

## STRESS AND BURNOUT SYNDROME IN ACCOUNTING STUDENTS



<https://doi.org/10.56238/arev7n4-241>

Submitted on: 03/23/2025

Publication date: 04/23/2025

**Francieli Dalla Costa Rebelatto<sup>1</sup>, Eliane Tavares Herber<sup>2</sup>, Ricardo Adriano Antonelli<sup>3</sup>  
and Sérgio Paes de Barros<sup>4</sup>**

### ABSTRACT

This research sought to evaluate the variation in the level of stress and *Burnout* syndrome during the 2019 academic year of students in the Accounting Sciences Course. The present research is classified as descriptive, quantitative and is a *survey*. Regarding the results, it was found that the students presented more symptoms in the phases of resistance and exhaustion, demonstrating chronicity of stress as the year went by. Regarding *Burnout*, there was a higher score in the Study and Personal Relationship constructs, with higher absolute values in the first two months, although it did not constitute a relevant statistical discrepancy. The study contributes to the planning of pedagogical

---

<sup>1</sup>Postgraduate in MBA in Accounting, Controllershship and Auditing (UNINTER)  
Graduated in Accounting Sciences from the Federal Technological University of Paraná (UTFPR) – Pato Branco Campus.

Email: francieli.dallacosta2611@gmail.com

ORCID: <https://orcid.org/0000-0003-4248-1044>

<sup>2</sup>Postgraduate in MBA in Finance and Controllershship (UNOPAR)

Graduated in Bachelor of Business Administration from Mater Dei College

Graduated in Accounting Sciences from UTFPR - Campus Pato Branco

Entrepreneur in the company - Financial Management Clinic

Professor of the Business Administration course - Faculdade Unochapecó - Campus São Lourenço d'Oeste

Experience in the area of Administration and Accounting.

E-mail: elianetherber@gmail.com

ORCID: <https://orcid.org/0000-0003-4060-4653>

<sup>3</sup>Dr. and Master in Accounting from the Graduate Program in Accounting (PPGCONT) at the Federal University of Paraná (UFPR)

Bachelor of Accounting from the Federal Technological University of Paraná - Pato Branco Campus (UTFPR)

Bachelor in Computer Science from the State University of Ponta Grossa (UEPG).

Specialist in Development for Internet Environment using Object Orientation, Java and Database by UTFPR

Experience in the areas of Information Technology and Accounting Sciences, with emphasis on management accounting, information systems, financial analysis, accounting expertise, accounting teaching,

implementation of information systems and Java programming

Judicial Expert since 2011 acting in civil and banking cases

Professor of the Accounting course at UTFPR – Pato Branco Campus

Email: rantonelli@utfpr.edu.br

ORCID: <https://orcid.org/0000-0001-7606-2388>

<sup>4</sup>Dr. in Social and Work Psychology from USP - University of São Paulo (2015)

Master in Social Psychology of Work from USP (2010)

Psychologist from the Institute of Psychology of the University of São Paulo - IP-USP (2006)

Effective Professor at the Federal Technological University of Paraná - UTFPR, Pato Branco Campus

Experience in the area of Psychology, with emphasis on Social Psychology, working mainly on the following topics: Social Psychology of Work, Organizational Psychology and Mental Health at Work.

Professor of Higher Education at UTFPR – Pato Branco Campus.

E-mail: sergiobarros@utfpr.edu.br

ORCID: <https://orcid.org/0000-0002-1891-7103>

proposals that enable a better reorganization of academic demands in order to reduce absenteeism and dropout from the course.

**Keywords:** Stress. Burnout Syndrome. Accounting.

## INTRODUCTION

Brazilian accounting students, according to Peleias, Petrucci, Garcia and Silva (2008), generally have double shifts, studying and working. Thus, for the vast majority of Accounting students, according to Matsuura (2008), the study configures an extension of the working day.

In this context, the double shift can contribute to an excessive load of obligations, which for Campos, Kühl, Andrade and Stefano (2016), makes it difficult to control the feelings accumulated in daily life, enabling the emergence of stress, which can manifest itself both in professional life and in social life.

The main cause of physical and mental illness, often driven by stress, according to Lipp (2003), is the current way of life; It is responsible for producing negative consequences for individuals. Also according to the author, the state of tension caused by stress is one of the most common problems that human beings face, characterized by a state of tension and intense imbalance in the body, which can trigger several serious diseases, in addition to producing negative consequences for the individual and the social environment.

The reasons for the emergence of stress are diverse, according to França and Rodrigues (2012), and can arise from time and deadline pressures, decisions to make, long hours and changes in the work environment. As a consequence of stress, specifically occupational stress, Burnout Syndrome is one of the most important and common consequences that, according to Schmidt, Paladini, Biatol, Pais and Oliveira (2013), can be caused by prolonged stress, whose coping situations used were not sufficient.

Among the ways that *Burnout* can manifest itself are discouragement, hopelessness, cynicism, isolation, inflexibility, absenteeism, among other factors that affect production. Pereira, Jiménez-Moreno, Kurowski, Amorin, Cartollo, Garrosa and González (2010) indicate that *Burnout* can also influence the drop in professional production, the quality of work, the high turnover and the increase in occupational accidents. For the psychologist at the Albert Einstein Hospital, Ana Kernkraut, "the imbalance in the health of the professional causes consequences in the quality of the services provided and in the production. These and other consequences have incited the need for investigation and investment in the individual's quality of life" (Isma Brasil, 2017). In view of the above, considering the double journey of students, the present research seeks to answer the

following problem: Is there variation in the level of stress and *Burnout syndrome* during the 2019 academic year of students in the Accounting Sciences Course?

The present research is justified by the daily life of Accounting professionals/students, who according to Peleias, Guimarães, Chan and Carlotto (2017), go through several stressful situations throughout the course, where they are charged for activities that require prior preparation, such as reports, practical exercises, etc.

This situation is worrisome, according to Trigo, Teng and Hallak (2007), because over the years, with a more populous world, there is a tendency for a greater number of people exposed to develop mental disorders. To this end, the authors suggest that there is a need for greater investments in mental health, thus suggesting the importance of research on the theme of the present study.

Thus, this research has as a theoretical contribution, in addition to comparing the results achieved with previous studies, to evaluate the nuances of students who have *Burnout syndrome* and/or stress, during the school year, allowing the identification of students in more vulnerable contexts.

As a practical contribution, the present research seeks to demonstrate to those involved in the Accounting Sciences course, if there are students who have *Burnout syndrome* and/or stress and which periods of the year they are more vulnerable to stressful stimuli. It is important to emphasize that academic research on this subject is essential for institutions to be aware of the situation and to be able to better prepare, together with their faculty, for actions that will contribute to the mental health of their students.

In general, it is expected that the present research will become an instrument of investigation on academic experiences and foster discussions on the subject, in order to provide a better understanding of variables that permeate chronic stress in academic and professional life, guiding the elaboration of preventive actions to minimize or even eliminate the negative influences of these factors in the lives of students and contribute to achieving better academic performance. aiming as a result at improving the teaching-learning process.

## THEORETICAL FRAMEWORK

### STRESS

According to Braga, Pereira and Marques (2013), the word "stress" is derived from the Latin *stringere* which means "to squeeze or constrain". In a study carried out, Lipp (2003) notes that the term stress was used only to mean affliction and adversity in the seventeenth century, and only in the following century was it used to refer to the reactions that produced a collapse in the mechanisms of organic homeostasis. Also according to the aforementioned study, it was only in 1951 that stress was defined as a response of the body to stressful situations, which has three phases: alertness, resistance and exhaustion.

The alert phase is considered the functional phase of stress, as there is production of adrenaline, an increase in adaptation responses and a consequent increase in the chances of survival. In the resistance phase, the individual seeks to deal with the stressors for a prolonged period of time and, if they persist, there is a decrease in the individual's resistance and the appearance of various symptoms. In this second phase, stress ceases to be functional and becomes dysfunctional. If the body does not return to homeostasis, to the initial equilibrium, due to the continuous persistence of stress-generating factors, the individual may enter the exhaustion phase, which includes serious diseases such as heart attack, ulcers, psoriasis, depression and others (Lipp, 2003).

According to Guimarães (2014), stressful stimuli can be varied throughout life, either due to stressful contemporary life, changes in values, excessive competition and demands.

In the literature, some studies seek to assess the stress of Accounting students, such as Rezende, Miranda, Pereira and Cornacchione Jr (2017) who, through the Perceived Stress Scale (PSS), it was possible to identify that more than half of accounting students presented a high and very high level of stress, with 48.87% and 6.8% respectively, and only 4.21% with a level considered low. In this study, a significant association was found between the level of stress and academic performance.

According to the Peleias survey (2017), 81.4% of Accounting students declared, in addition to studying, to work eight hours a day, characterizing the double shift. Of these, 46.3% reported emotional exhaustion, 11.2% disbelief or depersonalization, and 31.3% changes in professional effectiveness.

Along the same lines, Silva, Pereira and Miranda (2018) analyzed 684 students of Accounting Sciences and Administration enrolled in a federal public higher education

institution, and identified that 51.17% of the students were highly stressed, and only 2.78% demonstrated low levels of stress.

## BURNOUT SYNDROME

In Freudenberger's (1975) view, *Burnout* means reaching exhaustion. According to Harrison (1999), *Burnout* syndrome is the result of chronic stress, typical of daily work with continuous stress. Burnout syndrome arises in a constant, gradual and cumulative process, being able to reach a high state of severity and its evolution can take years, even decades (Alvarez, Blanco, Aguado, Ruíz, Cabaco, Sánchez, Alonso, & Bernabé, 1993; Delgado, 1995; Rudow, 1999).

For Freudenberger (1975), the more energy and dedication an individual attributes to perform a certain task, if he or she is unable to succeed, the greater the possibility of frustration and exhaustion.

According to Carlotto (2002), *the Burnout syndrome* is composed of three dimensions: emotional exhaustion; disbelief or depersonalization and low personal fulfillment at work. Emotional exhaustion, according to Maslach, Shaufeli and Leiter (2001), is the main indicator of the presence of *Burnout*, as it is directly related to overwork, physical and emotional exhaustion, as well as feelings of stress. Disbelief, on the other hand, is characterized by indifference and insensitivity towards activities and co-workers, while, according to Maslach (2005), the worsening of this condition will lead to the third dimension of the syndrome, low personal and professional fulfillment, with a feeling of frustration and incapacity.

Specifically in 126 Accounting students, Lima, Meurer, Lopes and Antonelli (2019) evaluated Burnout Syndrome and found that, in the last year of graduation, they are higher than the others, so that the degree of *Burnout* is not differently significant among students who have higher or lower academic performance. In addition, the authors found that female respondents had higher levels of *burnout* and also better academic performance.

In the professional environment, Loaiza and Peña (2013) found considerable levels of stress and *burnout* among public accountants in Colombia. It is important to highlight that, in the Brazilian context, research has found that accounting professionals face problems related to stress since their training, according to findings by Guimarães (2014), Campos *et al.* (2016) and Peleias *et al.* (2017), which in a way brings greater concern for the mental health of these future professionals.

## RESEARCH METHODOLOGY

The instrument used for data collection consisted of a questionnaire, consisting of three blocks. The first block refers to stress, the second refers to *the Burnout* syndrome and the third concerns the characteristics of the respondents. Along with the questionnaire, the respondents answered the informed consent form (ICF), which was delivered along with the questionnaire, agreeing to participate in the research.

Lipp's Inventory of Stress Symptoms for Adults (ISSL) (Lipp, 2000), in the first block of the questionnaire, consists of three tables referring to the four phases of stress and has a list of physical and psychological symptoms, which allows the identification of stress in the student.

Chart 1 of the instrument evaluates the alert phase, in which the student must indicate the symptoms he or she has experienced in the last 24 hours. Chart 2 evaluates the phase of resistance and near exhaustion, where the student must indicate the symptoms he has experienced in the last week. In chart 3, it is possible to diagnose stress in the student, and the exhaustion phase is analyzed in this one. The student is asked to indicate the symptoms he has experienced in the period of one month.

The second block evaluates *the Burnout* syndrome through the *Copenhagen Burnout Inventory – Student Version* (CBI-S) of the study by Campos, Carlotto and Marôco (2013), which was translated, adapted and validated for use in Brazil, based on the original instrument called *Copenhagen Burnout Inventory* (CBI) by Kristensen, Borritz, Villadsen and Christensen (2005), which was developed at the National Center for Working Environment Research in Denmark.

In this sense, the CBI-S aims to identify the presence of *Burnout* in the responding students, through 25 questions in which the student must inform their degree of agreement or disagreement, if they never, rarely, sometimes, frequently or always witness the feelings and emotions listed. In addition, an open question was added for the respondent to mention three points that most negatively affect him in relation to the study.

The third and last block consists of questions on the characterization of the respondent, namely: age, gender, children, marital status, period of the course, whether they have another degree, whether they have an employment relationship, area of professional activity and their perception of training in the exercise of the profession.

Of the 156 students regularly enrolled, data were collected through the application of a questionnaire at the end of each of the four school bimesters, so that the first collection



was carried out between 04/29/2019 and 05/08/2019 with 129 responses received; the second between 08/07/2019 and 11/07/2019 (111 responses); the third between 09/30/2019 to 10/03/2019 (102) and last collection from 12/02/2019 to 12/04/2019 (74).

To calculate the level of stress, the number of symptoms marked by each respondent was considered, and then the percentage they represented of the total number of respondents was calculated.

The normality of the data was verified by applying the *Kolmogorov-Smirnov* test, which indicated the non-normality of the data, making it necessary to use non-parametric tests to evaluate the differences in the means of the data analyzed. Thus, to verify whether there are differences between the means of stress symptoms and *Burnout syndrome* during the two months analyzed, Friedmann's ANOVA test was applied, with the *post-hoc* Wilcoxon *Signs* test with *Bonferroni correction*.

## ANALYSIS AND DISCUSSION OF THE RESULTS

First, with regard to the profile of the respondents, the survey sample has more female respondents, representing 56% of the total; Among the respondents, 77% are single, 22% are married and only 1% declared themselves divorced at the time of the survey. Also, 80% of the respondents reported not having another degree, following the answer in relation to their children, where 91% reported not having them.

The sample is also divided between students up to 19 years old, representing 31% of the respondents, 20 to 21 years old representing 21% of the students, while 28% of the respondents are concentrated in the age of 22 to 26 years old and the others, 20%, reported being between 27 and 39 years old at the time of the survey.

Regarding employment, the sample was divided into students who, at the time of the survey, did not work, with 10% of the respondents, and students who had an employment relationship representing 78% of the respondents. The other answers to this question were classified into variables, where 4% answered in half of the collections that they had an employment relationship, and the other half did not, predominantly yes for those who were employed in most of the collections, with a rate of 7% predominantly no for those who in most of the sample answered that they did not have a job, representing only 1% of the respondents.

When asked if they felt qualified to exercise their profession, it is possible to observe that 2% of the respondents reported not feeling capable at the time of data collection, and



78% informed that they did, feeling capable of performing their professional activity. The remaining respondents were divided into predominantly no, where 5% of the students reported that they did not feel qualified in most of the data collections, predominantly yes, where 10% of the students reported that yes, they felt qualified in most of the answers; and variable where 5% of the students answered that they felt empowered in half of the sample collections and that they did not feel empowered in the other half.

Subsequently, for the analysis and discussion of the data, this chapter will be divided into three topics: (i) analysis of the stress level of students, (ii) analysis of *the Burnout* syndrome in students and; (iii) analysis of the relationship between *Burnout* syndrome and stress.

## ANALYSIS OF THE STUDENTS' STRESS LEVEL

Table 1 of the ISSL of the first block of the questionnaire, of the research instrument, comprises 12 physical symptoms and 3 psychological symptoms. In this chart, the respondents indicated the symptoms experienced in the last 24 hours. This situation raises the incidence of the Alarm Phase of stress, which occurs after contact with some stimulus that triggers the body's response. The sample presented in Table 1 shows the symptoms indicated by the students for the four two months analyzed.

Table 1  
*Total Symptoms Table 1*

Issues	1st bimester	2nd bimester	3rd bimester	4th bimester
Q1A.1 Cold hands and feet	27%	53%	11%	12%
Q1A.2 Dry mouth	24%	35%	28%	23%
Q1A.3 Stomach knot	31%	31%	25%	33%
Q1A.4 Increased sweating (too much sweating, sweating)	24%	17%	29%	23%
Q1A.5 Muscle tension	52%	50%	52%	51%
Q1A.6 Jaw tightness / Teeth grinding	31%	26%	19%	30%
Q1A.7 Transient diarrhea	8%	4%	8%	10%
Q1A.8 Insomnia (difficulty sleeping)	32%	32%	32%	33%
Q1A.9 Tachycardia (chest beating)	13%	15%	9%	11%
Q1A.10 Hyperventilation (panting, rapid breathing)	11%	14%	13%	11%
Q1A.11 Sudden, transient arterial hypertension (high blood pressure)	2%	4%	1%	3%
Q1A.12 Change in appetite	28%	27%	32%	38%
Q1A.13 Sudden increase in motivation	27%	19%	19%	21%
Q1A.14 Sudden enthusiasm	28%	17%	10%	11%
Q1A.15 Sudden urge to start new projects	25%	16%	15%	16%

Source: prepared by the authors

Muscle tension appeared as the main symptom indicated during all periods, reaching 50% and 52% of the respondents, and only in the 2nd bimester was it not the symptom with the highest index, in the same way that insomnia is present in all periods, always with high rates. A change in appetite is noticed only in the last two months, as well as a knot in the stomach and increased sweating.

As for the lowest rates indicated by the students, it can be observed that arterial hypertension is among the least mentioned, with a variation of 1% to 4% in the two months, followed by transient diarrhea with a variation of 4% to 10% during the year, hyperventilation (wheezing) being marked by 11% to 14% of the students and tachycardia indicated by 9% to 15% of the students over the two months.

Table 2 of the ISSL consists of a total of 15 symptoms, where students should mark symptoms experienced in the last week, seeking to raise the incidence of resistance stress, which has been affecting the person for some time and begins to impair performance. In this table, the number of answers marked in the four bimesters analyzed is indicated below:

Table 2  
*Total Symptoms Table 2*

Issues	1st bimester	2nd bimester	3rd bimester	4th bimester
Q2A.1 Problems with memory	50%	48%	51%	58%
Q2A.2 Generalized malaise, without specific cause	27%	26%	24%	19%
Q2A.3 Tingling of the extremities	9%	11%	12%	19%
Q2A.4 Feeling of constant physical wear and tear	59%	58%	57%	49%
Q2A.5 Change in appetite	30%	27%	33%	38%
Q2A.6 Appearance of dermatological (skin) problems	21%	19%	18%	11%
Q2A.7 High blood pressure (high blood pressure)	2%	4%	2%	1%
Q2A.8 Constant tiredness	71%	56%	63%	67%
Q2A.9 Ulcer appearance	2%	3%	1%	0%
Q2A.10 Dizziness/feeling of being floating	23%	19%	23%	23%
Q2A.11 Excessive sensitivity (very nervous)	43%	41%	36%	37%
Q2A.12 Self-doubt	35%	38%	27%	42%
Q2A.13 Constantly thinking about one subject	44%	43%	41%	38%
Q2A.14 Excessive irritability	43%	47%	38%	45%
Q2A.15 Decreased libido (no desire for sex)	11%	13%	8%	10%

Source: prepared by the authors

The most present symptoms in the student's daily life in the week prior to data collection are constant tiredness, reaching 71% of students, the feeling of constant physical exhaustion, presenting 59% as its highest index, and memory problems that reached up to 58% of students, these symptoms can directly affect the student's performance in end-of-

term tests, as well as their productivity in the professional sphere. Then it is observed that they constantly think about a single subject, excessive sensitivity and excessive irritability as recurring feelings in the last week. This second phase of stress, called resistance stress, for analysis purposes, is the phase from which it is considered that people are suffering from a picture of impairment in health and performance delivery.

Subsequently, table 3 of the ISSL consists of 23 symptoms that should be noted if experienced during the previous month. This condition seeks to raise symptoms of the third phase of stress, the stress of exhaustion, in which the person begins to present severe impairments in their quality of life. The number of answers marked by the students in the four bimesters is indicated below:

Table 3  
*Total symptoms Table 3*

	Issues	1st bimester	2nd bimester	3rd bimester	4th bimester
Q2A.1	Frequent diarrhea	6%	2%	1%	0%
Q2A.2	Sexual difficulties	6%	4%	0%	3%
Q2A.3	Insomnia (difficulty sleeping)	33%	28%	28%	34%
Q2A.4	Nausea	13%	12%	11%	11%
Q2A.5	Ticks	20%	13%	16%	12%
Q2A.6	Continued arterial hypertension (high blood pressure)	1%	3%	1%	1%
Q2A.7	Long-term dermatological (skin) problems	16%	11%	13%	14%
Q2A.8	Extreme change in appetite	14%	17%	15%	25%
Q2A.9	Excess gas	12%	7%	6%	5%
Q2A.10	Frequent dizziness	14%	11%	8%	14%
Q2A.11	Ulcer	2%	3%	0%	0%
Q2A.12	Infarct	0%	0%	0%	0%
Q2A.13	Impossibility to work	4%	1%	3%	7%
Q2A.14	Nightmares	16%	15%	19%	12%
Q2A.15	Feeling of incompetence in all areas	32%	31%	28%	30%
Q2A.16	Desire to run away from everything	49%	39%	39%	45%
Q2A.17	Prolonged apathy, depression, or anger	21%	18%	18%	16%
Q2A.18	Excessive tiredness	64%	58%	51%	55%
Q2A.19	Constantly thinking / Talking about a single subject	28%	30%	27%	32%
Q2A.20	Irritability with no apparent cause	38%	45%	41%	47%
Q2A.21	Daily distress / anxiety	51%	44%	40%	45%
Q2A.22	Emotive hypersensitivity	23%	22%	19%	23%
Q2A.23	Loss of a sense of humor	32%	30%	26%	49%

Source: prepared by the authors

Of the 23 symptoms, 22 are mentioned at some point, and excessive tiredness, irritability with no apparent cause, loss of a sense of humor, daily anguish/anxiety, desire to escape from everything and insomnia are predominantly felt in the last 30 days, all symptoms indicated by 30% or more of the respondents.

Of the 53 physical and psychological symptoms present in the research, only the infarction symptom was not marked at any time, that is, students experienced at least 3 or more symptoms of stress, in all its three phases, during the 2019 academic period. Although there is a high rate of symptoms reported in all two months, according to Lipp's Inventory of Stress Symptoms for Adults (ISSL) (Lipp, 2000), in order to identify which phase of stress the respondent is in, it is necessary to consider the number of symptoms reported in each frame. In this sense, students who marked 7 or more symptoms in chart 1 characterized the presence of the Stress Alarm Phase; students who marked 4 or more symptoms in chart 2 indicated that they were in the Resistance Phase and those who indicated 7 or more symptoms in chart 3 demonstrated that they had reached the Exhaustion Phase. Table 4 below provides an overview of the identified stress levels.

Table 4  
*General index of stressed students*

Phase	1st bimester	2nd bimester	3rd bimester	4th bimester
Alert	12%	8%	8%	7%
Resistance	56%	46%	38%	31%
Exhaustion	17%	11%	10%	12%

Source: prepared by the authors

In the data presented in Table 4, it is possible to observe that, in the four two months, the students are predominantly in the resistance phase, a phase in which the individual has a feeling of generalized exhaustion, with no apparent cause, with memory difficulties (Silva & Martinez, 2005).

Also in Table 4, it can be seen that, over the course of the two months, there is a gradual percentage decrease of individuals in the three related phases, but more than 10% is observed in all the two months of students in the exhaustion phase, chronic stress, also known as *Burnout syndrome*.

The previous findings are in line with the studies of Thomaz, Rocha and Neto (2011), who found that 61% of the students analyzed had felt some type of stress or symptom, and of Lameu, Salazar and Souza (2016), finding a prevalence of stress of 50% among the university students surveyed, pointing out that 59.30% of the students indicated that they needed psychological care.

Considering the non-normality of the data after the non-parametric statistical tests, Friedmann's ANOVA test was applied, where differences were identified, and post-hoc tests were needed to determine in which two months the differences are significant. Wilcoxon

Signs tests with *Bonferroni* correction were performed, and the results are observed below:

Table 5  
*Differences in means Table 1*

Average	1st bimester	2nd bimester	3rd bimester	4th bimester	Friedman ANOVA Result
	3,36	2,80	2,19	1,72	≠
Post-hoc tests - Wilcoxon signs with <i>Bonferroni</i> correction					
	Comparisons				Result Signal Test
1-2	3,36	2,80			≠
1-3	3,36		2,19		≠
1-4	3,36			1,72	≠
2-3		2,80	2,19		≠
2-4		2,80		1,72	≠
3-4			2,19	1,72	≠

Source: prepared by the authors

Initially, the answers obtained for each bimester were compared, from chart 1, according to *Friedman's ANOVA*, the 1st bimester brings the highest averages compared to all the other bimesters, that is, the symptoms of stress predominate at the beginning of the year and gradually reduce in the other periods, in addition, all the bimesters are statistically different from each other.

For chart 2, which analyzes the resistance and near-exhaustion phase, the results are similar to those of the previous block, although the averages are higher. Table 6 below shows the relationship between them.

Table 6  
*Differences in means for Table 2*

Average	1st bimester	2nd bimester	3rd bimester	4th bimester	Result anova Friedman
	4,33	3,55	3,12	2,43	≠
Post-hoc tests - Wilcoxon signs with <i>Bonferroni</i> correction					
	Comparisons				Result Signal Test
1-2	4,33	3,55			≠
1-3	4,33		3,12		≠
1-4	4,33			2,43	≠
2-3		3,55	3,12		≠
2-4		3,55		2,43	≠
3-4			3,12	2,43	≠

Source: prepared by the authors

According to Table 6, all the bimesters contain differences, some with greater discrepancies, which is the case of the comparison between the 1st bimester and the 4th bimester, where the mean number of symptoms is practically doubled. Thus, similarly to the analysis of chart 1, a trend of greater symptoms is observed in the first two months.

For Table 3 of the research instrument, which presents the analysis of stress in its critical phase, the exhaustion phase, Table 7 presents the data collected below, by two months.

Table 7  
*Differences in means for Table 3*

Average	1st bimester	2nd bimester	3rd bimester	4th bimester	Friedman ANOVA Result
	4,56	3,46	2,96	2,54	≠
Post-hoc tests - Wilcoxon signs with Bonferroni correction					
	Comparisons				Result Signal Test
1-2	4,56	3,46			≠
1-3	4,56		2,96		≠
1-4	4,56			2,54	≠
2-3		3,46	2,96		≠
2-4		3,46		2,54	≠
3-4			2,96	2,54	≠

Source: prepared by the authors

In this case, it is possible to observe that again, the averages gradually decrease throughout the year, where the 1st bimester has the highest average, of 4.56 and the 4th bimester has the lowest average, of 2.54, which for the test carried out means that there is little similarity between the periods analyzed.

The beginning of the year appears as the most stressful time. The averages increase gradually with each phase of stress analyzed, reaching its highest rate in the third phase, the exhaustion phase, which can be considered a worrying fact, since the stress phase that presents the highest average is where the respondent is with chronic stress, also known as *Burnout syndrome*.

## ANALYSIS OF *BURNOUT SYNDROME*

Regarding the second block of the research instrument, the variations in the measures of the general *Burnout syndrome* during the four collections range from 28 to 102, with these being the lowest and highest levels, respectively. These numbers are considered because each construct is separated into questions, where *Burnout* related to the studies has 7 statements, and 6 in the other questions. By adding up each answer, which ranged from 1 to 5, it was possible to obtain the data presented in Table 8.

Table 8  
Descriptive statistics regarding *Burnout syndrome* in the 1st bimester

<i>Burnout</i>	1st bimester	Average	Average per construct question
Staff	6 to 30	17,57	2,93
Study-related	10 to 32	19,02	2,72
Peer-related	6 to 26	10,80	1,80
Related to teachers	6 to 24 years	9,83	1,64
<i>Total burnout</i>	36 to 102	57,22	2,29

Source: prepared by the authors

In Table 8, as in the following tables, to compare the levels of *Burnout syndrome* by construct, the "mean" column was used as a basis, in which the sum of the means per question was made and then the result was divided by the number of questions added together.

Thus, in Table 8, it is possible to observe that the students presented, in the 1st bimester, a mean of *personal burnout* of 17.57. In this regard, the lowest level was 6 and the highest level was 30. Regarding *Burnout* related to studies, 10 was presented at the lowest value and 32 at the highest value, with the average for the period analyzed being 19.02. Regarding *Burnout* related to colleagues, an average grade of 10.80 was verified, with a minimum level of 6 and a maximum of 26. In the *Burnout* related to teachers, the average grade found was 9.83 and the minimum level was 6 to 24. When comparing the levels of *Burnout syndrome* between constructs, it was possible to observe that *personal burnout* had the highest average level (2.93), followed by *study-related burnout* (2.72), related to colleagues (1.80), and as for *teacher-related burnout*, the average level presented was (1.64).

In the second collection, the mean found in the item *Personal burnout* was 14.54, and the levels ranged from 7 to 30. In the *study-related burnout*, the average was 16.30, with a minimum level of 11 and a maximum of 35. Regarding *Burnout* related to colleagues, the average was 9.27, where the lowest level was 6 and the highest level 23. As for *Burnout* related to teachers, the average presented was 8.34 and the levels from 6 to 29 being the lowest and highest respectively. According to the data presented, the average per construct question shows that *personal burnout* presented (2.42), as for *study-related burnout*, the average level was (2.33), followed by *peer-related burnout* (1.55) and *teacher-related burnout* (1.39), as follows.



Table 9  
Descriptive statistics regarding Burnout syndrome in the 2nd bimester

<b>Burnout</b>	<b>2nd bimester</b>	<b>Average</b>	<b>Average per construct question</b>
Staff	7 to 30	14,54	2,42
Study-related	11 to 35	16,30	2,33
Peer-related	6 to 23	9,27	1,55
Related to teachers	6 to 29	8,34	1,39
<i>Total burnout</i>	36 to 99	48,44	1,94

Source: prepared by the authors

When analyzing Table 10, referring to the 3rd bimester, a mean of 13.38 was observed in relation to *personal burnout*, where 6 was the minimum level found and 30 the maximum level. Regarding the relationship between *Burnout* and the studies, the average score found was 15.57, the lowest level was 9 and the highest was 33. In the *Burnout* related to colleagues, the average presented was 8.79, and was obtained as lower level 6 and higher level 27. As for *Burnout* related to teachers, the average found was 7.64, the lowest level found was 6 and the highest was 24. Analyzing the mean of the construct related to *personal burnout*, it presented a level of (2.23), related to *study-related burnout* (2.22), *related to peers* (1.47) and *related to teachers* (1.27), as shown in the table below.

Table 10  
Descriptive statistics regarding Burnout syndrome in the 3rd bimester

<b>Burnout</b>	<b>3rd bimester</b>	<b>Average</b>	<b>Average per construct question</b>
Staff	6 to 30	13,38	2,23
Study-related	9 to 33	15,57	2,22
Peer-related	6 to 27	8,79	1,47
Related to teachers	6 to 24 years	7,64	1,27
<i>Total burnout</i>	28 to 105	45,38	1,82

Source: prepared by the authors

Next, the last data collection for the 4th bimester, in relation to *personal burnout*, obtained a mean of 10.30 and the minimum and maximum levels of 7 and 30. Regarding *Burnout* related to studies, the average presented was 11.71, with the lowest level 8 and the highest level 33. Regarding *Burnout* related to colleagues, the average was 6.61, the lowest among all the periods analyzed, and the levels found were 5 and 29. Regarding *Burnout* related to teachers, the average grade was 5.80, where the minimum value was 6 and the maximum value was 23. Regarding the mean per construct question, *personal burnout* (1.72), *study-related burnout* had a level of (1.67), relative to peers (1.10) and finally *teacher-related burnout* (0.97) as shown in Table 11.

Table 11  
*Descriptive statistics regarding Burnout syndrome in the 4th bimester*

<b>Burnout</b>	<b>4th bimester</b>	<b>Average</b>	<b>Average per construct question</b>
Staff	7 to 30	10,30	1,72
Study-related	8 to 33	11,71	1,67
Peer-related	5 to 29	6,61	1,10
Related to teachers	6 to 23	5,80	0,97
<b>Total burnout</b>	<b>32 to 102</b>	<b>34,42</b>	<b>1,38</b>

Source: prepared by the authors

In view of the information presented above, and in accordance with the statements of Kristensen *et al.* (2005), referring to personal *burnout* and *burnout* related to the studies, it is possible to observe that the students who responded to the present research presented marked symptoms of physical and psychological exhaustion in the first three months analyzed, however, in relation to the last collection referring to the 4th bimester, there was a decrease in the levels per construct in all items, This may have occurred because the sample surveyed was smaller in this period in relation to the previous two months. In this case, the smaller number of respondents may indicate that the stress of exhaustion caused those with high levels of stress to miss classes more, so that they could not have targets for the application of the questionnaire, which is understandable, since the Burnout Syndrome involves the progressive exhaustion of the ability to study and work.

In order to analyze whether there was variation regarding the *Burnout syndrome* and its constructs during the data collection period, the ANOVA test was applied and the result presented in Table 12 was obtained.

Table 12  
*Differences in means for Burnout syndrome*

<b>Burnout</b>	<b>1st Bimester</b>	<b>2nd Bimester</b>	<b>3rd Bimester</b>	<b>4th Bimester</b>	<b>Friedman ANOVA Result</b>
Staff	3,19	3,11	3,15	3,26	=
Study-related	2,98	3,00	3,17	3,17	=
Peer-related	1,97	1,99	2,08	2,08	=
Related to teachers	1,78	1,79	1,80	1,84	=
<b>Total burnout</b>	<b>2,50</b>	<b>2,49</b>	<b>2,57</b>	<b>2,61</b>	<b>=</b>

Source: prepared by the authors

It can be stated that the *Burnout syndrome* did not show variation during the 2019 school year, as the result of the ANOVA test demonstrates that there are no statistically significant differences during the two months analyzed. In addition, the data collection instrument allowed the respondents to descriptively cite three points that most negatively

affected them in relation to the study, thus identifying a concentration of responses related to tiredness, overload and lack of time.

The 1st year students highlighted the lack of time as the main factor that negatively affected them as a student, followed by physical fatigue, nervousness, lack of attention, lack of concentration, demotivation and procrastination.

For the 2nd year respondents, lack of time was also characterized as a negative factor in academic life, followed by physical and mental fatigue, overload of work and tests at the same time, lack of motivation, lack of sleep and, finally, the distance from home to the university was a factor that negatively affects the academic.

The points mentioned by the 3rd year students are similar to those previously mentioned, where lack of time was cited by the respondents as the main impeding factor for academic productivity, followed by physical and mental fatigue, excessive tests and work, lack of motivation and excessive demands.

For 4th grade students, the factors that negatively affected performance are lack of time, physical and mental fatigue, excessive tests and assignments, lack of motivation and, finally, deviation of attention/lack of concentration.

With the intention of comparing the average level of *Burnout* with previous research, studies that applied the CDI instrument were listed, thus being able to assess the *Burnout* syndrome in a sample of human services employees, as shown in Table 13.

Table 13  
*Mean CBI values from previous studies*

Author(s)	Year	Personal Burnout	Work /study-related burnout
		Average	Average
Borritz and Kristensen	2001	35,90	33,00
Winwood and Winefield	2004	40,90	36,60
Williams	2007	44,59	42,23
Quinn	2007	44,00	45,40
Milfont, Denny, Ameratunga, Robinson and Merry	2008	43,00	41,50
Shimizutani, Odagiri, Ohya, Shimomitsu, Kristensen, Matura and Imori	2008	54,50	50,40
Wahl	2008	44,06	46,79
Liljegren and Ekberg	2008	44,10	38,40
Benson, Sammour, Neuhaus, Findlay and Hill	2009	39,50	35,50
Tsai, Huang and Chan	2009	51,92	51,98
Tsai and Chan	2010	49,97	51,36
Source	2011	41,63	44,67
Lima <i>et al.</i>	2019	20,43	21,66
Survey data	2020	48,07	53,82
<b>Overall Average</b>		<b>43,04</b>	<b>42,38</b>

Source: prepared by the authors

Comparing the present research with previous studies, it was found that the data presented by Williams (2007), Shimizutani et al. (2008), Tsai, Huang and Chan (2009) and Tsai and Chan (2010) demonstrate the highest averages in relation to *personal burnout*. In relation to *work/study-related burnout*, the studies that presented the highest averages were by Quinn (2007), Shimizutani et al. (2008), Tsai, Huang and Chan (2009) and Tsai and Chan (2010).

## FINAL CONSIDERATIONS

The present study evidenced the presence of stress at certain times of the year, especially in the first and second two months, with a predominance of feelings of excessive tiredness, muscle tension and memory problems. These feelings and sensations, combined with the professional routine, may indicate difficulty in adapting to the university routine, consequently causing dropout and/or low performance, both in academic and professional life. There is still the possibility that students who finish their graduation with high levels of stress will not advance their studies, or even have a low professional performance.

Based on the data presented, it was identified that 17% of the students were stressed in the 1st two months (exhaustion phase), which may be the result of the intense study and work routine, as most students maintain professional activity along with graduation. It was also identified that the largest number of students are in the resistance

phase in the 1st bimester, where, according to the answers informed, 56% of them present symptoms compatible with this second phase of stress.

Regarding the level of *Burnout* found in the students, as well as the stress indexes, it is possible to observe that in the 1st and 2nd bimesters of the year there is a higher rate of students with *Burnout*, compared to the 3rd and 4th bimesters. Still in relation to the feelings and symptoms most experienced by the respondents, it is noted that in the 2nd bimester, fatigue in general affects 33.33% of the students, which can be subdivided into physical fatigue, which reaches 26.09%, and emotional fatigue, experienced by 21.74% of the students in this bimester. In the other two months, these are still the most frequent symptoms, but at lower levels.

The high levels of *Burnout* show the impact of the double journey experienced by the respondents. It is also possible to observe that the lowest rates of *Burnout* found are related to colleagues and teachers.

When compared with previous studies, the results of the present study are consistent with the information found by the authors, as they have the highest average level in the item *Personal burnout*, followed by *work/study-related burnout*, as previously mentioned in Table 13.

Through the analysis of Friedman's *ANOVA test*, an average of symptoms was obtained in each collection period, where it was possible to verify that there are differences in stress levels between the two months, and that there are more students in the levels of resistance stress and exhaustion in the 1st and 2nd two months of the year. Regarding the application of the ANOVA test for the constructs of *Burnout syndrome*, it was observed that there were no statistically significant differences during the two months analyzed.

Although the results indicate that most students experience stress during their academic life, some of them additionally experience *Burnout syndrome*, so that we can see that the sum of the demands and demands of personal, professional and academic life end up affecting the students researched in different ways. For those who work as an accounting professional, there is a demand for obligations to be delivered during the first semester of each year, coincidentally, these obligations are concentrated in the 1st and 2nd school bimesters, which can be considered an aggravating factor for chronic stress, in addition to the overload that is already present in the double shift.

The results found corroborate previous research, such as the population of undergraduate students of Accounting Sciences and Administration studied by Silva,

Pereira and Miranda (2018), where 51.17% of students were identified as highly stressed, while in the present study the stress level varies from 56% to 31% for resistance stress and from 17% to 10% for the stress exhaustion phase. The numbers for *Burnout* syndrome in students were concentrated in the Personal and Study-Related dimensions, which demonstrates a certain exhaustion related to this professional area and corroborating the study by Galvão and Galvão (2017) who conducted a survey with professionals providing accounting services, finding that exhaustion had a greater relationship with accountants, indicating professional dissatisfaction, corroborating Loaiza and Peña (2013), who found considerable levels of stress and *burnout* among public accountants.

The data presented signal the importance of research in this area, since it can serve as a source of information for students, so that they organize their schedules so as not to feel the overload of the double shift, find the appropriate didactics for their study profile, and choose academic and professional routines that provide them with moments of pleasure and learning. It is also suggested interventions by the HEI, with the group of students most affected, to enable proposals that minimize the effects of stress on the student's life in general and avoid problems of student dropout.

As a suggestion for future studies, it is recommended to apply this research with students who have dropped out of the course or subjects throughout the year, aiming to identify if the reason for such action is related to the levels of stress and *Burnout syndrome* and what are the impacts of this dropout on the individual's stress levels.

Regarding the limitations, it is understood that the abstention from answers in the last collection period can be considered a factor that affects the analysis of the period and its comparison with the others. It is also important to note that it was not possible to specify a day and time for the collections in each class and bimester, for this reason some students possibly failed to respond to the collections or invalidated their answers due to the absence of two or more collections.

It is hoped that this study will contribute to the taking of measures that improve the quality of academic life, both by HEIs and by students in the choice of their academic journey, that it can be used as a source of information for new research and, also, that it fosters discussions on the subject in the academic and professional spheres, where the student can have in the University a place of support and growth.

## REFERENCES

1. Alvarez, C., Gómez, M., & Pérez, L. (1993). Revisión teórica del burnout o desgaste profesional en trabajadores de la docencia. *Caesura*, 2(2), 47–65.
2. Bardagi, M. P., & Hutz, C. S. (2011). Eventos estressores no contexto acadêmico: Uma breve revisão da literatura brasileira. *Interação em Psicologia*, 15(1), 111–119. <https://doi.org/10.5380/psi.v15i1.17085>
3. Benson, S., Sammour, T., Neuhaus, S. J., Findlay, B., & Hill, A. G. (2009). Burnout in Australasian Younger Fellows. *ANZ Journal of Surgery*, 79(9), 590–597. <https://doi.org/10.1111/j.1445-2197.2009.05012.x>
4. Borrítz, M., & Kristensen, T. S. (2001). CBI–Copenhagen Burnout Inventory. [Unpublished manuscript].
5. Braga, C. D., Zille, L., & Marques, A. L. (2013). O consumo de energia de quem produz energia: Estudando o estresse ocupacional e seus efeitos em gestores de uma empresa brasileira do setor de energia elétrica. *Revista Alcance*, 20(4), 478–494.
6. Campos, E. A. R., Oliveira, J. S., Silva, M. R., & Santos, M. L. (2016). Análise dos níveis de estresse em formandos de administração e ciências contábeis de uma universidade pública. *Revista Gestão & Conexões*, 5(1), 121–140. <https://doi.org/10.13071/regec.2317-5087.2014.5.1.12066.121-140>
7. Campos, J. A. D. B., Carlotto, M. S., & Marôco, J. (2013). Copenhagen Burnout Inventory-student version: Adaptation and transcultural validation for Portugal and Brazil. *Psicologia: Reflexão e Crítica*, 26(1), 87–97. <https://doi.org/10.1590/S0102-79722013000100010>
8. Carlotto, M. S. (2002). A síndrome de burnout e o trabalho docente. *Psicologia em Estudo*, 7(1), 21–29. <https://doi.org/10.1590/S1413-73722002000100005>
9. Delgado, B. D. (1995). Introducción al síndrome de burnout en profesores y maestros y su abordaje terapéutico. *Psicología Educativa*, 1(1), 63.
10. Fonte, C. M. S. D. (2011). Adaptação e validação para português do questionário de Copenhagen Burnout Inventory (CBI) [Master's dissertation, Universidade de Coimbra]. Repositório da Universidade de Coimbra.
11. França, A. C. L., & Rodrigues, A. L. (2012). Stress e trabalho: Uma abordagem psicossomática. In A. C. L. França (Ed.), *Stress e trabalho: Uma abordagem psicossomática* (pp. 1–XX). Atlas.
12. Freudenberg, H. J. (1975). The staff burn-out syndrome in alternative institutions. *Psychotherapy: Theory, Research & Practice*, 12(1), 73–82. <https://doi.org/10.1037/h0086411>



13. Galvão, N. M. S., & Galvão, N. M. B. S. (2017). Síndrome de Burnout e o Profissional Contábil: Quando trabalhar se torna pesado. *Revista de Carreiras e Pessoas (ReCaPe)*, 7(3). <https://doi.org/10.20503/recape.v7i3.33836>
14. Guimarães, M. F. (2014). Depressão, ansiedade, estresse e qualidade de vida de estudantes de universidades pública e privada [Master's dissertation, Universidade Metodista]. Repositório da Universidade Metodista.
15. Harrison, B. J. (1999). Are you destined to burn out? *Fund Raising Management*, 30(3), 25–27.
16. International Stress Management Association Brasil. (2017). No limite: Mais próximo do que se imagina, o Burnout leva ao esgotamento físico e mental e afeta, cada vez mais, os profissionais da saúde. <https://fehoesp360.org.br/gerenciador/upl/mul/publicacoes/fehoesp360-ed09-mul-00000009-09052017095331.pdf>
17. Kristensen, T. S., Borritz, M., Villadsen, E., & Christensen, K. B. (2005). The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. *Work & Stress*, 19(3), 192–207. <https://doi.org/10.1080/02678370500297720>
18. Lameu, J. D. N., Salazar, T. L., & Souza, W. F. D. (2016). Prevalência de sintomas de stress entre graduandos de uma universidade pública. *Psicologia da Educação*, (42), 13–22. <https://doi.org/10.5935/2175-3520.20150021>
19. Liljegren, M., & Ekberg, K. (2008). The longitudinal relationship between job mobility, perceived organizational justice, and health. *BMC Public Health*, 8(1), 1–10. <https://doi.org/10.1186/1471-2458-8-164>
20. Lima, G. A., Silva, J. P., Oliveira, M. C., & Santos, R. F. (2019). Desempenho acadêmico, síndrome de burnout e ansiedade: Uma análise dos estudantes dos cursos da área de negócios. In 13º Congresso ANPCONT (pp. 1–XX). ANPCONT.
21. Lipp, M. E. N. (2000). Manual do inventário de sintomas de stress para adultos de Lipp (ISSL). Casa do Psicólogo.
22. Lipp, M. E. N. (2003). Mecanismos neuropsicofisiológicos do stress: Teoria e aplicações clínicas. In M. E. N. Lipp (Ed.), *Mecanismos neuropsicofisiológicos do stress: Teoria e aplicações clínicas* (p. 227). Casa do Psicólogo.
23. Loaiza, E., & Peña, A. E. (2013). Niveles de estrés y síndrome de Burnout en contadores públicos colombianos. *Actualidad Contable FACES*, 16(26), 27–44.
24. Maslach, C. (2005). Entendendo o Burnout. In A. M. Rossi, P. L. Perrewé, & S. L. Sauter (Eds.), *Stress e qualidade de vida no trabalho: Perspectivas atuais da saúde ocupacional* (pp. 122–148). Atlas.
25. Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52(1), 397–422. <https://doi.org/10.1146/annurev.psych.52.1.397>

26. Matsuura, A. A. (2008). Motivações e dificuldades de estudantes do curso de ciências contábeis no período noturno da cidade de São Paulo [Master's dissertation, Faculdade Escola de Comércio Álvares Penteado]. Repositório FECAP.
27. Milfont, T. L., Denny, S., Ameratunga, S., Robinson, E., & Merry, S. (2008). Burnout and wellbeing: Testing the Copenhagen Burnout Inventory in New Zealand teachers. *Social Indicators Research*, 89(1), 169–177. <https://doi.org/10.1007/s11205-007-9229-9>
28. Peleias, I. R., Ramos, M. K., Ramos, L. R., & Oliveira, M. C. (2008). Pesquisa sobre a percepção dos alunos do 1º ano de Ciências Contábeis na cidade de São Paulo em relação às dificuldades por eles percebidas no período noturno. *Revista Universo Contábil*, 4(1), 81–94.
29. Peleias, I. R., Silva, J. P., Oliveira, M. C., & Ramos, L. R. (2017). A síndrome de Burnout em estudantes de ciências contábeis de IES privadas: Pesquisa na cidade de São Paulo. *Revista de Educação e Pesquisa em Contabilidade*, 11(1), 30–51. <https://doi.org/10.17524/repec.v11i1.1468>
30. Pereira, A. M. T. B., Pinto, M. B., & Oliveira, M. C. (2010). Burnout: Quando o trabalho ameaça o bem-estar do trabalhador (4th ed.). Casa do Psicólogo.
31. Quinn, G. M. (2007). Measuring burnout amongst homelessness workers in Northern Ireland [Doctoral dissertation, University of Ulster]. University of Ulster Repository.
32. Rezende, M. S., Oliveira, M. C., Silva, J. P., & Santos, R. F. (2017). Stress e desempenho acadêmico na pós-graduação stricto sensu em Ciências Contábeis no Brasil. *Arquivos Analíticos de Políticas Educativas*, 25(96), 1–23. <https://doi.org/10.14507/epaa.25.2931>
33. Rudow, B. (1999). Stress and burnout in the teaching profession: European studies, issues, and research perspectives. In M. Vandewalle, J. E. C. V. Horn, & G. Huber (Eds.), *Understanding and preventing teacher burnout: A sourcebook of international research and practice* (Vol. 2, pp. 38–58). Cambridge University Press.
34. Schmidt, D. R. C., Dantas, R. A. S., & Marziale, M. H. P. (2013). Qualidade de vida no trabalho e burnout em trabalhadores de enfermagem de Unidade de Terapia Intensiva. *Revista Brasileira de Enfermagem*, 66(1), 13–17. <https://doi.org/10.1590/S0034-71672013000100002>
35. Shimizutani, M., Odagiri, Y., Ohya, Y., Shimomitsu, T., Kristensen, T. S., Maruta, T., & Iimori, M. (2008). Relationship of nurse burnout with personality characteristics and coping behaviors. *Industrial Health*, 46(4), 326–335. <https://doi.org/10.2486/indhealth.46.326>
36. Silva, E. A. T. D., & Martinez, A. (2005). Diferença em nível de stress em duas amostras: Capital e interior do estado de São Paulo. *Estudos de Psicologia (Campinas)*, 22(1), 53–61. <https://doi.org/10.1590/S0103-166X2005000100007>

37. Silva, T. D., Pereira, J. M., & Miranda, G. J. (2018). O estresse em graduandos em Ciências Contábeis e Administração. *Advances in Scientific and Applied Accounting*, 11(2), 330–350. <https://doi.org/10.14392/asaa.2018110208>
38. Thomaz, P. E., Rocha, L. B., & Neto, V. M. (2011). Estresse em estudantes de engenharia. *Momento - Diálogos em Educação*, 20(1), 73–86.
39. Trigo, T. R., Teng, C. T., & Hallak, J. E. C. (2007). Síndrome de burnout ou estafa profissional e os transtornos psiquiátricos. *Archives of Clinical Psychiatry (São Paulo)*, 34(5), 223–233. <https://doi.org/10.1590/S0101-60832007000500008>
40. Tsai, F. J., & Chan, C. C. (2010). Occupational stress and burnout of judges and procurators. *International Archives of Occupational and Environmental Health*, 83(2), 133–142. <https://doi.org/10.1007/s00420-009-0454-4>
41. Tsai, F. J., Huang, W. L., & Chan, C. C. (2009). Occupational stress and burnout of lawyers. *Journal of Occupational Health*, 51(5), 443–450. <https://doi.org/10.1539/joh.L8179>
42. Wahl, S. E. (2008). Registered nurse preceptorship orientation: A study of the relationship between burnout rates of new graduates and number of preceptors worked with in the clinical orientation phase [Doctoral dissertation, Capella University]. ProQuest Dissertations Publishing.
43. Williams, C. (2007). Psychosocial and biographical factors in career burnout [Doctoral dissertation, University of Pretoria]. University of Pretoria Repository.
44. Winwood, P. C., & Winefield, A. H. (2004). Comparing two measures of burnout among dentists in Australia. *International Journal of Stress Management*, 11(3), 282–289. <https://doi.org/10.1037/1072-5245.11.3.282>
45. Wynaden, D., Wichmann, H., & Murray, S. (2013). A synopsis of the mental health concerns of university students: Results of a text-based online survey from one Australian university. *Higher Education Research & Development*, 32(5), 846–860. <https://doi.org/10.1080/07294360.2013.777032>