REVISTA HYGEIA **ISSN: 1980-1726**
https://seer.ufu.br/index.php/hygeia DOI: https://doi.org/10.14393/Hygeia1968175

ANXIETY, STRESS AT WORK, AND EMPLOYEE TRUST: A STUDY WITH BRAZILIAN CIVIL SERVANTS

ANSIEDADE, ESTRESSE NO TRABALHO E CONFIANÇA DO TRABALHADOR: UM ESTUDO COM SERVIDORES PÚBLICOS BRASILEIROS

Raquel Boff Menegazzi
Postgraduate Program in Administration, Federal University of Santa Maria (UFSM), Santa Maria, RS
menegazzi.rb@gmail.com

Luis Felipe Dias Lopes
Postgraduate Program in Administration, Department of Administrative Sciences, Federal University of Santa Maria (UFSM), Santa Maria, RS
luis.lopes@ufsm.br

Deoclécio Junior Cardoso da Silva
Postgraduate Program in Administration, Federal University of Santa Maria (UFSM), Santa Maria, RS
15deoclecio@gmail.com

Martiele Gonçalves Moreira
Postgraduate Program in Administration, Federal University of Santa Maria (UFSM), Santa Maria, RS
martiele18moreira@gmail.com

Luciano Amaral
Postgraduate Program in Administration, Federal University of Santa Maria (UFSM), Santa Maria, RS
lucianoaml@gmail.com

Fillipe Grando Lopes
Resident Doctor, Ernesto Dornelles Hospital, Porto Alegre, RS
fill.med@hotmail.com

ABSTRACT

Objective: This study aimed to analyze the degree of anxiety, stress at work, and employee trust, as well as whether anxiety is a moderator in the relationship between stress at work and employee trust dimensions in Brazilian civil servants during the COVID-19 pandemic. Methodology: A quantitative study was conducted between July and August 2021, in which answers were obtained from 375 Brazilian civil servants. The results were analyzed using descriptive statistics techniques and partial least squares structural equation modeling to verify the relationships between the constructs. Results: Our findings revealed direct relationships between the constructs of stress and anxiety, direct relationships between anxiety and trust, and indirect relationships between stress and trust. Implications: This study presents managerial and theoretical contributions by bringing relevant reflections on the mental health of Brazilian civil servants during the COVID-19 pandemic.

Keywords: Anxiety disorder. Stress at work. Trust. Mental health. Civil servants.

RESUMO

Objetivo: Este estudo teve como objetivo analisar o grau de ansiedade, estresse no trabalho e confiança do trabalhador, bem como se a ansiedade é moderadora nas relações entre o estresse no trabalho com as dimensões de confiança do trabalhador, em servidores públicos, durante a pandemia de COVID-19. Método: Por meio de um estudo quantitativo entre os meses de julho e agosto de 2021, obteve-se a resposta 375 servidores públicos brasileiros. Para análise dos resultados, aplicou-se técnicas de estatística descritiva, bem como, modelagem de equações estruturais de mínimos quadrados parciais (PLS-SEM) com o intuito de verificar as relações entre os construtos. Resultados: As descobertas deste estudo revelam relações diretas entre os construtos de estresse e ansiedade, relações diretas entre ansiedade e confiança, e relações indiretas entre estresse e confiança. Implicações: Diante

Recebido em: 02/02/2023
Aceito para publicação em: 17/08/2023.

dos resultados, o presente estudo apresenta contribuições gerenciais e teóricas, trazendo reflexões relevantes quanto à saúde mental dos servidores públicos brasileiros em meio ao período pandêmico.

Palavras-chave: Transtorno de ansiedade. Estresse no trabalho. Confiança. Saúde mental. Servidores Públicos.

INTRODUCTION

An organizational environment is a place of complex relationships permeated by daily situations that tend to influence workers' behavior, especially when this environment becomes stressful due to work overload, pressure for greater productivity, and environmental and social factors that can increase perceived stress (MITTAL et al., 2022). The insecurity brought about by the COVID-19 pandemic and the consequent changes in the way of working have directly affected workers' lives, even more so regarding mental and emotional health, triggering symptoms of anxiety, depression, and stress, fading as secondary stressors such as economic hardship, job loss, and bereavement became more frequent (KAR; KAR; KAR, 2021; TONIOLO-BARRIOS; PITT, 2021).

Anxiety disorders and stress at work are the most common symptoms affecting employees. There is also higher-level evidence of the development of depression or burnout in these individuals (KLOUTSINIOTIS et al., 2022; LACOMBA-TREJO et al., 2022; PFEIFER et al., 2022; SOROKIN et al., 2022). The aforementioned studies identified such symptoms during the COVID-19 pandemic, demonstrating this context's influence on individuals' lives and the decline in job performance and satisfaction (MITTAL et al., 2022).

Nevertheless, although different predictors of stress are perceived (e.g., high workload), factors such as the employee's feeling that their values coincide with those of the organization, feeling recognized for the tasks performed, and feeling trusted by the supervisor, as well as interpersonal trust, may negatively influence these stressors, thereby improving employee well-being (CHUDZICKA-CZUPAŸA et al., 2022). In an organization with a proactive mindset, where managers provide support and autonomy and work processes are understood by everyone, workers are ready to perform their function effectively, with dedication and a spirit of sacrifice, even during times of health crisis (ZAGHINI et al., 2021).

Civil servants, a group of workers who play a crucial role in society in implementing and executing government policies, many times do not receive the proper attention or sufficient practical actions from the institutions in which they work, damaging their health and directly interfering with their effectiveness at work (SONG et al., 2021).

In this sense, we have the following research question: Is anxiety a moderator of the relationship between stress at work and employees' trust dimensions in civil servants during the COVID-19 pandemic? Thus, this study sought to analyze the degree of anxiety, stress at work, and employee trust, as well as whether anxiety is a moderator in the relationship between stress at work and the dimensions of employee trust in civil servants during the COVID-19 pandemic.

This study is justified by the fact that only a handful of studies have related these three constructs (anxiety and stress at work and employee trust in the organization) and sought to find effective solutions to improve the quality of life at work and increase employee well-being, especially when applied to civil servants. The theoretical implications of this study concern the theoretical and empirical development regarding the themes addressed since the relationships between these constructs have proven to be scarce or non-existent, thereby being a research gap. In addition, we seek to contribute by disseminating knowledge and reflection on this theme. As far as the managerial implications are concerned, this study can provide reliable information on the emotional situation of employees, enabling one to take action to build a healthier and more productive environment. Hence, this study is relevant in terms of public health issues, and its originality lies in constructing a model to be replicated in other groups.

THEORETICAL FOUNDATION

Anxiety and stress at work and worker confidence

The main characteristic of generalized anxiety disorder is excessive or uncontrollable worry (STEIN; SAREEN, 2015). Stress is often related to anxiety and even depression and refers to the tensions faced by the individual (SONG et al., 2021; YIN, 2022). The difference between stress and anxiety is quite nebulous, as highlighted by the American Psychological Association (2022). Both are emotional responses, although stress is usually externally triggered and short- or long-term, whereas anxiety is defined by persistent and excessive concerns that dwindle even in the absence of a stressor; the coping mechanisms are also similar (APA, 2022).

Since insecurity is one of the elements that can generate stress and anxiety (YIN, 2022), seeking to be safe in the workplace depends on the trust placed by the employee in the organization where they work (OLIVEIRA; TAMAYO, 2008). Therefore, one more element can be incorporated into the analysis of the organizational environment and the relationship with its employees: trust. Employee trust involves four interdependent pillars of beliefs related to the organization's ethical standards, the credibility of communication, economic power, and the organization's ability to recognize its employee (OLIVEIRA; TAMAYO, 2008).

While the COVID-19 pandemic interfered with the work of countless professionals as well as civil servants (SONG et al., 2021; LACOMBA-TREJO et al., 2022) identified that the consequences of the COVID-19 pandemic were directly related to increased stress and anxiety in a sample of teachers; conversely, resilience and emotional balance acted as mitigants. According to Song et al. (2021), stress at work may trigger anxiety, affecting work relationships and performance.

Hence, it is highly relevant to understand the organization's participation in promoting or mitigating these feelings in its employees, making research on stress even more important to further policymakers' knowledge at the organizational level and create measures to prevent occupational stress (MITTAL et al., 2022). Given this scenario, the first hypothesis of our study is presented, D: direct; I: indirect:

H_1D: Stress influences civil servants' anxiety.

People are naturally concerned with maintaining social relationships that give them a sense of security and well-being (OLIVEIRA; TAMAYO, 2008). This behavior goes beyond personal life and is directly applied in work environments. It is understood that an employee who is insecure or distrustful of their organization may feel more stressed or anxious, negatively interfering with performance and impairing the smooth progress of tasks (SONG et al., 2021).

To identify whether an employee trusts their organization, Oliveira and Tamayo (2008) developed a measure aimed at assessing how much the employee believes they can trust their workplace, the Employee Trust in the Organization Scale (ECEO), comprising five dimensions: 1) promotion of employee growth (PEG), 2) organizational strength (OS), 3) rules on employee dismissal (RED), 4) organizational financial recognition (OFR), and 5) ethical standards (ES).

The first dimension refers to promoting employee growth in the organization; the employee perceives that there are incentives and concrete alternatives that may become safe proposals for their development at work (OLIVEIRA; TAMAYO, 2008). Oliveira and Souza (2014) observed that organizational values such as autonomy, well-being, and power maintained by the organization affect the levels of trust deposited by employees regarding this dimension.

Oliveira, Gomide Júnior, and Poli (2020) corroborated this when they reported that positive feelings in the workplace and the perception of well-being interfere with the worker's level of trust. Therefore, on the contrary, negative feelings such as stress and anxiety may interfere with the employee's confidence. A study by Kloutsiniotis et al. (2022) with workers in the hotel industry in Greece found that in the context of the survey, anxiety was the most important stressor, and their findings showed the detrimental effect that anxiety has on employee burnout. Sorokin et al. (2022) evidenced that stress levels among respondents who reported an affective or anxiety disorder were higher in all survey periods than among those without mental disorders. To this end, leadership styles, especially those based on trust, such as transformational leadership, can reduce employee stressors and improve well-being and workers' productivity (KLOUTSINIOTIS et al., 2022).

To this end, we have the next two hypotheses:

H_2I: Stress, when moderated by anxiety, influences civil servant growth.

H_2D: Anxiety influences civil servant growth.

Considering the second dimension of the trust construct by authors Oliveira and Tamayo (2008), organizational strength measures the employee's perception of the organization's financial stability. It refers to whether the organization can fulfill its obligations to its employees, even during financial instability or economic crises (OLIVEIRA; TAMAYO, 2008). One can note that this dimension was one of the most affected by the COVID-19 pandemic, generating organizational instability, which also affected individuals' quality of life, increasing stress and anxiety levels (LACOMBA-TREJO et al., 2022). Pfeifer et al. (2022) conducted a study on healthcare students in the United States and observed that most participants reported moderate stress and anxiety levels, reaffirming that stress and anxiety are correlated; emotional and social well-being were also negatively affected (PFEIFER et al., 2022). Especially in the context of the pandemic, individuals who were already experiencing affective or anxiety disorders had a more acute response to the changes and restrictions imposed by COVID-19 (SOROKIN et al., 2022). Fountoulakis et al. (2022) explained that the expectation of a future crisis and possible unemployment are stress-generating factors. Therefore, two other hypotheses are suggested:

H_3I: Stress, moderated by anxiety, influences organizational strength.

H_3D: Anxiety influences organizational strength.

Organizational trust starts from an assumption that there is a healthy relationship between employee and employer (RICHTER; NÄSWALL, 2019). Thus, to maintain a good relationship, the organization must have rules on employee dismissal, making it possible to predict their permanence in the organization, which are characteristics of the third dimension of the trust construct (OLIVEIRA; TAMAYO, 2008). Zaghini et al. (2021) reported exciting results in this regard. When managers share a proactive mindset with their employees, in terms of the necessary training and available resources, and adopt a participatory approach, they provide greater security and competence, overcoming contingent situations with greater reassurance and preparedness.

Indeed, Chudzicka-czupaÿa et al. (2022) surveyed 1,113 workers in Poland and found that the evaluation of the work environment is significant for the severity of workers' perceived stress. Furthermore, the dimension of trust in the supervisor is of the utmost importance in predicting stress levels (CHUDZICKA-CZUPAŸA et al., 2022). Thus, the importance of ensuring a suitable environment in the team, where people have a feeling of support and belonging to the group, stood out. As far as trust is concerned, the knowledge and skills of the supervisor and co-workers are the most relevant aspects. Additionally, unsafe environments have been reported to promote stress and anxiety (SONG et al., 2021), resulting in two more hypotheses to be tested:

H_4I: Stress, moderated by anxiety, influences the rules on the dismissal of civil servants.

H_4D: Anxiety influences the rules on the dismissal of civil servants.

Employees will also place their trust in the organization when observing how they are rewarded for their efforts; this recognition mainly refers to financial appreciation through salary, thus characterizing the fourth dimension of trust, called organizational financial recognition (OLIVEIRA; TAMAYO, 2008). Job insecurity impacts employees' mental health (RICHTER; NÄSWALL, 2019; SONG et al., 2021), which can relate to workplace stress and anxiety, two feelings tied to mental health. Thus, we have the following hypotheses:

H_5I: Stress, moderated by anxiety, influences organizational financial recognition.

H_5D: Anxiety influences organizational financial recognition.

Lastly, the last dimension that makes up the construct of employee trust in the organization is called ethical standards, which govern employers' relationships with their employees and customers, always seeking to foster an environment of responsibilities and honest and transparent relationships (OLIVEIRA; TAMAYO, 2008). Organizational values influence the employee's trust evaluation towards the organization (OLIVEIRA; SOUZA, 2014; YIN, 2022). Being in a tense environment undermines good relationships between parties in an organization, which can rattle employee trust (MITTAL et al., 2022).

Chu, Chan and So (2022) conducted a study on 500 Hong Kong workers who worked remotely for the first time and found that among the three stress reducers (company support, supervisor trust, and work-life balance), work-life balance is the only one that positively influenced workers' psychological well-

being, promoting happiness and relieving stress. When they encountered stress in their activities, their productivity was not impaired, as they participated more in non-work-related activities to relieve stress.

To this end, the last hypotheses of this study are presented:

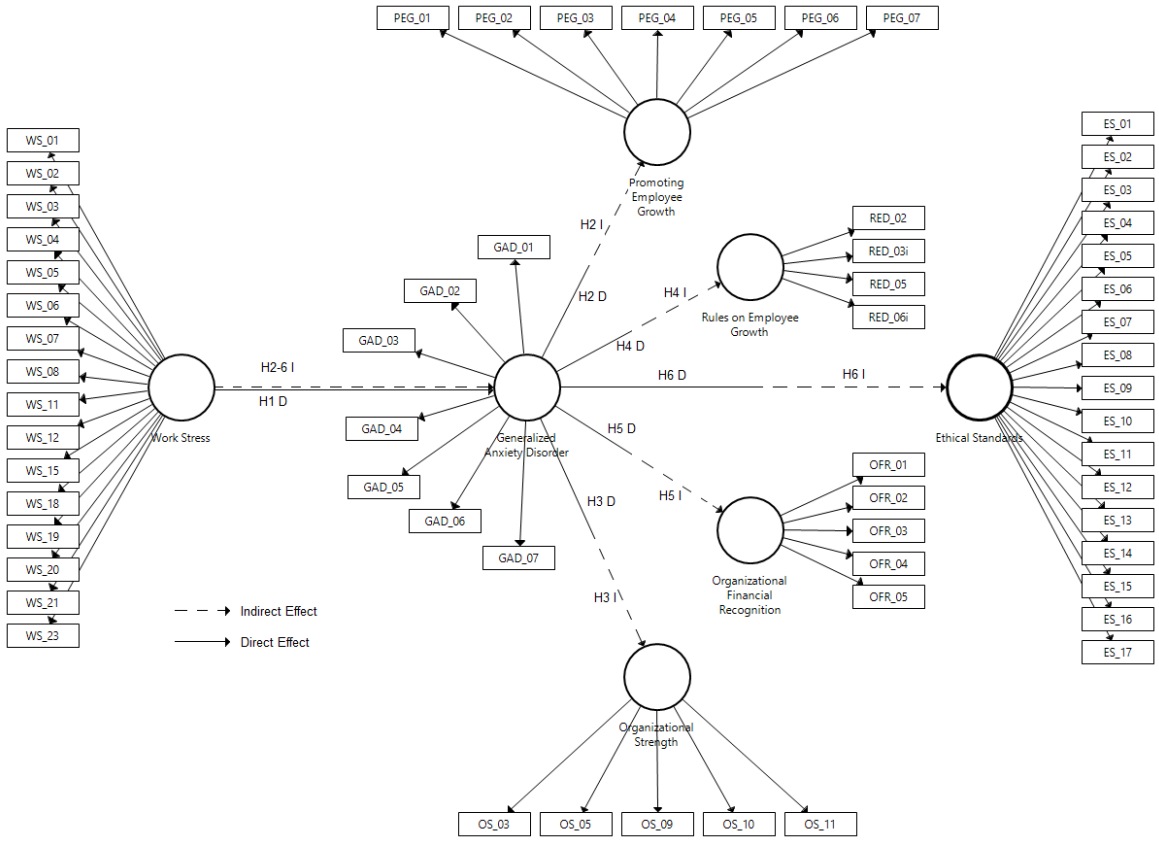
H_6I: Stress, moderated by anxiety, influences civil servants' ethical standards.

H_6D: Anxiety influences civil servants' ethical standards.

As Kloutsiniotis et al. (2022) pointed out, in the context of a crisis (e.g., the COVID-19 pandemic), anxiety, stress, and loneliness in the workplace will always be present. Therefore, one can observe the importance of the organization, in the role of managers, in knowing how to deal with these stressors to mitigate the increasing levels of burnout, which negatively and directly affect the organizations' results (HU et al., 2021; CHU, CHAN; SO, 2022; KLOUTSINIOTIS et al., 2022). In the next section, the methodological aspects of this study are discussed.

In order to achieve the outlined objective, Figure 1 illustrates the initial model proposed for the analysis.

Figure 1 – The initial structural equation model



Source: SmartPLS® software v. 3.3.9 (RINGLE; WENDE; BECKER, 2015).

The initial regression models are given by Equations 1.1 and 1.6:

$$GAD = \beta_1 (WS) \quad (1.1)$$

$$PEG = \beta_2 (GAD) + \beta_1 (WS) + \varepsilon_{EPG} \quad (1.2)$$

$$OS = \beta_3 (GAD) + \beta_1 (WS) + \varepsilon_{OS} \quad (1.3)$$

$$REG = \beta_4 (GAD) + \beta_1 (WS) + \varepsilon_{REG} \quad (1.4)$$

$$OFR = \beta_5 (GAD) + \beta_1 (WS) + \varepsilon_{OFR} \quad (1.5)$$

$$ES = \beta_6 (GAD) + \beta_1 (WS) + \varepsilon_{ES} \quad (1.6)$$

METHODOLOGICAL PROCEDURES

In order to achieve the research objective, a quantitative and descriptive study was carried out with 375 federal civil servants in higher education; the sample is characterized as non-probabilistic by convenience. It should be noted that this study was conducted between July and August 2021, a period justified for reaching an acceptable sample with reliability for the proposed model and analysis of the results.

Data were collected transversally through a survey developed with Google Forms and made available through institutional e-mails. The inclusion criterion consisted of being a civil servant of continuing education and filling out the informed consent form agreeing to participate. This study met the legal and ethical precepts of research and was approved by an ethics committee (Opinion no. 4.606.945; CAEE no. 44261821.8.0000.5346).

To measure the anxiety of the participants, we used the generalized anxiety disorder scale (GAD-7) developed and validated by Spitzer et al. (2006) and subsequently adapted and validated for Brazil by Bártolo, Monteiro and Pereira (2017). It is a self-report instrument that assesses the general anxiety symptoms described in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).

The GAD-7 has a unidimensional structure composed of seven items distributed on a 4-point Likert scale, ranging from 0 (not at all) to 3 (almost every day). The GAD-7 total score ranges from 0 to 21 points; the higher the score, the greater the severity of generalized anxiety symptoms. Regarding symptom severity, the values are between 0 to 5 points (none/normal), 5 to 9 points (mild anxiety), 10 to 14 points (moderate anxiety), and 15 to 21 points (severe anxiety).

The Work Stress Scale (WSS), developed and validated by Paschoal and Tamayo (2004), was chosen to assess the stress level perceived by civil servants. It is presented as a self-report instrument with a unidimensional structure composed of 23 items that form a single factor (unifactorial). Each item of the scale addresses a stressor, which corresponds to work overload, role conflict, role ambiguity, interpersonal relationships at work, career development factors, autonomy, work control, and an emotional reaction to these stressors (PASCHOAL; TAMAYO, 2004).

Its items are evaluated based on a 5-point Likert-type scale distributed as 1 (strongly disagree), 2 (disagree), 3 (partially agree), 4 (agree), and 5 (strongly agree) (PASCHOAL; TAMAYO, 2004). In conjunction, we used the ECEO developed and validated by Oliveira and Tamayo (2008) to measure the trust of civil servants in the educational institution. The ECEO is a multidimensional scale that performs a factor-based assessment corresponding to five dimensions: Promoting Employee Growth (7 questions), Organizational Strength (12 questions), Rules for Employee Dismissal (6 questions), Organizational Financial Recognition (5 questions), and Ethical Standards (17 questions). These items total 47 questions that are answered based on a 5-point Likert-type scale, ranging from “strongly disagree” to “strongly agree.”

Statistical analysis

Descriptive statistics were used to demonstrate the participants’ sociodemographic data. For the dimensions of the instruments, the scale standardization method was used so that the dimensions became comparable and classified (Equation 1) (Lopes, 2018).

$$Ss_i = 100 * \frac{(Sum - Minimum)}{(Maximum - Minimum)}, \quad (1)$$

where:

Ss_i = standardized score for dimension i;

Sum = sum of the valid scores for dimension i;

Minimum = the lowest possible score for dimension i;

Maximum = the highest possible score for dimension i.

The scores proposed by the seminal authors of the WSS, ECOS, and GAD-7 were adapted to a standardized score (Ssi), as presented in Table 1.

Table 1 – Adaptation of the authors' originally proposed WSS, ECOS, and GAD-7 scales with the standardized score.

Score of the original instrument	Proposed score (Ss_i)	Classification
WSS and ECOS		
All dimensions*	0 – 33.33 33.34 – 66.67 66.68 – 100.00	Low Moderate High
GAD-7		
1 – 4	0.00 – 15.00	Normal
5 – 9	15.01 – 45.00	Mild
10 – 14	45.01 – 70.00	Moderate
15 – 21	70.01 – 100.00	Severe

* Scale has no score proposed by the authors. Source: Lopes (2018)

As shown in Table 1, the WSS and ECOS instruments were classified as low, moderate, and high. As for the GAD-7, it was classified as normal, mild, moderate, and severe.

To analyze the relationships between the dimensions of the applied scales, partial least squares structural equation modeling (PLS-SEM) was used (Hair et al., 2017), which consists of using multivariate statistical techniques (multiple regression and confirmatory factor analysis) to explain the relationships between observed variables (OV's) and latent variables (LV's) (HAIR et al., 2014; TABACHNICK; FIDELL, 1996). Anxiety and stress were considered a predictive dimension (endogenous), and employee trust in the organization was considered exogenous. Given the methodological procedures, the results achieved are presented below.

RESULTS

Table 2 shows the sociodemographic data collected in the survey.

Table 2 – Sociodemographic characteristics of civil servants

Variables	Value
Age range (years)	
< 31	28 (7.47)
31 – 40	113 (30.13)
41 – 50	99 (26.40)
51 – 60	108 (28.80)
> 60	27 (7.20)
Sex, n (%)	
Male	135 (36.00)
Female	240 (64.00)
Level of education, n (%)	
Undergraduate degree	76 (20.27)
Specialization	148 (39.46)
Master's degree	121 (32.27)
Doctorate degree	30 (8.00)
Marital status, n (%)	
Widowed	6 (1.60)
Divorced	32 (8.53)

Unmarried	104 (27.73)
Married	233 (62.14)
Time of service (years), n (%)	
< 5	61 (16.27)
6 – 10	81 (21.60)
11 – 20	122 (32.53)
21 – 30	70 18.67)
> 30	41 (10.93)
Salary (Brazilian Real), n (%)	
< 4,000	88 (23.47)
4,000 – 8,000	213 (56.80)
> 8,000	74 (19.73)

Source: prepared by the authors.

Of a total of 375 employees who answered the survey, the predominant age bracket is 31–40 years old (30.13%), 240 (64.00%) are reported as being female, 148 (39.46%) have a specialization, and 233 (62.14%) are married. Of those surveyed, 32.53% have 11–20 years of service at the institution, and 56.80% have salaries between BRL 4,000.00 and BRL 8,000.00.

One can observe the existence of a sample of people of average age with a mild predominance of women, in which the vast majority of employees work for a considerable time in the institution, promoting a strong relationship with the organization and qualifying them to reliably answer the questions raised herein regarding the employees' trust in the organization. Additionally, it is possible to have a deeper analysis of times of crisis and feelings of anxiety and stress that may have already occurred in these years of work in the same institution.

Validity and model building and model fit tests

Some indicators were eliminated due to the assumptions required for the average variance extracted (AVE > 0.5). To this end, the factor loadings below 0.6 were eliminated, in this case: WS_09 (λ = 0.536); WS_10 (λ = 0.560), WS_13 (λ = 0.521), WS_14 (λ = 0.591), WS_16 (λ = 0.577), WS_17 (λ = 0.586); WS_22 (λ = 0.587), OS_01 (λ = 0.539), OS_02 (λ = 0.516), OS_04 (λ = 0.542), OS_06 ((λ = 0.596), OS_07 (λ = 0.372); OS_08 (λ = 0.507); OS_12 (λ = 0.474), RED_01 (λ = 0.087), and RED_04 (λ = 0.400).

The model stabilized after 9 iterations. This study adopted some criteria to evaluate the fit of the PLS-SEM model, including the standardized root mean square residual (SRMR), the square Euclidean distance (d_{ULS}) and geodesic distance (d-G), and the normed fit index (NFI). The results confirmed that the suggested structural model fit the data with acceptable indices such as SRMR = 0.068, d_{ULS} = 8.809, d-G = 2.368, NFI = 0.832) (HENSELER; HUBONA; RAY, 2016).

The SRMR value was below the threshold of 0.08 (SINKOVICS et al., 2016), and the NFI value was above the suggested value of 0.8 (HU; BENTLER, 1998), indicating that the satisfactory structural model fit the requirement.

Evaluation of the measurement model

Confirmatory factor analysis was performed as part of the measurement model evaluation in structural equation modeling (SEM) in order to confirm and refine the items (OVs) and dimensions (LVs) of the model. This step needs to examine three criteria: internal consistency reliability, convergent validity, and discriminant validity (HAIR et al., 2017).

Internal consistency and convergent validity

The internal consistency among the components in each dimension was verified using Cronbach's alpha (α). Table 3 lists the α values ranging from 0.705 to 0.943, all reaching values above the threshold value of 0.7, as suggested by Hair et al. (2014). In addition, the composite reliability values (ρ_c) of all

dimensions were higher than the recommended value of 0.7 (Hair et al., 2014), ranging from 0.818 to 0.947. Finally, the AVEs ranged from 0.522 to 0.708, and according to Ringle, Silva, and Bido (2014), values above 0.5 are suggested, resulting in satisfactory values.

Table 3 – Evaluation of the model

Dimensions	α	ρ_c	AVE
Generalized Anxiety Disorder (GAD)	0.931	0.944	0.708
Work Stress (WS)	0.940	0.945	0.573
Ethical Standards (ES)	0.943	0.947	0.516
Organizational Financial Recognition (OFR)	0.830	0.881	0.602
Organizational Strength (OS)	0.772	0.844	0.522
Promoting Employee Growth (PEG)	0.897	0.919	0.619
Rules on Employee Dismissal (RED)	0.705	0.814	0.525

Source: SmartPLS® software v. 3.3.9 (RINGLE; WENDE; BECKER, 2015).

The indications in Table 3 guarantee reliability in the internal consistency between the dimensions.

Discriminant validity

Discriminant validity was checked using the Fornell-Larcker and Heterotrait-Monotrait Ratio (HTMT) criteria to determine how much a dimension within its components differs from other dimensions (FORNELL; LARCKER, 1981). Thus, the square root of each dimension's AVE value was measured and compared to Pearson's correlation matrix and the HTMT criterion using the bootstrapping procedure (5,000 subsamples), which must have values below 1 for the upper limit (95% confidence). Table 4 shows that the square root of the AVE's for each dimension was greater than the values of the correlations, thereby validating this assumption. Hence, the assessment of discriminant validity between the dimensions met the requirements.

Table 4 – Fornell-Larcker and Heterotrait-Monotrait Ratio of the factor model

Dimension	$\sqrt{AVE}$	Pearson's Correlation Matrix						
		ES	GAD	OFR	THE	PEG	RED	WS
Ethical Standards	0.718	1.000						
Generalized Anxiety Disorder	0.841	-0.176	1.000					
Organizational Financial Recognition	0.776	0.538	-0.137	1.000				
Organizational Strength	0.722	0.616	-0.131	0.509	1.000			
Promoting Employee Growth	0.787	0.707	-0.154	0.654	0.551	1.000		
Rules on Employee Dismissal	0.724	-0.688	0.144	-0.334	-0.397	-0.587	1.000	
Work Stress	0.757	-0.385	0.414	-0.160	-0.243	-0.341	0.314	1.000
		Upper Limit (HTMT)$_{97.5\%}$						
Generalized Anxiety Disorder		0.269						
Organizational Financial Recognition		0.712	0.271					
Organizational Strength		0.820	0.277	0.756				
Promoting Employee Growth		0.894	0.277	0.841	0.753			
Rules on Employee Dismissal		0.899	0.297	0.558	0.654	0.802		
Work Stress		0.489	0.513	0.308	0.418	0.477	0.518	

Source: SmartPLS® software v. 3.3.9 (RINGLE; WENDE; BECKER, 2015).

Measurement model evaluations for internal consistency reliability, convergent validity, and discriminant validity met the requirements, empirically validating the appropriateness of the measurement model for this study.

Structural and hypothesis model testing and path relationship evaluations

The direct relationship between the dimensions was evaluated using regression coefficients (β) (Table 5). In addition, the bootstrapping procedure was performed to evaluate the significance of β values in the direct (D) and indirect (I) relationships between the dimensions based on the t-test value. According to Hair et al. (2017), the path relationship was considered significant for the 5% significance level when the t-test is above 1.96.

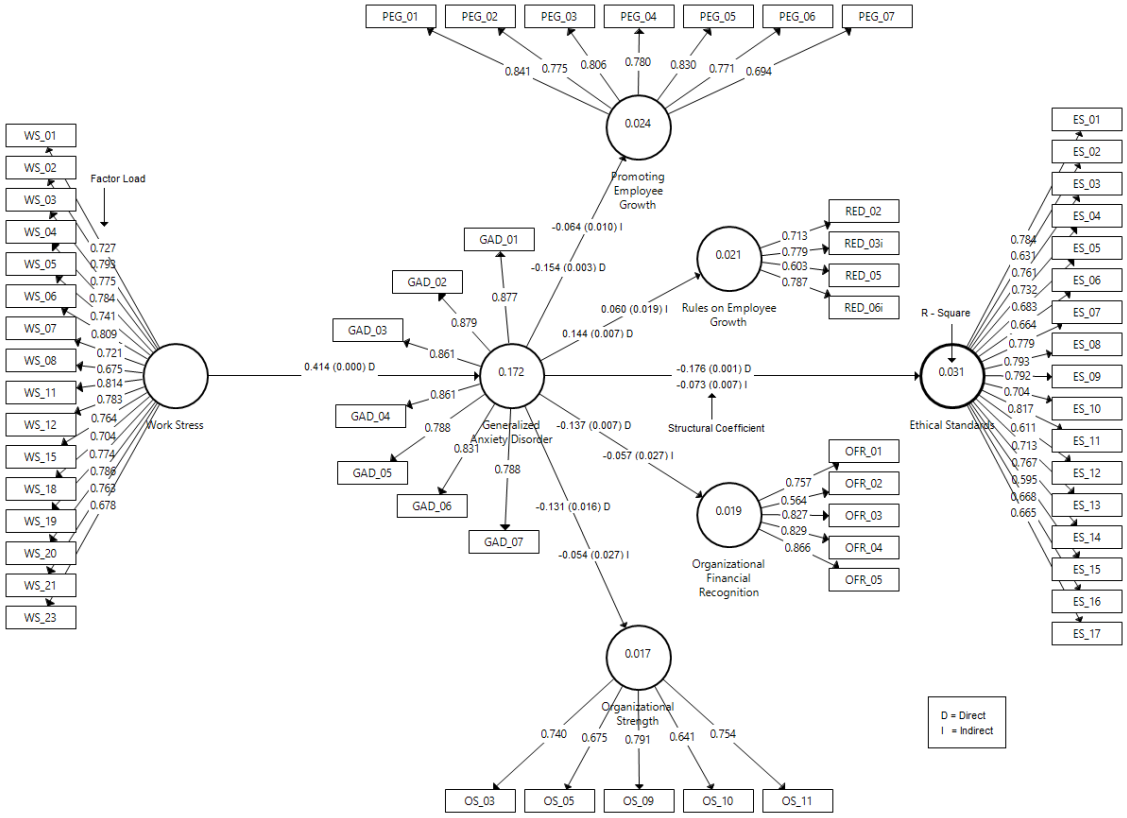
Table 5 – Results of the direct and indirect effects between the dimensions

Hypotheses / Path Relation						βs	sd*	t-statistics	p-value	Result
H1D	WS	→	GAD			0.414	0.041	9.998	0.000	Support
H2D	GAD	→	PEG			-0.154	0.050	3.114	0.002	Support
H3D	GAD	→	OS			-0.131	0.054	2.411	0.016	Support
H4D	GAD	→	RED			0.144	0.057	2.540	0.011	Support
H5D	GAD	→	OFR			-0.137	0.052	2.629	0.009	Support
H6D	GAD	→	ES			-0.176	0.056	3.149	0.002	Support
		Moderation								
H2I	WS	→	GAD	→	PEG	-0.064	0.024	2.692	0.007	Support
H3I	WS	→	GAD	→	OS	-0.054	0.025	2.201	0.028	Support
H4I	WS	→	GAD	→	RED	0.060	0.026	2.307	0.021	Support
H5I	WS	→	GAD	→	OFR	-0.057	0.024	2.413	0.016	Support
H6I	WS	→	GAD	→	ES	-0.073	0.026	2.811	0.005	Support

* sd = Standard deviation. Source: SmartPLS® software v. 3.3.9 (RINGLE; WENDE; BECKER, 2015).

Table 5 and Figure 2 show that all the proposed hypotheses presenting direct and indirect relationships between the dimensions were supported empirically, with all t-values being greater than 1.96 at the 5% significance level.

Figure 2 – Final structural equation model with the standardized coefficients.



Source: SmartPLS® software v. 3.3.9 (RINGLE; WENDE; BECKER, 2015).

All hypotheses relating the exogenous dimensions of WS and GAD were significant when related directly and indirectly to the ECOS dimensions ($p < 0.05$).

Predictive capability assessment

One of the important points in evaluating a PLS-SEM is to test the predictive accuracy and relevance of the model. Predictive accuracy is tested using the coefficient of determination (R^2 value; p-value), which presents the degree of variance explained in each endogenous dimension (Hair et al., 2017). Hair et al. (2017) explained that an R^2 value ranging between 0 and 1 (a high R^2 value) indicates a higher predictive accuracy, and one should evaluate its significance. Table 6 presents the evaluation of the model's accuracy and predictive relevance.

Table 6 – Evaluation of predictive accuracy and relevance

Dimensions	**R^2**	**p-value**	**SSO***	**SSE****	**Q^2**
GAD	0.172	0.000	2,625.00	2,312.47	0.119
ES	0.031	0.021	6,375.00	6,306.73	0.011
OFR	0.019	0.031	1,875.00	1,856,35	0.010
OS	0.017	0.036	1,875.00	1,861.59	0.007
PEG	0.024	0.030	2,625.00	2,592.32	0.012
RED	0.021	0.031	1,500.00	1,488.38	0.008

* SSO = Sum of Square Observations; **SSE = Sum of the Squared Prediction Errors. Source: SmartPLS® software v. 3.3.9 (RINGLE; WENDE; BECKER, 2015).

As observed in Table 6, the R^2 value for the predictor dimension GAD was 0.172 and others ranging from 0.017 to 0.031 ($p < 0.05$), indicating a substantial level of predictive accuracy (HENSELER; RINGLE; SINKOVICS, 2009; LOPES et al., 2020). Nevertheless, the assessment of predictive relevance was based on the sales procedure for calculating the value of Q^2 utilizing the blindfolding technique of the SmartPLS software.

Based on the suggestion of Hair et al. (2017) and Lopes et al. (2020), the value of $Q^2 > 0$ confirmed the predictive relevance among the endogenous variables in the model. The statistical results showed that the values of $Q^2 = 1 - (SSE / SSO)$ produced for each dimension are greater than 1, implying the predictive relevance of the model proposed in this study. Therefore, the final regression models are (Equations 3.1 to 3.6):

$$GAD = 0.414\ (WS) + \varepsilon_{GAD} \quad (3.1)$$

$$PEG = -0.154\ (CS) + 0.414\ (WS) + \varepsilon_{PEG} \quad (3.2)$$

$$OS = 0.131\ (CS) + 0.414\ (WS) + \varepsilon_{OS} \quad (3.3)$$

$$REG = 0.144\ (CS) + 0.414\ (WS) + \varepsilon_{REG} \quad (3.4)$$

$$OFR = -\ 0.137\ (CS) + 0.414\ (WS) + \varepsilon_{OFR} \quad (3.5)$$

$$ES = -\ 0.176\ (CS) + 0.414\ (WS) + \varepsilon_{ES} \quad (3.6)$$

The characteristics related to generalized anxiety disorder, work stress, and employee trust in the organization are listed in Table 7. In the analysis of the stress of the civil servants, we observed that 101 (26.93%) presented moderate to high stress, whose average was standardized mean 60.41 (11.12). As for generalized anxiety disorder, 285 (76.00%) were evaluated with moderate to severe anxiety disorder, and the mean was 40.85 (18.74).

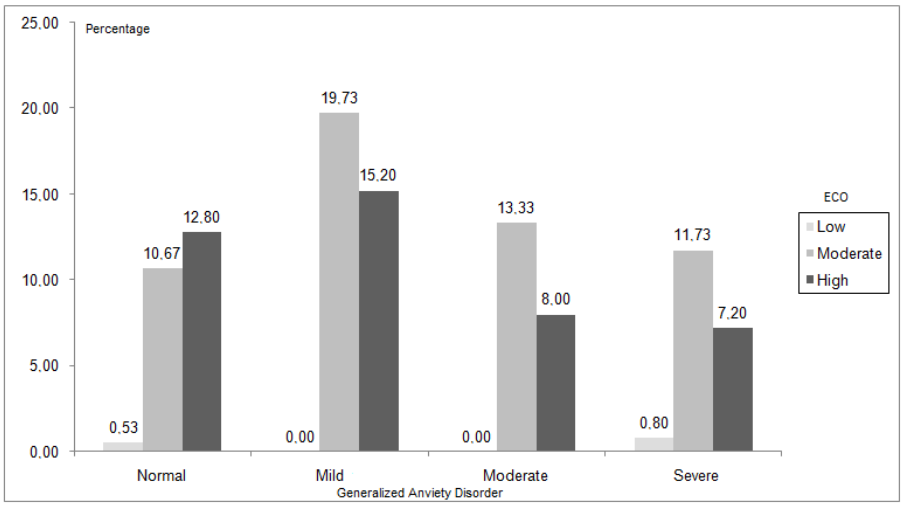
As for employee trust, we found that, in general, 370 (98.67%) employees have moderate to high trust in the organization. When analyzing the results per dimension, 262 (69.86%) showed low trust regarding the rules on employee dismissal, while 286 (76.27) had high trust for the organization's ethical standards and 242 (64.53%) high trust for promoting employee growth. As for the organizational strength and organizational financial recognition dimensions, 368 (98.13%) and 342 (91.20%) civil servants showed moderate to high confidence in the organization, respectively. The relationship between generalized anxiety disorder to the employees' trust in the organization is illustrated in Figure 3.

Table 7 – Generalized anxiety disorder, work stress scale, and civil servants' trust in the organization

Dimensions	**Classification n (%)**				**Descriptive***
	Normal	**Mild**	**Moderate**	**Severe**	**Mean (sd**)**
Generalized anxiety disorder	90 (24.00)	131 (34.93)	80 (21.33)	74 (19.73)	40.85 (18.74)
	Classification n (%)				
	Low	**Moderate**	**High**		**Mean (sd**)**
Work Stress Scale	274 (73.07)	80 (21.33)	21 (5.60)		60.41 (11.12)
Employee Trust in the Organization	5 (1.33)	189 (50.40)	181 (48.27)		65.02 (11.48)
Promoting Employee Growth	15 (4.00)	118 (31.47)	242 (64.53)		69.53 (18.46)
Organizational Strength	7 (1.87)	173 (46.13)	195 (52.00)		67.68 (16.72)
Rules on Employee Dismissal	262 (69.86)	107 (28.53)	6 (1.60)		24.72 (7.18))
Organizational Financial Recognition	33 (8.80)	210 (56.00)	132 (35.20)		59.73 (19.17)
Ethical Standards	5 (1.33)	84 (22.400)	286 (76.27)		75.78 (15.34)

* Ss_i - standardized score; **sd = standard deviation

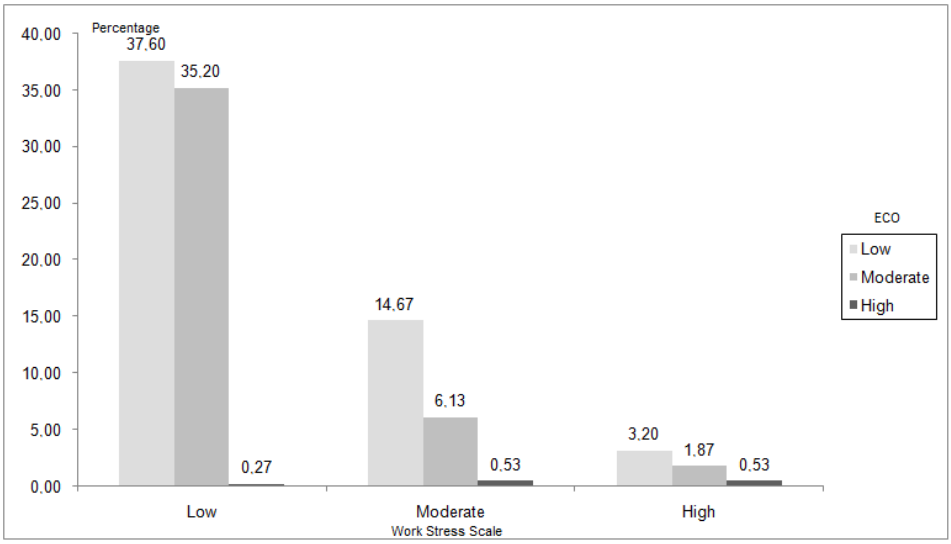
Figure 3 – Relationship of generalized anxiety disorder to employees' trust in the organization



Source: prepared by the authors.

By analyzing Figure 3, one can note that when presenting normal or low indices of generalized anxiety disorder, civil servants show moderate to high trust in the organization. In contrast, in the case of moderate or high generalized anxiety disorder, the employees' trust in the organization decreases, especially the high level of trust, which has the lowest rates (8 and 7.20%, respectively). Thus, it is possible to state that anxiety directly correlates with trust. As for work stress, its relationship with trust is presented in Figure 4.

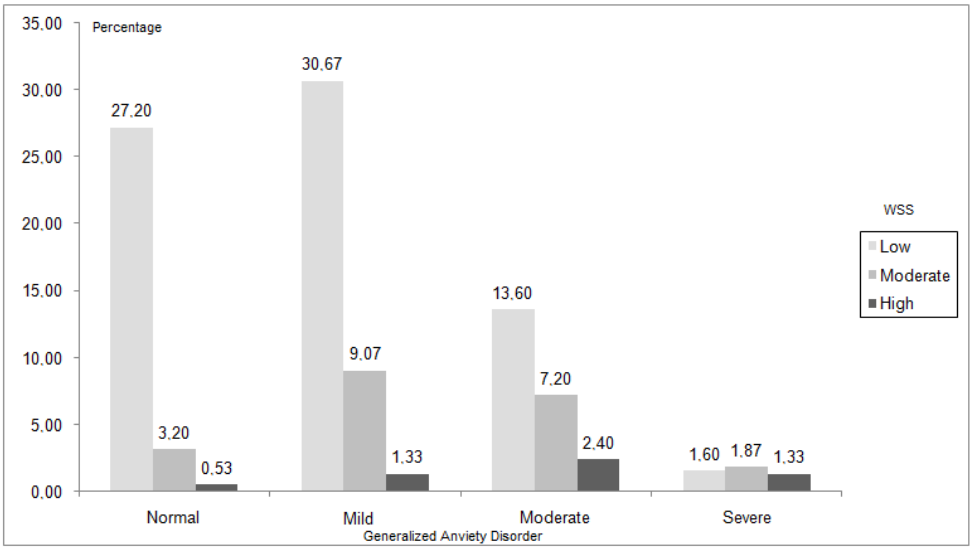
Figure 4 – Relationship of work stress to employee trust in the organization



Source: prepared by the authors.

Figure 4 shows that when civil servants show a low level of work stress, they have low (37.60%) and moderate (35.20%) trust in the organization. Nonetheless, in the case of high levels of job stress, the workers' trust in the organization presents significantly lower levels. These findings make it possible to state that work stress impacts the employees' trust in the organization, even indirectly mediated by anxiety. The relationships between generalized anxiety disorder and job stress are shown in Figure 5.

Figure 5 – Descriptive analysis of the dimensions of generalized anxiety disorder and work stress.



Source: prepared by the authors.

As shown in Figure 5, 30.67% of civil servants have a mild degree of generalized anxiety disorder and low stress. In comparison, those with normal anxiety levels have a low degree of stress (27.20%), and those with moderate anxiety have a low degree of stress (13.60%). In the case of those surveyed with high levels of generalized anxiety disorder, 1.87% also had moderate levels of stress. Thus, the existing relationship between anxiety and work stress and results found showed to be satisfactory for employees' well-being.

DISCUSSION

Our findings showed that 101 (26.93%) had moderate to high stress and 259 (69.07%) had mild to severe anxiety disorder. As Mittal et al. (2022) highlighted, even though stress cannot be extinguished, it is possible to identify and find the stressors that promote stress in different occupational areas. In the case of civil servants, more attention must be devoted to the psychological suffering of this population (HU et al., 2021).

As for the employees' trust in the organization, 370 (98.67%) employees presented moderate to high trust in the organization, and when analyzing the values obtained for each of the five dimensions, the lowest results were given for promoting employee growth (n = 242; 64.53%), ethical standards of the organization (n = 292; 77.87%), and regarding the rules on employee dismissal (n = 281; 78.93%). The dimensions of organizational strength (n = 368; 98.13%) and organizational financial recognition (n = 342; 91.20%) presented the best results.

Of the numerous consequences of the COVID-19 pandemic, the psychological impact suffered by individuals has been strongly observed, and with that, the development of anxieties and insecurities, including pandemic-specific fears, maintenance of a basic daily routine, change in economic situation, among others (FOUNTOULAKIS et al., 2022).

In the study by Fountoulakis et al. (2022), 47.41% of the respondents reported increased anxiety, and 40.28% reported increased depressive feelings. Corroborating the findings of Hu et al. (2021), 37.25 and 38.06% of respondents reported having symptoms of depression and anxiety, respectively. In the present study, 101 (26.93%) civil servants had moderate to high stress and 259 (69.07%) had mild to severe anxiety disorder.

In the study to validate the work stress scale of Paschoal and Tamayo (2004), the authors showed that stress could trigger a series of other emotions, including anxiety, thus confirming our first hypothesis (H_1D: Stress influences the anxiety of civil servants).

The hypotheses H_2I: Stress, when moderated by anxiety, influences civil servant growth and H_2D: Anxiety influences civil servant growth were confirmed herein, and this ECEO dimension, referring to the promotion of employees' growth, was highly trusted by civil servants (n = 242; 64.53%). This finding corroborates Hu et al. (2021), who found that Chinese civil servants who were younger, better educated, and had fewer years of work experience had higher scores for depression and anxiety.

Notably, in the case of the career of a civil servant, there is a well-defined career progression plan, where, using as an example the educational institution in which the present study was applied, the civil servant who enters this work modality is only entitled to salary progression after 18 months. In this sense, organizations must take responsibility for creating a work environment where employees do not feel excessive physical and mental wear, uncertainty, or pressure. As practical actions, work activities must be adapted to employees' abilities, preparing them in advance to perform the tasks and take care of their health through appropriate care programs (CHUDZICKA-CZUPAŸA et al., 2022).

Two other hypotheses related to the second dimension of the ECEO were confirmed: H_3I: Stress, moderated by anxiety, influences organizational strength and H_3D: Anxiety influences organizational strength. The organizational strength dimension presented the highest trust among the respondents (n = 368; 98.13%), which can be justified by the fact that it is a federal public educational institution with strong financial strength and social recognition.

Kar, Kar and Kar (2021) reported that the weight of employees' concerns might increase as secondary stresses appear, such as economic difficulties or risks related to job retention. In contrast, by trusting the organization, the employee believes that the counterparty will not act opportunistically and come to harm. Therefore, trust is an indicator that social interaction can be established and maintained over time (OLIVEIRA; TAMAYO, 2008), as evidenced herein.

Hypotheses H_4I: Stress, moderated by anxiety, influences the rules on the dismissal of civil servants and H_4D: Anxiety influences the rules on the dismissal of civil servants were also confirmed. For this dimension only, the employees showed low trust (n = 281; 78.93%). This reinforces the need for the organization to inform its employees about the resources available and practical methods used to deal with adversities that may arise (KAR; KAR; KAR, 2021).

As for hypotheses H_5I: Stress, moderated by anxiety, influences organizational financial recognition and H_5D: Anxiety influences organizational financial recognition, both were confirmed, and regarding this dimension, 342 (91.20%) civil servants showed high trust. The salary increase is one of the forms of recognition by the organization and benefits both parties because when employees realize that their efforts are recognized and valued, they are more productive (OLIVEIRA; TAMAYO, 2008). We also observed that most of the sample reported receiving salaries considerably above the minimum, which may reinforce the feeling of financial appreciation and recognition.

Chudzicka-czupaÿa et al. (2022) reported that appropriate rewards for completed tasks, whether financial or otherwise, are significant strategies for stress prevention since the feeling of being recognized as a predictor of stress. Chu, Chan, and So (2022) stated that achieving a healthy work-life balance promotes happiness and also relieves stress, so when employees feel happy, work productivity increases and recognition takes place.

The last two hypotheses were also confirmed: H_6I: Stress, moderated by anxiety, influences civil servants' ethical standards and H_6D: Anxiety influences civil servants' ethical standards. In this dimension, 292 (77.87%) employees declared high trust. This result corroborates Chudzicka-czupaÿa et al. (2022), who found that workers' feeling that their values coincide with those of the organization is a predictor of stress. In the study by Zanabazar, Jigjiddor and Jambal (2022), higher work satisfaction led employees to be loyal and trust the organization they work for, which made them deepen their commitment and show positive attitudes toward the company.

These findings contribute to society and government to better understand the mental health situation of civil servants and provide references and guidelines to formulate corresponding management and prevention measures (SONG et al., 2021). In times of crisis, being aware of the possible consequences that stress and anxiety can cause to civil servants and in the development of their activities is of the utmost importance so that there are policies to prevent or mitigate such symptoms, valuing actions to promote organizational well-being.

FINAL CONSIDERATIONS

This study aimed to analyze the degree of anxiety, work stress, and worker trust and whether anxiety moderates the relationships between work stress and worker trust dimensions in civil servants during the COVID-19 pandemic. Our findings suggest that public organizations, specifically universities and educational institutions, can improve their understanding of the mental health status and various stressors of their employees and devote more attention to creating prevention, containment, and intervention measures for anxiety symptoms in order to make the environment increasingly humanized and healthy.

It was observed that 41.06% of respondents demonstrated a moderate to severe degree of generalized anxiety disorder. Thus, strategies must be created to maintain transparency regarding the norms related to employee dismissal since the lack of clarity can cause insecurity and uncertainty. Moreover, we observed that anxiety moderates the relationship between work stress and worker trust since all hypotheses were supported.

Given our findings, this study provides theoretical and managerial contributions. Regarding the theoretical contributions, the present article presents empirical research on Brazilian civil servants in education and who faced the COVID-19 pandemic, where many changes have occurred in this environment. It also contributes to disseminating knowledge about the area of behavioral diseases applied to the work environment.

As managerial contributions, our empirical findings can help public managers to stimulate the generation of proactive actions of the competent bodies to mitigate the levels of anxiety and work stress and increase the trust of the civil servants in the institution so that the model can be disseminated and tested in other populations.

As a limitation, his study focused on researching educational civil servants, which has its own unique cultural and organizational characteristics. The findings may not be generalizable to other cultural contexts, where attitudes towards work-life balance and trust may differ.

As suggestions for future studies can focus their efforts on other public sectors to compare the results and confirm the findings. However, it is suggested for new research, can employ the same analysis

model in different publics, including sectors and, especially, different contexts. It is understood that the COVID-19 pandemic may have accentuated the symptoms and development of anxiety and stress, which may affect the employee's trust in the organization, leading to numerous uncertainties of the period. Nevertheless, the resumption of activities in the so-called post-pandemic period, which configures a period of stability of the disease and with high immunization, opens new scenarios in the work environment. What denotes the study of this new beginning are the challenges and how workers' physical, mental, and psychological health will be.

ACKOLEDGMENTS

This study was supported by the following Brazilian research agencies: Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq), Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES) and Fundação de Amparo à Pesquisa do Estado do Rio Grande do Sul, Brazil (FAPERGS). We would also like to thank Atlas Assessoria Linguística (ATLAS) for language editing.

REFERENCES

APA - AMERICAN PSYCHOLOGICAL ASSOCIATION. **What's the difference between stress and anxiety?** American Psychological Association. Available in: https://www.apa.org/topics/stress/anxiety-difference.

BÁRTOLO, A.; MONTEIRO, S.; PEREIRA, A. Estrutura fatorial e validade de construto da escala Generalized Anxiety Disorder 7-item (GAD-7) entre alunos universitários em Portugal. **Cadernos de Saúde Pública**, v. 33, n. 9, p. 1-12, 2017. https://doi.org/10.1590/0102-311X00212716.

CHU, A. M. Y.; CHAN, T. W. C.; SO, M. K. P. Learning from work-from-home issues during the COVID-19 pandemic: Balance speaks louder than words. **PLOS ONE**, v. 17, n. 1, 2022. https://doi.org/10.1371/journal.pone.0261969.

CHUDZICKA-CZUPAŸA, A.; GRABOWSKI, D.; CZERW, A.; STASIŁA-SIERADZKA, M. Assessment of worklife areas, trust in supervisor and interpersonal trust as conditions of severity of stress at work. **International Journal of Occupational Medicine and Environmental Health**, 2022. https://doi.org/10.13075/ijomeh.1896.01990.

FORNELL, C.; LARCKER, D. F. Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics. **Journal of Marketing Research**, v. 18, n. 3, p. 382-388, 1981. https://doi.org/10.1177/002224378101800313.

HAIR, J. F.; GABRIEL, M. L. D. S.; PATEL, V. K. Modelagem de Equações Estruturais Baseada em Covariância (CB-SEM) com o AMOS: Orientações sobre a sua aplicação como uma Ferramenta de Pesquisa de Marketing. **Revista Brasileira de Marketing**, v. 13, n. 2, p. 44-55, 2014. https://doi.org/10.5585/remark.v13i2.2718.

HAIR, J. F.; HULT, G. T. M.; RINGLE, C.; SARSTEDT, M. **A primer on partial least squares structural equation modeling (PLS-SEM)**. Los Angeles: Sage publications; 2017.

HENSELER, J.; HUBONA, G.; RAY, P. A. Using PLS path modeling in new technology research: updated guidelines. **Industrial Management Data Syst**em, v. 116, p. 2-22, 2016. https://doi.org/10.1108/IMDS-09-2015-0382.

HENSELER, J.; RINGLE, C. M.; SINKOVICS, R. R. **The Use of Partial Least Squares Path Modeling in International Marketing**. New challenges to International Marketing. Emerald Group Publishing Limited. 2009. https://doi.org/10.1108/S1474-7979(2009)0000020014

HU, L.; BENTLER, P. M. Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. **Psychological Methods**, v. 3, n. 424, 1998. Available in: https://psycnet.apa.org/doi/10.1037/1082-989X.3.4.424.

HU, Q., HU, X., ZHENG, B.; Li, L. (2021). Mental Health Outcomes Among Civil Servants Aiding in Coronavirus Disease 2019 Control. **Frontiers Public Health**, v. 9, p. 601791. https://doi.org/10.3389/fpubh.2021.601791.

KAR, N.; KAR, B.; KAR, S. Stress and coping during COVID-19 pandemic: Result of an online survey. **Psychiatry Research**, v. 295, 2021. https://doi.org/10.1016/j.psychres.2020.113598.

KLOUTSINIOTIS, P. V.; MIHAIL, D. M.; MYLONAS, N.; PATELI, A. Transformational Leadership, HRM practices and burnout during the COVID-19 pandemic: The role of personal stress, anxiety, and workplace loneliness. **International Journal of Hospitality Management**, v. 102, p. 103177, 2022. https://doi.org/10.1016/j.ijhm.2022.103177.

LACOMBA-TREJO, L.; SCHOEPS, K.; VALERO-MORENO, S.; DEL ROSARIO, C.; MONTOYA-CASTILLA, I. Teachers' Response to Stress, Anxiety and Depression During COVID-19 Lockdown: What Have We Learned from the Pandemic? **Journal of School Health**, v. 92, n. 9, p. 864-872, 2022. https://doi.org/10.1111/josh.13192.

LOPES, L. F. D. **Métodos Quantitativos Aplicados ao Comportamento Organizacional**. [electronic resource]. Santa Maria: Voix, 2018. Available in: https://www.gpcet.com/wp-content/uploads/2023/05/E-book.pdf.

LOPES, L. F.; CHAVES, B. M.; FABRÍCIO, A.; PORTO, A.; ALMEIDA, D. M.; OBREGON, S. L.; LIMA, M. P.; SILVA, W. V.; CAMARGO, M. E.; VEIGA, C. P.; MOURA, G. L.; SILVA, L. S. C. V.; COSTA, V. M. F. Analysis of Well-Being and Anxiety among University Students. **International Journal of Environmental Research and Public Health**, v. 17, n. 11, 2020. https://doi.org/10.3390/ijerph17113874.

MITTAL, S.; MAHENDRA, S.; SANAP, V.; CHURI, P. How can machine learning be used in stress management: A systematic literature review of applications in workplaces and education. **International Journal of Information Management Data Insights**, v. 2, n. 2, p. 100110, 2022. https://doi.org/10.1016/J.JJIMEI.2022.100110.

OLIVEIRA, Á. F.; GOMIDE JÚNIOR, S.; POLI, B. V. Antecedentes de bem-estar no trabalho: Confiança e políticas de gestão de pessoas. **RAM. Revista de Administração Mackenzie**, v. 21, n. 1, 2020. https://doi.org/10.1590/1678-6971/eRAMD200105.

OLIVEIRA, A. F.; SOUZA, M. A. Confiança do empregado na organização: impacto dos valores pessoais e organizacionais. **Revista Psicologia: Organizações e Trabalho**, v. 14, n. 2, p. 204-217, 2014.

OLIVEIRA, Á. F.; TAMAYO, Á. **Confiança do empregado na organização**. Siqueira, M. M. M. (org.). In: Medidas do comportamento organizacional: Ferramentas de diagnóstico e de gestão. Porto Alegre: Artmed, 2008.

PFEIFER, J.; EGGER, A.; HUGHES, M.; TONDL, L.; HIGH, R.; NELSON, K. L. An investigation of stress and anxiety among health professions students in the early stages of the COVID-19 pandemic. **Journal of interprofessional education & practice**, v. *28*, p. 100531, 2022. https://doi.org/10.1016/j.xjep.2022.100531.

RICHTER, A., NÄSWALL, K. Job insecurity and trust: Uncovering a mechanism linking job insecurity to well-being. **Work & Stress**, v. 33, n. 1, p. 22-40, 2019. https://doi.org/10.1080/02678373.2018.1461709.

RINGLE, C. M.; SILVA, D.; BIDO, D. D. S. Modelagem de Equações Estruturais com Utilização do Smartpls. **Revista Brasileira de Marketing**, v. 13, n. 2, p. 56-73, 2014. https://doi.org/10.5585/remark.v13i2.2717.

RINGLE, C. M.; WENDE, S.; BECKER, J. M. **SmartPLS 3**. Bönningstedt: SmartPLS, 2015.

SINKOVICS, R. R., HENSELER, J.; RINGLE, C. M.; SARSTELD, M. Testing measurement invariance of composites using partial least squares**. International Marketing Review**, v. 33, p. 405-431, 2016. https://doi.org/10.1108/IMR-09-2014-0304.

SONG, H., ZHANG, M., WANG, Y., YANG, L., WANG, Y., LI, Y. The impact of resilience on anxiety and depression among grass-roots civil servants in China. **BMC public health**, v. 21, n. 1, p. 1-10, 2021. https://doi.org/10.1186/s12889-021-10710-2.

SOROKIN, M. Y.; KASYANOV, E. D.; RUKAVISHNIKOV, G. V.; KHOBEYSH, M. A.; MAKAREVICH, O. V.; NEZNANOV, N. G.; ...; MAZO, G. E. Determinants of Stress Levels and Behavioral Reactions in Individuals with Affective or Anxiety Disorders During the COVID-19 Pandemic in Russia. **Frontiers in Sociology**, v. 7, 2022. https://doi.org/10.3389/fsoc.2022.870421.

SPITZER, R. L.; KROENKE, K.; WILLIAMS, J. B. W.; LÖWE, B. A brief measure for assessing generalized anxiety disorder: the GAD-7. **Archive International Medicine**, v. 166, n. 10, p. 1092-7, 2006. https://doi.org/10.1001/archinte.166.10.1092.

STEIN, M. B.; SAREEN, J. Generalized anxiety disorder. **New England Journal of Medicine**, v. 373, n. 21, p. 2059-2068, 2015. https://doi.org/10.1056/NEJMcp1502514.

TABACHNICK, B. G.; FIDELL, L. S. **Using multivariate statistics**. 3. ed. New York: Harper Collins, 1996.

TONIOLO-BARRIOS, M.; PITT, L. Mindfulness and the challenges of working from home in times of crisis. **Business Horizons**, v. 64, n. 2, p. 189-197, 2021. https://doi.org/10.1016/j.bushor.2020.09.004.

YIN, J. Living with tensions in the workplace: a grounded theory of paradoxical leadership in cultivating subordinates' paradox mindset, **Leadership & Organization Development Journal**, v. 43, n. 6, p. 862-873, 2022. https://doi.org/10.1108/LODJ-04-2021-0151.

ZAGHINI, F.; FIORINI, J.; LIVIGNI, L., CARRABS, G.; SILI, A. Um estudo de métodos mistos da abordagem de uma organização para a crise de saúde COVID-19. **Enfermeiras Outlook**, v. 69, n. 5, p. 793 804, 2021. https://doi.org/10.1016/j.outlook.2021.05.008.

ZANABAZAR, A.; JIGJIDDOR, S.; JAMBAL, T. The Impact of Work-related Stress on Job Satisfaction and Organizational Trust during COVID-19 Pandemic. **SHS Web of Conferences**, v. 135, 2022. https://doi.org/10.1051/shsconf/202213501019.