent years, given the unprecedented disruptions caused by the COVID-19 pandemic and its global socioeconomic ramifications, research on entrepreneurial well-being has emerged as a critical scholarly domain, particularly in light of entrepreneurs' heightened psychological vulnerability and adaptive challenges during crises. This field has galvanized interdisciplinary attention across social science disciplines, including management [8-10], economics [11, 12], sustainability [13, 14], technology [15] and society [16-18]. This convergence of crisis-driven empirical inquiry has generated a widespread body of literature.

Taking all the above factors into account, it becomes evident that while the field of entrepreneurial well-being has gained increasing academic attention, existing studies still present several notable limitations. First, due to its interdisciplinary nature - spanning management, psychology, sociology, and economics—the literature lacks a coherent knowledge structure, making it difficult to synthesize findings across domains. Second, prior research has predominantly adopted qualitative or narrative review approaches, which often lack the methodological rigor and comprehensiveness needed to map the intellectual and thematic evolution of the field. Third, most studies focus narrowly on individual or psychological dimensions of well-being, overlooking broader social, contextual, and temporal dynamics, particularly those shaped by global crises such as the COVID-19 pandemic.

To address these limitations and provide a more systematic and data-driven understanding of the field, this study conducts a comprehensive bibliometric analysis of published literature on entrepreneurial well-being. Using VOSviewer and Bibliometrix as analytical tools, this research aims to: (1) map collaboration patterns among researchers; (2) identify the distribution and trends of key research themes; (3) compare thematic developments before and after the COVID-19 pandemic; (4)

examine the evolution of antecedent factors influencing entrepreneurial well-being; and (5) determine the most influential publications, journals, countries and institutions. In doing so, this study contributes to the field in three significant ways. First, by employing a quantitative bibliometric approach, it constructs a structured and integrative overview of an otherwise fragmented interdisciplinary literature, thus enhancing the coherence and accessibility of knowledge in this domain. Second, it overcomes the limitations of prior narrative reviews by using robust statistical techniques to visualize thematic patterns, collaboration networks, and intellectual trends, thereby offering a more objective and replicable mapping of the field's development. Third, by conducting a comparative analysis of pre- and post-COVID-19 research, it responds to the temporal and contextual gap in earlier studies, shedding light on how global crises have reshaped the conceptual and empirical focus of entrepreneurial well-being research. These contributions not only strengthen the theoretical foundation of the field but also provide valuable guidance for future scholarly exploration.

The structure of this article is organized as follows. First, the article outlines the research methodology employed in the study. Second, the findings from the bibliometric analysis and mapping are presented. Third, the main conclusions are discussed.

# 2. Research Design

Bibliometrics is a widely applied statistical approach in academic literature reviews for quantitatively evaluating scientific production [19-21]. In this study, a five-step process is employed to analyze networks, evolutionary tendencies, and the most impactful entities - such as researchers, keywords, articles, journals, institutions, and countries - within the domain of entrepreneurial well-being. The methodological design for the bibliometric analysis in this study consists of five stages. For this, the standard workflow proposed by Zupic and Čater [22] 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.

## 2.1 Obtaining the Metadata Set

A bibliographic search was performed on the Web of Science (WoS) to gather a representative selection of articles related to research on entrepreneurial well-being, specifically within the Social Science Citation Index (SSCI). This search was conducted without time constraints and limited to English-language publications. The Web of Science was chosen due to its aggregation of high-impact literature from the Journal Citation Report (JCR), and it is widely acknowledged for its superior quality standards compared to other databases [19, 23, 24]. The analysis relied on a keyword search strategy. Following prior review studies in academic research [19], the search string "(wellbeing OR well-being) AND (entrepreneur\* OR self-employ\*)" was employed. It is important to highlight that only peer-reviewed research articles were included in the analysis, excluding other document types such as review articles, book chapters, and conference proceedings. The dataset obtained included details such as article title, publication year, journal, authorship, abstract, keywords, and citation counts. The final data set included a total of 961 publications. It covered 99 countries, 1,362 organizations, and 2,711 authors, as identified through VOSviewer's citation analysis. Figure 1

illustrates the distribution of these publications by year. The first article on entrepreneurial well-being was published in 1999, with a slow pace of publications until 2018, after which there was a significant increase in research output across various disciplines.

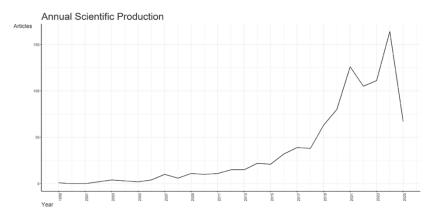


Figure 1. Distribution of entrepreneurial well-being research by publication year Source: By authors.

## 2.2 Data Analysis

To visualize key factors and track the evolution of research in the domain of entrepreneurial well-being, three bibliometric tools were employed. Specifically, VOSviewer was utilized to construct a visual network showcasing the prominent factors in this research area [25]. The Bibliometrix R package was used to map changes in research focus over time, following the methodology proposed by Lechuga Sancho, Martín-Navarro and Ramos-Rodríguez [23]. This open-source package has become a widely accepted and valuable tool for bibliometric analysis.

In this study, VOSviewer was applied to evaluate publication volume, citation frequency, and Total Link Strength (TLS) across the dataset. Based on these metrics, three types of networks were generated:

- 1. Coauthorship Analysis: Explored collaborative relationships among authors contributing to entrepreneurial well-being research.
- 2. Cooccurrence Analysis: Identified and categorized frequently used keywords to highlight trending topics and their interconnections.
- 3. Citation Analysis: Determined the most influential researchers, journals, countries, and institutions in the field of entrepreneurial well-being.

To enhance the understanding of the field's intellectual structure and thematic evolution, both a strategic diagram and an evolution map were generated using Bibliometrix. The strategic diagram illustrates the density and centrality of various research themes, while the evolution map tracks how significant keywords have changed over time.

To ensure consistency in keyword analysis, synonymous terms were consolidated. For instance, terms such as "COVID-19" and "COVID-19 pandemic" were grouped together using Bibliometrix's word-grouping function. Outlier data points were removed to produce a clearer visualization. In the network maps generated by both Bibliometrix and VOSviewer, node size corresponds to performance metrics - such as the number of publications, citations, or TLS - while the distance between nodes

reflects the strength of their association. Thus, larger nodes represent more influential factors, and closely positioned nodes indicate a higher likelihood of concurrent occurrence in the literature.

## 3. Research Design

## 3.1 Coauthorship Status

The coauthorship analysis included researchers with at least two publications (fractional counting) regarding entrepreneurial well-being. Out of the initial pool of 2,711 researchers, 184 met this criterion and were subsequently included in the network analysis. Among these 184 researchers, only 21 of them collaborated directly or indirectly. The authors separated these 21 researchers into six clusters to form a network of coauthorship. As illustrated in Figure 2, the node sizes within the red, blue, and purple clusters are generally larger than those in the other clusters, indicating a higher volume of publications among the affiliated researchers. The distance between the nodes indicates the strength of collaboration. Nodes within the red, yellow, green, blue, and purple clusters are closer to one another, reflecting stronger partnerships, while they are more distant from the dark blue clusters, indicating weaker connections.

Specifically, the red cluster comprises six researchers, among whom Wincent, Joakim has the highest publication output. The purple cluster also includes two researchers, with Shepherd, Dean A. being the most prolific. Likewise, the blue cluster consists of two researchers, with Patel, Pankaj C. contributing the largest number of publications. The remaining three clusters do not feature any particularly prominent authors. Institutional affiliations further reveal geographic trends in collaboration. Researchers in the purple, yellow and blue clusters are primarily affiliated with institutions in the United States. The green cluster includes scholars from both Sweden and the United States, while the dark blue cluster is composed of researchers based in Germany and Belgium. The red cluster features affiliations with institutions in Finland, Chile, the Netherlands, Sweden and Slovenia. These findings indicate a foundational level of international collaboration within the field of entrepreneurial well-being research.

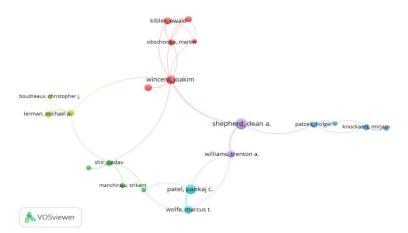


Figure 2. Coauthorship network in the entrepreneurial well-being field Source: By authors.

The study further analyzed collaboration among researchers by country in the field of entrepreneurial well-being. Among the 99 countries, 51 countries satisfied the criterion of at least five publications. These were included in further analysis, as shown in Figure 3. In this visualization map, the larger nodes indicate the more publications a country has produced. The map's lighter color nodes indicate more recent publications.

Comparing node size, the countries with the greatest quantity of entrepreneurial well-being research are the United States, England and China. The color bar at the bottom right corner of the map shows at what point researchers in each country developed interest in this field. The map shows that researchers in the U.S. were the first groups to explore the field, followed by England and Germany. Researchers in China were the latest to enter the field.

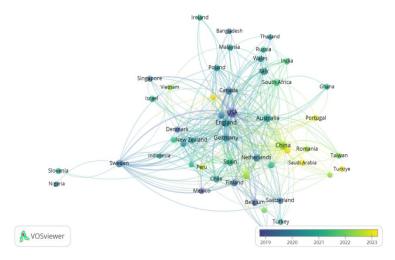


Figure 3. Collaboration among researchers from different countries Source: By authors.

## 3.2 Keyword Analysis and Trend Topics in Entrepreneurial Well-being

A total of 2931 author keywords was used in the selected 961 publications. To clear the map, the authors only considered keywords labeled in at least 6 publications. This resulted in 77 keywords. The keyword "entrepreneurial well-being" was excluded because it was used in the query. Other keywords were excluded because they did not hold practical meaning. These included "article", "126", and "i31" and so on. To ensure consistency in keyword analysis, synonymous terms were consolidated, such as "COVID-19" and "COVID-19 pandemic". Ultimately, 66 keywords were moved to the next step of analysis.

As shown in Figure 4, the keywords are classified into seven clusters. In the red cluster, the focus is on individual well-being, entrepreneurial intentions, and education, highlighting themes such as autonomy, ethics, and self-determination. The green cluster emphasizes social entrepreneurship and sustainable development, with an emphasis on social capital, rural development, and the role of women entrepreneurs. In the dark blue cluster, the themes are centered around empowerment and development, particularly in emerging economies such as China and India, with a focus on innovation and the capability approach. The yellow cluster focuses on entrepreneurial success and workplace dynamics, examining factors like job satisfaction, performance, and work-life balance. The purple

cluster addresses subjective well-being, exploring the links between happiness, income, and mental health. In the light blue cluster, the impact of global crises like COVID-19 on resilience, stress, and coping mechanisms is emphasized. The orange cluster examines economic development and employment issues, with particular attention to sustainability, youth, and indigenous populations. These clusters illustrate the broad and interconnected nature of research in well-being, entrepreneurship, and societal development, reflecting the multifaceted ways in which these topics intersect across different contexts.

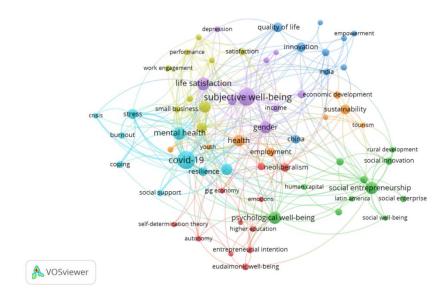


Figure 4. Network visualization of cooccurrence of keywords Source: By authors.

In addition, Bibliometrix was used to present the longitudinal framework of entrepreneurial well-being. It traced the important topics discussed in each period (see Figure 5). The analysis of keywords in the document collection reveals a wide variety of terms that have occurred at least fifty times.

Based on the analysis of the keyword trends in the document collection, we can observe a clear progression in the evolution of entrepreneurship and well-being-related topics. In 2012, terms such as "economic development" began to emerge, signaling the growing recognition of entrepreneurship as a key driver of economic and societal growth. This term reached their peak around 2016. It reflects an initial emphasis on macroeconomic outcomes associated with entrepreneurial activity, underscoring the role of entrepreneurship as a catalyst for regional and national economic progress [26].

From 2015 onwards, the discourse began to shift toward more individual-centric and psychosocial constructs in the field of entrepreneurial well-being. This change reflected a broader recognition of the psychological and emotional toll that entrepreneurship can have on individuals, moving beyond the initial focus on economic outcomes to examine the internal, subjective experiences of entrepreneurs. The emergence of keywords such as "happiness," "coping," "burnout," and "depression" between 2016 and 2019 marked a pivotal transition in the research agenda. During

this period, the literature increasingly recognized the complex relationship between entrepreneurial activity and mental health. Entrepreneurs often face high levels of stress, uncertainty, and emotional strain, which can lead to significant mental health challenges, including burnout and depression [27, 28]. As a result, studies began to emphasize the psychological risks inherent in entrepreneurship, such as emotional exhaustion and chronic stress, which are often exacerbated by the financial pressures and work-life imbalance that entrepreneurs face.

The year 2020 marked a pivotal juncture with the onset of the COVID-19 pandemic, which not only disrupted global economic systems but also profoundly impacted the psychological resilience of entrepreneurs. The emergence of the term "covid-19" in the literature, alongside a notable increase in the frequency of related terms such as "mental health," "quality of life," and "life satisfaction," signals an intensified scholarly focus on the psychosocial vulnerabilities that entrepreneurs face during systemic crises. Notably, this period witnessed a surge in empirical investigations that explored how entrepreneurs responded to heightened uncertainty, financial instability, and isolation. Studies began to foreground the role of emotional regulation, social support networks, and adaptive coping mechanisms in sustaining entrepreneurial functioning under crisis [29, 30]. Researchers also examined the differential impacts of the pandemic across entrepreneurial subgroups - such as women entrepreneurs and solo self-employed individuals - who often faced compounded stressors due to pre-existing structural inequities[31].

Simultaneously, the conceptual scope of entrepreneurial well-being began to expand beyond individual psychological constructs to encompass more socially-oriented dimensions. Terms such as "social enterprise," "social innovation," and "social entrepreneurship" gained increasing prominence, reflecting a paradigmatic shift in how entrepreneurship is conceptualized - as not merely a vehicle for economic gain but also as an instrument for generating social value. Scholars have emphasized how socially motivated entrepreneurs often derive well-being not only from autonomy and personal achievement, but also from prosocial engagement and the perceived meaningfulness of their ventures [32]. By linking individual entrepreneurial motivations to broader social missions, this thematic expansion contributes to an enriched understanding of the multifaceted nature of well-being. It underscores a convergence between self-realization and collective benefit, thereby offering a more integrative and socially embedded perspective within the field of entrepreneurship studies.

From 2023 onward, a diversification of themes is evident. The appearance of "entrepreneurial well-being," "eudaimonic well-being," and "women entrepreneurs" as high-frequency terms in the most recent years signals the maturation and specialization of the field. The introduction of gender analyses points to a nuanced understanding of how entrepreneurial experiences and associated well-being outcomes are shaped by socio-demographic factors [33]. Moreover, the inclusion of "China" as keywords suggests a geographical broadening of the literature, acknowledging the contextual embeddedness of entrepreneurial well-being across different socio-economic and cultural environments.

Taken together, the trajectory of keyword emergence and prevalence underscores an important epistemological shift in entrepreneurial research - from economic determinism to holistic well-being.

The field has progressively integrated psychological, social, and contextual dimensions, moving toward a multidimensional understanding of entrepreneurship. This evolution not only reflects broader societal transformations but also presents a compelling agenda for future research, particularly in exploring intersectional, cross-cultural, and longitudinal dynamics of well-being in entrepreneurial contexts.

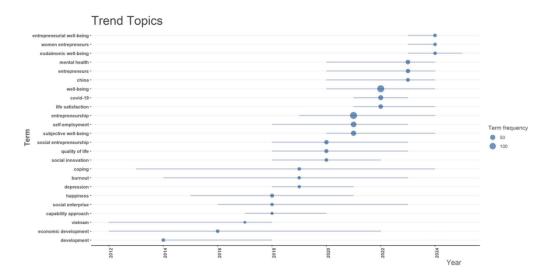


Figure 5. Thematic Trends in the Entrepreneurial Well-Being Field Source: By authors.

## 3.3 Thematic Evolution Before and After the COVID-19 Pandemic: A Comparative Analysis

The thematic evolution of the analyzed dataset is divided into four distinct temporal subperiods. This categorization is consistent with the methodology employed by prior scholars [19], where the total number of publications is given equal weight across the periods. The first subperiod covers 1999 to 2017, accounting for 21.64% of the total with 208 articles; the second spans from 2018 to 2020, comprising 22.16% with 213 articles; the third ranges from 2021 to 2022, with 24.97% and 240 articles; and the final subperiod extends from 2023 to 2025, representing 31.22% with 300 articles.

Based on this four-phase framework, we constructed four strategic diagrams utilizing the density and centrality indices. The density index measures the strength of relationships between keywords within a particular topic, with higher density indicating greater topic maturity. The centrality index, on the other hand, reflects the interconnectivity of topics, with central topics being more strongly related to others. The strategic diagrams consist of four quadrants. Quadrant 1, referred to as "motor themes," contains topics characterized by both high centrality and density, signifying their role as foundational elements that structure and drive the development of the digital transformation research field. Quadrant 2, representing "highly developed and isolated themes," includes topics that have reached a high level of maturity but exhibit weak connections to other themes. Quadrant 3, "emerging or declining themes," contains topics with both low centrality and low density, indicating they are either in the early stages of emergence or experiencing a decline in relevance. Finally, Quadrant 4, "basic and transversal themes," encompasses topics with high centrality but low density, reflecting

themes that are central to the field yet underdeveloped or crosscutting in nature [20].

The analysis of the thematic evolution before the COVID-19 pandemic (1999-2020) reveals distinct themes that shaped the early stages of entrepreneurial well-being research. It is important to note that 2020, despite the onset of the COVID-19 pandemic, is considered part of the pre-pandemic period in this analysis due to the typical delay between the occurrence of events and the publication of corresponding research articles. In the first subperiod (Figure 6), 10 main themes emerged over the 19 years. In the upper right quadrant (motor themes), topics such as "job satisfaction," "big data," "employment," "social entrepreneurship," "social capital," and "sustainability" emerge as dominant drivers of research. These themes illustrate the integration of data-driven decision-making and social value creation within entrepreneurial contexts. The upper left quadrant (niche themes) includes terms like "China" and "subjective economic well-being," which are well-developed but less connected to the broader research network, suggesting region-specific or specialized inquiries. In contrast, the lower right quadrant (basic themes) houses foundational concepts such as "development," "economic development," and "quality of life," indicating their central role in the field despite lower development degree. The lower left quadrant (emerging or declining themes) features "governance" and "women entrepreneurs," reflecting either declining interest or emerging discussions that have yet to integrate with mainstream research. Nearby, terms like "entrepreneurship," "empowerment," "India," "burnout," and "self-employed" occupy a transitional space with moderate centrality and density, suggesting ongoing interest but uncertain developmental trajectories. As we moved into the second subperiod (2018-2020, Figure 7), a significant shift in the research landscape can be observed. Themes such as "entrepreneurship," "subjective well-being," "innovation," "self-employment," "happiness," and "mental health" emerged in the upper right quadrant, reflecting both high centrality and low development. Their presence suggests a foundational shift towards integrating psychological dimensions - particularly emotional and mental states - into the broader discourse on entrepreneurial well-being. This reflects an early recognition of the psychological costs and benefits of entrepreneurial careers, paving the way for deeper post-pandemic investigations into these issues. The niche themes quadrant includes terms like "social entrepreneurship," "social well-being," and "qualitative research." These are well-developed topics with lower centrality, indicating focused, possibly context-specific inquiries that contribute to methodological and socially-oriented diversification. The presence of "social innovation," "sustainability," and "social enterprise" positioned just below the niche quadrant - further reinforces the increasing importance of social and environmental considerations in entrepreneurial research during this period. Meanwhile, in the emerging or declining themes quadrant, "workplace violence" stands out. Its low density and centrality may imply that, while the topic had entered scholarly discourse, it had not yet become fully integrated or widely explored within the entrepreneurial well-being framework.

Following the pandemic, research on entrepreneurial well-being experienced a notable shift, particularly during 2021–2022 (Figure 3). This period marked the first clear emergence of COVID-19-related themes and a growing focus on psychological and social dimensions. In the motor themes quadrant, terms such as "life satisfaction," "job satisfaction," "autonomy," and "entrepreneurship

education" highlight the increasing importance of personal well-being and education in entrepreneurship. The appearance of "entrepreneurial intention" further underscores the role of educational systems in shaping well-being outcomes. In the basic themes quadrant, keywords like "self-employment," "COVID-19," and "subjective well-being" are conceptually central yet underdeveloped, suggesting an early-stage integration of these themes. Their clustering reflects rising interest in the mental health impacts of external disruptions on entrepreneurs. Niche themes such as "poverty," "family firms," "sustainability," and "entrepreneurial passion" signal growing attention to social, environmental, and emotional factors. Meanwhile, declining themes such as "employment," "economic development," "stress," and "performance" show reduced centrality and maturity, indicating a shift away from broad economic concerns toward more nuanced topics. From 2023 to 2025 (Figure 4), the field continues to mature. "Psychological well-being," "entrepreneurial wellbeing," and "eudaimonic well-being" dominate the motor themes quadrant, reflecting a deepening focus on purpose, autonomy, and personal growth. In the basic quadrant, "entrepreneurship," "selfemployment," "life satisfaction," and "mental health" remain central but still developing, showing continued scholarly interest in the long-term effects of the pandemic. Niche themes such as "technostress," "African entrepreneurship," and "digital self-efficacy" indicate emerging, contextspecific inquiries, while declining themes like "quality of life," "women entrepreneurs," and "Latin America" appear less integrated and influential in the current discourse.

The thematic evolution of entrepreneurial well-being research reveals clear differences in focus before and after the COVID-19 pandemic. In the pre-pandemic era (1999–2020), scholarly attention was largely centered on economic and structural dimensions of entrepreneurship. Core themes included employment, economic development, job satisfaction, and social entrepreneurship. These topics emphasized the role of entrepreneurship in economic systems and its potential to generate social value. From 2018 to 2020, however, the field began to shift, with increasing attention to psychological and emotional dimensions, as reflected in the emergence of themes such as subjective well-being, happiness, mental health, and self-employment. This transition marks the field's growing recognition of the personal experiences and inner states of entrepreneurs. The inclusion of social innovation, sustainability, and social enterprise also signaled a diversification of interest into more socially responsible and ethically oriented entrepreneurship. Following the onset of the pandemic (2021–2025), the field underwent a conceptual transformation, driven by the need to understand how entrepreneurs were affected by global disruptions. The years 2021-2022 marked the first explicit incorporation of COVID-19 as a thematic cluster, accompanied by heightened focus on mental health, life satisfaction, and autonomy. Themes such as entrepreneurship education and entrepreneurial intention gained prominence, pointing to the role of education in preparing individuals for uncertain and dynamic environments. By 2023-2025, the research matured further, with psychological wellbeing, entrepreneurial well-being, and eudaimonic well-being emerging as dominant themes [34-36]. These reflect a deepening exploration of purpose, fulfillment, and personal growth in the entrepreneurial journey. Meanwhile, technostress, digital self-efficacy, and African entrepreneurship represent more context-specific and emerging areas of inquiry, suggesting that geographical, technological, and demographic variations are gaining attention.

In comparison, the pre-pandemic period emphasized macroeconomic and structural aspects, while the post-pandemic landscape is characterized by micro-level, psychological, and emotional considerations. This reflects a broader disciplinary turn toward well-being as not just an economic outcome but a multidimensional construct influenced by mental health, personal values, and social context.

In the post-pandemic era, research on entrepreneurial well-being is expected to increasingly focus on several key areas. Mental health and resilience will remain central, as scholars continue to explore the psychological challenges entrepreneurs face, particularly in terms of emotional regulation, stress management, and long-term mental health outcomes. The growing interest in eudaimonic well-being suggests a shift towards understanding how entrepreneurs derive meaning, fulfillment, and personal growth from their work, beyond mere financial success. Additionally, as digital transformation continues to reshape entrepreneurial landscapes, themes such as technostress and digital self-efficacy will likely gain further attention, examining the impact of technological change on entrepreneurial well-being. The increasing recognition of geographical and cultural differences in entrepreneurship will also lead to more comparative studies, particularly focused on regions such as Africa and Latin America. Furthermore, the role of entrepreneurship education and policy interventions in fostering well-being is expected to emerge as an important avenue of research, as scholars investigate how educational systems and institutional support can help shape entrepreneurs' psychological and emotional experiences.

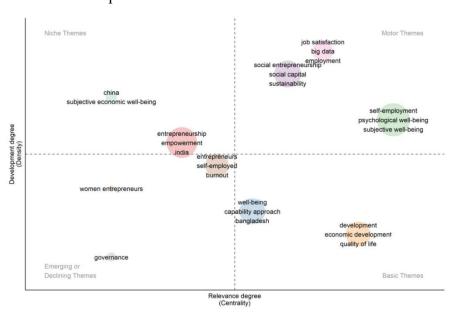


Figure 6. Strategic diagram for window period 1999 to 2017 Source: By authors.

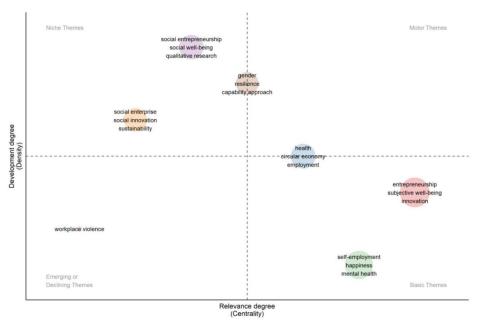


Figure 7. Strategic diagram for window period 2018 to 2020 Source: By authors.

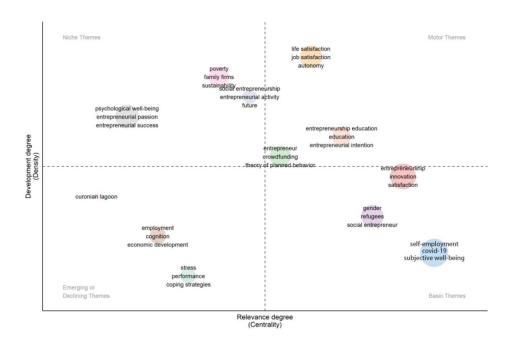


Figure 8. Strategic diagram for window period 2021 to 2022 Source: By authors.

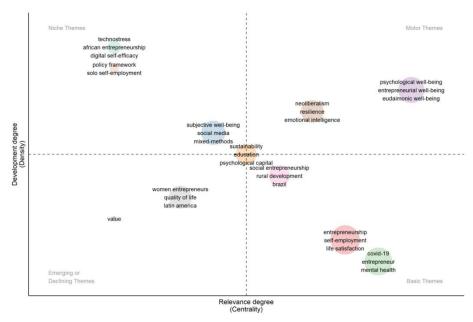


Figure 9. Strategic diagram for window period 2023 to 2025 Source: By authors.

## 3.4 Research on Changes in Antecedent Factors of Entrepreneurial Well-being

Based on the distribution of entrepreneurial well-being research by publication year, we can categorize the changes in the antecedent factors of entrepreneurial well-being into three distinct phases. The first phase, from 1999 to 2015, was characterized by a relatively stable volume of publications, with no significant upward trend. The second phase, spanning 2016 to 2020, saw a gradual increase in the number of publications. The third phase, from 2021 to 2025, experienced an exponential surge in publication volume.

In the first phase (1999-2015), research on entrepreneurial well-being was initially focused on external socio-economic and organizational factors, which were viewed as the primary determinants of entrepreneurial success and well-being. Early studies examined the role of interorganizational collaboration, positing that positive interactions between agencies could enhance service outcomes and well-being [37]. Research on women entrepreneurs revealed the socio-economic constraints that, while limiting well-being, were counterbalanced by the positive impact of microenterprise involvement on household prosperity [38]. As the decade progressed, the research expanded to include ethical decision-making and social responsibility, with scholars exploring how ethical dilemmas and societal discourses influenced entrepreneurial identity and well-being [39]. By 2009-2012, the focus shifted toward personal and work-related factors, such as work-life balance [40] and the role of psychological well-being, particularly through personal initiative and eudaimonic well-being [41]. These shifts in focus illustrated an increasing awareness of the complex, multifaceted nature of entrepreneurial well-being, moving beyond mere economic factors to encompass the psychological and emotional dimensions of entrepreneurship.

The second phase (2016-2020) marked a significant broadening of the research scope, incorporating a wider array of individual, social, and environmental factors. Early in this phase, studies emphasized the role of stakeholder relationships and co-creation in entrepreneurial success,

which were found to have a direct impact on entrepreneurs' well-being [42]. Concurrently, research on "victim entrepreneurship" emerged, focusing on how adversity could drive entrepreneurs to create ventures that not only enhanced their personal well-being but also contributed to communal welfare [43]. By 2017, the research emphasis shifted toward the exploration of individual psychological traits, such as autonomy, emotional regulation, and career adaptability, all of which were found to be critical to entrepreneurial persistence and success [44]. The increasingly complex nature of work-life balance, particularly for entrepreneurs facing gendered inequalities and health-related stress, also became a significant area of study [45]. Additionally, studies on career adaptability further illuminated its importance for both career satisfaction and emotional well-being [46]. By 2020, research extended into preconditions influencing entrepreneurial well-being, emphasizing the importance of self-efficacy, motivation, and family support [47], marking a shift towards recognizing the central role of psychological factors, institutional environments, and resource access in shaping entrepreneurial well-being. This phase witnessed the integration of both individual and external elements, representing a substantial departure from the earlier focus on external socio-economic factors.

The third phase (2021-2025) represented a paradigm shift toward a more holistic and nuanced understanding of entrepreneurial well-being. This phase saw a focus on individual traits, stressors, and external factors, reflecting the dynamic interplay between personal characteristics and external conditions. In 2021, studies emphasized the role of entrepreneurial passion, alertness, and intention, which were positively associated with psychological well-being [14]. Research also highlighted the role of creativity and mindfulness in buffering stress, thereby promoting a more sustainable entrepreneurial experience [48]. The same year saw the recognition of the differentiated impacts of challenge versus hindrance stressors, with challenge stressors linked to improved performance and hindrance stressors identified as detrimental to well-being [49]. By 2022, the COVID-19 pandemic became a central concern, with research examining the heightened anxiety and pressure that the pandemic imposed on entrepreneurs' mental health [50]. Social dynamics, including social undermining and family support, also emerged as significant factors influencing entrepreneurial wellbeing, underscoring the role of interpersonal relationships in mitigating stress and enhancing wellbeing [51]. Studies on resilience and achievement motivation suggested that these traits could buffer the negative effects of stress and improve entrepreneurial well-being [52]. In 2023, attention shifted to entrepreneurial identity and psychological resources, with studies revealing that a relational identity, particularly one tied to spirituality, helped mitigate identity threats and foster entrepreneurial persistence [53]. Autonomy and emotional resilience were also identified as critical factors for preventing burnout and maintaining well-being [54]. In 2024, research expanded to consider technological and gender factors, highlighting the impact of smart city ecosystems on well-being [55] and gender-based inequalities that exacerbate well-being challenges for women entrepreneurs [33]. Technological stress, particularly techno-overload, was also identified as a growing challenge for entrepreneurs in the digital age [56]. By 2025, research turned to competencies, civic engagement, and coping strategies, with studies showing that entrepreneurial competencies enhanced both business performance and well-being [57]. Furthermore, the link between civic engagement and eudaimonic

well-being was explored, highlighting how engagement in societal causes could positively influence entrepreneurial intentions [58].

#### 3.5 Most Influential Researchers

A collaboration network map was constructed to visualize the positional influence of researchers within the scholarly landscape. The mapping process included only those researchers who had accrued at least 100 citations. A total of 124 researchers met this threshold; however, only 60 of those researchers had connections with each other, thereby forming an interconnected network. As illustrated in Figure 10, these 60 researchers were grouped into 11 distinct clusters. Node size represents the relative volume of publications, with larger nodes indicating greater research output. Notably, scholars such as Patel, P.C., Stephan, U., Nikolaev, B., and Wincent, J. emerged as central figures, reflecting their prominent contributions to the field.

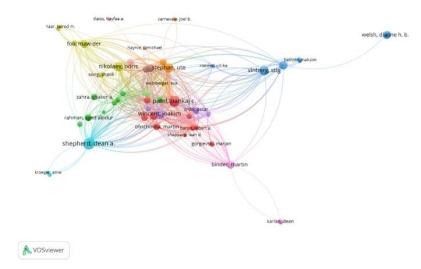


Figure 10. Network visualization of the most influential researchers Source: By authors.

#### 3.6 Most Influential Publications

Of the 961 articles on entrepreneurial well-being identified through citation analysis, the top 10 most-cited publications are presented in Table 1. The most frequently cited article is *Employee adjustment and well-being in the era of COVID-19: Implications for human resource management.* This article explores the challenges organizations encounter in managing human resources during the COVID-19 pandemic, with a particular focus on strategies to help employees adapt to new work environments. It also offers several recommendations for future research in this area.

Table 1. Ten publications on entrepreneurial well-being with the most citations

Year	Article Title	Citations	
2020	Employee adjustment and well-being in the era of COVID-19: Implications for	591	
	human resource management		
2017	Career adaptability: A meta-analysis of relationships with measures of	417	
	adaptivity, adapting, responses, and adaptation results		

2016	Why Entrepreneurs Often Experience Low, Not High, Levels of Stress: The	341	
	Joint Effects of Selection and Psychological Capital		
2008	Being independent is a great thing: Subjective evaluations of self-employment	330	
	and hierarchy		
2010	Sustainability-driven entrepreneurship: Principles of organization design	327	
2016	Building resilience or providing sustenance: Different paths of emergent	325	
	ventures in the aftermath of the Haiti earthquake		
2020	Wellbeing costs of technology use during Covid-19 remote working: An	257	
	investigation using the Italian translation of the technostress creators scale		
2017	The human capital hoax: Work, debt and insecurity in the era of uberization	253	
2017	Micro-entrepreneurs, dependent contractors, and instaserfs: Understanding	227	
	online labor platform workforces		
2022	Economic effects of the COVID-19 pandemic on entrepreneurship and small	224	
	businesses		
·		·	

Source: By authors.

## 3.7 Most Influential Journals

We used the citation analysis provided by VOSviewer to identify journals with the strongest link strength. Of the full 435 sources of publications, 31 journals published at least 5 studies on entrepreneurial well-being. Table 2 lists the 10 most influential journals in the field of entrepreneurial well-being research as ranked by TLS value. Among these leading journals, Journal of Business Venturing, Small Business Economics and Entrepreneurship Theory and Practice have the highest link strength values.

Table 2. Ten most influential journals in entrepreneurial well-being

Journal	Articles	Citations	TLS
Journal of Business Venturing	24	1920	533
Small Business Economics	35	1085	338
Entrepreneurship Theory and Practice	17	917	308
Journal of Business Research	19	1131	149
Journal of Happiness Studies	13	355	124
Frontiers in Psychology	30	240	120
International Journal of Entrepreneurial Behavior & Research	23	177	92
Academia-revista Latinoamericana de Administracion	1	1	89
Journal of Small Business Management	10	165	75
sustainability	57	797	72

Source: By authors.

## 3.7 Most Influential Countries and Universities

The dataset on publications related to entrepreneurial well-being includes 99 countries and 1,362

institutions. Consistent with previous categorizations, we employed the TLS value to identify the leading universities and countries in the field of entrepreneurial well-being research. Table 3 presents the top 10 countries, while Table 4 lists the top 10 universities.

As shown in Table 3, the United States leads both in TLS value and the number of publications on entrepreneurial well-being, followed by Germany and the United Kingdom. To focus on universities with a sustained emphasis on entrepreneurial well-being, we applied a criterion that each university must have published at least five papers in this area. This resulted in a final set of 68 universities for analysis. Table 4 indicates that, based on citation counts, the top two universities are the University of St. Gallen and Baylor University. Additionally, the universities are geographically diverse, with two located in the United Kingdom and the remaining eight spread across the United States, Switzerland, Finland, Germany, Singapore, Sweden, the Netherlands, and Chile.

Table 3. Top ten countries in the field of entrepreneurial well-being research

Rank	Country	Articles	Citations	TLS
1	USA	252	9136	2080
2	Germany	81	3255	1467
3	England	141	4424	1456
4	Netherlands	60	1786	875
5	China	127	1497	869
6	Sweden	47	1582	784
7	Switzerland	21	1631	728
8	Spain	60	947	573
9	France	29	703	485
10	Finland	33	1086	444

Source: By authors.

Table 4. Top ten universities in the field of entrepreneurial well-being research

Rank	Universities	Articles	Citations	TLS
1	University of St. Gallen (Switzerland)	9	1152	692
2	Baylor University (USA)	9	544	498
3	King's College London (United Kingdom)	10	446	444
4	Hanken School of Economics (Finland)	7	421	435
5	Technische Universität Dresden (Germany)	5	241	372
6	National University of Singapore (Singapore)	11	502	354
7	University of Sussex (United Kingdom)	9	449	349
8	Luleå University of Technology (Sweden)	5	382	342
9	University of Groningen (Netherlands)	12	284	331
10	Universidad del Desarrollo (Chile)	6	232	314

Source: By authors.

## 5. Conclusions

These findings indicate that research on entrepreneurial well-being has gained significant traction and evolved into a prominent area of academic inquiry. Scholars from diverse disciplinary backgrounds have examined entrepreneurial well-being through various theoretical and methodological lenses, leading to a substantial volume of published studies in the field. The results of the co-authorship analysis suggest that collaborative research efforts in this domain have reached a relatively mature stage.

Despite a broad base of 2,711 researchers, only 21 have engaged in extensive collaborative networks, reflecting a concentrated core of scholarly influence. These researchers are geographically dispersed, representing institutions in the United States, Sweden, the Netherlands, Germany, Belgium, Finland, and Slovenia. The co-authorship analysis also reveals a significant degree of international collaboration, although the timing of entry into the field varies among countries. The United States, the United Kingdom, and China have emerged as the most influential contributors to entrepreneurial well-being research. Among them, China represents the most recent entrant, with a rapid increase in output. The prolific publication activity observed in these countries suggests the emergence of a potential concentration of intellectual dominance within the field.

The keyword analysis reveals that entrepreneurial well-being has been explored across diverse practical domains, including individual well-being, social entrepreneurship, empowerment, entrepreneurial success, subjective well-being, global crises, and employment issues. Moreover, the increasing publication volume indicates rapid growth in the field since 2018. Notably, the evolving thematic trends highlight a shift from economic determinism to a more holistic understanding of well-being, gradually incorporating psychological, social, and contextual factors. This evolution advances toward a multidimensional conceptualization of entrepreneurship, considering both individual and collective factors in shaping entrepreneurial outcomes.

The analysis of the evolution of research themes' centrality and density reveals shifts in entrepreneurial well-being research from 1999 to 2025. Initially, the focus was on macro-level factors like economic development, income, and employment. By 2015, attention shifted toward individual experiences, including happiness, burnout, and subjective well-being. The COVID-19 pandemic further accelerated this transition, highlighting mental health, resilience, and life satisfaction. Recent studies integrate emotional, psychological, and social dimensions, while considering broader contexts like neoliberalism and digital transformation. Furthermore, the study of changes in the antecedents of entrepreneurial well-being indicates a shift in focus over time. Initially, research emphasized socioeconomic and organizational factors as key determinants. In the second phase, attention expanded to individual psychological traits, stakeholder relationships, and the impact of adversity on entrepreneurship. The third phase highlights a more holistic perspective, integrating personal traits, psychological resources, and external factors such as technological challenges and gender dynamics.

The collaboration network highlights Patel, P.C., Stephan, U., Nikolaev, B., and Wincent, J. as key researchers in entrepreneurial well-being. The top 10 most cited publications primarily focus on psychological adjustment, resilience, and subjective well-being, particularly during crises like the

COVID-19 pandemic, aligning with broader trends emphasizing adaptive responses and psychological capital in entrepreneurship. Influential journals, such as Journal of Business Venturing and Small Business Economics, play a central role in disseminating interdisciplinary research. The United States, Germany, and the United Kingdom are the leading contributors, reflecting strong research support in these countries. Notable institutions like the University of St. Gallen and Baylor University are pivotal in advancing research in this field.

This study analyzed the coauthorship network, emerging trends, changes in antecedents of entrepreneurial well-being, influential researchers, journals, publications, countries, and institutions within the field. The core focus of this study lies in systematically mapping the intellectual structure and thematic evolution of entrepreneurial well-being research, especially emphasizing the comparative analysis of research themes and antecedents before and after the COVID-19 pandemic. By doing so, it reveals a paradigmatic shift in scholarly attention - from macroeconomic determinants to psychological, emotional, and social dimensions of well-being. Looking ahead, future research is expected to delve deeper into understudied dimensions such as eudaimonic well-being, digital transformation-related stress (e.g., technostress), gender-specific well-being experiences, and crosscultural comparisons of entrepreneurial well-being. Furthermore, there is significant potential for longitudinal studies and the integration of psychological constructs with socio-institutional factors to better understand the complex, dynamic interplay shaping entrepreneurial well-being in a post-pandemic world.

#### References

- [1] Cardon, M.S., Foo, M.D., Shepherd, D. and Wiklund, J. Exploring the heart: Entrepreneurial emotion is a hot topic. Entrepreneurship Theory and Practice, 2012, 36(1), 1-10. DOI: 10.1111/j.1540-6520.2011.00501.x.
- [2] Cardon, M.S. and Patel, P.C. Is stress worth it? Stress-related health and wealth trade-offs for entrepreneurs. Applied Psychology, 2013, 64(2), 379-420. DOI: 10.1111/apps.12021.
- [3] Nikolaev, B., Boudreaux, C.J. and Wood, M. Entrepreneurship and subjective well-being: The mediating role of psychological functioning. Entrepreneurship Theory and Practice, 2019, 44(3), 557-586. DOI: 10.1177/1042258719830314.
- [4] Wiklund, J., Nikolaev, B., Shir, N., Foo, M.-D. and Bradley, S. Entrepreneurship and well-being: Past, present, and future. Journal of Business Venturing, 2019, 34(4), 579-588. DOI: 10.1016/j.jbusvent.2019.01.002.
- [5] Stephan, U. Entrepreneurs' mental health and well-being: A review and research agenda. Academy of Management Perspectives, 2018, 32(3), 290-322. DOI: 10.5465/amp.2017.0001.
- [6] Kazemi, A. Conceptualizing and measuring occupational social well-being: A validation study. International Journal of Organizational Analysis, 2017, 25(1), 45-61. DOI: 10.1108/ijoa-07-2015-0889.
- [7] Colenberg, S., Appel-Meulenbroek, R., Romero Herrera, N. and Keyson, D. Conceptualizing social well-being in activity-based offices. Journal of Managerial Psychology, 2020, 36(4), 327-343. DOI: 10.1108/jmp-09-2019-0529.
- [8] St-Jean, E., Tremblay, M., Chouchane, R. and Saunders, C.W. Career shock and the impact of stress, emotional exhaustion, and resources on entrepreneurial career commitment during the COVID-19 pandemic. International Journal of Entrepreneurial Behavior & Research, 2023, 29(8), 1927-1949. DOI: 10.1108/ijebr-03-2022-0280.

- [9] Ogundana, O.M., Umoru, U., Ikhile, D. and Egbe, C.L. Migrant women entrepreneurship and health-related crisis: An intersectional perspective. Management Decision, 2025. DOI: 10.1108/md-02-2024-0357.
- [10] Ribeiro, M.A., Adam, I., Kimbu, A.N., Dayour, F., Adeola, O. and Tichaawa, T.M. Resilience in uncertainty: The impact of coping strategies on tourism entrepreneurs' subjective well-being in sub-Saharan Africa. Tourism Management, 2025, 110. DOI: 10.1016/j.tourman.2025.105169.
- [11] Belitski, M., Guenther, C., Kritikos, A.S. and Thurik, R. Economic effects of the COVID-19 pandemic on entrepreneurship and small businesses. Small Business Economics, 2022, 58(2), 593-609. DOI: 10.1007/s11187-021-00544-y.
- [12] Muhammad, S., Yin, Z. and Rasheed, M.H.U. Observing the COVID-19 pandemic SOPs and sales performance: Evidence from Khyber Pakhtunkhwa, Pakistan. European Research on Management and Business Economics, 2024, 30(3). DOI: 10.1016/j.iedeen.2024.100262.
- [13] Haider, M., Shannon, R., Moschis, G.P. and Autio, E. How has the COVID-19 crisis transformed entrepreneurs into sustainable leaders? Sustainability, 2023, 15(6). DOI: 10.3390/su15065358.
- [14] Wang, C. and Mundorf, N., Salzarulo-McGuigan, A. Psychological well-being sustainable during entrepreneurial process—The moderating role of entrepreneurial creativity. Sustainability, 2021, 13(19). DOI: 10.3390/su131910732.
- [15] Khan, A.S. and Shahid, S. Gender and social inclusion: Impact of mobile payment system on micro-entrepreneurs' perceived success and subjective well-being. Aslib Journal of Information Management, 2024. DOI: 10.1108/ajim-08-2023-0321.
- [16] Hernandez-Sanchez, B.R., Cardella, G.M. and Sanchez-Garcia, J.C. Psychological factors that lessen the impact of COVID-19 on the self-employment intention of business administration and economics' students from Latin America. International Journal of Environmental Research and Public Health, 2020, 17(15). DOI: 10.3390/ijerph17155293.
- [17] Zandi, G., Shahzad, I., Farrukh, M. and Kot, S. Supporting role of society and firms to COVID-19 management among medical practitioners. International Journal of Environmental Research and Public Health, 2020, 17(21). DOI: 10.3390/ijerph17217961.
- [18] Navarro, V. Why Asian countries are controlling the pandemic better than the United States and Western Europe. International Journal of Health Services, 2021, 51(2), 261-264. DOI: 10.1177/0020731421999930.
- [19] Sierra-Casanova, C., Lechuga Sancho, M.P. and Ramos-Rodríguez, A.R. What science says about entrepreneurs' well-being: A conceptual structure review. Academia Revista Latinoamericana de Administración, 2024, 37(3), 355-382. DOI: 10.1108/arla-01-2024-0005.
- [20] Shi, L., Mai, Y. and Wu, Y.J. Digital transformation: A bibliometric analysis. Journal of Organizational and End User Computing, 2022, 34(7), 1-20. DOI: 10.4018/joeuc.302637.
- [21] Goksu, I. Bibliometric mapping of mobile learning. Telematics and Informatics, 2021, 56. DOI: 10.1016/j.tele.2020.101491.
- [22] Zupic, I. and Čater, T. Bibliometric methods in management and organization. Organizational Research Methods, 2014, 18(3), 429-472. DOI: 10.1177/1094428114562629.
- [23] Lechuga Sancho, M.P., Martín-Navarro, A. and Ramos-Rodríguez, A.R. Information systems management tools: An application of bibliometrics to CSR in the tourism sector. Sustainability, 2020, 12(20). DOI: 10.3390/su12208697.

- [24] Ramos-Rodriguez, A.-R., Lechuga Sancho, M.P. and Martínez-Fierro, S. Authorship trends and collaboration patterns in hospitality and tourism research. International Journal of Contemporary Hospitality Management, 2021, 33(4), 1344-1367. DOI: 10.1108/ijchm-09-2020-0981.
- [25] Van Eck, N.J. and Waltman, L. Software survey: VOSviewer, a computer program for bibliometric mapping. Scientometrics, 2010, 84(2), 523-538. DOI: 10.1007/s11192-009-0146-3.
- [26] Welsh, D.H.B., Kaciak, E. and Thongpapanl, N. Influence of stages of economic development on women entrepreneurs' startups. Journal of Business Research, 2016, 69(11), 4933-4940. DOI: 10.1016/j.jbusres.2016.04.055
- [27] .Baron, R.A., Franklin, R.J. and Hmieleski, K.M. Why entrepreneurs often experience low, not high, levels of stress: The joint effects of selection and psychological capital. Journal of Management, 2016, 42(3), 742-768. DOI: 10.1177/0149206313495411.
- [28] Kallioniemi, M.K., Simola, A., Kaseva, J. and Kymalainen, H.R. Stress and burnout among Finnish dairy farmers. Journal of Agromedicine, 2016, 21(3), 259-268. DOI: 10.1080/1059924X.2016.1178611.
- [29] Vinberg, S. and Danielsson, P. Managers of micro-sized enterprises and Covid-19: Impact on business operations, work-life balance and well-being. International Journal of Circumpolar Health, 2021, 80(1), 1959700. DOI: 10.1080/22423982.2021.1959700.
- [30] Esteban-Gonzalo, S., Gonzalez-Pascual, J.L., Caballero-Galilea, M. and Esteban-Gonzalo, L. Psychosocial correlates of mental health and well-being during the COVID-19: The Spanish case. Frontiers in Psychology, 2020, 11, 609815. DOI: 10.3389/fpsyg.2020.609815.
- [31] Xia, C.L., Wei, A.P. and Huang, Y.T. The COVID-19 lockdown and mental wellbeing of females in China. International Journal of Environmental Research and Public Health, 2022, 19(9). DOI: 10.3390/ijerph19094960.
- [32] Torres, P. and Augusto, M. Digitalisation, social entrepreneurship and national well-being. Technological Forecasting and Social Change, 2020, 161. DOI: 10.1016/j.techfore.2020.120279.
- [33] Love, I., Nikolaev, B. and Dhakal, C. The well-being of women entrepreneurs: The role of gender inequality and gender roles. Small Business Economics, 2024, 62(1), 325-352. DOI: 10.1007/s11187-023-00769-z.
- [34] Eib, C. and Bernhard-Oettel, C. Entrepreneurial action and eudaimonic well-being in a crisis: Insights from entrepreneurs in Sweden during the COVID-19 pandemic. Economic and Industrial Democracy, 2023, 45(2), 335-362. DOI: 10.1177/0143831x231154753.
- [35] Luu, N. and Nguyen, H. Disentangling the effects of entrepreneurs' passion and perfectionism on their eudaimonic well-being. International Journal of Entrepreneurial Behavior & Research, 2024, 30(10), 2509-2529. DOI: 10.1108/ijebr-07-2023-0752.
- [36] Dwyer, S.M., Nikolaev, B., Bradley, S.W. and Neubert, M.J. Psychological perspectives on faith-driven persistence in self-employment: The mediating role of mental health and well-being. Journal of Small Business Management, 2025, 1-43. DOI: 10.1080/00472778.2025.2465380.
- [37] Page, S. Entrepreneurial strategies for managing interagency collaboration. Journal of Public Administration Research and Theory, 2003, 13(3), 311-339. DOI: 10.1093/jopart/mug026.
- [38] Eversole, R. Change makers? Women's microenterprises in a Bolivian city. Gender, Work & Organization, 2004, 11(2), 123-142. DOI: 10.1111/j.1468-0432.2004.00225.x.
- [39] Payne, D. and Joyner, B.E. Successful U.S. entrepreneurs: Identifying ethical decision-making and social responsibility behaviors. Journal of Business Ethics, 2006, 65(3), 203-217. DOI: 10.1007/s10551-005-4674-3.

- [40] McManus, R. Work-life balance: A case of technical disempowerment? Social Politics: International Studies in Gender, State & Society, 2009, 16(1), 111-131. DOI: 10.1093/sp/jxp004.
- [41] Hahn, V.C., Frese, M., Binnewies, C. and Schmitt, A. Happy and proactive? The role of hedonic and eudaimonic well-being in business owners' personal initiative. Entrepreneurship Theory and Practice, 2012, 36(1), 97-114. DOI: 10.1111/j.1540-6520.2011.00490.x.
- [42] Shams, S.M.R. and Kaufmann, H.R. Entrepreneurial co-creation: A research vision to be materialised. Management Decision, 2016, 54(6), 1250-1268. DOI: 10.1108/md-11-2015-0487.
- [43] Williams, T.A. and Shepherd, D.A. Victim entrepreneurs doing well by doing good: Venture creation and well-being in the aftermath of a resource shock. Journal of Business Venturing, 2016, 31(4), 365-387. DOI: 10.1016/j.jbusvent.2016.04.002.
- [44] Farrington, S.M. Psychological well-being and perceived financial performance: An SME perspective. South African Journal of Business Management, 2017, 48(4), 47-56. DOI: 10.4102/sajbm.v48i4.42.
- [45] Godin, I., Desmarez, P. and Mahieu, C. Company size, work-home interference, and well-being of self-employed entrepreneurs. Archives of Public Health, 2017, 75, 69. DOI: 10.1186/s13690-017-0243-3.
- [46] Rudolph, C.W., Lavigne, K.N. and Zacher, H. Career adaptability: A meta-analysis of relationships with measures of adaptivity, adapting responses, and adaptation results. Journal of Vocational Behavior, 2017, 98, 17-34. DOI: 10.1016/j.jvb.2016.09.002.
- [47] Chen, M.H., Tseng, M. and Teng, M.J. Creative entrepreneurs' well-being, opportunity recognition and absorptive capacity: Self-determination theory perspective. Entrepreneurship Research Journal, 2020, 10(1), 20180171.
- [48] Lanivich, S.E., Bennett, A., Kessler, S.R., McIntyre, N. and Smith, A.W. Rich with well-being: An entrepreneurial mindset for thriving in early-stage entrepreneurship. Journal of Business Research, 2021, 124, 571-580. DOI: 10.1016/j.jbusres.2020.10.036.
- [49] Lerman, M.P., Munyon, T.P. and Williams, D.W. The (not so) dark side of entrepreneurship: A meta-analysis of the well-being and performance consequences of entrepreneurial stress. Strategic Entrepreneurship Journal, 2021, 15(3), 377-402. DOI: 10.1002/sej.1370.
- [50] Li, Y., Chen, H., Liu, C. and Liu, H. How does COVID-19 pandemic affect entrepreneur anxiety? The role of threat perception and performance pressure. Frontiers in Psychology, 2022, 13, 1044011. DOI: 10.3389/fpsyg.2022.1044011.
- [51] Yu, W., Li, Z.A., Foo, M.-D. and Sun, S. Perceived social undermining keeps entrepreneurs up at night and disengaged the next day: The mediating role of sleep quality and the buffering role of trait resilience. Journal of Business Venturing, 2022, 37(2). DOI: 10.1016/j.jbusvent.2021.106186.Li, Y., Zh
- [52] ang, L., Zhang, R., Xu, T. and Feng, T. The neural basis linking achievement motivation with procrastination: Left precuneus connectivity with right anterior cingulate cortex. Personality and Social Psychology Bulletin, 2022, 48(9), 1382-1392. DOI: 10.1177/01461672211040677.
- [53] Smith, B.R., Lawson, A., Dubard Barbosa, S. and Jones, J. Navigating the highs and lows of entrepreneurial identity threats to persist: The countervailing force of a relational identity with God. Journal of Business Venturing, 2023, 38(4). DOI: 10.1016/j.jbusvent.2023.106317.
- [54] Tahar, Y.B., Rejeb, N., Maalaoui, A., Kraus, S., Westhead, P. and Jones, P. Emotional demands and entrepreneurial burnout: The role of autonomy and job satisfaction. Small Business Economics (Dordrecht), 2023, 1-16. DOI: 10.1007/s11187-022-00702-w.

- [55] Bukhari, A., Alshibani, S.M. and Ali, M.A. Smart city as an ecosystem to foster entrepreneurship and well-being: Current state and future directions. Sustainability, 2024, 16(24). DOI: 10.3390/su162411209.
- [56] Thurik, R., Benzari, A., Fisch, C., Mukerjee, J. and Torrès, O. Techno-overload and well-being of French small business owners: Identifying the flipside of digital technologies. Entrepreneurship & Regional Development, 2024, 36(1-2), 136-161. DOI: 10.1080/08985626.2023.2165713.
- [57] Kumar, A., Singh, R., Gupta, R. and Sinha, P.K. Entrepreneurial competencies influence subjective well-being of subsistence entrepreneurs: Examining the mediating role of business performance. Journal of Small Business Management, 2025, 63(2), 819-848. DOI: 10.1080/00472778.2024.2358878.
- [58] Chu, V.T., Tran, H.T. and Freel, M. How civic engagement sparks entrepreneurial intention: The mediating role of well-being. Entrepreneurship & Regional Development, 2025, 37(5-6), 740-765. DOI: 10.1080/08985626.2025.2463605.