

Under Pressure: Anxiety, Depression, and Burnout Among Women Leaders and its Impact on Entrepreneurial Performance

Baixo presión: ansiedad, depresión e esgotamento entre as mulleres líderes e o seu impacto no rendemento empresarial

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Abstract

This study examines the psychological challenges faced by women in business leadership positions, focusing on anxiety, depression, and burnout among female entrepreneurs and executives in Spain (N=199). Using the Goldberg Anxiety and Depression Scale and Burnout Clinical Subtype Questionnaire, the research reveals significant findings: 77.89% of participants exhibited anxiety symptoms, while depressive symptoms were less prevalent but notable, with 71.36% reporting energy deficits. The sample comprised highly educated women (82.41% with tertiary degrees) averaging 47.01 years of age and 19.57 years of professional experience. While burnout levels were generally low, presenteeism affected 53.54% of participants, with self-reported work performance averaging 73.5/100. The study addresses a critical gap in empirical research on mood disorders among female leaders, demonstrating how emotional and psychological pressures impact managerial performance. The findings underscore the need for mental health policies encompassing both organisational and considerations related to the work environment.

Keywords: Women entrepreneurship; Gender; Health economics; Mood disorders; Presenteeism; Absenteeism; Resilience.



Resumo

Este estudo analiza os desafíos psicolóxicos aos que se enfrentan as mulleres en posiciones de liderado empresarial, centrándose na ansiedade, a depresión e o *burnout* entre emprendedoras e directivas en España (N=199). Utilizando a Escala de Ansiedad e Depresión de Goldberg e o Cuestionario Clínico de Subtipos de *burnout*, a investigación revela achados significativos: o 77,89 % das participantes presentou síntomas de ansiedade, mentres que os síntomas depresivos foron menos prevalecientes, aínda que destacables, cun 71,36 % reportando déficits de enerxía. A mostra estivo composta por mulleres altamente cualificadas (82,41 % con estudos terciarios), cunha idade media de 47,01 anos e unha experiencia profesional media de 19,57 anos. Aínda que os niveis xerais de *burnout* foron baixos, o presentismo afectou ao 53,54 % das participantes, cun rendemento laboral *autoinformado* de 73,5 sobre 100. O estudo aborda unha lagoa crítica na investigación empírica sobre os trastornos do estado de ánimo en mulleres líderes, demostrando como as presións emocionais e psicolóxicas inciden no desempeño directivo. Os resultados subliñan os desafíos específicos que enfrentan as mulleres ao compaxinar roles de liderado coas expectativas sociais e domésticas.

Palabras clave: Emprendemento feminino; Xénero; Economía da saúde; Trastornos do estado de ánimo; Presentismo; Absentismo; Resiliencia.

JEL classification: M12; M14; J16.

1. INTRODUCTION

Entrepreneurs, executives, and any individuals in decision-making positions are frequently exposed to emotionally tense situations that they must manage in order to navigate the challenges of business administration, ensuring the continuity of the enterprise and achieving milestones that secure successful market positioning (Stephan, 2018). Those emotionally tense situations, accompanied by stress, affect the venture and also their well-being. There is an abundant literature that has explored stress in the work environment, and particularly in the entrepreneurship work (Lerman et al., 2021; Neneh, 2024). Despite the relevance of stressors potentially leading to mood disturbances, anxiety symptoms, or even burnout, references in the literature specifically addressing such manifestations among women in corporate decision-making roles remain exceedingly scarce. Moreover, within the general population, some studies suggest a certain degree of controversy (Purvanova & Muros, 2010). Some studies suggest that certain stressors, for individuals in positions of responsibility, may act as motivators, whereas for others, they become obstacles (Lerman et al., 2021). In this regard, some authors even argue that the level of psychological capital serves as a protective factor against emotional and motivational consequences (Ross et al., 2021).

The emotional response to work-related conditions has long been a subject of interest within occupational psychology, leading to the development of explanatory theoretical frameworks. One such theoretical model of psychological stress in the workplace is the 'job demand/job control' model (Jönsson et al., 2003; Karasek, 1979; Karasek & Theorell, 1990; Pinto et al., 2014). According to this model, when job demands are high and the degree of control over one's work is low, a detrimental form of stress arises that negatively impacts health. This is a theoretically relevant aspect for the practical observation of women in leadership roles, as their daily activity typically involves high demands, yet their leadership position affords them a certain degree of control. Other studies (Elovainio et al., 2007) have reinforced this line of inquiry, indicating that psychological distress—not exclusively among individuals in leadership positions—is essentially associated with the interplay between job control and job strain.

The role of mood disorders, symptoms of anxiety, and particularly the so-called burnout syndrome is a matter of particular interest within a population of women in executive positions, whose responsibilities constitute the motivation for this study. For women executives and in entrepreneurial positions, the pressures associated with management may be intensified by the self-perceived performance (Mouratidou et al., 2024), or by the domestic roles they typically balance alongside their professional activities (De Clercq & Briege, 2022). Family dynamics and achievement expectations placed on women entrepreneurs can act as stressors or even barriers to entrepreneurship, as highlighted by some studies (Dewitt et al., 2023). The literature has already addressed this issue, analysing the balance between personal and professional life for women entrepreneurs (Kaciak & Welsh, 2020) and emphasizing the importance of public policies in maintaining this balance (Eddleston & Powell, 2012). Additionally, the link between mood disorders, anxiety, and burnout in the workplace has been studied in various works (De Clercq & Briege, 2022; Hakanen et al., 2008). However, issues related to mental health and its impact on the work performance of women entrepreneurs remain a scarcely studied topic.

Anxiety is defined as the anticipatory emotional response to an imminent threat, whether real or imagined. The global prevalence of anxiety is estimated to be around 7.3%. In Europe, it stands at 1.8%, with higher rates among women (1%-5.6%) than men (0.6%-1.5%) (Reyes Marrero & de Portugal Fernández del Rivero, 2019). The World Health Organization (World Health Organization, 2025) reports that anxiety disorders impacted 301 million individuals

suffering, data for the year 2019. Stress is the physiological response to anxiety, often characterized by headaches, discomfort, tension, fatigue, stomach upset, or loss of sleep. Generally, it is transient and can be either positive (eustress), motivating the individual to overcome the difficulty, or negative (distress), which exhausts the person, preventing clear thinking to resolve the source of concern. Depression is a mood disorder that may include symptoms such as sadness, a sense of emptiness, frustration, and irritability, feelings of guilt, worthlessness, or helplessness, anhedonia or loss of interest in pleasurable activities, and cognitive difficulties in concentrating, remembering, or making decisions. Additionally, it can lead to loss of appetite and weight, pain, and other physical symptoms. In more persistent and severe cases, it may include suicidal ideation and even suicide attempts (Mayo Clinic, 2023). According to WHO (2022) data, by 2019, depression affected approximately 280 million people globally, representing 5% of the adult population. This condition is more prevalent in women than men. Burnout syndrome is an inadequate response to a process of chronic stress specifically related to the work environment. Gil-Monte and Peiró (1999) define it as a reaction to prolonged work-related stress, which involves negative attitudes and feelings towards colleagues and one's own work, along with a sense of exhaustion. Regarding burnout, WHO (2022) stated that around 25% of workers experienced this syndrome, though WHO notes that the figure has gradually declined since the end of the COVID-19 pandemic.

Mood disorders, in addition to their psychological effects, are associated with productivity losses and entail related social costs (Collins et al., 2005; Despiégel et al., 2012). Psychological disorders such as depression, anxiety, and the characteristic conditions of burnout syndrome can lead to absenteeism, that is, absences from work due to leave or even medical sick days. Absenteeism is typically measured by the number of days absent; in contrast, presenteeism is more challenging to quantify. Presenteeism is characterized by a reduction in performance without physical absence from the workplace, linked to a lack of focus on the task at hand. The individual is not fully engaged in their work activities during working hours (Adler et al., 2006; Schultz et al., 2009). The connection between burnout, job dissatisfaction, absenteeism, and presenteeism has been corroborated in a literature review (Salvagioni et al., 2017). Some authors (Kiefl et al., 2024) have highlighted the link between presenteeism and workload, which tends to be high among small entrepreneurs, as the entire responsibility for the business falls on them. The evidence remains somewhat controversial. While some studies indicate that entrepreneurship can lead to toxic stress levels, they also find that, on average, entrepreneurs experience less job burnout than employees. According to certain authors, solo entrepreneurs exhibit the lowest burnout risk compared to other entrepreneurial groups (Obschonka et al., 2023). In this sense, professional experience has been proposed as a factor that helps reduce emotional disturbances associated with decision-making in individuals holding managerial or entrepreneurial positions (Serna-Zuluaga et al., 2024). In this regard, several studies have underscored the importance of coping strategies among entrepreneurs to ensure their mental health (Kiefl et al., 2024).

Despite the marked interest in the influence of emotional and psychological factors in general among entrepreneurs and individuals in decision-making positions, as well as the controversies raised, evidence specifically regarding women in these roles remains limited. The novelty of this study lies in assessing the incidence of mood disturbances, anxiety, and burnout among a population that, to the best of our knowledge, has been the focus of very few empirical studies: women in decision-making roles, entrepreneurs, and executives. The aim is to explore potential links between these psychological disturbances and the demographic profiles and labour market positions of these women. Additionally, the study seeks to determine whether there is any relationship between these psychological signs and perceptions of performance,

absenteeism, and presenteeism, given the implications these factors have for business management and viability.

Consequently, the primary objective of this study is to analyse the relationship between mood disorders and the socio-professional profile of female entrepreneurs or executives. Given the impact of the business class on the generation of wealth within a country or region, obtaining reliable information on whether high levels of stress impair decision-making is of particular relevance. The study is structured around two hypotheses. The main hypothesis (H1) is that female entrepreneurs and executives exhibit more symptoms of anxiety than of depression. This predominance of anxiety contributes to maintaining motivation and resilience in the face of adversity, resulting in relatively low levels of burnout within this population. In line with this, the second hypothesis (H2) posits that the presence of mood-related symptoms has a minimal impact on absenteeism and medical leave rates.

The structure of the manuscript is organised as follows: an *Introduction*, which outlines the relevance of the study and the scarcity of similar research, supported by various bibliographic references that highlight the study's contribution to addressing a knowledge gap. The *Methods* section describes the procedure followed, including ethical committee approval, sample size, the instruments administered, and the rationale for their selection. The *Results* section presents the findings without interpretation, alongside the statistical tests employed and their corresponding outcomes. The *Discussion* is focused on interpreting the results in light of existing knowledge. The *Conclusions* section reflects the authors' interpretation of the findings. Finally, the manuscript includes a section on the *Practical implications and potential applications* of the study, as well as a section addressing its *Limitations* and proposing *Future lines of research*.

2. METHOD

This study was conducted using a non-random cross-sectional design based on a sample obtained through the selfless/disinterested collaboration of businesswomen and executives of Galicia. Galicia is a region at the northwest of Spain. In the compilation of data has been key the support of "Woman Emprende" an initiative by the University of Santiago de Compostela (Spain), which promotes entrepreneurship among female university students in Galicia; and the association of businesswomen and executives "Executivas de Galicia". "Executivas de Galicia" is an association with a strong representation of the female entrepreneurial community in Galicia. The last one comprises nearly 300 professionals from various executive and managerial fields, both public and private. The design of this study was previously approved by the Ethics Committee of the University of Murcia (Spain), registration no: 3512/CEIH/2023. No data that could identify the respondents, nor any data that could allow identification through cross-referencing, was gathered to ensure the anonymity of the participants (e.g., the name of the company or information regarding residence data below the provincial level was not recorded). The people who analysed the data were blind to the origin of it. As an inclusion criterion, participants were required to provide informed consent, be female, and currently hold a position as a business owner or executive within a company.

A total of 223 women in positions of responsibility and/or business ownership responded to the questionnaire. After excluding incomplete cases in essential elements (e.g., not responding to the mood and burnout questionnaires, women in employee positions, neither executives nor business owners), a total of 199 cases were analysed. Data were collected from mid-February to mid-May 2024.

The questionnaire was divided into four sections, requesting: a) information related to their sociodemographic profile, b) data on health and mood status, including the Goldberg Anxiety and Depression Scale (Goldberg et al., 1988) (see Appendix 1) and the Burnout Clinical Subtype Questionnaire (BCSQ-12) Montero-Marín et al., 2011), c) questions regarding the impact on their social and personal lives, and d) data concerning the personal economic repercussions related to their mood over the past 12 months (see Appendix 2). The mood and burnout questionnaires, following their respective protocols, referred to the preceding two weeks.

The Goldberg Anxiety and Depression Scale (GADS) is designed to be used by non-psychiatrists and provides dimensional measures of the severity of each disorder. Each section consists of nine questions addressing signs of anxiety and depression, respectively. The full set of nine questions should only be administered if there are positive responses to the first four. In the anxiety section, at least two positive answers are required among the first four questions to proceed with the remaining five. In the depression section, at least one positive response among the first four questions is necessary to continue with the remaining five questions. Thus, scores range from 1 to 9 in each section, and consequently from 1 to 18 in the entire test. The Goldberg test has been validated across various clinical and non-clinical settings (George et al., 2011; Montenegro Peña et al., 2013), as well as among different population groups, including the assessment of outcomes by gender. In this case, no differences attributable to gender were found in the test results (Leach et al., 2008).

Burnout has conventionally been conceptualised as a multidimensional construct encompassing *exhaustion*, *cynicism*, and *inefficiency*. The Burnout Clinical Subtype Questionnaire (BCSQ-12) Montero-Marín et al., 2011) has identified three distinct subtypes: the *frenetic* subtype, associated with *overload*; the *under-challenged* subtype, linked to a *lack of development*; and the *worn-out* subtype, connected to *neglect*. The BCSQ-12, which operationalises the dimensions of overload, lack of development, and neglect, is posited as a succinct yet theoretically grounded instrument for capturing the diverse phenomenological expressions of burnout. According to the test authors, the BCSQ-12 offers advantages over the *gold standard* instrument for measuring burnout, the Maslach Burnout Inventory General Survey (MBI-GS) (De Beer et al., 2024; Maslach & Jackson, 1981), in characterising work-related discomfort experienced in relation to one's occupation. The BCSQ-12 has been employed with various types of populations (Abós et al., 2021; Montero-Marín et al., 2011) and has been specifically validated with the Spanish population. The test comprises 12 statements that individuals are required to rate on a scale from 1 to 7, where 1 indicates strong disagreement with the statement, and 7 indicates strong agreement. Consequently, the total score on the burnout test ranges from 12 (indicating a very low level of burnout) to 84 points (indicating the highest level of burnout).

In the BCSQ-12 test, the items are additionally grouped into three dimensions: *Overload*, *Lack of Development*, and *Neglect*. The *Overload* dimension includes items related to: excessive dedication to work, restriction of personal life, the perception that work poses a health risk, and the neglect of personal needs. The *Lack of Development* dimension comprises items about: the desire for another job, the view that work is an obstacle to personal development, the belief that work limits the expression of talent, and the consideration of work as a limitation of personal opportunities. The *Neglect* dimension includes items related to: the desire to leave the job, the capacity to resist frustration, the intention to abandon work when faced with difficulties, and items related to the willingness to give up at work when it requires more effort.

3. RESULTS

First, the data from the descriptive statistical analyses, based on central tendency and dispersion measures —means, medians, and standard deviations (SD)— are presented. Correlation analyses are then performed. When applicable, a robust linear correlation or ANOVA was conducted, depending on the type of variables. In cases where the criteria for these tests were not met, a non-parametric test was used: either the Kruskal-Wallis test or Spearman's rank correlation, depending on the characteristics of the variables. Finally, the analysis was completed by applying a binary logistic regression to estimate the probabilities of absenteeism based on other variables of interest in the study. The odds ratios were calculated. For the data analysis, the statistical software Stata 14.1 was used.

3.1. Sociodemographic characteristics

Table 1 provides a summary of the sociodemographic characteristics of the population under study. The mean age of the women surveyed is 47.01 years (SD 9.28). The mean age varies according to marital status, being lowest among single women (40.32 years, SD: 9.10) and highest among widows (55.6 years, SD: 0.84). The number of children is similar across all cases. The highest number is found among widows (1.59 children, SD: 0.73) and married women (1.56 children, SD: 0.99). The lowest is among single women (0.34 children, SD: 0.76). Regarding children under 18 years of age, the highest figure is among married women (0.76 children, SD: 0.87) and the lowest among single women (0.31 children, SD: 0.70).

Table 1. Main socio-demographic characteristics of the sample (N = 199)

Variable	Value	Mean or % (SD)
Sex (*)	Women	100%
Age	Years	47.01 (9.28)
Marital status	Married (**)	52.76%
	Single	29.65%
	Divorced	14.57%
	Widow	2.51%
	Other	0.50%
Number of children	Number	1.20 (1.05)
Number of children under 18 years of age	Number	0.62 (0.83)
Do you have a dependent in your care?	Yes	34.67%
Relationship with the dependent (if applicable)	Minors	63.77%
	Adults	18.84%
	Both	17.39%
Educational level, according to the ISCED-2011 classification (International Standard Classification of Education 2011(EuroStat, 2024))	Level 0 – Early childhood education ('less than primary' for educational attainment)	0.00%
	Level 1 – Primary education	1.51%
	Level 2 – Lower secondary education	3.52%
	Level 3 – Upper secondary education	4.52%
	Level 4 – Post-secondary non-tertiary education	8.04%

	Level 5– Short-cycle tertiary education Level 6 Bachelor's or equivalent level (***)	36.18%
	Level 6 – Master's or equivalent level Level 7- Doctoral or equivalent level (***)	46.23%
Seniority in the labour market (in years)	General sample	19.57 (10.23)
	Businesswoman	17.39 (10.51)
	Executive	21.54 (9.87)
	Both positions	20.26 (9.95)
Tenure in the current position (in years)	General sample	9.91 (8.84)
	Businesswoman	8.82 (8.58)
	Executive	11.40 (8.84)
	Both positions	9.92 (9.05)
Legal form of the company	Limited Liability Company (LLC)	26.63%
	Employee-owned private limited company	1.01%
	Single-member private limited company	1.01%
	Civil partnership	2.01%
	Self-employed individual	53.77%
	Cooperative	3.02%
	Public limited company (PLC)	5.03%
	Public Administration	2.01%
	Non-Governmental Organisation (NGO)	3.52%
	Others	2.01%

(*) The sample consisted only of women. (**) It includes civil unions. (***) These levels of studies were analysed in aggregate.

Among the women who identified themselves as businesswomen, the most common legal form of practice was as self-employed (78.87%). Among those who defined themselves as executives but not self-employed, the majority worked in limited liability companies (LLC) (30.77%). Large commercial companies, specifically Public Limited Companies (PLC), represented a small percentage of the sample, accounting for 5.03% of the total. Across the entire sample, the most frequent professional practice was as self-employed (53.77%). For those who indicated that they held both positions, businesswomen and executives, the most common form was again as a self-employed professional (44.74%). Experience, measured as seniority in the labour market, as shown in [Table 1](#), is approximately 20 years (19.57 years, SD: 10.23), while tenure in the current position is around 10 years (9.91 years, SD: 8.84). As can be seen in [Table 1](#), it is higher in the case of executives, 11.40 years (SD: 8.84).

For the subsequent analysis, the legal forms of the companies will be grouped into five categories: those where personal asset risk is limited (PLC, Employee-Owned PLC, Single-Member PLC); those structured as partnerships but without limitation of personal asset risk (Civil Partnership, Cooperative); Self-Employed Individual; Public Limited Company (PLC); and those that are non-profit or not considered commercial enterprises (Public Administration, NGO, and others).

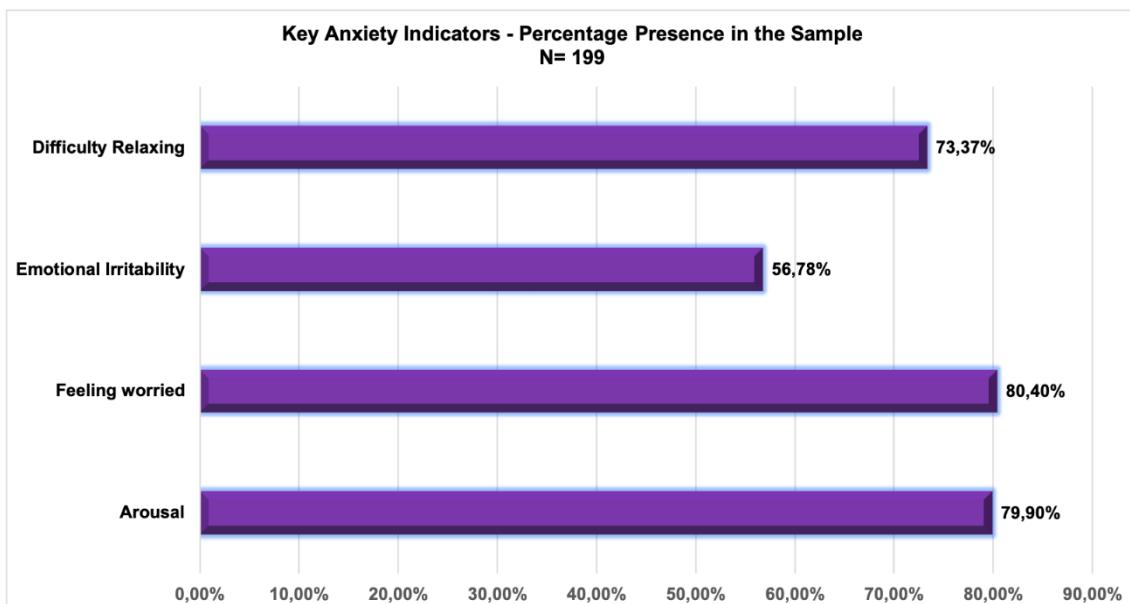
3.2. Signs of Anxiety, Depression and Burnout

This section will describe the main results of the paper. On the anxiety scale, the mean score was 6.23 points (SD: 3.31), with the 50th percentile at 7 points. On the depression scale, the mean score was 4.43 points (SD: 3.24), with the 50th percentile at 5 points. Overall, on the Goldberg Anxiety and Depression Scale, the mean score was 10.66 points (SD: 5.87), with the 50th percentile at 12 points.

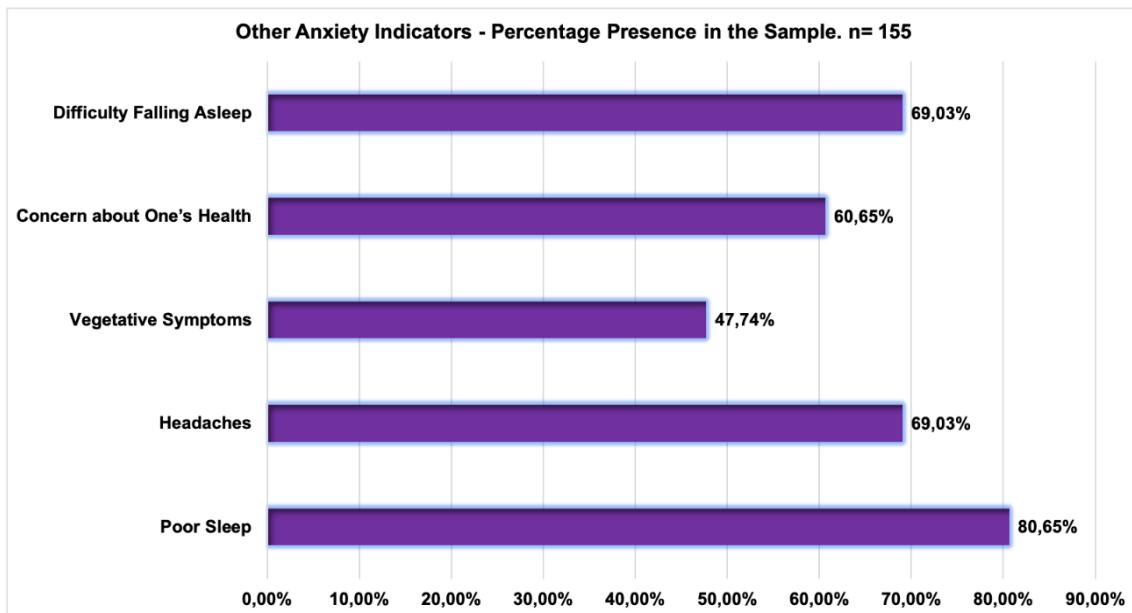
Signs of anxiety

77.89% of the sample exhibited at least two of the principal signs considered in the anxiety test (Arousal, Feeling Worried, Emotional Irritability, Difficulty Relaxing). In these four indicators, the percentage of the sample displaying them was consistently above 56%. In three of these indicators, as illustrated in [Figure 1](#), the prevalence exceeded 73%, reaching as high as 80.40% in the case of feelings of worry.

Figure 1. Key anxiety indicators – Percentage presence in the sample. N = 199



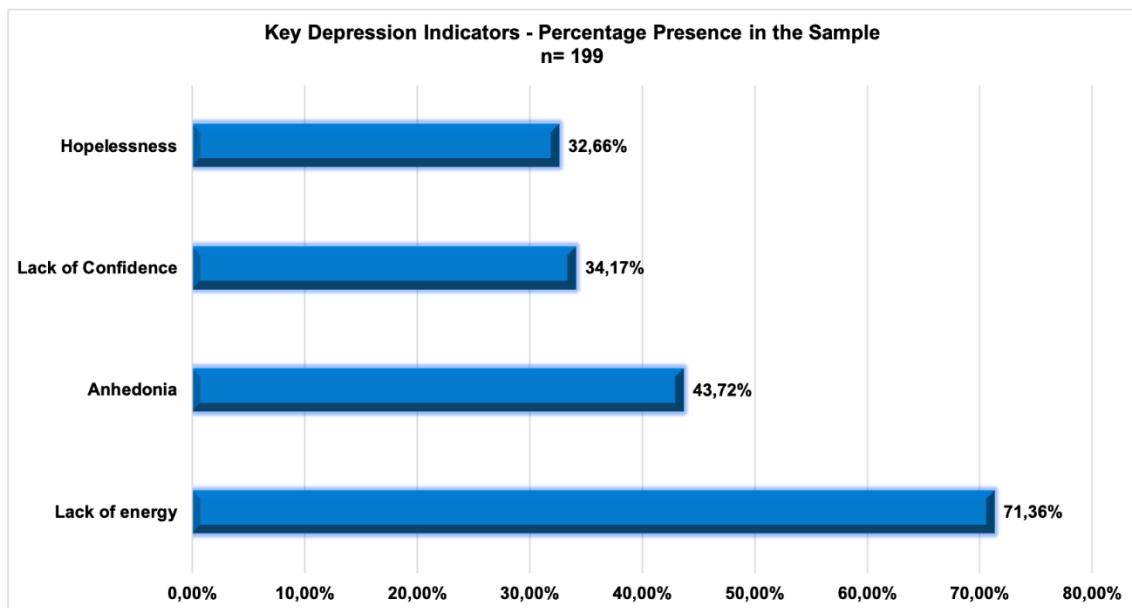
According with the instructions of the test, individuals who exhibited at least two principal signs of anxiety were asked to complete the following five items on the questionnaire. As shown in [Figure 2](#), the primary complaints related to sleep quality, reported by 80.65%, and difficulties in falling asleep, expressed by 69.03% of those who responded.

Figure 2. Other anxiety indicators – Percentage presence in the sample. N = 155

Signs of depression

The signs of depression were less prevalent in the analysed sample. In the test related to this mood disorder, the four principal indicators (Lack of Energy, Anhedonia, Lack of

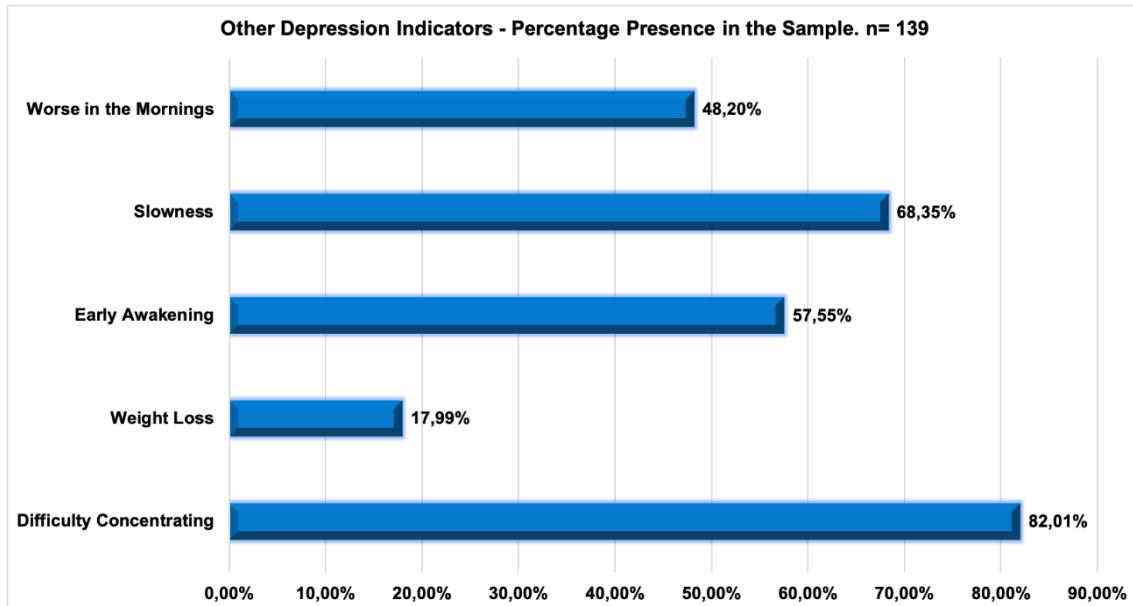
Confidence, Hopelessness) were observed at rates ranging from 32.66% for Hopelessness to 71.36% for Lack of Energy. See [Figure 3](#).

Figure 3. Key Depression Indicators – Presence in the sample. N = 199

When at least one of these signs was present, which occurred in 69.85% of the cases, participants were asked to complete the remaining five items of the depression scale. Among the cases of individuals who completed the depression test, as shown in [Figure 4](#), the primary

complaint was related to difficulty concentrating, present in 82.01% of respondents, followed by feelings of slowed thinking (bradypsychia), reported by 68.35%.

Figure 4. Other Depression Indicators – Percentage Presence in the Sample. N = 139



Burnout

The level of burnout was measured using the Burnout Clinical Subtype Questionnaire (BCSQ-12) (see [Appendix 2](#)). The score for each item ranged from 1 to 7 points, which were grouped into three intensity levels for analysis based on the scores: low (1-2), medium (3-4), and high (5-7). The levels according to the scores within the sample are presented in [Table 2](#) and [Figure 5](#).

Table 2. Scores on the Burnout Clinical Subtype Questionnaire (BCSQ-12). Percentages by levels of grouped scores: low (1-2), medium (3-4), and high (5-7)

Item	Low	Medium	High
<i>Overload dimension</i>			
1 Excessive dedication to work	15,15%	13,64%	71,21%
4 Neglect of personal life when facing challenges	22,22%	28,79%	48,99%
7 I risk my health in pursuit of good results at work.	22,22%	29,80%	47,98%
10 I neglect my own needs.	17,68%	24,75%	57,58%
<i>Lack of development dimension</i>			
2 Would like a more challenging job	54,55%	24,75%	20,71%
5 I consider work an obstacle to the development of my skills	61,62%	22,73%	15,66%
8 I would like another job where I can develop my talent.	56,06%	18,18%	25,76%
11 My job does not offer opportunities to develop my skills.	58,59%	20,20%	21,21%
<i>Neglect dimension</i>			

Item		Low	Medium	High
3 Desire to leave the job when faced with difficulties		70,20%	21,72%	8,08%
6 I give up in the face of difficulties (Frustration tolerance)		75,76%	14,65%	9,60%
9 I give up in the face of any difficulty.		75,25%	16,16%	8,59%
12 When the effort I invest in work is insufficient, I yield.		59,09%	29,80%	11,11%

Items 1, 4, 7, and 10 comprise the Overload dimension. Items 2, 5, 8, and 11 comprise the Lack of Development dimension. Items 3, 6, 9, and 12 comprise the Neglect dimension.

The mean score on the burnout test was 37.90 (SD: 13.54). The 50th percentile was 37 points. In the Overload dimension, the mean score was 18.11 (SD: 5.91), with the 50th percentile at 19 points. For the Lack of Development dimension, the mean score was 11.22 (SD: 6.79), with the 50th percentile at 10 points. In the Neglect dimension, the mean score was 8.67 (SD: 5.13), with the 50th percentile at 7 points.

As can be observed in [Table 2](#), only in item 1, related to Excessive dedication to work, is the intensity predominantly high, with 71.21% of responses at this intensity. This is followed by item 10, related to neglection of personal needs, where there are high-intensity responses in 57.58% of cases. The majority of responses regarding the intensity of burnout signs are of a low level.

Table 3. Intensities of burnout levels based on position (businesswomen, executives, and those occupying both positions) and dimensions—Overload, Lack of Development, and Neglect

Intensity	Overload	Businesswoman	Executive	Both positions
Low	15,15%	15,49%	19,61%	11,84%
Medium	37,88%	39,44%	37,25%	36,84%
High	46,97%	45,07%	43,14%	51,32%
Total	100%	100%	100%	100%
	Lack of development	Businesswoman	Executive	Both positions
Low	58,59%	57,75%	47,06%	67,11%
Medium	27,78%	25,35%	41,18%	21,05%
High	13,64%	16,90%	11,76%	11,84%
Total	100%	100%	100%	100%
	Neglect	Businesswoman	Executive	Both positions
Low	76,77%	70,42%	82,35%	78,95%
Medium	19,19%	22,54%	15,69%	18,42%
High	4,04%	7,04%	1,96%	2,63%
Total	100%	100%	100%	100%

As can be seen in [Table 3](#), when analysing burnout levels across the three dimensions — Overload, Lack of Development, and Neglect — the only dimension where high percentages are observed is in relation to Overload. Here, 46.97% of the sample exhibits high levels. In the other two dimensions, low intensity levels prevail. When examining the data by position, businesswomen consistently show higher levels across all three dimensions compared to executives and those holding dual positions, in all three burnout dimensions. The criteria for normality and homoscedasticity were assessed to determine whether a correlation between position and the score on the Overload dimension could be verified using an ANOVA test. The

criteria were met. The ANOVA test yielded a p-value of 0.1875, indicating that no statistically significant relationship can be established between the position held and the level of Overload within the burnout scale.

It was examined whether there was a relationship between the results of anxiety, depression and burnout tests and the individual's position within the company. To do so, the assumptions for conducting an ANOVA (normality and homoscedasticity) were first tested. Since these assumptions were not met, the non-parametric Kruskal-Wallis test was employed. In none of the cases was a significant relationship found between the variables.

Similarly, it was examined whether a relationship existed between levels of anxiety, depression, and burnout, and both tenure in the labour market and tenure in the current position. Since the scores on the anxiety and depression and burnout tests can be considered ordinal with a defined range, and the tenure variables as quantitative, Spearman's rank correlation, a non-parametric measure that does not assume a linear relationship but a monotonic one, was applied. No statistically significant relationship was found between the anxiety and depression and burnout scores and the years of tenure in the labour market and current position.

3.3. Absenteeism and Presenteeism

8.18% of the sample indicated that they had experienced absences from work (not requiring medical leave) in the past 12 months that they attributed to their mood or to anxiety signs. Among those who had this type of absence, 69.44% also associated it with a poor work environment. The proportion of individuals who had taken medical leave was 17.09%.

Among women who reported medical leave from work in the past 12 months, the average was 23.44 days (SD: 68.26), although the variation is quite high. The 50th percentile is 3 days, and the 75th percentile is 14 days. The pattern is similar for work absences that do not involve medical leave. The average is 39 days (SD: 80.09), but the variation is substantial. The 50th percentile is 8.5 days, and the 75th percentile is 17.5 days. This suggests that a small number of individuals account for a significant portion of both work absences and medical leaves.

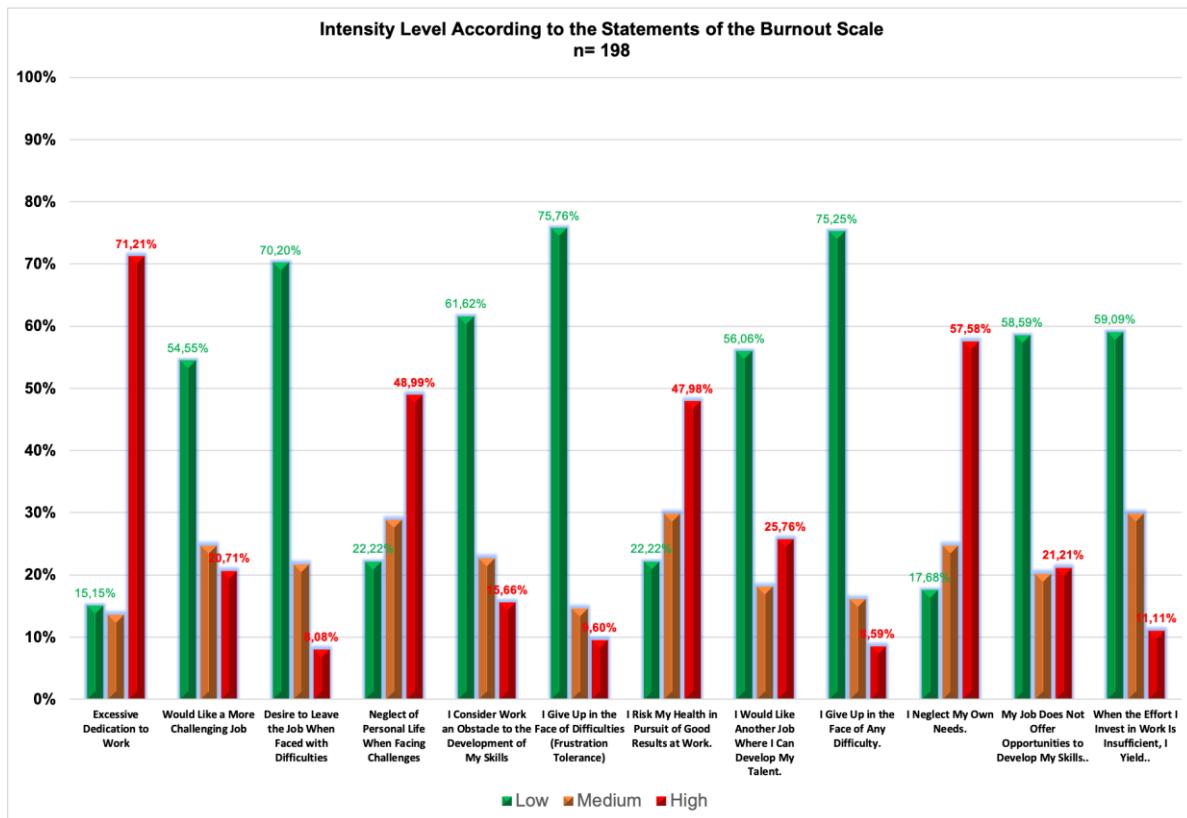
As an indicator of presenteeism, participants were asked to estimate their perceived work performance. 53.54% indicated that their performance was below 100%. The estimated performance averages 73.5 out of 100 points (SD: 24.67). Given that the score is based on a 100-point scale, this translates to an average performance reduction of 26.5%. The 50th percentile score is 80 points.

To examine the relationship between performance levels and anxiety, depression, the burnout test, and particularly the overload dimension, where the highest levels were recorded, a robust linear regression was conducted. A highly significant correlation was found between performance levels and scores in depression ($\alpha: 0.001$) and the burnout test ($\alpha: 0.000$). Specifically, for each increase in performance level, the depression score decreases by 2.23 points, and the burnout score decreases by 0.59 points. Regarding the anxiety scale, the correlation was near the significance threshold ($\alpha: 0.056$), while in the Overload dimension, the correlation was far from being significant ($\alpha: 0.90$).

To assess the likelihood of absenteeism and medical leave, the same variables were analysed using a binary logistic regression, as the absenteeism and medical leave variables are dichotomous, with yes/no values. In relation to medical leaves, the test yielded a significant result for the anxiety scale ($\alpha: 0.045$). Once the odds ratio was calculated, the coefficient for the anxiety variable (0.2211) indicates that, as anxiety levels increase by one unit, the likelihood of an individual being absent from work increases by approximately 24.7%. Similarly, regarding

the burnout test, the relationship was also significant ($\alpha: 0.002$). Once the odds ratio for the coefficient (0.0588) was calculated, it was found that for each additional unit increase in burnout level, the probability of medical leave increases by approximately 6.05%. In the case of absenteeism, the same variables were found to be significant. In this case, the odds ratio for the anxiety variable indicated that for each one-unit increase in anxiety level ($\alpha: 0.025$), the probability of having been absent from work in the last 12 months increases by approximately 26.09%. Regarding the scores in the burnout test, the relationship with absenteeism was also significant ($\alpha: 0.013$). The odds ratio indicated that for each one-unit increase in the burnout test, the probability of having been absent from work in the last 12 months increases by approximately 4.78%.

Figure 5. Intensity Level According to the Statements of the Burnout Scale



3.4. Personal and social life

The social support network is limited. A total of 57.07% of the sample reported having no relationships with co-workers outside of the workplace. Among those, business owners are the most likely to report not having such relationships (40.71%). Those who report having the most relationships with co-workers (42.35%) are individuals who identify as both business owners and executives. More generally, 60.10% stated that their social life has diminished. Furthermore, 66.37% of the sample indicated that they have no social relationships, either outside of work or with co-workers. Conversely, 48.24% reported that they do maintain social relationships with co-workers and have not experienced a reduction in their social life.

Personal Economic Impact and Expenditures on Activities Related to Mental Health

The majority of the sample (69.04%) has declared a net income of less than €2,500 per month. This figure (considering only 12 payments) is clearly higher than the average salary in Spain: €2,245.24 on average, €2,029.99 on average for women, and €2,448.49 on average for men, according to the National Institute of Statistics ([Instituto Nacional de Estadística, 2024](#)). By group, individuals in executive positions report the highest incomes. Specifically, 28.00% of executives earn between €2,501 and €3,000 net per month (compared to 7.04% of business owners), and 26.00% earn over €3,501 net per month (compared to 8.45% of business owners). A total of 90.36% reported that they had not experienced a reduction in their income over the past year. The average number of income earners per household is 1.77 (SD: 0.55). In 55.66% of the cases, the combined net household income was less than €2,500. In 27.92%, it exceeded €4,500 net.

A total of 63.93% reported that they had not consulted a mental health professional. Among those who did, the highest proportion (47.89%) identified as business owners. The average number of visits to a mental health professional in the past year was 8.28 (SD: 9.56), with the 50th percentile at 5 visits. The average annual expenditure on mental health was €603.94 (SD: €673.70). The significant variation suggests that this expenditure did not follow a normal distribution. The 50th percentile was €360.00, with a range from €0.00 to €3,750.00 per year.

In addition to specific expenditures on mental health services, participants were also asked about their use of non-specialized services with an impact on mental well-being (e.g., yoga classes, hiking, sports, etc.). Of the respondents, 58.88% engaged in such activities to improve their mental health. Among those who did, executives were the group that utilized this strategy the most (68.00%). The average expenditure on these mental well-being activities was €711.84 (SD: €904.21). The considerable variability in spending is reflected in a range from €0.00 to €7,000.00 per year, with the 50th percentile at €500.00 per year.

4. DISCUSSION

There is a notable scarcity of studies —such as the one we have conducted— focusing on women entrepreneurs or executives and the links between mood disorders, anxiety, burnout, and absenteeism behaviours, despite the considerable implications these emotional disturbances may have for individuals in positions of business leadership and decision-making. Decision-makers, such as female entrepreneurs and executives, are frequently required to navigate highly uncertain scenarios, which may significantly impact the future of their companies, their personal assets, and the livelihoods of employees under their supervision. It is, therefore, logically expected that such circumstances could lead to elevated levels of emotional distress. Additionally, entrepreneurial women often juggle their professional responsibilities with caregiving duties, such as caring for children and dependent family members. This dual role increases the likelihood of encountering stressful situations. However, a high level of resilience often observed in entrepreneurial profiles may explain why, despite the personal and business-related challenges, average levels of anxiety, depression, and burnout have been relatively low in our results. [Chadwick and Raver \(2020\)](#) established a positive association between resilience and venture survival, indicating that ventures demonstrating greater resilience are more likely to endure in the long term. In other studies, such as that conducted by [Zastempowski \(2024\)](#) on a sample of 1,848 Polish entrepreneurs —without disaggregation by gender— the focus was placed on personality traits, a theme that

lies outside the scope of our investigation, although it represents a promising line of enquiry. It is possible that the three factors identified among micro-entrepreneurs (openness to experience, conscientiousness, and extraversion) also contribute to a characteristic emotional tendency that fosters resilience. The ability to cope with adversity, adapt to demanding situations, and maintain mental well-being is a key factor contributing to their sustained performance and emotional stability. In this regard, some authors have noted that female entrepreneurs exhibit strong coping mechanisms. However, certain women entrepreneurs remain unaware of these mechanisms, which can result in elevated stress levels and a heightened sense of isolation in their careers (Krithiga & Velmurugan, 2024).

Regardless of the resilience capacity that has been primarily observed through the assessment of burnout levels, in our sample anxiety symptoms have been highly prevalent. The four primary signs exhibited a very high prevalence (see Figure 1) additionally, 77.89% of the sample displayed at least two of the primary defined signs of anxiety. Women in decision-making positions, entrepreneurs and executives, are subject to high levels of anxiety. This condition manifests in sleep disturbances, affecting both quantity and quality, in addition to other somatic consequences such as headaches, vegetative symptoms (tremors, tingling, dizziness, sweating, diarrhoea), and psychological rumination that results in persistent concerns about health (see Figure 2). Similar results have been found by previous research. In this sense, some authors (Kiefl et al., 2024) have found correlations between proactive coping and both job demands and mental exhaustion, suggesting a proactive coping against work-related stress, although in this instance, no sex-disaggregated analysis was performed on the sample (n=117).

The findings reveal a predominance of anxiety-related symptomatology relative to stress-related manifestations. This pattern may account for the observed low levels of burnout, aligning with prior research (Manchiraju et al., 2024) that underscores the critical role of stress as a necessary antecedent in the development of burnout. In addition, the motivation of female entrepreneurs and executives, along with their education and experience, may explain the resilient profile observed in the mood and burnout assessments. In this same vein, some authors (De Clercq & Brieger, 2022), using data from various countries, have found that women entrepreneurs, seeking to combine professional and private responsibilities, derive benefits even in environments initially considered hostile to female entrepreneurship.

To the best of our knowledge, no studies have examined the consequences of burnout in terms of absenteeism and medical leave among women entrepreneurs and executives. On this subject, the most studied population, especially recently following the COVID epidemic, has been healthcare professionals. In this group, a relationship has indeed been observed, with some authors (Lee et al., 2023) showing that healthcare workers with higher levels of burnout, particularly in the exhaustion dimension, have a higher risk of unplanned absenteeism (OR=1.04). Our study's contribution indicates that, as observed among women entrepreneurs and in executive positions, the likelihood of absenteeism and medical leaves was linked to anxiety and burnout scores. As reported in the results section, the probability of absenteeism increases significantly as anxiety symptoms rise, and to a lesser extent, when burnout symptoms also increase.

5. CONCLUSIONS

This study has provided a gender-based analysis of the influence of mood alterations anxiety, and signs of burnout among female entrepreneurs and decision-makers within Spanish companies, particularly from a sample of Galicia, a northern region. The entrepreneurial

woman is characterized by her dynamism (Fernández Fernández et al., 2024). The data reveal a profile of women typically around 40 years old, with a high level of education (predominantly university graduates), who engage in entrepreneurial activities after extensive experience in the workforce, often exceeding two decades (with slightly less experience in the case of those exclusively running businesses and approximately ten years in their current position. Women who venture into entrepreneurial activity do so with a solid foundation of education and experience. The fact that the majority of businesses are small in size in the sample matches with the Spanish business network where large companies, given that in Spain (Ministerio de Industria y Turismo, 2024), large companies (those with more than 250 employees) represent only 0.19% of the total.

Consistent with H1, women in entrepreneurial and executive roles exhibit a predominance of anxiety-related symptoms over those associated with depression. The symptom related to the perception of lack of energy (see Figure 3) was present in a substantial proportion of female entrepreneurs and executives. In this instance, the test required completion when any of the four symptoms were present, which occurred in a high percentage (68.35%). Upon completing the depression test, it became evident that symptoms related to lack of energy and cognitive slowing, such as difficulty concentrating or bradyphrenia, were the most prevalent (see Figure 4). The activity associated with decision-making roles appears to manifest more in apathetic symptoms than in mood-related symptoms, such as hopelessness, anhedonia, or loss of confidence. This can be interpreted as a greater emphasis on physical exhaustion associated with emotional tension rather than a psychological impact that limits motivation, which does not appear to be the case based on the results obtained. These findings are independent of the woman's position within the company, as well as her experience in the labour market or current role. From an analytical perspective, the concentration of symptomatology primarily in the somatic rather than affective domain may offer a dual explanatory framework. First, it is plausible that the elevated intrinsic motivation observed in this population segment enhances psychological resilience, mitigating the subjective perception of distress. Second, the somatisation of psychological discomfort may contribute to the underrecognition of such manifestations as clinically relevant mental health issues. This symptomatological ambiguity could, in part, elucidate the low prevalence of help-seeking behaviours and the limited utilisation of professional psychological support services among women occupying leadership or decision-making roles. These potential explanatory mechanisms, however, fall beyond the scope of the present study. Nevertheless, we contend that they warrant further investigation in future research endeavours.

These findings on mood and anxiety disorders are highly valuable for studying their connection with work performance. Previous studies (Esposito et al., 2007), though not conducted on a population of female entrepreneurs and executives, have shown that the presence of mood and anxiety disorders correlates with lower presenteeism scores compared to those without such disorders. In any case, although the number of female entrepreneurs and executives reporting medical leaves and absences is low over this population of highly resilient women in executive positions, therefore, it can be concluded that the second hypothesis (H2) has likewise been supported, our analyses show that among those who do experience such absences, a significant proportion (69.44%) attributed them to the work environment. Consequently, measures aimed at improving the workplace environment can reduce absenteeism and sick leave, thereby enhancing productivity for the companies.

Concerning the presence of burnout-related symptoms, our findings indicate that the *overload* dimension displayed markedly elevated scores on the measurement scale. This profile appears to predominate among women in leadership positions within business activities. The profiles characterised by these features are closely aligned with the *frenetic* subtype described

by [Montero-Marín et al. \(2011\)](#). The *frenetic* subtype is defined by an excessive dedication to work, often manifested in individuals who display high levels of involvement, ambition, and occupational *overload*. The profile of those with elevated levels in the *overload* dimension is marked by a willingness to risk their health and sacrifice personal well-being and life in pursuit of achieving positive outcomes. Additionally, our results have demonstrated a strong correlation between depression scores and the burnout scale, as well as high levels of *overload*. Thus, as scores on these scales improve, the sense of *overload* diminishes. The profile of female entrepreneurs and executives is marked by high resilience in the face of anxiety-inducing factors, along with an ability to manage *overload*, enabling them to overcome adverse circumstances and persist in their objectives. The fact that average performance is estimated to be reduced (26.5% on average), combined with the finding that factors associated with depressive symptoms increase signs of *overload*, as well as evidence that anxiety and burnout symptoms lead to reduced performance through a higher likelihood of absenteeism and medical leaves, highlights the need for mental and emotional health policies and improvement plans, both for medical reasons and for the economic performance of companies.

One key aspect to reflect upon is the limited social support network that women entrepreneurs and those in decision-making positions within companies often experience. Our results revealed that 60.10% reported a decrease in their social relationships. Moreover, 66.37% indicated that they have no relationships with colleagues, either at work or outside of it. The lack of social networks is a factor that increases emotional vulnerability and may reduce performance in managerial roles. Equally striking is the finding that, despite experiencing high levels of anxiety and mood disturbances, the search for support does not rely on resources provided by mental health professionals (63.93% reported that they had not consulted with a mental health professional). Instead, they resort to general coping strategies or emotional release through activities such as exercise, yoga, or other pursuits (58.88% reported engaging in these activities).

Practical implications and potential applications of the findings

The findings of our study research emphasize the need for policies to promote mental health support, also flexibility in the work agenda. Such policies, and also good practices, may help to mitigate the mental health challenges that arise from balancing personal life and career demands. Also, it may support women leadership in the business world.

While data reveal a profile of female entrepreneurs as well-educated, experienced, motivated, and highly resilient in the face of the stressors inherent to their professional activities, it is equally true that symptoms of anxiety—and to a lesser extent, depression—are common. Nevertheless, these symptoms do not appear to lead to the use of mental health support services. Policies promoted both by healthcare services and, crucially, by the business organisations themselves, that encourage the recognition of early signs of emotional distress and the use of specialised services, could contribute significantly to improving the well-being of female entrepreneurs and executives, as well as to securing the long-term sustainability of their enterprises.

Limitations and future lines of investigation

This study makes a valuable contribution to knowledge by addressing the characteristics of a profile for which there is little empirical evidence in relation to the object of study. Research focused on entrepreneurial women or those in leadership positions is scarce, and even fewer

studies analyse the emotional repercussions of this group. However, when extrapolating the results of this study, it is important to consider that the sample was not obtained randomly, which may introduce bias into the findings. There is no relevant criterion to suggest that the geographical distribution within the country would limit the conclusions. The particularities of entrepreneurial women are similar to those in other regions, given the similarity of their demographic profiles and management challenges. Nevertheless, due to the scarcity of similar studies, this aspect could be a topic for future research. Likewise, we consider it of interest for future investigations to explore the relationships between economic business outcomes and the psychological factors that have been analysed. Furthermore, studies that explore family structures, support networks, and the use of both professional and non-professional resources to improve mental health among female entrepreneurs and executives —linking these factors to their positions, economic resources, and types of enterprises— also represent a promising line of research beyond the scope of the present study.

Research based on larger and more geographically diverse samples represents a promising line of inquiry that could yield more nuanced and generalisable conclusions. Similarly, incorporating additional dimensions into the characterisation of female entrepreneurs and executives —beyond the scope of the present study— such as personality profile analysis, would further enhance our understanding of this still under-researched population. In this regard, our study offers a meaningful contribution. Future research should aim to deepen the analysis of psychological and contextual factors influencing the well-being and performance of women in leadership roles. Such insights would not only strengthen the academic understanding of this group but could also inform evidence-based policies and organisational strategies to foster healthier, more inclusive and sustainable work environments for female entrepreneurs and executives.

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Authors contribution

Conceptualization: MRA, SMR, Data Curation: MRA, Formal Analysis: MRA, Funding Acquisition: SMR, Investigation: MRA, SMR, Methodology: MRA, SMR, Project Administration: MRA, Resources: MRA, SMR, Supervision: MRA, SMR, Validation: MRA, SMR, Visualization: MRA, SMR, Writing – Original Draft: MRA, SMR, Writing – Review & Editing: MRA, SMR. All authors have read and agreed to the published version of the manuscript.

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Appendix 1. The Goldberg anxiety and depression symptom inventory

Next are some specific questions about your health and how you have been feeling in the PAST MONTH.

Anxiety Subscale

	Yes / No
GADS1 a Have you felt keyed up or on edge?	
GADS2 b Have you been worrying a lot?	
GADS3 c Have you been irritable?	
GADS4 d Have you had difficulty relaxing?	
GADS5 e Have you been sleeping poorly?	
GADS6 f Have you had headaches or neckaches?	
GADS7 g Have you had any of the following: trembling, tingling, dizzy spells, sweating, diarrhoea or needing to pass urine more often than usual?	
GADS8 h Have you been worried about your health?	
GADS9 i Have you had difficulty falling asleep?	
Score on the Anxiety Scale	/9

For the anxiety subscale (9 items), four core items must be asked and if the response was "yes" to at least two of these, the five supplementary questions must be asked.

Depression Subscale

	Yes / No
GADS10 j Have you been lacking energy?	
GADS11 k Have you lost interest in things?	
GADS12 l Have you lost confidence in yourself?	
GADS13 m Have you felt hopeless?	
GADS14 n Have you had difficulty concentrating?	
GADS15 o Have you lost weight (due to poor appetite)?	
GADS16 p Have you been waking early?	
GADS17 q Have you felt slowed down?	
GADS18 r Have you tended to feel worse in the mornings?	
Score on the Anxiety Scale	/9

For the depression subscale (9 items), four core items must be asked and if the response was "yes" to at least one of these, the five supplementary questions must be asked.

Total Scale Score: ___/18

Appendix 2. Burnout Clinical Subtype Questionnaire (BCSQ-12)

The following is a series of statements indicating experiences that may occur at work. Read each statement carefully and mark with an X the option that best represents how you feel, what you do and what you think about your work. There are no right or wrong answers. Please DO NOT LEAVE ANY STATEMENT UNANSWERED.

	Totally disagree	Strongly disagree	Disagree	Unsure	Agree	Strongly agree	Totally agree
1. I think the dedication I invest in my work is more than what I should for my health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I would like to be doing another job that is more challenging for my abilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. When things at work don't turn out as well as they should, I stop trying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I neglect my personal life when I pursue important achievements in my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I feel that my work is an obstacle to the development of my abilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I give up in response to difficulties in my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I risk my health when I pursue good results in my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I would like to be doing another job where I can better develop my talents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I give up in the face of any difficulties in my work tasks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I overlook my own needs to fulfil work demands	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. My work doesn't offer me opportunities to develop my abilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. When the effort I invest in work is not enough, I give in	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Correction algorithm

The 'overload' dimension is made up of items 1, 4, 7, 10.

The 'lack of development' dimension is made up of items 2, 5, 8, 11.

The 'neglect' dimension is made up of items 3, 6, 9, 12.

The answers are scored between 1 (totally disagree) and 7 (totally agree).