

LITERATURE REVIEW

Factors that lead to increased Burnout in digital entrepreneurs: a systematic review

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ABSTRACT

Goal: The objective of this work is to highlight the factors that lead to the increase of Burnout in digital entrepreneurs.

Design / Methodology / Approach: This is an exploratory research, developed through a systematic review of the literature.

Results: It is expected to find, analyze in detail and select articles to help understand the factors that contribute to the increase in Burnout in digital entrepreneurs.

Limitations of the investigation: The topic of this article is new to academia. Therefore, few articles were found and other factors not mentioned among them may be part of the relationship that this research seeks.

Practical implication: The study is an attempt to stop the increase in cases, as this syndrome can result in a state of deep depression and therefore it is essential to seek professional support when the first symptoms appear.

Originality/Value: The relevance lies in providing enough knowledge so that digital entrepreneurs are alert to the importance of prevention.

Keywords: Entrepreneurship; Digital, Burnout.

INTRODUCTION

There are several reasons that lead a person to open their own business. (Vale et al., 2014) state that these motivations are associated with two possibilities: need and/or opportunity. For (Guimarães et al., 2022), the COVID 19 pandemic increased the unemployment rate, causing these people to seek new sources of income.

Currently, Brazil is one of the most enterprising countries in the world with higher initial entrepreneurship rates than Germany and the United States of America, considering the total number of people involved with some entrepreneurial activity. However, the reason for most Brazilians to become entrepreneurs is necessity rather than opportunity, leading to small survival rates (Eschholz et al., 2018).

The Internet has allowed society to have uninterrupted communication, even between people from different places and, therefore, its use has expanded every day, generating changes in the cultural, social, economic and political spheres (Castells, 2003).

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The term business model has been used as: a framework that details the firm's target customers and competitors, its products or services, and its activities and resources; is used to express a theme, i.e. an overall pattern that connects the technology, operational practices and market elements of a firm's strategy; and has also been used as a broad concept to express decisions and actions related to value delivery and profit making (Nakano, 2018).

According to (Gouveia, 2020), the digital market has grown exponentially in recent years, especially in times of a pandemic. Faced with the context of social isolation, the digital medium proved to be a viable alternative to reach an audience that could not leave the house. As a result, many entrepreneurs started to undertake in the digital market.

Digital entrepreneurship is a phenomenon resulting from technological assets such as the internet, information and communication technology (Le dinh et al., 2018). Combining technology with entrepreneurship generates transformations in the products and services offered, causing a disruptive transformation in traditional management and offering opportunities for the creation of new businesses (Ries, 2012).

Digitalization can be defined as the conversion of products and services into a digital format. Digitalization is currently one of the biggest challenges for the industry, and as many companies are currently implementing digitization projects, it is crucial to evaluate which critical success factors determine if a project is successful or not. A critical success factor is a critical factor or an activity with the aim of guiding a company or an organization to success (Winkler and Zinsmeister, 2019).

According to (Cappelozza, 2018), the development and expansion of technology has led people to a digital lifestyle, affecting their behavior, their professional skills and even their psychosocial development. In addition, (Reis, 2018) states that it is possible to perceive that technology has many positive effects on human development, but there are also substantial negative effects on social relationships, cognitive structure, behavior, emotions and psychological health of each individual.

Faced with these negative consequences, (Torrès et al., 2021) warn of the increased risk for the development of Burnout syndrome. It usually presents itself through chronic emotional exhaustion, followed by the need for isolation and desensitization (personification) of the individual, resulting in reduced personal satisfaction with feelings of inadequacy (Maslach and Jackson, 1981; Maslach et al., 1996; Maslach, 1998).

There is no single definition for the Burnout syndrome, but (Farber, 1991) describes the definition, based on the clinical view, of (Freudenberger, 1974), who considers Burnout as a state of exhaustion resulting from exhausting work, leaving aside even the own needs.

As Burnout is both physical and psychological, people can experience different types of Burnout in their lives (Deliorman et al., 2009). According to (Erten and Özdemir, 2020), one type of burnout is digital, which is one of the diseases of this time. With the power in hand to use digital devices at any time of the day, making it possible to do business outside of traditionally stipulated working hours, workers end up not knowing when to stop until they find themselves in a digital burnout.

It is possible to find research on the incidence of Burnout in many occupations, especially in teachers and health professionals, but no studies on the occurrence of this syndrome in digital entrepreneurs are found. Digital Burnout is a phenomenon not yet understood (Chang, 2016).

Thus, the guiding question of this research is: according to the literature, what are the factors that lead to an increase in Burnout in digital entrepreneurs? As a result, the objective of the article is to highlight the factors that lead to the increase of Burnout in digital entrepreneurs.

The relevance of this research lies in providing enough knowledge for digital entrepreneurs to be aware of the importance of prevention. For society, it is an attempt to stop the increase in cases, as this syndrome can result in a state of deep depression and therefore it is essential to seek professional support when the first symptoms appear. In most cases, people do not seek medical help because they do not know or do not identify all the symptoms and often neglect the situation without knowing that something more serious may be happening (Ministry of Health, 2020).

This research will be presented in five sections, namely: the first introduces the research topic and definitions within a current and classic context. Then, the literature review brings a discussion of the theoretical bases in relation to digital entrepreneurship and the Burnout syndrome, on which the work was developed. The third section addresses the methodological process for surveying the literature used. The fourth section comprises the systematic analysis of the results and the fifth presents the article's conclusions and suggestions for future research.

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METHOD

This is an exploratory research, having been developed through a systematic review of the literature that seeks to answer a question of a specific problem. For this, the acronym PICO (population, intervention, comparison and outputs) was used strategically to formulate the research question. Being the population (P) the digital entrepreneurs, the intervention (I) studied the factors that influence the output (O) which is the Burnout syndrome. For the problem studied, comparison (C) was not observed.

Searches in the scientific databases Google Scholar, Web of Science and Scopus were performed on June 15, 2022. To perform the search, the Boolean connectors OR and AND were used, resulting in the following search string: ("Digital entrepreneur" OR "Digital Producer") AND ("Factor" OR "Criteria" OR "Task") AND ("Burnout").

The articles selected to compose the bibliographic base followed the recommendations of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). The step by step related to the search, selection, eligibility and inclusion of studies related to the factors that lead to the increase of Burnout in digital entrepreneurs is illustrated in Figure 1.

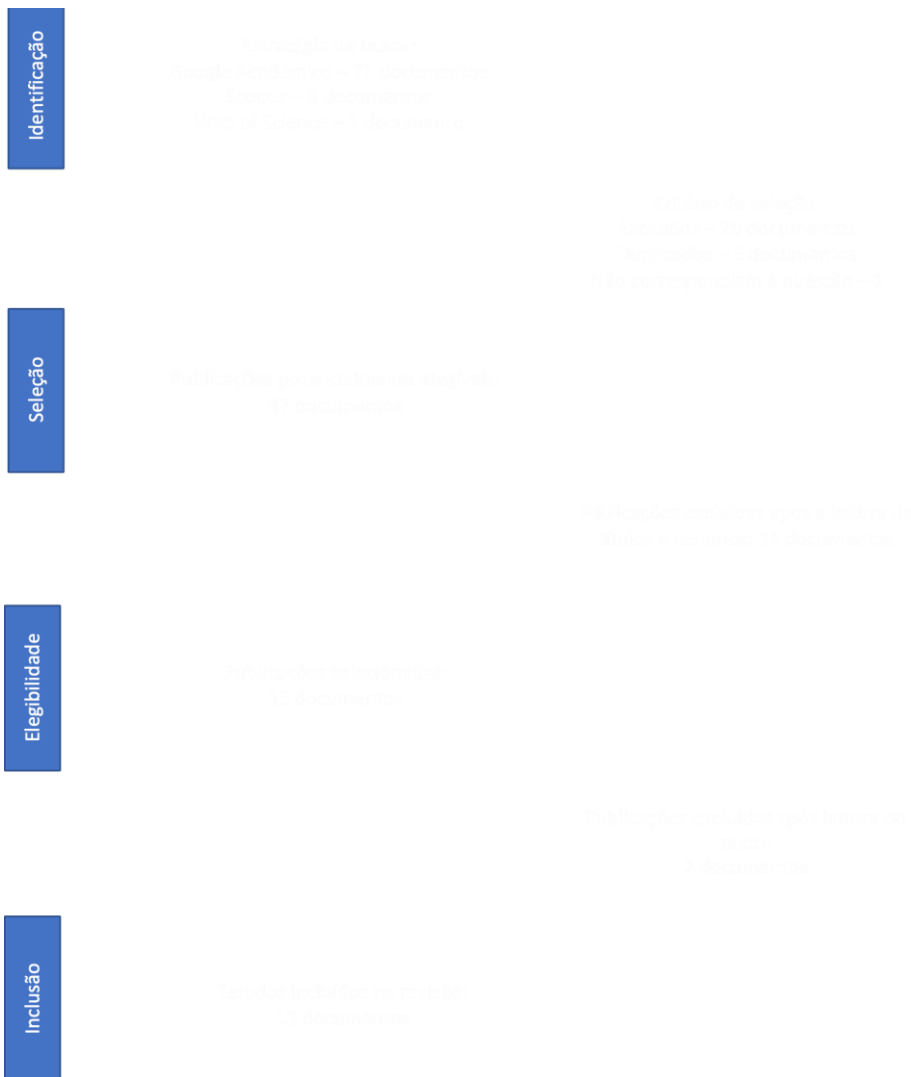


Figure 1 - Step by step for the formulation of the bibliographic base.
Source: Self elaboration.

After placing the keywords in the scientific bases, the result was 71 documents in Google Scholar, 8 documents in Scopus and 1 in Web of Science. Of these, 6 were duplicates, 26 were excluded because they were not scientific articles, and 1 was withdrawn because it did not correspond to the research question. From there, 47 publications became potentially eligible. However, not all were completely adherent to the research. Therefore, 34 documents were removed after reading the titles and abstracts. As a result, 15 articles were selected for full text reading. After reading, 2 documents were withdrawn, resulting in 13 documents included in the review.

RESULTS

The 13 selected articles were analyzed in detail to help understand the factors that contribute to the increase in Burnout in digital entrepreneurs. The articles that make up the bibliographic base are shown in table 1, which in addition to the title, brings the authors, the vehicle that was published and the year of publication.

Table 1 - Bibliographic basis of the study.

#	Title	Author	Vehicle	Year
1	Digital entrepreneurship: A research agenda on new business models for the twenty-first century	Kraus et al	International Journal of Entrepreneurial Behaviour and Research	2019
2	Dijital Tükenmişlik Ölçeği	Erten & Özdemir	İnönü Üniversitesi Eğitim Fakültesi Dergisi	2020
3	On the costs of digital entrepreneurship: Role conflict, stress, and venture performance in digital platform-based ecosystems	Nambisan & Baron	Journal of Business Research	2021
4	The burden of the digital environment: a systematic review on organization-directed workplace interventions to mitigate physician burnout	Craig et al	Journal of the American Medical Association : JAMIA	2021
5	The effect of technology, information, and marketing on an interconnected world	Huang et al	Journal of Business Research	2021
6	Passionate and engaged? Passion for inventing and work engagement in different knowledge work contexts	Toth et al	International Journal of Entrepreneurial Behaviour and Research	2021
7	Keeping up the pace of digitalization in small businesses—Women entrepreneurs' knowledge and use of social media	Olsson & Bernhard	International Journal of Entrepreneurial Behaviour and Research	2021
8	Entrepreneurs' Capacity for Mentalizing: Its Influence on Burnout Syndrome	Manzano-García et al	Public Health	2021
9	Predicting the effect of entrepreneurial stressors and resultant strain on entrepreneurial behaviour: an SEM-based machine-learning approach	Arshi et al	International Journal of Entrepreneurial Behaviour and Research	2021
10	Risk of burnout in French entrepreneurs during the COVID-19 crisis	Torrès et al	Small Business Economics	2022
11	Determining digital burnout in nursing students: A descriptive research study	Durmuş et al	Nurse Education Today	2022

12	The COVID-19 crisis and telework: a research survey on experiences, expectations and hopes	Moens et al	European Journal of Health Economics	2022
13	Digital Entrepreneurship: Future Research Directions and Opportunities for New Business Model	Baig et al	Sustainability (Switzerland)	2022

Source: Self elaboration.

After the formulation of the bibliographic base, the articles were exported to Mendeley, a free software that manages the bibliography. In order to understand the behavior of the discussion related to the selected articles, it was decided to use the VOSViewer software. As a result, it was possible to visualize the occurrence networks of important terms for the search found from the selected documents. Thus, figure 2 illustrates the main constructs related to the research.

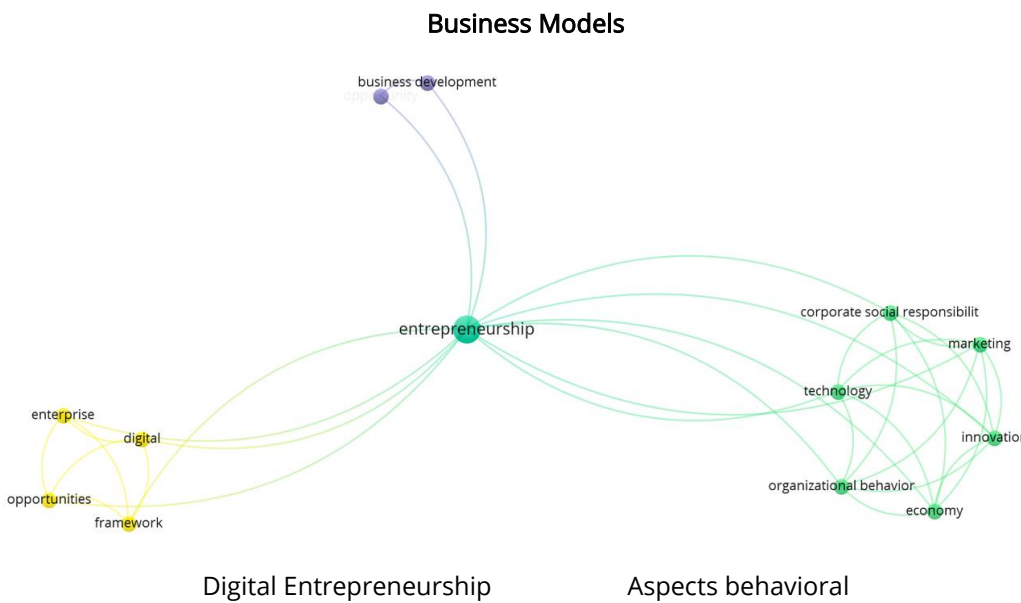


Figure 2 - Research constructs.
Source : Self elaboration.

Figure 2 shows the formation of 3 networks related to entrepreneurship. When reflecting on this, it is possible to name these networks in order to configure the research constructs, namely: digital entrepreneurship, business models and behavioral aspects. These will be the constructs discussed throughout the research.

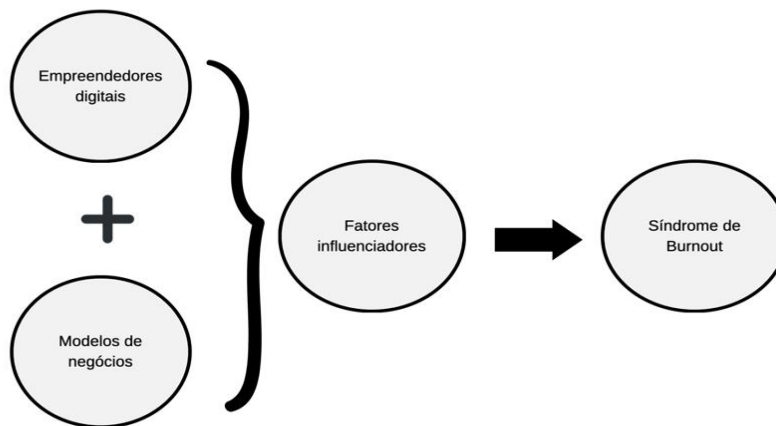


Figure 3 - Discussion of results.
Source: Self elaboration.

The schematic in Figure 3 shows how the findings of this article are related and will be

presented below.

Digital entrepreneurship

In addition to new businesses created with the opportunities arising from digitization, existing businesses shift from offline to online as well, establishing digital entrepreneurship as a new form of entrepreneurial activity. Digital entrepreneurship can then be understood as a category of entrepreneurship where part or everything that was physical was digitized (Kraus et al., 2019).

(Olsson and Bernhard, 2021) present digital entrepreneurship as the search for opportunities based on the use of digital media and other information and communication technologies and seen as the intersection of digital technology and entrepreneurship.

Digital entrepreneurship, in general, is characterized as any entrepreneurial activity that transfers an asset, service or a large part of the business to digital. Products, marketing activities and workplace are the main differentiating criteria between digital and non-digital entrepreneurs (Kraus et al., 2019).

Entrepreneurial activity is enhanced when increased market freedom and social spending complement each other. Mixed national policies that combine market freedom and social spending are best positioned to stimulate entrepreneurship (Huang et al., 2021).

It is necessary for digital entrepreneurs to be aware of differences, opportunities and threats to be successful; otherwise, the digital enterprise is at considerable risk of failure (Kraus et al., 2019).

Entrepreneurship is directly linked to risks and, according to (Huang et al., 2021), one of the major causes of the high level of what they call entrepreneurial death is the combination of the high sociocultural propensity for entrepreneurship and digital media exposure, and the absence of technological and human digital infrastructure.

Technological resources relate to the concept of digital entrepreneurship, i.e. digital entrepreneurs as entrepreneurs looking for new ways of doing business based on technology, often including a transformation from offline business to online business (Kraus et al., 2019).

The digital ecosystem, by its nature, exposes entrepreneurs to a high degree of role conflict – arising from the fact that they must fulfill the obligations of two distinct roles: as a member of the ecosystem and as a new venture leader (Nambisan and Baron, 2021).

Digital entrepreneurship has strongly affected the global business world. They are responsible for transforming communication, they have artificial intelligence that increases the quality of decision-making and the perception of real life, made the calculation, storage and exploitation of information more accessible, flexible and economical, that is, excellent opportunities for evolution business (Baig et al., 2022).

A much-discussed fragment in the academic literature on digital entrepreneurship covers the opportunities that arise through this phenomenon, but it is also essential to highlight the challenges that digital entrepreneurship entails as a consequence of latent uncertainties regarding business decisions, in relation to the extremely dynamic market, regulatory risks, in addition to the need for continuous innovation and differentiation (Kraus et al., 2018).

(Baig et al., 2022) calls these challenges as barriers faced by digital entrepreneurs and adds the difficulty of obtaining investments, gaining reliability and threats arising from the launch of new technologies.

More current research on digital entrepreneurship aims to present results that offer insights into the costs of digital entrepreneurship and indicate potential mitigation abilities (Nambisan and Baron, 2021).

Digital business models

Traditional business models are different from digital models and therefore digital entrepreneurs must be familiar with the prevailing differences, threats and opportunities to succeed. These models are defined as activities that deal with products and services, digital distribution, digitized connection with stakeholders and execution of internal digital processes (Baig et al., 2022).

Digital business models are considerably more dynamic compared to traditional businesses. Digital startup development follows redefinition steps over and over again, putting together the right team, being willing to change things and staying agile during the trial-and-error business development phase, as well as initiating networking and building valuable social capital. (Kraus et al., 2019).

Technological innovation is one of the most effective ways to help companies gain

competitive advantage. Innovation creates opportunities for entrepreneurship. The integration of technology with marketing strategy can affect the success of companies in an environment of constant change, such as the digital environment (Huarng et al., 2021).

Articles dealing with digital business models are very dominant in the existing literature. Most deal directly or indirectly with the emergence of new business models, however, digital entrepreneurship is rapidly changing at a high level and academia seems to respond by following the latest developments (Kraus et al., 2018).

In the interconnected world, technology can support improvements in many areas of business and management, including innovation, entrepreneurship, marketing, corporate social responsibility, economics and organizational behavior. Among the benefits of technology adoption by the company, the personalization of marketing elements, better forecasting of trends, disintermediation (direct engagement) and increased productivity stand out (Huarng et al., 2021).

Behavioral aspects

In an increasingly complex, changeable and unpredictable environment, entrepreneurs are considered important drivers of economic growth and the social and technical development of countries. They play a key role in creating new jobs, exploring new opportunities, designing and developing new products and services, and stimulating competitiveness. (Manzano-García et al., 2021).

When joining digital ecosystems, entrepreneurs need to surrender at least a part of their "independent mindset" and adopt an "ecosystem mindset" (Nambisan and Baron, 2021).

Technology has become an indispensable part of human life, but it has come at a high price in its behavior: digital exhaustion. This exhaustion has been increasing, presenting itself through digital aging and emotional exhaustion. Research indicates that burnout levels are measured through the average time spent online per day, stress level, physical and emotional health and economic status (Durmus et al., 2022).

To stay competitive in the market, entrepreneurs need to constantly learn new digital skills to capture the potential and keep pace in digitizing their business, being constantly present on social media, taking care of maintenance of all digital channels and platforms, dealing with comments negative on social media. And, still, find balance between personal and professional life (Olsson and Bernhard, 2020).

(Nambisan and Baron, 2021) present the importance of role conflict in understanding the behavior of entrepreneurs and the performance of the enterprise in digital ecosystems.

Digital work is a continuous journey that requires entrepreneurial behavior that includes learning and reflections along the challenges, opportunities and crises of the digital world (Olsson and Bernhard, 2021).

The understanding of stressors and their impact on behavioral aspects of tension are fundamental for the elaboration of intervention and stress coping mechanisms. Such findings can guide entrepreneurs and occupational psychologists in dealing with these stressors that hamper entrepreneur achievement and behavior and can provide guidance for overcoming or managing them (Arshi et al., 2021).

Factors

Clinical exhaustion has been considered a global crisis since 2019, where 60% of workers had at least one symptom of Burnout. The COVID-19 pandemic worsened emotional, physical and psychological exhaustion, exacerbating the health of professionals, especially those who were directly impacted economically and those who were working on the front lines of the fight against the pandemic (Craig et al., 2021). Those who had to instantly migrate from their traditional jobs to telework were also affected (Moens et al., 2021).

The phenomenon of digitization implies rapid and transformative changes. Therefore, it is important that entrepreneurs and entrepreneurship researchers are aware of the related outcomes and connections and are able to identify emerging business opportunities (Kraus et al., 2018).

Entrepreneurial activities are usually associated with a high level of ambiguity in terms of results, as the information available for decision making is usually incomplete. In addition, they tend to have long, intense working hours to keep the business in the market reaching its goals. These circumstances, among others, contribute to the emergence of Burnout syndrome (Manzano-García et al., 2021).

The opportunities created and restrictions associated with the digital platform generate a characteristic known as role conflict in the profile of the digital entrepreneur. This conflict and

its effects are, for example, a capacity that those who wish to enter this digital ecosystem must acquire (Nambisan and Baron, 2021).

Digital ecosystems require entrepreneurs to simultaneously fulfill two roles: ecosystem member and new venture leader. Often these roles are incompatible, generating conflict and high levels of stress (Nambisan and Baron, 2021).

There are certain specific job demands for entrepreneurs based on their job characteristic (compared to salaried workers), such as: time demands, uncertainty, risk, responsibility where they will certainly experience a higher level of stress (Torrès et al., 2021).

In order to measure digital burnout, (Erten and Özdemir, 2020) concluded two subscales derived from the many hours of screen exposure: digital aging, which is the inability to find a balance between the real and virtual world; and digital deprivation, which refers to the fact that a person feels bad when moving away from screens.

Although previous research has focused its efforts on investigating the stress-performance relationship, often focusing on personality factors. In contrast, (Nambisan and Baron, 2021) focus on self-control, an aspect of self-regulation that can be acquired and serve to mitigate the costs of digital entrepreneurship.

Entrepreneurs must understand that adverse events are temporarily caused by factors beyond their control, while positive events are personally determined, and in the face of this, build self-efficacy and resilience by focusing on past successes and reframing their emotional responses to stressful situations (Arshi et al., 2021).

Symptoms

Burnout syndrome is a threat to workers of any profession, as it is a state of physical, emotional and mental exhaustion. The syndrome was first documented in the 1970s, but burnout among entrepreneurs has become an interesting topic recently (Torrés et al., 2022).

Digital Burnout is a recent phenomenon and its first results show that much of the stress and tension are caused by long hours of work causing burnout. Digital detox and recess are needed to deal with digital burnout. Lack of concentration is one of the main symptoms of digital burnout and they are unable to disconnect their minds from digital devices. Multitasking and information overload tend to cause depression and cardiovascular disease (Erten and Özdemir, 2020).

Burnout is a mental disorder that causes difficulties for the entrepreneur to control his personal and professional life. The most common consequences of Burnout in entrepreneurs include the subject experiencing low motivation, low organizational commitment, loss of energy, demoralization in relation to their work, poor quality at work, feeling of failure and the perception that the company is performing poorly. (Manzano-Garcia et al., 2021).

Burnout in digital entrepreneurs is commonly measured using the Digital Burnout Scale (Durmus et al., 2022); which is made up of the following factors: "Digital aging" which focuses on a person's inability to find a balance between the real world and the virtual world as a consequence of the amount of time spent on digital platforms.

Another factor is called "digital deprivation" which measures how badly a person can feel physically or psychologically when they stay away from digital platforms. And finally, the "emotional exhaustion" factor that measures how emotionally exhausted the person is (Durmus et al., 2022).

The scale was developed to detect Burnout syndrome due to the use of digital technologies in everyday life, and can be considered reliable and valid for this purpose due to exploratory and evidentiary analyzes (Erten and Özdemir, 2020).

There are still other methods to identify Burnout: Maslach Burnout Inventory (MBI), which includes subscales related to depersonalization, emotional exhaustion and personal fulfillment; Proxy Measures of Burnout that includes satisfaction and stress; Satisfaction Studies that measure results of satisfaction, professional fulfillment, well-being and joy; and Stress Studies that include outcomes of stress, psychological (and cognitive) strain and distress at work (Craig et al., 2021).

Digital burnout occurs as a result of excessive time spent on digital devices, and over time, stress, fatigue, desensitization to the environment, loss of interest, and physical and mental problems occur (Erten and Özdemir, 2020).

CONCLUSION

The number of digital entrepreneurs has grown worldwide, especially after the COVID-19 pandemic. With this growth, several impacts were observed. Some can be considered positive, such as the economic impacts caused by digital ventures. While others are negative, in

particular with regard to the social relationships and mental health of this group of individuals.

In this way, the objective of the article was to highlight the factors that lead to the increase of Burnout in digital entrepreneurs, according to the literature. After conducting the research, it was possible to infer that there are two axes that lead digital entrepreneurs to develop the Burnout syndrome. The first is related to the various roles played by these people. The second concerns the business model developed to deliver value to the customer.

These axes lead digital entrepreneurs to develop behaviors that make them more prone to emotional burnout. Such factors are associated with a strenuous workday, the conflict of roles experienced by them, the high number of hours exposed to the screen and the high level of emotional intelligence required of them.

Despite the great relevance and emergence of conducting this research, there is a limitation of external validation with regard to the results found. Therefore, it is suggested that the results found here are then taken to other people in order to collect their perceptions and validated (or not) through robust scientific methods.

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