

## Academic stressors as predictors of burnout syndrome in university students

*Estressores acadêmicos como preditores da síndrome de burnout em estudantes*

*Estresores académicos como predictores del síndrome de burnout en estudiantes universitarios*

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### ABSTRACT

Burnout Syndrome in students is a feeling of exhaustion due to the demands of the study proceeding in an attitude of disbelief and a sense of ineffectiveness of professional training. The objective of the study was to identify the predictive power of academic stressors on Burnout Syndrome in a sample of 1,169 university students. As instruments, the Burnout Syndrome Assessment Scale in University Students, a sociodemographic and academic questionnaire, and a questionnaire on academic stressors were used. The stressors that predicted Burnout Syndrome were relationships with teachers, reconciling study and leisure, many subjects to take, relationships with colleagues, performing extracurricular work, performing tests and class work, performing tests and class work, and reconciling studies / professional internships. The results suggest the need for intervention in academic stressors present in the university context.

**Keywords:** Burnout Syndrome. Academic Stress. University Students.

### RESUMO

A Síndrome de *Burnout* em estudantes é um sentimento de esgotamento devido às demandas do estudo, decorrendo em uma atitude de descrença e um senso de ineficácia da formação profissional. O objetivo do estudo foi identificar o poder preditivo dos estressores acadêmicos sobre a Síndrome de *Burnout* em uma amostra de 1.169 estudantes universitários. Como instrumentos foram utilizados a Escala de Avaliação da Síndrome de *Burnout* em Estudantes Universitários, um questionário sociodemográfico e acadêmico e um questionário de estressores acadêmicos. Os estressores que predisseram a Síndrome de *Burnout* foram: relação com professores, conciliar estudo e lazer, muitas disciplinas para cursar, relação com colegas, realizar trabalhos extraclasse, realizar provas e trabalhos de aula, realizar provas e trabalhos de aula, e conciliar estudos/estágio profissional. Os resultados sugerem a necessidade de intervenção nos estressores acadêmicos presentes no contexto universitário.

**Palavras-chave:** Síndrome de Burnout. Estresse Acadêmico. Estudantes Universitários.

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## RESUMEN

El Síndrome de Burnout en los estudiantes es una sensación de agotamiento por las exigencias del estudio, traduciéndose en una actitud de incredulidad y una sensación de ineficacia de la formación profesional. El objetivo del estudio fue identificar el poder predictivo de los estresores académicos para el Síndrome de Burnout en una muestra de 1.169 estudiantes universitarios. Se utilizaron como instrumentos la Escala de Evaluación del Síndrome de Burnout en Estudiantes Universitarios, un cuestionario sociodemográfico y académico y un cuestionario de estresores académicos. Los factores estresantes que predijeron el Síndrome de Burnout fueron: relaciones con los profesores, conciliar estudio y trabajo, muchas disciplinas para estudiar, relaciones con compañeros, hacer trabajo extraescolar, hacer pruebas y trabajos en clase y conciliar estudios / prácticas. Los resultados sugieren la necesidad de intervención en los estresores académicos presentes en el contexto universitario.

**Palabras clave:** Síndrome de Burnout. Estrés Académico. Estudiantes Universitarios.

## INTRODUCTION

Entering university education implies significant changes, including the establishment of new emotional bonds, the need for greater autonomy and problem-solving skills, and meeting new academic demands and requirements (Sahão and Kienen, 2021). The transition to university life can represent, for many young individuals, leaving home, breaking away from the family, and engaging in activities different from those performed in high school. These changes entail alterations in their lifestyle and the way they approach their academic studies (Cushman and West, 2006; Vizzotto, Neves de Jesus and Calé Martins, 2017).

Young people often enter university with the expectation of achieving stable employment, status, and social recognition, which requires them to thrive in a highly competitive environment (Caballero Domínguez, 2012). According to the author, many students lack economic resources, social support, family psychological resources, or functional resources that enable them to effectively cope with the stressors inherent in the university learning process. High levels of stress can contribute to the emergence of emotional, cognitive, and behavioral responses that can negatively affect students' health, adaptation to the academic environment, and overall educational journey. University students, upon entering university, redirect their time toward assignments, exams, and internships, among other activities, often neglecting aspects that once were important to them, such as family, friends, emotional relationships, religion, sports, and recreational activities, resulting in serious consequences for their mental health (Cortez *et al.*, 2017). This adaptive process involves personal, social, and economic considerations, which can lead to disruptions in the physical and psychological health of this population (Souza, 2017), particularly anxiety, depression, and stress (Sahão and Kienen, 2021).

Stress is a significant issue for students dealing with a variety of academic, social, and personal challenges. When stress is perceived negatively or becomes excessive, it can impact both health and academic performance (Madigan and Curran, 2021). Academic stress is a systematic, psychological, and adaptive process that occurs when students are subjected to a series of demands that they perceive as stressful (Benuzzi and Benuzzi, 2021).

Entering higher education involves the process of adaptation, experienced through the transition from high school to university, socializing with new peers and professors, adapting to new rules and learning content, which require greater autonomy and responsibility, and expectations related to the world of work. These processes serve as stressors that can lead to emotional exhaustion (Tarnowski

and Carlotto, 2007). Other stressors in this process include lack of time for leisure, family, friends, and personal needs, concerns about future careers and academic debts (Nogueira-Martins, 2002), disciplines or academic work overload, financial difficulties, family situations, professors' performance, and difficulties in assimilating course materials (Abacar, Aliante and Antonio, 2021). Furthermore, it is important to consider the pressure for high grades or productivity within the academic context, pressure from professors and parents, and self-imposed pressure. Specific symptoms include fatigue, sleep disturbances, irritability, loss of initiative, lack of attention and concentration, memory problems, impatience, tendency toward isolation, and loss of interest in studies (Alves *et al.*, 2022).

Stressors, if persistent, can lead to Burnout Syndrome (BS) in university students, characterized as a form of chronic, malignant, and insidious stress, generally unnoticed in the academic environment, which can affect the development, commitment, and satisfaction of students with their education and academic life, as well as with their health (Caballero Domínguez, 2012).

BS has been considered a social problem of extreme relevance and has been studied in various countries. It is a response to interpersonal stressors that occur in work situations (Maslach, Schaufeli and Leiter, 2001) and consists of three dimensions: emotional exhaustion, depersonalization, and low professional achievement (Maslach and Jackson, 1981). Emotional exhaustion is characterized by a lack or reduction of energy and enthusiasm, and a feeling of resource depletion. Workers believe that they no longer have the capacity to expend more energy on serving their clients or others as they did before. Depersonalization leads professionals to treat clients, colleagues, and the organization as objects, which can lead to emotional insensitivity. Low professional achievement is characterized by a tendency for workers to self-evaluate negatively, with people feeling unhappy with themselves and dissatisfied with their professional development (Maslach, Schaufeli and Leiter, 2001).

The interest in BS has led to an expansion in its field of study. From the initial investigations focused on helping professionals, it has extended to other professional fields, and subsequently, studies with students have emerged (Ricardo and Paneque, 2013; Rosales-Ricardo *et al.*, 2021). The broadening of the concept of Burnout in students, that is, to a pre-professional activity, although it has emerged in some scattered studies over the years, was rigorously proposed and empirically supported by Schaufeli *et al.* (2002). Although university students are not formal contractual workers, as there is no remuneration for their work, from a psychological and social perspective, many of the activities they perform are comparable to those of a worker. Like any employee, they are part of an organization where they play a specific role, perform tasks that require effort, have goals to achieve, and their performance is constantly evaluated and rewarded by their professors, who perform a function very similar to that of a supervisor in a work context (Caballero Domínguez, Bresó and González Gutiérrez, 2015).

The burnout construct in students also consists of three dimensions (Martínez *et al.*, 2002): firstly, a sensation of exhaustion stemming from study demands, secondly, a resulting sense of disillusionment toward their studies, and thirdly, a feeling of professional inefficacy, implying that their education fails to contribute meaningfully to their professional growth. Therefore, among university students, burnout is characterized by a sense of exhaustion due to study demands and a lack of a theoretical-practical relationship, leading to a sense of disbelief and a feeling of professional inefficacy. According to Caballero Domínguez (2012), it is a process and response to chronic stress that arises in the teaching-learning process and affects the student's sense of competence and interpersonal relationships. Burnout can negatively impact the well-being of students and may lead to anxiety disorders (Kordzanganeh *et al.*, 2021), depressive symptoms (Al-Alawi *et al.*, 2019), and dropping out of studies (Carlotto and Câmara, 2008; Salgado and Au-Yong-Oliveira, 2021).

While burnout in professionals is an issue well-established in various studies (Rodríguez-Marín, 1995; Maslach, Schaufeli and Leiter, 2001), it can be argued that burnout in students also

represents a relevant and distinct issue due to the numerous stressors present in the university context (Caballero Domínguez, Hederich and Palacio Sañudo, 2009; Romano *et al.*, 2021; Jagodics e Szabó, 2022). Cushway (1992) highlighted that burnout can begin in the academic phase, during the preparation for work. Consequently, early detection of significant symptomatic levels can be an indicator of potential difficulties, both in terms of educational and professional success, allowing for preventive interventions (Martinez *et al.*, 2002; Chen, Li and Feng, 2021). Its analysis can prevent behaviors such as poor academic performance, dropout (Montoya-Restrepo, *et al.*, 2021), and negative impacts on the education system (Fariborz, Hadi and Ali, 2019).

Studies on BS in students have mainly been conducted with students in fields such as Medicine (Silvestre *et al.*, 2021), Nursing (Albuquerque, Barbosa and Pacheco, 2021), Physiotherapy (Schulke *et al.*, 2011), Dentistry (Oliveira and Oliveira, 2018), Psychology (Castro-Silva, Maciel and Melo, 2021), and with students in the healthcare field in general (Carlotto, Nakamura and Câmara, 2006; Pinto *et al.*, 2018). Their results reveal significant impairments in both the personal and academic aspects of students.

Studies on this issue may be relevant for educators, students, and future employers and clients (Balogun *et al.*, 1995). Therefore, burnout in university students is an important aspect of an institution's effectiveness and, as such, may have distinct policy implications for higher education institutions (Li and Huang, 2014). Accordingly, the present study sought, through observational, analytical, and cross-sectional research, to verify the predictive power of academic stressors for BS in university students.

## METHOD

### PARTICIPANTS

Participants were 1,169 university students who had been enrolled at the university for more than one semester. Six outliers were identified through residual analysis. Consequently, the final sample comprised 1,163 participants.

The majority of the participants were female (70.1%), single (89.6%), without children (92.0%), and had a mean age of 24.26 years ( $SD = 6.00$ ; range: 17 to 57 years). Additionally, most of the students were between the 6<sup>th</sup> and 10<sup>th</sup> semester of their programs (53.3%), attended public universities (64.2%), and did not work (59.7%). They were enrolled in courses related to the eight knowledge areas defined by the National Council for Scientific and Technological Development (*Conselho Nacional de Desenvolvimento Científico e Tecnológico* – CNPq) (<http://lattes.cnpq.br/web/dgp/arvore-do-conhecimento>): Humanities (21.7%), Social and Applied Sciences (19.4%), Health Sciences (15.0%), Engineering (12.7%), Linguistics, Literature, and Arts (10.0%), Exact and Earth Sciences (8.6%), Agricultural Sciences (6.8%), and Biological Sciences (6.8%). The largest portion of participants came from the state of Rio Grande do Sul (37.3%), while the remaining participants, ranging from 0.3 to 8.9%, were distributed across the 26 states of Brazil and the Federal District.

### INSTRUMENTS

Data were collected through the following self-administered instruments:

1. Socio-demographic Data Questionnaire: This questionnaire collects information regarding gender, age, marital status, having children (yes/no), academic details such as course, class schedule, current semester, number of ongoing disciplines, year of course initiation, type of institution (public/private), possession of another completed higher education degree (yes/no), possession of another incomplete higher education degree (yes/no), current employment status (yes/no), and psychosocial aspects such as funding of studies (self/family/scholarship/financing),

- satisfaction with the course (yes/no), satisfaction with the university (yes/no), contemplation of course dropout (yes/no), and engagement in specific leisure activities (yes/no);
2. Evaluation Scale for Burnout Syndrome in University Students (*Escala de Avaliação da Síndrome de Burnout em Estudantes Universitários* - ESB-eu) constructed by Carlotto and Câmara (2020). This instrument includes 14 items distributed across three dimensions: Emotional and Physical Exhaustion (EPE) (06 items;  $\alpha = 0.83$ , e.g., “After my classes, I feel low on energy for other activities”), Disengagement (DIS) (04 items;  $\alpha = 0.84$ ; e.g., “My interest in the course has decreased”), and Ineffectiveness of Education (INEF) (04 items;  $\alpha = 0.80$ ; e.g., “The content of my course has not provided me with meaningful learning”). The items are assessed using a 5-point Likert-type scale ranging from 0 (never) to 4 (every day); and
  3. Student Stressors Questionnaire developed by Carlotto, Câmara and Borges (2005): This questionnaire consists of 12 items: 1) Many disciplines to attend; 2) Taking exams and completing classroom assignments; 3) Completing extracurricular assignments; 4) Working on group projects; 5) Relationships with professors; 6) Relationships with peers; 7) Balancing work and coursework; 8) Balancing study and family; 9) Balancing study and romantic relationships; 10) Balancing study and leisure; 11) Balancing study and professional internships; and 12) Economic costs associated with the course.

## DATA COLLECT PROCEDURES

The study was presented to the participants through an electronic form shared via social media and email contacts of the researchers and members of the research group. It was explained that the study was voluntary, with no obligation to participate, and that responses would be anonymous and confidential. The statement specified that only university students who had been attending a university for over a year were eligible to participate. On average, it took participants approximately 20 minutes to complete the survey.

Data collect was conducted using a virtual platform that included ESB-eu, and the socio-demographic, the academic, and the Academic Stressors Questionnaires, as well as a consent form. Participants could access the instruments only after agreeing to the consent form.

The study adhered to ethical procedures in accordance with Resolution 510/2016 of the National Health Council (*Conselho Nacional de Saúde* — CNS). All participants agreed to participate in the study after reading the consent form, which was available on the first page of the online instrument. The study received approval from the Research Ethics Committee of Universidade do Vale do Rio dos Sinos.

## DATA ANALYSIS PROCEDURES

The database was analyzed using the PASW statistical software package, version 26 (SPSS/PASW Inc., Chicago, IL). To identify predictors, a multiple linear regression analysis was conducted using the Stepwise method after assessing its assumptions, following Field's (2009) guidelines. The absence of multicollinearity was confirmed, as all correlation values were below 0.541, Variance Inflation Factor (VIF) values were below 4 (1.417), and tolerance values were less than 1 (0.848). The analysis of the Durbin-Watson coefficient identified a value close to 2 (1.968), indicating independence of distribution and non-correlation of residuals. Cook's distance had a value below 1 (0.001), indicating the absence of influential predictors and a suitable model fit.

In this analysis, the dependent variable was BS, while the independent variables were academic stressors.

A significance level of  $p < 0.05$  was considered for the selection of predictor variables. In the regression analysis, the magnitude of the effect was determined by the standardized regression coefficients calculated in the final model, following Marôco's (2007) approach.

## RESULTS

The results obtained indicate that the mean score for BS was 3.86, suggesting that the investigated group experienced symptoms of the syndrome “every day” (4 points on the scale). In terms of academic stressors, it can be seen that the highest scores were obtained in “having multiple disciplines to attend,” “taking exams and completing classroom assignments,” and “working on group projects” (see Table 1).

Table 2 presents the results of the multiple linear regression analysis, which considered BS as the dependent variable, and academic stressors as predictor variables.

**Table 1 - Mean and standard deviation of the study variables**

	M	SD
Burnout Syndrome	3.86	0.68
Many disciplines to attend	3.25	0.78
Taking exams and completing classroom assignments	3.13	0.80
Completing extracurricular assignments	2.83	0.90
Working on group projects	3.25	0.89
Relationships with professors	1.92	0.87
Relationships with peers	2.04	0.92
Balancing work and coursework	2.93	1.12
Balancing study and family	2.75	1.05
Balancing study and romantic relationships	2.58	1.13
Balancing study and leisure	2.92	1.00
Balancing study and professional internships	2.77	1.06
Economic costs related to the course	2.84	1.12

M: mean; SD: standard deviation.

Source: Created by the authors.

**Table 2 - Model of multiple linear regression analysis for Burnout Syndrome**

Stressors	R <sup>2</sup>	R <sup>2</sup> adj	B	SE	β	t
Relationships with professors	0.23	0.23	0.25	0.02	0.31**	12.10
Balancing study and leisure	0.32	0.32	0.13	0.02	0.18**	6.81
Many disciplines to attend	0.35	0.35	0.11	0.02	0.12**	4.67
Relationships with peers	0.36	0.36	0.09	0.02	0.12**	4.91
Completing extracurricular assignments	0.38	0.37	0.07	0.02	0.09**	3.49
Taking exams and completing classroom assignments	0.38	0.38	0.08	0.02	0.09**	3.31
Balancing study/professional internships	0.39	0.38	0.04	0.08	0.06*	2.46
Model F-value	103.74					

SE: scale efficiency. \*p < 0.05, \*\*p < 0.01.

Source: Created by the authors.

Among the 12 stressors studied, seven emerged as predictors of BS in university students. The most significant predictor was found to be relationships with professors ( $\beta = 0.31$ ), followed by difficulty balancing study and leisure ( $\beta = 0.18$ ). Many disciplines to attend and relationships with peers ranked joint third in importance ( $\beta = 0.12$ ), with completing extracurricular assignments and taking exams and completing classroom assignments being fourth ( $\beta = 0.09$ ). Lastly, balancing study and professional internships had the weakest effect ( $\beta = 0.06$ ). The set of predictors demonstrated an explanatory capacity of 39% for BS.

Results indicate a substantial effect size ( $R^2 = 0.39$ ), according to the parameters indicated by Marôco (2007). This suggests that the relationships identified are likely to also be present in the target population of university students.

## DISCUSSION

This study aimed to identify the predictive power of academic stressors for BS in university students. The results revealed that seven stressors jointly explained 39% of the variation in BS. Therefore, it is evident that a higher perception of difficulties in relationships with professors, balancing study and leisure, having many disciplines to attend, relationships with peers, completing extracurricular assignments, taking exams and completing classroom assignments, and balancing study and professional internships are associated with a higher level of BS in students.

The findings confirm the theoretical model of burnout and the literature indicating that academic stressors are important predictive factors of the syndrome in university students (Carlotto, Câmara and Borges, 2005; Caballero Domínguez, Hederich and Palacio Sañudo, 2009; Caballero Domínguez, 2012). Students experiencing higher academic stress tend to have a greater tendency toward burnout (Gomes *et al.*, 2022).

Regarding the stressor “relationships with professors,” this result can be understood considering a study conducted by Oliveira *et al.* (2014) about university students’ perceptions of the professor-student relationship. In this study, students highlighted apparent indifference, inaccessibility, and a superior attitude of some professors as factors that could cause difficulties. They also mentioned aspects related to teaching methods, such as tests on content not explained in class, excessive use of seminars as course activities, and the lack of structured lectures. Misunderstandings regarding the expectations of students, who expect dedication and engagement from professors, and professors, who expect impersonal and professional treatment from students, can lead to conflicts.

Difficulties in relationships, marked mainly by excessive formality, authoritarianism, distance, rudeness, lack of relationship, and less attention to individual student issues, can compromise students’ positive expectations and make them feel exposed or demotivated for learning and even continuing their studies (Ribeiro, 2020). This result aligns with the literature, which suggests that relational problems are important predictors of BS in students (Lin and Huang, 2014; Kim *et al.*, 2018; Wink, LaRusso and Smith, 2021). A longitudinal study by Romano *et al.* (2021) investigated the protective role of students’ perception of emotional support from professors in relation to BS. They found that levels of burnout tended to increase over the academic year and identified the protective role of professor sensitivity in reducing the risk of burnout. According to the authors, this result underscores the importance of strengthening the professor-student affective relationship as a protective measure against the development of the syndrome.

Regarding the stressor “balancing study and leisure,” considering leisure as activities carried out in a person’s free time according to their personal interests, after fulfilling their formal obligatory activities (Isayama and Gomes, 2008), university students reported difficulties in engaging in leisure activities due to lack of time (Nogueira-Martins, 2002; Buzacarini and Corrêa, 2015; Silva Filho *et al.*, 2020). The continuous demands of university education go beyond the time spent on

campus and require a significant amount of time for study, updates, and activities. In addition to these more concrete aspects, young people feel pressure to achieve a successful professional life, which limits their time for leisure activities. The educational context can become so absorbing that leisure activities are considered secondary or superfluous. This stressor has been characterized as a predictor of BS in students (Carlotto, Câmara and Borges, 2005; Carlotto and Câmara, 2008).

The stressor “having many disciplines to attend” has also been identified in other studies as a significant stressor in university students (Carlotto, Nakamura and Câmara, 2006; Carlotto and Câmara, 2008; Ahmed and Shah, 2019; Abacar, Aliante and Antonio, 2021; Batista and Castro, 2022). The arrangement of disciplines in the curriculum follows a pedagogical plan, however, it is also consistent with the expected duration of the course. Therefore, the number of disciplines and the associated workload may not consider the specific demands of each discipline and their workload outside the classroom. Taking many disciplines implies allocating more time to the course, increasing the volume of assignments, readings, and assessments (Carlotto, Nakamura and Câmara, 2006). This situation generates a sense of overload (Abacar, Aliante and Antonio, 2021; Batista and Castro, 2022) associated with BS (Carlotto, Nakamura and Câmara, 2006; Carlotto and Câmara, 2008; Ahmed and Shah, 2019). The result aligns with those obtained by Galdino *et al.* (2020), who found that a higher discipline workload was associated with higher levels of all three dimensions of burnout in nursing students.

Regarding the stressor “relationships with peers,” a study conducted by Kienen and Botomé (2003) identified that students’ main difficulties in relation to their peers were individualistic attitudes, lack of cooperation, and rivalry. Unlike the relationships established in high school, the context of higher education establishes a dichotomy between collaborative construction and individual responsibility for future success in the chosen field. This conception of university education, combined with a perspective of a restricted job market, contributes to individualistic functioning in a formation process that benefits from group interactions. In Bardagi and Hutz’s (2012) investigation, students negatively evaluated their relationships with peers, attributing them to differences in values and lifestyles. Engaging in a particular academic context involves the stress of dealing with people with significantly different life circumstances, a process that has repercussions on learning and personal growth. However, it should be considered that the transition imposed by this new context requires significant effort to deal with reality, involving changes that often generate stress. The results obtained confirm a study by Salgado and Au-Yong-Oliveira (2021), involving 207 Portuguese university students, which found that among several explanatory factors for BS, one of them was competitiveness and conflicts with peers.

The stressors “completing extracurricular assignments” and “taking exams and completing classroom assignments” were identified as specific stressors predicting BS in university students. Although these stressors are quite specific in academic life, it is possible to consider that they are linked to the stressor pertaining to the simultaneous enrollment in multiple disciplines. The intense overload of content covered and assessed in each discipline/semester in a short period is considered stressful for students (Batista and Castro, 2022). A study by Cushman and West (2006) found that university students consider the amount of academic work, combined with exams, to be excessive, being considered the main factors contributing to overload and BS.

Regarding the stressor “balancing study and professional internships,” it should be emphasized that internships are a significant part of the academic journey, both personally and professionally. This stage of academic life presents students with multiple challenges and tasks that precede their entry into the professional world and adulthood. During this period, students have the opportunity to apply the knowledge acquired throughout their course (Morgado, Silva and Rodrigues, 2018), and often, they become aware of the differences between theory and practice (Rocha Neto, 2020).

The phase of professional internships usually occurs in the final stage of the course, a time when insecurities arise regarding their own competencies, the effectiveness of their education, and concerns about entering the job market (Rocha Neto, 2020).

The unpredictability of the daily work routine, which generates new demands on students, leads them to constantly reconsider their practices. The excess of challenging situations compels students to devote more of their time to internship activities, impeding their academic performance and resulting in an excessive workload (Rocha Neto, 2020).

The set of stressors predicting BS in university students reveals that relational aspects with professors and peers, especially with professors, represent an important aspect that can contribute to illness. However, it also proves to be a valuable resource to be considered in preventing BS among university students. It is also important to consider that the structure of higher education generates physical and mental overload, impacting the quality of life of students.

## CONCLUSION

Two sets of stressors that predict BS in students can be considered based on the results obtained: relational stressors and stressors related to the content of academic activities. One of the strengths of this study is the use of a consistent theoretical model of the evaluated constructs, the use of instruments with adequate reliability indices, and the high effect size of the predictor variables in the identified model.

However, the study has some limitations that should be taken into account when interpreting its results. One of them is its cross-sectional design, which prevents the analysis of causal relationships. Another limitation stems from the fact that the majority of the sample under investigation originated from the state of Rio Grande do Sul, which possesses distinct characteristics compared to other regions of the country, leading to significant variations based on the region.

Based on the research conducted, several potential areas for future studies were identified. These include conducting mixed longitudinal studies to assess the behavior and stability of the predictive model (Abbad and Carlotto, 2016) and to understand how the BS process develops and the impact of academic stressors. Expanding studies with samples from different Brazilian states would be important to examine the cultural and socioeconomic influence of students and the factors that generate stress. Finally, it is suggested to analyze BS considering the Demand-Resource model, which would enable the evaluation of stressors as demands and resources as mediators.

In terms of practical implications and prevention, it is crucial to monitor BS from the beginning of students' integration into the academic environment, developing actions focused on the proper management of academic stressors. It is imperative to create actions aimed at improving the quality of interpersonal relationships between students and professors and among students. Regarding stressors related to the content of academic activities, restructuring measures that aim to reduce student overload can be considered.

Actions involving the entire academic community at various levels are essential to reduce stress and BS. The reduction of student stress occurs only when all those involved in the education process recognize the difficulties and work to alleviate the pressures placed on students.

## REFERENCES

ABACAR, Mussa; ALIANTE, Gildo; ANTONIO, Júlio Frederico. Stress e estratégias de coping em estudantes universitários. *Aletheia*, v. 54, n. 2, p. 133-144, 2021. Available at: <https://www.periodicos.ulbra.br/index.php/aletheia/article/view/6864>. Accessed on: 31 Jan. 2022.

ABBAD, Gardênia da Silva; CARLOTTO, Mary Sandra. Analyzing challenges associated with the adoption of longitudinal studies in Work and Organizational Psychology. **Revista Psicologia: Organizações e Trabalho**, v. 16, n. 4, p. 340-348, 2016. Available at: <http://pepsic.bvsalud.org/pdf/rpot/v16n4/v16n4a07.pdf>. Accessed on: 27 Jun. 2022.

AHMED, Habib; SHAH, Syed Moin ud Din. Burnout among business students and its impact on academic performance. **RASD-Journal of Management**, v. 1, n. 1, p. 37-45, 2019. Available at: <https://journals.internationalrasd.org/index.php/jom/article/view/126>. Accessed on: 20 Jan. 2022.

AL-ALAWI, Mohammed; AL-SINAWI, Hamed; AL-QUBTAN, Ali; AL-LAWATI, Jaber; AL-HABSI, Assad; AL-SHURAIQI, Mohammed; AL-ADAWI, Samir; PANCHATCHARAM, Sathiya Murthi. Prevalence and determinants of burnout syndrome and depression among medical students at Sultan Qaboos University: A cross-sectional analytical study from Oman. **Archives of Environmental & Occupational Health**, v. 74, n. 3, p. 130-139, 2019. Available at: <https://pubmed.ncbi.nlm.nih.gov/29116906/>. Accessed on: 21 Feb. 2022.

ALBUQUERQUE, Roberto Nascimento de; BARBOSA, Amanda Fukuyoshi; PACHECO, Gabriele Batista Ferreira. Síndrome de burnout em acadêmicos de enfermagem. **Revista de Pesquisa, Cuidado é Fundamental**, v. 13, p. 1596-1602, 2021. Available at: <https://seer.unirio.br/cuidadofundamental/article/view/10547>. Accessed on: 23 Jan. 2022.

ALVES, Isabella Tavares; CONRADO, Gabrielle de Oliveira; GOMES, Giovana Celestino; TAVARES, Heitor Costa; MIRANDA, Mariana Rodrigues; LOPES, Yara Silva; MENDES, Kevyn Felipe. As complicações da vida acadêmica relacionada à Síndrome de Burnout: uma revisão integrativa de literatura. **Archives of Health**, Curitiba, v. 3, n. 2, p. 296-302, 2022. Available at: <https://ojs.latinamericanpublicacoes.com.br/ojs/index.php/ah/article/view/936>. Accessed on: 31 Jan. 2022.

BALOGUN, Joseph Abiodun; HELGEMOE, Sandra; PELLEGRINI, Elizabeth; HOEBERLEIN, Teresa. Test-retest reability of a psychometric instrument designed to measure physical therapy student's Burnout. **Perceptual and Motor Skill**, v. 81, n. 2, p. 667-672, 1995. Available at: <https://pubmed.ncbi.nlm.nih.gov/8570376/>. Accessed on: 21 Jan. 2022.

BARDAGI, Marucia Patta; HUTZ, Claudio Simon. Rotina acadêmica e relação com colegas e professores: impacto na evasão universitária. **Psico-PUCRS**, v. 43, n. 2, p. 174-184, 2012. Available at: <https://revistaseletronicas.pucrs.br/ojs/index.php/revistapsico/article/view/7870>. Accessed on: 15 Jul. 2021.

BATISTA, Fredgaard Victor Cavicchioli; CASTRO, Ewerton Helder Bentes de. Sobrecarga e desmotivação na vida acadêmica: Sentidos atribuídos à pressão do tempo por discentes do 7o ao 12o período de psicologia em instituição pública. **REH - Revista Educação e Humanidades**, v. 3, n. 1, p. 270-301, 2022. Available at: <https://periodicos.ufam.edu.br/index.php/reh/article/view/10326>. Accessed on: 31 Jan. 2022.

BENUZZI, Agustina Biondi; BENUZZI, Alba Liliana. Ansiedad, engagement y burnout académico en estudiantes. **Perspectivas en Psicología**, v. 18, n. 1, p. 118-122, 2021. Available at: <https://200.0.183.216/revista/index.php/pep/article/view/556>. Accessed on: 31 Mar. 2022.

BUZACARINI, Cíntia; CORRÊA, Evandro Antonio. Lazer dos estudantes universitários. **Conexões: Revista da Faculdade de Educação Física da UNICAMP**, v. 13, n. 2, p. 15-28, 2015. Available at: <https://editora.universidadedevassouras.edu.br/index.php/RPU/article/view/896>. Accessed on: 30 Jan. 2022.

CABALLERO DOMÍNGUEZ, Carmen Cecilia. **El burnout académico: Prevalencia y factores**

**asociados en estudiantes universitarios del área de la salud de la ciudad de Barranquilla.** 2012. 300 f. Dissertation (Doctorate in Psychology) – Universidad del Norte, Barranquilla (Colombia), 2012. Available at: <https://manglar.uninorte.edu.co/bitstream/handle/10584/7411/sindrome.pdf?sequence=1>. Accessed on: 31 Jul. 2021.

CABALLERO DOMÍNGUEZ, Carmen Cecilia; BRESO, Édgar; GONZÁLEZ GUTIÉRREZ, Orlando. Burnout en estudiantes universitarios. **Psicología desde el Caribe**, v. 32, n. 3, p. 424-441, 2015. Available at: <https://www.redalyc.org/pdf/213/21342681007.pdf>. Accessed on: 30 Mar. 2022.

CABALLERO DOMÍNGUEZ, Carmen Cecilia; HEDERICH, Christian; PALACIO SAÑUDO, Jorge Enrique. El burnout académico: delimitación del síndrome y factores asociados con su aparición. **Revista Latinoamericana de Psicología**, v. 42, n. 1, p. 131-146, 2009. Available at: <https://www.redalyc.org/pdf/805/80515880012.pdf>. Accessed on: 12 Jan. 2022.

CARLOTTO, Mary Sandra; CÂMARA, Sheila Gonçalves; BORGES, Ângela María Brazil. Predictores del síndrome de Burnout en estudiantes de un curso técnico de enfermería. **Diversitas**, v. 1, n. 2, 1p. 95-204, 2005. Available at: [https://www.scielo.org.co/scielo.php?script=sci\\_arttext&pid=S1794-99982005000200008](https://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S1794-99982005000200008). Accessed on: 30 Mar. 2021.

CARLOTTO, Mary Sandra; NAKAMURA, Antonieta Pepe; CÂMARA, Sheila Gonçalves. Síndrome de Burnout em estudantes universitários da área da saúde. **Psico-PUCRS**, v. 37, n. 1, p. 57-62, 2006. Available at: <https://revistaseletronicas.pucrs.br/ojs/index.php/revistapsico/article/view/1412>. Accessed on: 31 Mar. 2021.

CARLOTTO, Mary Sandra; CÂMARA, Sheila Gonçalves. Preditores da síndrome de burnout em estudantes universitários. **Pensamiento Psicológico**, v. 4, n.10, p. 101-109, 2008. Available at: <https://www.redalyc.org/pdf/801/80111670006.pdf>. Accessed on: 30 Mar. 2021.

CARLOTTO, Mary Sandra; CÂMARA, Sheila Gonçalves. Escala de Avaliação da Síndrome de Burnout em Estudantes Universitários: construção e evidências de validade. **Research, Society and Development**, v. 9, n. 7, p. e171974013, 2020. Available at: <https://rsdjournal.org/index.php/rsd/article/view/4013>. Accessed on: 10 Dec. 2020.

CASTRO-SILVA, Igor Iuço; MACIEL, Jacques Antonio Cavalcante; MELO, Marcelo Miranda de. Saúde mental e vida universitária: desvendando burnout em estudantes de Psicologia. **Revista Sustinere**, v. 9, n. 1, p. 5-22, 2021. Available at: <https://www.e-publicacoes.uerj.br/index.php/sustinere/article/view/50314>. Accessed on: 25 Jan. 2022.

CHEN, Meiyang; LI, Rui; FENG, Yiwei. The effect of attachment style on academic burnout: the mediating role of self-esteem and self-efficacy. **Advances in Social Science, Education and Humanities Research**, v. 561, 2021. Available at: <https://www.atlantis-press.com/proceedings/icmhhe-21/125958079>. Accessed on: 30 Mar. 2022.

CORTEZ, Laine Antunes; BRAGA, André Luiz de Souza; OLIVEIRA, Alessandra Gonçalo da Silva; RIBAS, Beatriz Folly; MATTOS, Mônica Montuano Gonçalves Ramos; MARINHO, Tatiane Glicerio; CAVALCANTI, Thayná Victório Costa; DUTRA, Virgínia Faria Damásio. Promoção à saúde mental dos estudantes universitários. **Revista Pró-UniverSUS**, v. 08, n.1, p. 48-54, 2017. Available at: <https://editora.universidadedevasouras.edu.br/index.php/RPU/article/view/896>. Accessed on: 15 Jan. 2022.

CUSHMAN, Stephanie; WEST, Richard. Precursors to college student burnout: developing a typology of understanding. **Qualitative Research Reports in Communication**, v. 7, n. 1, p. 23-31, 2006. Available at: <https://www.tandfonline.com/doi/abs/10.1080/17459430600964638>. Accessed on: 31 Jan. 2022.

CUSHWAY, Delia. Stress in clinical psychology trainees. **British Journal of Clinical Psychology**, v. 31, n. 2, 1p. 69-179, 1992. Available at: <https://bpspsychub.onlinelibrary.wiley.com/doi/10.1111/j.2044-8260.1992.tb00981.x>. Accessed on: 15 Jan. 2022.

FARIBORZ, Nikdel; HADI, Jalili; ALI, Taghvaie Nia. Students' Academic Stress, Stress Response and Academic Burnout: Mediating Role of Self-Efficacy. **Pertanika Journal of Social Sciences & Humanities**, v. 27, n. 4, p. 2441-2454, 2019. Available at: [https://www.pertanika.upm.edu.my/resources/files/Pertanika%20PAPERS/JSSH%20Vol.%2027%20\(4\)%20Dec.%202019/16%20JSSH-3103-2018.pdf](https://www.pertanika.upm.edu.my/resources/files/Pertanika%20PAPERS/JSSH%20Vol.%2027%20(4)%20Dec.%202019/16%20JSSH-3103-2018.pdf). Accessed on: 10 Jan. 2022.

FIELD, Andy. **Descobrimos a estatística usando o SPSS-2**. Porto Alegre: Bookman Editora, 2009.

GALDINO, Maria José Quina; ALMEIDA, Laio Preslis Brando Matos de; SILVA, Luiza Ferreira Rigonatti da; CREMER, Edivaldo; SCHOLZE, Alessandro Rolim; MARTINS, Júlia Trevisan; HADDAD, Maria do Carmo Fernandez Lourenço. Burnout among nursing students: a mixed method study. **Investigación y Educación en Enfermería**, v. 38, n. 1, p. e07, 2020. Available at: <http://www.scielo.org.co/pdf/iee/v38n1/2216-0280-iee-38-01-e07.pdf>. Accessed on: 27 Jun. 2022.

GOMES, Rui; SIMÕES, Clara; MORAIS, Catarina; COUTO, Adriana. Occupational stress and cognitive appraisal profiles as predictors of students' burnout. In: AREZES, Pedro Manuel; BAPTISTA, João Silvano; BARROSO, Mónica Patrícia; CARNEIRO, Paula; CORDEIRO, Patrício; COSTA, Néilson; MELO, Rui Borges; MIGUEL, A. Sérgio; PERESTRELO, Gonçalo. (Eds.). **Occupational and environmental safety and health III: Studies in systems, decision, and control**. Cham: Springer, 2022. p. 505-520. Available at: [https://link.springer.com/chapter/10.1007/978-3-030-89617-1\\_45](https://link.springer.com/chapter/10.1007/978-3-030-89617-1_45). Accessed on: 03 Mar. 2022.

JAGODICS, Balázs; SZABÓ, Éva. Student burnout in higher education: a demand-resource model approach. **Trends in Psychology**, v. 31, p. 757-776, 2022. Available at: <https://link.springer.com/article/10.1007/s43076-021-00137-4>. Accessed on: 03 Mar. 2022.

KIENEN, Nádia; BOTOMÉ, Sílvio Paulo. As relações entre controle sobre trabalho e condições de saúde de alunos universitários. **Interação em Psicologia**, v. 7, n. 2, p. 11-22, 2003. Available at: <https://revistas.ufpr.br/psicologia/article/view/3219>. Accessed on: 10 Jun. 2022.

KIM, Boram; JEE, Sooin; LEE, Joungwha; AN, Sunghee; LEE, Sang Min. Relationships between social support and student burnout: A meta-analytic approach. **Stress and Health**, v. 34, p. 127-134, 2018. Available at: <https://onlinelibrary.wiley.com/doi/10.1002/smi.2771>. Accessed on: 17 Mar. 2021.

KORDZANGANEH, Zahra; BAKHTIARPOUR, Saeed; HAFEZI, Fariba; DASHTBOZORGI, Zahra. The relationship between time management and academic burnout with the mediating role of test anxiety and self-efficacy beliefs among university students. **Journal of Medical Education**, v. 20, n. 1, p. e112142, 2021. Available at: <https://brieflands.com/articles/jme-112142>. Accessed on: 07 Mar. 2022.

LIN, Shu-Hui; HUANG, Yun-Chen. Life stress and academic burnout. **Active Learning in Higher Education**, v. 15, n. 1, p. 77-90, 2014. Available at: <https://journals.sagepub.com/doi/10.1177/1469787413514651>. Accessed on: 15 Mar. 2022.

MADIGAN, Daniel Joseph; CURRAN, Thomas. Does burnout affect academic achievement? A meta-analysis of over 100,000 students. **Educational Psychology Review**, v. 33, p. 387-405, 2021. Available at: <https://link.springer.com/article/10.1007/s10648-020-09533-1>. Accessed on: 12 Dec. 2021.

MARÔCO, João. **Análise estatística com utilização do SPSS**. 3.ed. Lisboa: Edições Sílabo, 2007.

MARTINEZ, Isabel; PINTO, Alexandra Marques; SALANOVA, Marisa; LOPES da SILVA, Adelina. Burnout en estudiantes universitarios de España y Portugal. Un estudio croscultural. **Ansiedad y Estrés**, v. 8, p. 13-23, 2002. Available at: <https://www.ansiedadestres.es/sites/default/files/rev/ucm/2002/anys2002a2.pdf>. Accessed on: 20 Jun. 2021.

MASLACH, Christina; JACKSON, Susan Elaine. The measurement of experienced burnout. **Journal of Organizational Behavior**, v. 2, n. 2, p. 99-113, 1981. Available at: <https://onlinelibrary.wiley.com/doi/10.1002/job.4030020205>. Accessed on: 15 Mar. 2022.

MASLACH, Christina; SCHAUFELI, Wilmar; LEITER, Michael. Job burnout. **Annual Review of Psychology**, v. 52, n. 1, p. 397-422, 2001. Available at: <https://www.annualreviews.org/doi/pdf/10.1146/annurev.psych.52.1.397>. Accessed on: 10 Mar. 2020.

MONTOYA-RESTREPO, Luz Alexandra; URIBE-ARÉVALO, Abel Eduardo; URIBE-ARÉVALO, Aura Janeth; MONTOYA-RESTREPO, Iván Alonso; ROJAS-BERRIO, Sandra Patricia. Burnout académico: impacto de la suspensión de actividades académicas en el sistema de educación pública en Colombia, **Panorama**, v. 15, n. 29, 2022. Available at <https://journal.poligran.edu.co/index.php/panorama/article/view/2319>. Accessed on: 19 Apr. 2022.

MORGADO, Elsa Maria Gabriel; SILVA, Levi Leonido Fernandes da; RODRIGUES, João Bartolomeu. O universo da supervisão: uma abordagem inclusiva no domínio da inserção profissional. **Pro-Posições**, v. 29, n. 3, p. 492-516, 2018. Available at: <https://www.scielo.br/j/pp/a/sGJZJ9GP8nSS9DY4Bqd7Zjq/?lang=pt>. Accessed on: 03 Mar. 2021.

NOGUEIRA-MARTINS, Luiz Antonio. Saúde mental dos profissionais de saúde. *In*: BOTEGA, Neury José (Org.). **Prática psiquiátrica no hospital geral: interconsulta e emergência**. Porto Alegre: Artmed, 2002. p. 130-144.

OLIVEIRA, Clarissa Tochetto; WILES, Jamille Mateus; FIORIN, Pascale Chechi; DIAS, Ana Cristina Garcia. Percepções de estudantes universitários sobre a relação professor-aluno. **Psicologia Escolar e Educacional**, v. 18, n. 2, p. 239-246, 2014. Available at: <https://www.scielo.br/j/pee/a/s3W5PBQmYJhLGqjpdY7j6jp/?lang=pt>. Accessed on: 03 Mar. 2022.

OLIVEIRA, Pedro Henrique Barbosa; OLIVEIRA, Augusto Henrique Alves. Síndrome de Burnout em acadêmicos de Odontologia. **Journal of Dentistry & Public Health**, v. 9, n. 4, p. 263-269, 2018. Available at: <https://www5.bahiana.edu.br/index.php/odontologia/article/view/2064>. Accessed on: 30 Mar. 2020.

PINTO, Priscilla Sarmento; NUNES, Fabricia Mickle Rodrigues; CAMPOS, Debora e Silva; FREITAS, Rejane Haidee Borges; BONAN, Paulo Rogério Ferreti; BATISTA, André Ulisses Dantas. Burnout syndrome in odontology, medicine, and nursing students: a literature review. **REFACS/ Revista Família, Ciclos de Vida e Saúde no Contexto Social**, v. 6, n. 2, p. 238-248, 2018. Available at: <https://seer.uftm.edu.br/revistaeletronica/index.php/refacs/article/view/2822>. Accessed on: 31 Mar. 2022.

RIBEIRO, Marinalva Lopes. A relação professor-estudante na educação superior. **Educação em Análise**, v. 5, n. 1, p. 185-200, 2020. Available at: <https://ojs.uel.br/revistas/uel/index.php/educanalise/article/view/40326>. Accessed on: 03 Mar. 2022.

RICARDO, Yury Rosales; PANEQUE, Fredy Roberto Rosales. Burnout estudiantil universitario. Conceptualización y estudio. **Salud Mental**, v. 36, n. 4, p. 337-345, 2013. Available at: [https://www.scielo.org.mx/scielo.php?script=sci\\_arttext&pid=S0185-33252013000400009](https://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S0185-33252013000400009). Accessed on: 10 May. 2021.

ROCHA NETO, José Haroldo Pimentel. **Os estágios acadêmicos e suas reverberações na construção**

**dos sentidos do trabalho: uma investigação com estudantes da UFC Fortaleza.** 2020. 95 f. Dissertação (Mestrado em Psicologia) – Universidade Federal do Ceará, Fortaleza, 2020. Available at: <https://repositorio.ufc.br/handle/riufc/52774>. Accessed on: 03 Mar. 2022.

RODRÍGUEZ-MARÍN, Jesús. **Psicología social de la salud.** Madrid: Síntesis, 1995.

ROMANO, Luciano; ANGELINI, Giacomo; CONSIGLIO, Piermarco; FIORILLI, Caterina. The effect of students' perception of teachers' emotional support on school burnout dimensions: longitudinal findings. **International Journal of Environmental Research Public Health**, v. 18, p. 1922, 2021. Available at: <https://www.mdpi.com/1660-4601/18/4/1922>. Accessed on: 11 Mar. 2022.

ROSALDES-RICARDO, Yury; RIZZO-CHUNGA, Florentino; MOCHA-BONILLA, Julio; FERREIRA, José Pedro Leitão. Prevalence of burnout syndrome in university students: A systematic review. **Salud Mental**, v. 44, n. 2, p. 91-102, 2021. Available at: [https://www.scielo.org.mx/scielo.php?script=sci\\_arttext&pid=S0185-33252021000200091](https://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S0185-33252021000200091). Accessed on: 03 Apr. 2022.

SAHÃO, Fernanda Torres; KIENEN, Nádia. Adaptação e saúde mental do estudante universitário: revisão sistemática da literatura. **Psicologia Escolar e Educacional**, v. 25, p. e224238, 2021. Available at: <https://www.scielo.br/j/pee/a/tdnsrZFwKyb53nvNZG79p9n/>. Accessed on: 05 Mar. 2022.

SALGADO, Sofia; AU-YONG-OLIVEIRA, Manuel. Student Burnout: A Case Study about a Portuguese Public University. **Education Sciences**, v. 11, n. 1, p. e.31, 2021. Available at: <https://www.mdpi.com/2227-7102/11/1/31>. Accessed on: 20 Apr. 2021.

SANCHES, Géssica Fernandes; VALE, Bianca Clemente do; PEREIRA, Sandra de Souza; ALMEIDA, Catia Candida; PRETO, Vivian; SAILER, Giselle Clemente. Burnout syndrome among graduates of undergraduate nursing course. **Journal of Nursing UFPE**, v. 11, n. 1, p. 31-39, 2017. Available at: <https://periodicos.ufpe.br/revistas/index.php/revistaenfermagem/article/view/10107/10577>. Accessed on: 11 May. 2022.

SCHAUFELI, Wilmar.; MARTÍNEZ, Isabel; PINTO, Alexandra Marques; SALANOVA, Marisa; BAKKER, Arnold. Burnout and engagement in university students: A cross-national study. **Journal of Cross-cultural Psychology**, v. 33, n. 5, p. 464-481, 2002. Available at: <https://journals.sagepub.com/doi/10.1177/0022022102033005003>. Accessed on: 21 Feb. 2021.

SCHULKE, Ana Paula; TAROUCO, Ariane Madruga; KOETZ, Agnes Ivana Koetz; CARLOTTO, Mary Sandra. A Síndrome de Burnout em Estagiários de Fisioterapia. **Diversitas**, v. 7, n. 1, p. 167-177, 2011. Available at: [http://www.scielo.org.co/scielo.php?script=sci\\_arttext&pid=S1794-99982011000100012&lng=en&nrm=iso](http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S1794-99982011000100012&lng=en&nrm=iso). Accessed on: 10 May 2022.

SILVA FILHO, Benedito Fernandes da; SANTOS, Rodrigo Novaes; SOUZA, Anderson Jambeiro de; CONSTÂNCIO, Jocinei Ferreira; MUNARO, Hector Luiz Rodrigues. Fatores associados ao estresse em universitários. **Research, Society and Development**, v. 9, n. 9, p. e480997129, 2020. Available at: <https://rsdjournal.org/index.php/rsd/article/view/7129>. Accessed on: 12 May. 2022.

SILVESTRE, Rafael; CRUZ, Michele Santos da; SILVA, Maria Joana Carvalho e; MELLO, Tiago Henrique Toldo; CESCO, Yasmim Paula; GUERRA, Paulo Henrique. Metanálise das prevalências da Síndrome de Burnout em discentes de escolas médicas brasileiras. **Revista Psicologia, Diversidade e Saúde**, v. 10, n. 3, p. 522-531, 2021. Available at: <https://www5.bahiana.edu.br/index.php/psicologia/article/view/3723>. Accessed on: 10 May. 2022.

SOUZA, Deise Coelho de. **Condições emocionais de estudantes universitários: estresse, depressão,**

ansiedade, solidão e suporte social. 2017. 90 f. Dissertation (Master's in Psychology) – Programa de Pós-Graduação em Psicologia, Universidade Federal do Triângulo Mineiro, Uberaba, 2017.

TARNOWSKI, Marelaine; CARLOTTO, Mary Sandra. Síndrome de Burnout em estudantes de psicologia. **Temas em Psicologia**, v. 15, n. 2, p. 173-180, 2007. Available at: [http://pepsic.bvsalud.org/scielo.php?script=sci\\_arttext&pid=S1413-389X2007000200004&lng=pt&nrm=iso](http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1413-389X2007000200004&lng=pt&nrm=iso). Accessed on: 16 Jan. 2022.

VIZZOTTO, Marília Martins; JESUS, Saul Neves de; MARTINS, Alda Calé. Saudades de casa: indicativos de depressão, ansiedade, qualidade de vida e adaptação de estudantes universitários. **Revista Psicologia e Saúde**, v. 9, n. 1, p. 59-73, 2017. Available at: <https://pssaucdb.emnuvens.com.br/pssa/article/view/469>. Accessed on: 21 Feb. 2021.

WINK, Mackenzie Nicole; LaRUSSO, Maria Delores; SMITH, Rhiannon Leigh. Teacher empathy and students with problem behaviors: Examining teachers' perceptions, responses, relationships, and burnout. **Psychology in the Schools**, v. 58, n. 8, p. 1575-1596, 2021. Available at: <https://onlinelibrary.wiley.com/doi/abs/10.1002/pits.22516>. Accessed on: 20 Feb. 2021.

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