“From resistance to exhaustion”: defense strategies, sociodemographic variables and fighting Burnout Syndrome in banking professionals

"Da resistência à exaustão": estratégias de defesa, variáveis sociodemográficas e combate à Síndrome de Burnout em profissionais do setor bancário

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ABSTRACT
This study aims to verify the relationship between Burnout Syndrome (BS) and sociodemographic and functional variables and the use of defense strategies by professionals in the banking sector. Therefore, descriptive research of the survey type with a quantitative approach was conducted. Two hundred sixty-two bank employees...
answered the Sociodemographic and Functional Questionnaire and the Maslach Burnout Inventory – General Survey, available on Google Forms. Based on the logistic regression analyses performed for each BS dimension, the gender variable is significant for predicting the reduced professional achievement dimension. Individualism and denial strategies are significant for predicting the emotional exhaustion dimensions and depersonalization. With these data, this study is expected to alert bank managers to invest in their professionals’ physical and mental health.

**Keywords:** Burnout Syndrome, banking sector, defense strategies, sociodemographic variables, mental health.

**INTRODUCTION**
The concern for mental health within organizations is increasingly gaining strength in a scenario where mental disorders are no longer seen as something superficial (Freitas & Silva, 2019). The tension and stress experienced in the work environment have increased the rate of occupational illnesses of a psychic nature. Burnout syndrome (BS), a variant of occupational stress, is an example of a mental disorder at work (Jacquet et al., 2015; Maresca et al., 2022; Moro et al., 2022). BS is a depressive psychic disorder with symptoms similar to anxiety, stress, and panic syndrome (Ilhomjonova & Ochilova, 2022). Its symptoms can be perceived in connection with the individual’s professional life (National Association of Occupational Medicine (ANAMT, 2021; OPAS, 2019). BS happens as a worker’s response to the demands imposed in their work environments.
ANAMT (2021) also highlighted that, in 2019, BS was included in the 11th Revision of the International Classification of Diseases (ICD-11) of the World Health Organization (WHO), in a list that entered into force in 2022, classifying it as a disease associated exclusively with the work context due to the chronic stress to which professionals are exposed in their work environments (PAHO, 2019).

Maslach and Jackson (1981) explained that BS could manifest itself in three dimensions: emotional exhaustion, depersonalization and reduced professional achievement. The first dimension is emotional exhaustion, which is linked to loss of energy, and the feeling of being depleted, overwhelmed, and exhausted psychologically and physically. The second dimension, depersonalization, also known as cynicism, refers to an emotional hardness or coldness, which leads individuals to treat people, such as their customers and colleagues, with indifference, without the ability to empathize with others. The third dimension concerns reduced professional achievement, in which the individual evaluates his work negatively and feels unable to perform his tasks (Ilhomjonova & Ochilova, 2022; Maslach et al., 2001; Rotstein et al., 2019; Schaufeli et al., 2009).

BS is linked to all sectors of work-related activities and professions and is present in all organizations, whether in the private or public sector (Troyer, 2012). However, it mainly affects professionals who work directly and intensely with others (Dias & Angélico, 2018). With that in mind, Bloise (2009) explained that the professions most exposed to BS are those of treatments, such as doctors, psychologists and educators, and services, such as banking (Kyaw, 2022). In agreement with Bloise (2009), Dias and Angélico (2018) and Tafi et al. (2022), since bank workers are evaluated as an occupational group with a high risk of developing BS, the focus of this work will be on this group; in this case, workers in the banking sector (Wiesyk & Pludowska, 2022).

In addition to this functional factor, other sociodemographic factors, such as gender and age, may also be associated with the prevalence of BS (Vilaça et al., 2021). Such factors, associated with sources of stress from the work context, can contribute to the onset or worsening of BS. In the meantime, it remains for professionals in this sector to find defense strategies that can mitigate the suffering caused by these factors (Areosa, 2019; Dejours, 2003; Mendes, 1995/1996).
Banking work and BS in workers in this sector have attracted the attention of many researchers. Valente et al. (2016) investigated the relationship between burnout symptoms and the condition of the work environment of these professionals, and Khalid et al. (2020) performed a similar analysis on bank workers in Pakistan. Kiseleva (2018) investigated the prevalence of BS in bank employees interacting directly with customers. These articles provided relevant contributions. However, no research correlated bank employees to defense strategies concerning BS.

Based on the above, and bearing in mind that the organizational dynamics and the geographic context can also contribute to the prevalence of psychological distress at work, the objective is to verify the relationship between BS and sociodemographic and functional variables and the use of defense strategies of professionals in the banking sector. Two contributions emerge from this research: a theoretical approach not yet explored in the literature, and the results of this study, which can contribute to clarifying how BS affects these professionals and open space for other discussions based on more critical analyses regarding this syndrome in banking institutions.

2 STUDY HYPOTHESES

2.1 SOCIODEMOGRAPHIC VARIABLES

Sociodemographic variables appear as risk factors in the origin and evolution of BS. According to Marinaccio et al. (2013), sociodemographic variables, such as age and gender, have been increasingly associated with the prevalence of BS.

2.1.1 Age

Age can determine the progression of BS (Maslach et al., 2001; Santos, 2020). It happens due to the differences between younger and older professionals regarding expectations, experiences, and maturity to deal with stressors in the work context (Ahola & Hakanen, 2007; Boštjančič et al., 2015).

Studies carried out with bank employees (Amigo et al., 2014; Carneiro, 2019; Cerqueira, 2016; Li et al., 2015; Macedo, 2015; Santos, 2020; Tafi et al., 2022) and studies carried out with other occupational groups (Carvalho, 2020; Ferreira & Lucca, 2015; Silva et al., 2015), identified that the age group that is most exposed to the
prevalence of BS is that between 30 and 40 years. In another study, the age group most likely to develop the syndrome is between 41 and 51 years old (Vilaça et al., 2021).

Based on the results of the studies presented, we observed that, depending on the characteristics of the study, a certain age group is more susceptible to BS than others, which leads to Hypothesis 1 (H1):

H1: The variable concerning age is significant for predicting the BS levels of professionals in the banking sector.

2.1.2 Gender

Gender-related issues can significantly influence individuals’ illness (Wu et al., 2013). Historically, in addition to biological characteristics and differences in ways of expressing oneself emotionally, there is an inequality in the social roles developed by men and women concerning household chores, care for children and the elderly, as well as related to career opportunities in the labor market (Jablonski, 2010; Maslach & Jackson, 1985).

Studies conducted with bank employees in this scenario identified that women become mentally ill more frequently than men (Amigo et al., 2014; Carneiro, 2019; Cerqueira, 2016; Li et al., 2015; Macedo, 2015; Santos, 2020). In addition to this occupational group, studies conducted with other occupational groups also reached the same result (Nascimento et al., 2021; Salvaro & Mariano, 2021).

In contrast, studies with other occupational groups (Carlotto et al., 2014, Nágime et al., 2020) identified that men have higher levels of depersonalization and lack of personal fulfillment than women, which leads to Hypothesis 2 (H2) for this investigation:

H2: The variable concerning gender is significant for predicting the BS levels of professionals in the banking sector.

2.2 FUNCTIONAL VARIABLE

Bearing that the work context contributes to the relationship of pleasure and suffering experienced by an individual in their work environment (Dejours, 2003), the variable concerning constitution, either in the public or private sector, may be associated with the prevalence of BS.
2.2.1 Constitution

To Dias and Angélico (2018), in Brazil, there is a difference between the constitutions, that is, public and private banking institutions, that must be understood. Among these differences, the main one is the stability of public banks, as opposed to private banks (Carneiro, 2019; Cerqueira, 2016; Vilaça et al., 2021). Furthermore, the private sector’s work is considered more burdensome than the public sector, which is because there is greater pressure for goals (Macedo, 2015), in addition to uncertainties regarding their future and career in the organization (Cerqueira, 2016; Resende & Mendes, 2004; Santos, 2020; Vilaça et al. 2021).

For these reasons, data from studies with bank employees suggest that private organizations’ employees have higher rates of emotional exhaustion and depersonalization, while public organization workers have higher levels of reduced professional achievement (Carneiro, 2019; Cerqueira, 2016; Vilaça et al., 2021).

In this sense, work contexts, whether in private or public banking institutions, can contribute to the prevalence of BS. Based on the above, we established Hypothesis 3 (H3) for this investigation:

**H3**: The variable concerning constitution is significant for predicting the BS levels of professionals in the banking sector.

2.3 DEFENSE STRATEGIES

With the pressures within organizations and the suffering generated at work, professionals create defense strategies to minimize the perception of what makes them suffer in the work environment and thus protect their psychic apparatus (Amorim et al., 2021).

Defense strategies are considered a “protective shield” that individuals use to minimize their suffering (Areosa, 2019). Thus, according to Dejours et al. (1994), defense strategies make work bearable and possible for workers. In other words, workers use defense strategies to face their daily suffering, as they help maintain psychic balance by promoting resources to overcome this suffering (Mendes et al., 2003; Wegwu, 2022).

It is important to point out that these defense strategies, whether individual or collective, are used for coping, denial, and mediation of suffering; they do not concretely
modify the reality of professionals since it is a mental and unconscious process. In this sense, defense strategies help in psychic balance, providing resources to overcome suffering, but do not have the role of collective mobilization. The strategies are mechanisms that do not interfere with the context since the stressors remain in the environment until this context is modified (Dejours, 1999; Mendes, 1995/1995; Mendes et al., 2003).

Studies with bank employees show they also use defense strategies (Ferreira, 2007; Mendes, 1995/1996; Resende & Mendes, 2004; MACEDO, 2015; MATTOS, 2016). Among the most used are individualism (Mendes, 1995/1996; Resende & Mendes, 2004), denial (Ferreira, 2007; Macedo, 2015; Mattos, 2016), passivity (Mendes 1995/1996), and rationalization (Ferreira, 2007; Mendes 1995/1996; Macedo, 2015; Mattos, 2016). For this study, these will be the defense strategies considered for analysis. Therefore, they will be detailed below.

### 2.3.1 Individualism

Individualism is the naturalization of current ways and facts of work situations, which lead the professional to isolation without considering the cause of these events. The professional begins to isolate himself from everyone, as he feels distrust, lack of solidarity and hypocrisy, among other symptoms. He creates his world and starts acting individually (Mendes, 1995/1996).

In the face of bank work, individualism can be a collective strategy, encouraged by his co-workers, making competitions, in the sense of showing who is most sought after in the branches, who is more organized and who has a larger customer base, all of this without asking others for help (Resende & Mendes, 2004).

Based on the above, we established Hypothesis 4 (H4) for this investigation:

**H4:** The variable concerning the use of individualism as a defense strategy is significant for predicting the BS levels of professionals in the banking sector.

### 2.3.2 Denial

Denial is when the individual seeks to deny reality as if it did not exist. The individual considers a thought/feeling to be non-existent, which, if he admitted it, would
cause him much pain. The individual uses this strategy to deny an unpleasant or undesirable part of external reality, either through a fantasy of satisfaction or through their behavior (Freud, 2006).

Denial is considered as an individual’s conscious rejection to perceive disturbing facts. It extracts from the individual the necessary perception to deal with external challenges and the ability to use adequate survival strategies (Freire & Elias, 2017).

To Ferreira (2007), Macedo (2015), and Mattos (2016), the professional denies that the problem is a failure of the company and seeks professional adequacy to meet goals and grow within the organization.

Based on the above, we established Hypothesis 5 (H5) for this investigation:

**H5:** The variable concerning denial as a defense strategy is significant for predicting the BS levels of professionals in the banking sector.

### 2.3.3 Passivity

Passivity is when the professional denies his perception of reality. It is an accommodation behavior to explain changes not made in work situations (Mendes, 1995/1996). Professionals create conformist attitudes to protect themselves from new disappointments since changes were attempted within the organization and were not accepted by these professionals (Perez, 2012).

To Dejours (1999), passivity is linked to the lack of alternatives and manifests as a silent resignation and consented service. According to Mendes (1995/1996), this strategy is considered harmful to change processes, as the professional cannot identify what causes their suffering in the organization, so he does not expose his sufferings to co-workers and feels rid of responsibility for justifying passivity to all co-workers.

Based on the above, we established Hypothesis 6 (H6) for this investigation:

**H6:** The variable concerning passivity as a defense strategy is significant for predicting the BS levels of professionals in the banking sector.

### 2.3.4 Rationalization

Rationalization is when the individual tries to give a plausible justification for a certain situation or suffering caused by either his/her thinking or behavior inconsistent
with his/her values and moral principles. In other words, the individual tries to give an acceptable explanation for his actions, ideas, feelings and behaviors, and his real motives are not perceived (Febriana & Darma, 2022; Jain & Sinha, 2022; Mendes, 1995/1996).

According to Mendes (1995/1996), rationalization is used in the face of frustrations to explain more precisely the reasons that cause these workers to suffer, such as the division between planning and execution and the disruption of psycho-affective relationships with their colleagues. To Seligmann-Silva (2011), this mechanism is unconsciously used by workers, and the purpose of its use is to hide painful experiences.

Based on the above, we established Hypothesis 7 (H7) for this investigation:

**H7:** The variable concerning rationalization as a defense strategy is significant for predicting the BS levels of professionals in the banking sector.

### 3 METHODOLOGICAL PROCEDURES

To test the established hypotheses that the levels of BS of professionals in the banking sector are dependent on the variables concerning age, gender, constitution, and use of defense strategies, we carried out descriptive research (Neuman, 2013) of a quantitative nature (Bryman, 2017) by the survey method (Humeau-Heurtier, 2019). Below is a detail of the methodological procedures conducted in this research, which comprehends six steps.

#### 3.1 SAMPLE SELECTION

The study population is bank professionals from the State of Rio Grande do Norte from public and private financial institutions. The number of bank employees is approximately 3,010 professionals who work throughout the state. The RN Bank Workers’ Union representatives verbally provided this data. At the end of the collection, 262 completed and valid questionnaires were obtained. This sample size is representative of the estimated population, with a confidence level of 95% and an estimation error of 6% (Cohen, 2013).
3.2 PREPARATION OF COLLECTION INSTRUMENTS

The participants answered two data collection instruments to conduct the study: the Sociodemographic and Functional Questionnaire (SFQ) and the Maslach Burnout Inventory – General Survey (MBI-GS).

The SFQ was prepared by the author and is composed of questions of a personal nature, which questioned the bank employees about age and gender and the constitution of the bank where they work, whether public or private, among other issues to characterize the sample. These questions enable the identification of one or more defense strategies, either individualism, denial, passivity, or rationalization (Mendes, 1995/1996). Such items are shown in Table 1.

<table>
<thead>
<tr>
<th>Table 1 SFQ items</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Select your Gender: Male ( ) Female ( )</td>
<td></td>
</tr>
<tr>
<td>2 - What is your age (full years)? ____________</td>
<td></td>
</tr>
<tr>
<td>3 - Do you work in a public or private bank? Public ( ) Private ( )</td>
<td></td>
</tr>
<tr>
<td>4- Is the agency you work for located in the interior of RN or the capital of RN? Interior ( ) Capital ( )</td>
<td></td>
</tr>
<tr>
<td>5- Name the city where you work: ______________</td>
<td></td>
</tr>
<tr>
<td>6- Time working as a banker (full years): __________</td>
<td></td>
</tr>
<tr>
<td>7- What is the number of employees/servants in your agency? __________</td>
<td></td>
</tr>
<tr>
<td>8- What is your role in the agency? ______________</td>
<td></td>
</tr>
<tr>
<td>9- Do you have a managerial role? Yes ( ) No ( )</td>
<td></td>
</tr>
<tr>
<td>10- What is your position? ______________</td>
<td></td>
</tr>
<tr>
<td>Individualism</td>
<td>11- Do you feel suspicious of your co-workers and prefer to act individually in your agency? Yes ( ) No ( )</td>
</tr>
<tr>
<td>Denial</td>
<td>12- Have you ever been reluctant/resistant to assuming an event for yourself and others because you believed it would be easier not to deal with certain situations? Yes ( ) No ( )</td>
</tr>
<tr>
<td>Passivity</td>
<td>13- Do you feel that you are uninterested in your work? Yes ( ) No ( )</td>
</tr>
<tr>
<td>Rationalization</td>
<td>14- In the face of adverse situations, do you always find a justification to simplify sof-ten? Yes ( ) No ( )</td>
</tr>
</tbody>
</table>

Source: Designed by the authors (2022).

While the MBI-GS instrument was developed by Maslach and Jackson (1985) and adapted by Cerqueira (2016) for the reality of bank employees in Brazil, it is used to measure burnout in any occupational work context. This instrument contains 22 closed questions that address the three dimensions of burnout: emotional exhaustion, 9 items;
depersonalization, 5 items; and reduced professional achievement, 8 items, as shown in Table 2.

Table 2 MBI-GS Items by Dimension

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emotional exhaustion</strong></td>
<td>I feel emotionally let down by my job.</td>
</tr>
<tr>
<td></td>
<td>I feel drained when I finish my workday.</td>
</tr>
<tr>
<td></td>
<td>I feel fatigued when I get up and face another day at work.</td>
</tr>
<tr>
<td></td>
<td>I feel that working with people every day makes me tired.</td>
</tr>
<tr>
<td></td>
<td>I feel that my job is wearing me out.</td>
</tr>
<tr>
<td></td>
<td>I feel frustrated by my job.</td>
</tr>
<tr>
<td></td>
<td>I feel as if I am working too hard at my job.</td>
</tr>
<tr>
<td></td>
<td>I feel that working in direct contact with people stresses me out.</td>
</tr>
<tr>
<td></td>
<td>I feel as if I am at the end of my possibilities.</td>
</tr>
<tr>
<td><strong>Depersonalization</strong></td>
<td>I feel that I am treating some recipients of my work as if they were impersonal objects.</td>
</tr>
<tr>
<td></td>
<td>I feel I have become harder on people since I started this job.</td>
</tr>
<tr>
<td></td>
<td>I worry about this job because it is hardening me emotionally.</td>
</tr>
<tr>
<td></td>
<td>I feel that I really do not care what happens to the people I must work with professionally.</td>
</tr>
<tr>
<td></td>
<td>It seems to me that the recipients of my work blame me for some of their problems.</td>
</tr>
<tr>
<td><strong>Reduced professional achievement</strong></td>
<td>I feel I can easily understand how the people I must deal with feel about things.</td>
</tr>
<tr>
<td></td>
<td>I feel that I deal very effectively with the problems of the people with whom I must deal.</td>
</tr>
<tr>
<td></td>
<td>I feel that I am positively influencing people’s lives through my work.</td>
</tr>
<tr>
<td></td>
<td>I feel very vigorous in my work.</td>
</tr>
<tr>
<td></td>
<td>I feel that I can easily create a pleasant climate with the recipients of my work.</td>
</tr>
<tr>
<td></td>
<td>I feel encouraged after working directly with those with whom I must deal.</td>
</tr>
<tr>
<td></td>
<td>I think I get a lot of valuable things out of this job.</td>
</tr>
<tr>
<td></td>
<td>In my work, I deal with emotional problems very calmly.</td>
</tr>
</tbody>
</table>

Source: Adapted from Cerqueira (2016).

All items in this instrument follow a Likert scale with alternatives from 0 to 6, in which the respondent needs to mark according to the frequency in which the feelings related to the proposed statements are manifested, being 0 - never, 1 - a few times a year, 2 - at least once a month, 3 - a few times a month, 4 - once a week, 5 - a few times a week, and 6 - every day.
3.3 DATA COLLECTION

Data collection was conducted online, which allowed bank access from all over the state promptly and provided convenience to respondents. Thus, the questionnaires were inserted into Google Forms, and the link to this form was made available via state bank groups on social networks, such as WhatsApp, LinkedIn, and Instagram. The collection took place during the 30 days of October 2022.

3.4 DATA VALIDATION AND EXPLORATION

Google Forms provides an Excel spreadsheet containing all the participants’ responses, and when data collection ended, this spreadsheet was numerically coded; that is, all responses received numerical codes according to their respective items.

Initially, the reliability of the MBI-GS was verified by calculating Cronbach’s alpha (Amirrudin et al., 2021). Hair et al. (2009) argue that this is the best reliability measurement coefficient, where their values range from 0 to 1; the closer to 1, the greater the reliability between the indicators. The values obtained for all items of the MBI-GS as well as its subscales, referring to the items of each BS dimension, were all greater than 0.800, which means a high level of reliability between the items of the full scale and of each subscale (Amirrudin et al., 2021; Hair et al., 2009).

Next, simple descriptive statistics were made to trace the sociodemographic and functional profile of the banking category, measure the level of BS in each dimension and identify the frequency of use of defense strategies, which include mean, standard deviation, frequency, and percentage.

The data extracted from the MBI-GS was analyzed to identify the incidence level of each BS dimension presented by the bank employees based on a Standardized Score ($S_p$). For this, the sum of the values answered in each item was added, and this value was divided by the number of items in the subscale, subtracted from 1. This result was multiplied by 20; that is, the calculation was made using the following formula:

$$S_{pi} = 20 \cdot \left( \frac{\sum \text{Values informed}}{\text{No. of items informed} - 1} \right), i = 1,2,3.$$
In this formula, “i” indicates the number of subscales whose $Sp$ will be calculated, allowing the formula to be replicated in the three MBI-GS subscales. Thus, $Sp_1$ refers to the “emotional exhaustion” subscale score; $Sp_2$ to the “depersonalization” subscale score; and $Sp_3$ to the “reduced professional achievement” subscale score (Goulart, 2014).

To classify the level per subscale as high or low, bank employees with a score of up to 50% were considered to have a low level in that subscale and above that value to have a high level in the subscale in question (Goulart, 2014).

3.5 HYPOTHESES TESTING

Next, to meet the last two specific objectives, that is, to relate the sociodemographic and functional profile and the use of defense strategies with the level of BS, as well as to assess the hypotheses of this study, logistic regression analyses were performed for each of the BS dimensions (Hosmer et al., 2013).

For this study, the dependent output variable is a dichotomous or binary categorical variable, referring to the level of burnout in each dimension (emotional exhaustion, depersonalization, reduced professional achievement), considered as high or low; and as predictor or independent variables, such as age (full years), gender (male or female) of the respondents, the constitution of the financial institution in which the respondent works (public or private), and the use of defense strategies: individualism, denial, passivity and rationalization (yes or no). These analyses were performed using the Statistical Package for Social Sciences (SPSS)® analysis software, version 21.

3.6 DISCUSSION OF THE RESULTS

From the previous step’s results, the confirmation or not of each hypothesis in this study was discussed in the light of the theoretical framework in the form of a comparison with the results presented in other studies on the subject.

To enable a greater understanding of the methodological procedures conducted, Table 3 provides a summary of each step.
Table 3 Summary of methodological procedures

<table>
<thead>
<tr>
<th>Step 1 Sample selection</th>
<th>Two hundred sixty-two bank employees in Rio Grande do Norte from public and private financial institutions. Representative sample at the confidence level of 95% and estimation error of 6%.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 3 Data collection</td>
<td>Google Forms. Link sent by social networks and available for 30 days.</td>
</tr>
<tr>
<td>Step 4 Data validation and exploration</td>
<td>MBI-GS reliability analysis. Standardized score calculation ($\bar{s}$). Classification of burnout dimensions as high or low.</td>
</tr>
<tr>
<td>Step 5 Test of hypotheses</td>
<td>Logistic Regression Analyzes for each of the burnout dimensions.</td>
</tr>
<tr>
<td>Step 6 Discussion of the results</td>
<td>Appreciation of the results considering the literature on the subject.</td>
</tr>
</tbody>
</table>

Source: Designed by the authors (2022).

Finally, it should be noted that this study complies with Resolution CNS no. 510/16, which deals with ethics in research with human beings (Brasil, 2016). In this sense, the Ethics Committee of the State University of Rio Grande do Norte approved the project of this study do Norte (UERN), with CAAE number 59824822.0.0000.5294.

4 PRESENTATION OF RESULTS

4.1 SAMPLE CHARACTERIZATION

The sample of this study is predominantly male (68.6%). This data portrays the reality of financial institutions, where men are predominant, bearing in mind that men still occupy more than half of positions in the banking sector, compared to women. However, the increase of these women in banks is already remarkable (Faria, 2005). Regarding age, respondents are between 21 and 69 years old, with an average of 36 years old.

There is a wide variation in the banking sector’s operation time, between less than 1 year and 48 years. However, even with this variation, this data reveals that the vast majority have extensive professional experience, with an average of more than 11 years. Concerning the size of the respondents’ institutions, referring to the number of civil servants or employees, it ranges from 1 to 172, with an average of 18 employees per agency.
56.6% of the respondents stated that they had some managerial role within banking institutions. 51.2% of bank workers in this study work in a public bank, while 48.8% work in a private financial institution. 88.4% of respondents work in banks, and 11.6% in credit unions, financial institutions located in the interior of the state (65.5%) or the capital of RN (34.5%). It is important to note that bankers from 33 cities in the state of RN and 19 different financial institutions participated in the study.

4.2 ANALYSIS OF THE BURNOUT INCIDENCE LEVEL

Based on the data collected in the MBI-GS, the level of BS incidence was identified for each dimension separately and together. The findings reveal that 51.2% did not have a high level in any of the three dimensions; that is, they are unaffected by the prevalence of BS. However, 35.7% had high scores in only one dimension, 10.9% had a high score in two dimensions, and 2.3% (6) scored high in all three dimensions. These data indicate a high prevalence of BS in these banks, considering that high scores in two dimensions can already be considered an indicator of BS (Maslach et al., 2001).

4.3 IDENTIFICATION OF DEFENSE STRATEGIES USED

The rationalization defense strategy was the most indicated by the respondents (54.3%), followed by denial strategies (43%), passivity (27.5%), and individualism (19.8%).

The results were similar in three other studies conducted with bank employees (Macedo, 2015; Mattos, 2016). Mattos (2016) found that bank employees use the denial strategy more, followed by rationalization. Macedo (2015) observed that private-sector bank employees use the denial defense strategy more, followed by the rationalization defense strategy, while public-sector bank employees use rationalization more, followed by denial.

4.4 LOGISTICS REGRESSION MODELS FOR EACH DIMENSION

This topic will present a logistic regression model for each BS dimension, emotional exhaustion, depersonalization, and reduced professional achievement.
Table 4 shows the variables included in the logistic regression model for the emotional exhaustion dimension. They use individualism and denial strategies; only these variables can predict emotional exhaustion with a significance level lower than 0.05.

Table 4 Logistic regression model for the emotional exhaustion dimension

<table>
<thead>
<tr>
<th>Included variables</th>
<th>B(EP)</th>
<th>Lower</th>
<th>Exp b</th>
<th>Higher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-2.011** (0.251)</td>
<td>0.134</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individualism</td>
<td>1.945** (0.375)</td>
<td>3.354</td>
<td>6,992</td>
<td>14,578</td>
</tr>
<tr>
<td>Denial</td>
<td>1.220** (0.330)</td>
<td>1.775</td>
<td>3,338</td>
<td>6,468</td>
</tr>
</tbody>
</table>

Note: Log-likelihood = 2 initial/final = 309.229/245.354, R² = 0.206 (Hosmer and Lemeshow), 0.219 (Cox and Snell), 0.314 (Nagelkerke). x² (2) of the Model = 63.875, p < 0.001, * p < 0.01, ** p < 0.001

Source: Survey data (2022).

This means that about 22% of the variations in the log odds ratio are explained by the independent variables: individualism and denial strategies. Furthermore, the model can explain about 31% of the variations recorded in the emotional exhaustion dimension.

In addition, the chances of a bank employee who uses the individualism strategy having a high emotional exhaustion level are 6.992 times greater than a bank employee who does not use the individualism strategy. Likewise, the chances of a bank employee who uses the denial strategy having a high emotional exhaustion level are 3.338 times greater than a bank employee who does not use the denial strategy.

Notably, the variables not included in the logistic regression model showed significance greater than 0.05, meaning that these variables do not predict emotional exhaustion.

In the same way, as for the emotional exhaustion dimension, Table 5 shows the variables inserted in the logistic regression model for the depersonalization dimension, which is the use of individualism and denial strategies. Such data indicate that only these two variables can predict depersonalization with a significance level lower than 0.05.
Table 5 Logistic regression model for the depersonalization dimension

<table>
<thead>
<tr>
<th>Included variables</th>
<th>B(EP)</th>
<th>95% Confidence Interval for a exp b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-4.583**(0.729)</td>
<td>0.010</td>
</tr>
<tr>
<td>Individualism</td>
<td>1.855**(0.459)</td>
<td>0.010</td>
</tr>
<tr>
<td>Denial</td>
<td>2.619**(0.765)</td>
<td>0.010</td>
</tr>
</tbody>
</table>

Note: Log-likelihood - 2 initial/final = 185.474/129.040, $R^2 = 0.304$ (Hosmer and Lemeshow), 0.196 (Cox and Snell), 0.383 (Nagelkerke). $x^2(2)$ of the Model = 56.433, $p < 0.001$, * $p < 0.01$, ** $p < 0.001$

Source: Survey data (2022).

These data also show that approximately 19% of the variations in the log odds ratio are explained by the set of independent variables: the use of the individualism strategy and denial strategy. Furthermore, the model presented in Table 5 can explain more than 38% of the variations recorded in the depersonalization dimension.

Based on the data presented, the chances of a bank employee who uses the individualism strategy to have a high level of depersonalization are 6.392 times greater than a bank employee who does not use the individualism strategy. In comparison, the chances of a bank employee who uses the denial strategy to have a high level of depersonalization are 13.724 times greater than that of a bank employee who does not use the denial strategy.

We emphasize that some variables did not enter the logistic regression model because their significance values were greater than 0.05, which means that the variables concerning gender, age, constitution, and use of passivity and rationalization defense strategies do not have the power to predict the level of depersonalization of the participants in this study.

Next, concerning the reduced dimension of professional fulfillment, Table 6 inserted the variable in the logistic regression model for the reduced dimension of professional fulfillment, in this case, the variable concerning gender. Only this variable can predict reduced professional achievement, with a significance level of less than 0.05.
Table 6 Logistic regression model for the reduced dimension of professional achievement

<table>
<thead>
<tr>
<th>Included variables</th>
<th>B(EP)</th>
<th>Lower</th>
<th>Exp b</th>
<th>Higher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-1.400**(0.189)</td>
<td>0.246</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>0.707* (0.302)</td>
<td>1.122</td>
<td>2.029</td>
<td>3.666</td>
</tr>
</tbody>
</table>

Note: Log-likelihood - 2 initial/final = 284.542/-142.271, R² = 0.018 (Hosmer and Lemeshow), 0.021 (Cox and Snell), 0.031 (Nagelkerke). x²(1) of the Model = 5.398, p = 0.20, * p < 0.01, ** p < 0.001
Source: Survey data (2022).

The data presented in Table 6 denote that only 2% of the variations that occurred in the log of the odds ratio are explained by the independent variable concerning gender, which means that the model can explain only 3% of the variations recorded in the reduced professional achievement dimension.

Bearing that the value ‘1’ refers to females and the value ‘0’ to males, the data indicate that the chances of a female bank employee having a high level of reduced professional achievement are 2.029 times greater than a male bank clerk. However, these data must be considered cautiously due to the low explanatory percentage.

The other variables were not included in the logistic regression model because their significance values were greater than 0.05. That is, the variables concerning age and constitution and the four defense strategies cannot predict the level of reduced professional achievement of the participants in this study.

In short, according to the data extracted from the analysis, defense strategies, individualism, and denial predict emotional exhaustion and depersonalization levels. Meanwhile, the gender of professionals in the banking sector predicts reduced professional achievement.

4.5 STATUS AND DISCUSSION OF HYPOTHESES

Table 7 shows the status of each hypothesis right after the analysis.
Table 7 Status of hypotheses after their testing

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: The variable concerning age is significant for predicting the BS levels of professionals in the banking sector.</td>
<td>Refuted</td>
</tr>
<tr>
<td>H2: The variable concerning gender is significant for predicting the BS levels of professionals in the banking sector.</td>
<td>Confirmed - for the reduced dimension of professional achievement</td>
</tr>
<tr>
<td>H3: The variable concerning constitution is significant for predicting the BS levels of professionals in the banking sector.</td>
<td>Refuted</td>
</tr>
<tr>
<td>H4: The variable concerning the use of individualism as a defense strategy is significant for predicting the BS levels of professionals in the banking sector.</td>
<td>Confirmed for the emotional exhaustion and depersonalization dimensions</td>
</tr>
<tr>
<td>H5: The variable concerning denial as a defense strategy is significant for predicting the BS levels of professionals in the banking sector.</td>
<td>Confirmed for the emotional exhaustion and depersonalization dimensions</td>
</tr>
<tr>
<td>H6: The variable concerning passivity as a defense strategy is significant for predicting the BS levels of professionals in the banking sector.</td>
<td>Refuted</td>
</tr>
<tr>
<td>H7: The variable concerning rationalization as a defense strategy is significant for predicting the BS levels of professionals in the banking sector.</td>
<td>Refuted</td>
</tr>
</tbody>
</table>

Source: Designed by the authors (2022).

The first hypothesis that the variable concerning age is significant for predicting the BS levels of professionals in the banking sector was completely refuted. Data from the three logistic regression analyses show that the age variable was insignificant in predicting any BS dimensions. As in the study by Macedo (2015) conducted with bank employees, the age variable was excluded from the regression model because it had an insignificant statistical impact on burnout.

However, the results of other studies with bank employees differed from this one (Amigo et al., 2014; Cerqueira, 2016; Li et al., 2015; Vilaça et al., 2021). Most of these studies show that younger bank employees under 40 have higher emotional exhaustion levels (Amigo et al., 2014; Cerqueira, 2016; Li et al., 2015) and depersonalization (Cerqueira, 2016). In contrast, in one of these studies (Vilaça et al., 2021), evidence shows that the oldest, between 41 and 50 years old, are the ones who have higher emotional exhaustion levels.

These differences in results may be due to the study design. Furthermore, these studies were conducted in other states of Brazil (Cerqueira, 2016; Macedo, 2015; Vilaça et al., 2021) and even in other countries (Amigo et al., 2014; Li et al., 2015).

Regarding the study’s second hypothesis, it was confirmed that the gender variable is significant for predicting the BS levels of professionals in the banking sector.
only for the reduced dimension of professional achievement, which means that there is a probability that female bank employees have a higher level of reduced professional achievement than male bank employees.

In other studies with bank employees, there is evidence that gender can predict a higher level of reduced professional achievement, emotional exhaustion, and depersonalization (Amigo et al., 2014; Cerqueira, 2016; Li et al., 2015). Each of these studies was conducted in distinct locations and with methodological procedures. Such questions may have moderated their results. Furthermore, we emphasize that their results should be viewed cautiously due to the values found for this variable in this study.

The third hypothesis that the constitution variable is significant for predicting the BS levels of professionals in the banking sector was completely refuted. Significance values for the constitution variable were greater than 0.05, so they were not included in the three logistic regression models. This means that the constitution variable does not predict any of the BS dimensions in the participants.

This result partially confirms what was found in the study by Vilaça et al. (2021), that both public and private sector bank employees have a high level of reduced dimension of professional achievement. On the contrary, Carneiro (2019) concluded that bank employees at public institutions had a high level of the reduced dimension of professional achievement, whereas professionals from credit unions, also considered private institutions, obtained higher levels in two dimensions, emotional exhaustion, and depersonalization.

In turn, the fourth hypothesis, that the variable use of individualism as a defense strategy is significant for predicting the BS levels of professionals in the banking sector, was confirmed for the emotional exhaustion and depersonalization dimensions.

Individualism in the banking sector is also considered collective, as it is encouraged by their co-workers when they compete to show who is more organized, more requested by customers, and who dominates modern technologies more, without asking for help. In recent years, banking work has been automated, disqualified and with greater overload; at the same time, it has represented one of the best employment options. Thus, subjects may be using defense strategies as a reaction to work that does not allow for
personal fulfillment but is necessary for socioeconomic reasons (Resende & Mendes, 2004).

Because of this, a causal question arises: Do these bank employees who use individualism have more emotional exhaustion and depersonalization because the defense strategy is causing the emergence of BS? Or: Why do individuals with emotional exhaustion and high depersonalization use this defense strategy more?

Likewise, the fifth hypothesis, that the variable use of denial as a defense strategy is significant for predicting the BS levels of professionals in the banking sector, was also confirmed for the emotional exhaustion and depersonalization dimensions.

To Ferreira (2007), Macedo (2015), and Mattos (2016), these professionals deny that the problem is a failure of the company and seek professional adequacy to meet goals and grow within the organization. According to Macedo (2015), denial arises from the trivialization of difficulties arising in the work environment and from the denial that this environment is responsible for their suffering. That is, denial is linked to the non-recognition of one’s suffering and the suffering of others (Ferreira, 2007). Mattos (2006) explained in his study that the analyzed bank employees deny their working conditions to themselves. While they deny it, they verbalize that they are adapted and have a certain tranquility concerning what is required.

The characteristics of this strategy also instigate a causal question: Do these bank employees who use denial have more emotional exhaustion and depersonalization because the defense strategy is causing the emergence of BS? Or conversely: Why do individuals with emotional exhaustion and high depersonalization use this defense strategy more?

The sixth hypothesis that the variable use of passivity as a defense strategy is significant for predicting the BS levels of professionals in the banking sector was completely refuted. The passivity variable did not enter the logistic regression model in any of the three dimensions, as its significance level was greater than 0.05. That is, this variable does not predict BS levels in banks.

The study by Mendes (1995/1996) identified that bank professionals used passivity as an alternative to maintaining psychic balance within the work environment. The author of this study interviewed an audience other than bank employees (engineers
in the technical area of a telecommunications company) and adopted a qualitative approach. This study’s design differs from this current study. Therefore, these differences may have influenced the results.

As there is no study conducted with bank employees to confirm this result, two questions arise: Were the values insignificant because the cause-and-effect relationship between the variables was nulled? Or: Does using the passivity defense strategy relate to burnout?

The seventh hypothesis that the variable use of rationalization as a defense strategy is significant for predicting the BS levels of professionals in the banking sector was also rejected. The rationalization variable did not enter any of the three logistic regression models; its significance level was greater than 0.05. Thus, this variable does not predict BS levels in banking professionals either.

According to Ferreira (2007), Macedo (2015), and Mattos (2016), rationalization arises in the face of statements that justify adversities at work. Professionals, faced with difficulties, try not to change what they consider wrong but to find rationally created justifications to explain the stressors in the work environment.

According to Mendes et al. (2003), as a way of coping with overload, these professionals use alternatives outside the work environment, both through physical activities and therapy and through behaviors of escaping suffering, ignoring it through logical and coherent justifications. Thus, rationalization is the defense strategy most used by these professionals to deal with the suffering generated in the work environment and, perhaps, the most effective or appropriate.

As the results of this study do not confirm the hypothesis that the use of the rationalization defense strategy predicts the BS levels of professionals in the banking sector, the following questions arise: Is there a relationship among the variables? Or even: Can the use of external alternatives to work nullify the effect of this strategy?

5 FINAL REMARKS

The general objective of this study was to verify the relationship between BS and sociodemographic and functional variables and the use of defense strategies by professionals in the banking sector in the State of Rio Grande do Norte, Brazil.
Regarding the level of BS in each dimension, according to the results, it is evident that most of the responding professionals needed to present a high level in any of the three dimensions or only one dimension. However, a smaller percentage of banking respondents had a high score in two or three dimensions, which is already a worrying alert, as it indicates a certain prevalence of BS in these banking institutions.

Concerning the defense strategies, we identified that rationalization is most used by these bank professionals in their work environments, followed by denial, passivity, and individualism.

As for the association of the sociodemographic and functional profile with the level of BS, it was clear that only the gender variable is significant in predicting the prevalence of one of its dimensions, the reduced professional fulfillment. On the other hand, the variables concerning age and constitution do not present an indication to predict any of its dimensions.

Concerning the relationship between the use of defense strategies and the level of BS, we concluded that individualism and denial are predictors of two dimensions: emotional exhaustion and depersonalization. At the same time, rationalization and passivity defense strategies are not significant for predicting any of the three.

This study brought an overview of the prevalence of BS in the banking sector and some of the predictive factors that help in its development. In addition, it filled a gap when investigating mental health in this sector.

Based on the results of this study, the importance of mental health prevention for these professionals was highlighted. In this sense, knowledge of the prevalence of BS is necessary to proceed with possible managerial interventions on the part of the organization; and psychological help by specialized professionals, regardless of whether it is in the initial or more advanced stages. It is impossible to eliminate the stressors inherent to the work environment. However, it is important to alleviate them and act on psychosocial and occupational risks to promote a better quality of life at work. Furthermore, it is important to share more and more information about BS within financial institutions to contribute to its recognition and prevention.

In addition, specifically on the defense strategies most used by bank employees, it is up to the managers of their respective financial institutions to promote an
environment with a minimum of psychosocial and occupational risks so that these professionals do not always have to justify the adversities that arise in their work context. In addition, they must offer a more welcoming social environment associated with recognition and appreciation for the effort undertaken and the results achieved.

Finally, considering that women stood out in the reduced professional achievement dimension, financial institutions can provide psychologists or promote therapies so that their employees and servants do not feel incapable and can have healthy experiences in their work environments and, therefore, their homes.

Although the study brings contributions, the present research had some limitations concerning the data collected, and its exploratory analysis showed a non-normal distribution. This issue restricted the use of other multivariate analyses of parametric data. Because of the limitations presented, we suggest that future work be conducted to fill the lack of scientific studies that address the prevalence of BS in the banking sector. Other types of statistical analyses are recommended to deepen and better detail the results of this one, including a qualitative approach, to understand the meaning of the work and its context as a predictor or aggravating factor of BS, besides new surveys covering other states, regions or even the entire country, to obtain more expressive data results, or to enable geographic comparisons.
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