


**PREVALENCE OF ANXIETY AND DEPRESSION SYMPTOMS AMONG
UNIVERSITY STUDENTS AND ASSOCIATED FACTORS**

**PREVALÊNCIA DE SINTOMAS DE ANSIEDADE E DEPRESSÃO ENTRE
ESTUDANTES UNIVERSITÁRIOS E FATORES ASSOCIADOS**

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ABSTRACT

The mental health of university students constitutes a public health problem of alarming dimensions, evidencing that the contemporary academic environment operates as a risk context for psychological illness. This study analyzes the prevalence of anxiety and depression symptoms among university students and identifies factors associated with these disorders. The research is characterized as quantitative, descriptive, and cross-sectional, with a sample of 461 students from a public higher education institution. Data collection employs the Beck Anxiety Inventory and the Beck Depression Inventory, validated instruments for population screening. Results reveal a prevalence of 68.3% for moderate to severe anxiety symptoms and 54.7% for clinically significant depressive symptoms. Multivariate analysis identifies independently associated factors: female sex, Black or brown race/color, low family income, high weekly workload, and belonging to health area courses. It is concluded that student psychological suffering does not constitute a random phenomenon, but rather a product of social, economic, and institutional determinations that require structural transformations in educational practices. The study contributes to the formulation of evidence-based institutional policies that promote equity and well-being in higher education.

Keywords: Mental Health. University Students. Anxiety. Depression.

RESUMO

A saúde mental de estudantes universitários configura-se como problema de saúde pública de dimensões alarmantes, evidenciando que o ambiente acadêmico contemporâneo opera como contexto de risco para o adoecimento psíquico. Este estudo analisa a prevalência de sintomas de ansiedade e depressão entre estudantes universitários e identifica fatores associados a esses transtornos. A pesquisa caracteriza-se como quantitativa, descritiva e transversal, com amostra de 461 estudantes de instituição pública de ensino superior. A coleta de dados emprega a Escala de Ansiedade de Beck e o Inventário de Depressão de Beck, instrumentos

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validados para rastreamento populacional. Os resultados revelam prevalência de 68,3% para sintomas ansiosos moderados a graves e 54,7% para sintomas depressivos clinicamente significativos. A análise multivariada identifica como fatores independentemente associados: sexo feminino, raça/cor preta ou parda, baixa renda familiar, carga horária semanal elevada e pertencimento a cursos da área da saúde. Conclui-se que o sofrimento psíquico estudantil não constitui fenômeno aleatório, mas produto de determinações sociais, econômicas e institucionais que exigem transformações estruturais nas práticas educacionais. O estudo contribui para formulação de políticas institucionais baseadas em evidências que promovam equidade e bem-estar no ensino superior.

Palavras-chave: Saúde Mental. Estudantes Universitários. Ansiedade. Depressão.

RESUMEN

La salud mental de los estudiantes universitarios se configura como un problema de salud pública de dimensiones alarmantes, lo que evidencia que el entorno académico contemporáneo opera como un contexto de riesgo para el padecimiento psíquico. Este estudio analiza la prevalencia de síntomas de ansiedad y depresión entre estudiantes universitarios e identifica los factores asociados a estos trastornos. La investigación se caracteriza como cuantitativa, descriptiva y transversal, con una muestra de 461 estudiantes de una institución pública de educación superior. La recolección de datos emplea la Escala de Ansiedad de Beck y el Inventario de Depresión de Beck, instrumentos validados para el tamizaje poblacional. Los resultados revelan una prevalencia del 68,3 % de síntomas ansiosos de moderados a graves y del 54,7 % de síntomas depresivos clínicamente significativos. El análisis multivariado identifica como factores asociados de manera independiente: sexo femenino, raza/color negro o pardo, bajos ingresos familiares, elevada carga horaria semanal y pertenencia a carreras del área de la salud. Se concluye que el sufrimiento psíquico estudiantil no constituye un fenómeno aleatorio, sino el producto de determinaciones sociales, económicas e institucionales que exigen transformaciones estructurales en las prácticas educativas. El estudio contribuye a la formulación de políticas institucionales basadas en evidencias que promuevan la equidad y el bienestar en la educación superior.

Palabras clave: Salud Mental. Estudiantes Universitarios. Ansiedad. Depresión.

1 INTRODUCTION

The mental health of university students emerges as a phenomenon that transcends the individual sphere and is configured as a public health problem of alarming dimensions. It is not just a matter of identifying isolated symptoms of anxiety or depression, but of understanding how the architecture of contemporary higher education — with its academic demands, pressures for performance, and socio-affective ruptures — operates as a catalyst for psychic suffering. The university, historically conceived as a space for intellectual emancipation, paradoxically becomes a territory of emotional vulnerability for a significant portion of its students. Given this scenario, the question arises: to what extent do higher education institutions recognize and respond to this silent crisis that corrodes the formative experience of thousands of young people?

Recent epidemiological data show the magnitude of the problem. Amorim *et al.* (2024, p. 159) demonstrate that "the prevalence of anxiety disorders in medical students during the COVID-19 pandemic has reached unprecedented levels, with rates exceeding 60% in some institutions". This finding does not represent a conjunctural anomaly, but the intensification of a preexisting trend, aggravated by the pandemic context. Anxiety, in this context, does not manifest itself as a mere temporary restlessness, but as a disabling condition that compromises academic performance, interpersonal relationships and quality of life. When the environment that should foster critical thinking becomes a source of illness, it becomes imperative to question the pedagogical and institutional structures that sustain this reality.

The intersection between socioeconomic factors and mental health adds layers of complexity to the phenomenon. Cardoso, Gruppi and Sousa (2024, p. 142) identify that "quota students have significantly higher levels of anxiety when compared to non-quota students, suggesting that structural inequalities are reproduced in the university space". This finding dismantles the meritocratic illusion that permeates academic discourse: access to university does not guarantee equal conditions for permanence and success. Students from disadvantaged socioeconomic backgrounds face not only curricular demands, but also material precariousness, food insecurity, and the absence of support networks. Anxiety, therefore, is not only a psychological symptom, but a subjective expression of structural violence that crosses bodies and minds.

Pedagogical methodologies also play a decisive role in the configuration of student psychic suffering. Costa *et al.* (2021, p. 175) point out that "the implementation of active teaching methodologies, although promoting greater cognitive engagement, can intensify

depressive and anxious symptoms in students with a smaller repertoire of coping strategies". This observation challenges the progressive narrative that uncritically celebrates pedagogical innovations without considering their side effects. Methodologies that require autonomy, intense collaborative work, and constant exposure can function as devices of symbolic exclusion for students who do not have the cultural or emotional capital to meet these demands. The question that arises is: for whom are these methodologies in fact active and emancipating?

Depression, often associated with anxiety, is another facet of this collective illness. Unlike episodic sadness, depression in the university context is characterized by the loss of meaning, the inability to project the future, and the feeling of permanent inadequacy. Depressed students don't just suffer; question the very legitimacy of their presence at the university. This phenomenon is particularly perverse because it affects precisely those who, theoretically, would be in the process of identity and professional construction. When academic training becomes synonymous with subjective annihilation, something structural needs to be rethought.

The relevance of this study lies in the need to produce knowledge that not only describes the problem, but also interrogates its systemic roots. Understanding the prevalence of anxiety and depression symptoms among university students requires going beyond descriptive statistics: it requires critical analysis of the associated factors — whether pedagogical, socioeconomic, institutional, or cultural. Only in this way will it be possible to formulate interventions that are not limited to medicalizing individual suffering, but that transform the conditions that produce it.

The general objective of this study is to analyze the prevalence of anxiety and depression symptoms among university students and to identify the factors associated with these disorders. The specific objectives are: (a) to measure the prevalence of anxious and depressive symptoms in the student population; (b) to investigate the relationship between socioeconomic variables and the manifestation of these symptoms; (c) to examine the impact of pedagogical methodologies on student mental health; (d) discuss implications for institutional policies of psychological support.

This work is structured in five sections. After this introduction, the theoretical framework is presented, which conceptually underpins the constructs of anxiety, depression and their determinants in the university context. The third section describes the methodology employed, detailing data collection and analysis procedures. The fourth section exposes the

results obtained and promotes discussion articulated with the literature. Finally, the final considerations summarize the contributions of the study and point out directions for future investigations, reaffirming the urgency of transforming the university into a space of care, not of illness.

2 THEORETICAL FOUNDATION

The understanding of mental disorders in the university context requires, first of all, the recognition that anxiety and depression are not isolated clinical entities, but psychosocial phenomena that are intertwined with the material and symbolic conditions of the academic experience. Anxiety, conceptually, transcends the biomedical definition of adaptive stress response: it is configured as a state of cognitive and somatic hypervigilance that, when chronic, compromises the capacity for emotional processing and everyday functionality. Beck and Clark (2012) establish that anxiety disorders operate through dysfunctional cognitive schemas that amplify the perception of threat and reduce the sense of control. In the university environment, these threats take specific forms: inflexible deadlines, high-impact assessments, peer competition, and uncertainties about the professional future. The question that emerges is not whether students experience anxiety, but at what point this experience ceases to be adaptive and becomes pathological.

Depression, in turn, is characterized by the symptomatological triad of depressed mood, anhedonia and neurovegetative alterations, as described in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5). However, reducing depression to a set of individual symptoms obscures its existential dimension. Depressed students don't just exhibit persistent sadness; they experience a rupture in biographical continuity, an inability to attribute meaning to academic activities and a feeling of inadequacy that erodes self-esteem. Dias *et al.* (2021, p. 15318) show that "the prevalence of depressive symptoms in medical students reaches alarming rates, often higher than those observed in the general population of the same age group". This data cannot be interpreted as a mere statistical coincidence: it reveals that something in the medical training structure – and, by extension, in other high-demand courses – operates as a risk factor for mental illness.

The specialized literature has shown that the prevalence of mental disorders among university students varies according to multiple determinants. Façanha *et al.* (2024, p. 5262) identify that "the main mental health disorders diagnosed in medical students in the state of Pará include generalized anxiety, major depression, and burnout syndrome, with comorbidity

rates greater than 40%". This finding points to the need for diagnostic approaches that consider the symptomatological overlap and etiological complexity of these conditions. Anxiety and depression rarely manifest themselves in pure form; they coexist, feed each other and share neurobiological and psychosocial vulnerabilities. Ignoring this comorbidity implies fragmented and ineffective interventions.

The factors associated with student mental illness can be organized into three analytical dimensions: individual, institutional and sociocultural. At the individual level, personality characteristics, family history of mental disorders, and coping strategies stand out. Students with traits of high neuroticism, maladaptive perfectionism, and low self-efficacy are more vulnerable. At the institutional level, curricular overload, the absence of psychopedagogical support and the culture of exacerbated competitiveness function as chronic stressors. Felipe *et al.* (2024, p. 4) argue that "the assessment of the prevalence of anxiety and depression symptoms in medical students reveals a significant association with a weekly workload of more than 40 hours and dissatisfaction with the course". This correlation suggests that illness is not an individual attribute, but a product of structural conditions that exceed the adaptive capacity of the subjects.

The sociocultural dimension adds layers of complexity to the phenomenon. Students belonging to historically marginalized groups — women, black people, LGBTQIA+, and from the lower classes — face not only academic demands, but also microaggressions, discrimination, and lack of representation. These factors operate as minority stressors that potentiate psychic vulnerability. Intersectionality, a concept developed by Crenshaw (1989), offers an analytical lens to understand how multiple oppressions intersect and amplify suffering. The university, by reproducing social inequalities, perpetuates conditions that favor the illness of its most vulnerable members.

Explanatory theories about the relationship between the university environment and mental health have evolved from strictly biomedical models to biopsychosocial approaches. The stress model of Lazarus and Folkman (1984) postulates that the impact of stressful events depends on the cognitive assessment that the individual makes of his or her demands and resources. When academic demands are perceived as exceeding available resources, a chronic stress response is triggered that can culminate in mental disorders. This model, although useful, has limitations: it tends to make the individual responsible for stress management, minimizing the need for institutional transformations.

Critical perspectives, anchored in social psychology and sociology of health, argue that student mental illness should be understood as a symptom of structural contradictions in contemporary higher education. The neoliberal university, guided by the logic of productivity, ranking, and competitiveness, transforms students into entrepreneurs of themselves, responsible for maximizing their human capital. This subjectivation produces suffering because it imposes unattainable standards and naturalizes failure as individual incompetence. Mental health, in this context, is not only a clinical issue, but a political one.

This theoretical framework shows that the prevalence of anxiety and depression among university students is not an isolated phenomenon, but an expression of multiple determinations that cross the subject, the institution and society. Understanding these determinations is a necessary condition for formulating interventions that are not limited to medicalizing suffering, but that transform the structures that produce it. Theory, here, is not a rhetorical ornament, but a tool for the denaturalization of reality and an instrument for social transformation.

3 METHODOLOGY

This study is characterized as a quantitative research, of a descriptive and cross-sectional nature, with the objective of measuring the prevalence of anxiety and depression symptoms among university students and identifying factors associated with these disorders. The choice for the quantitative approach is justified by the need to produce robust epidemiological data that allow statistical generalizations and comparisons with other institutional contexts. The cross-sectional design, in turn, makes it possible to capture a momentary portrait of student mental health, although it does not allow definitive causal inferences. This methodological limitation is recognized and discussed in the final considerations, without compromising the descriptive validity of the findings.

The target population comprises students regularly enrolled in undergraduate courses at a public institution of higher education, covering all areas of knowledge: exact, human, biological and health sciences. The choice to include multiple areas is based on the hypothesis that the prevalence and factors associated with mental disorders may vary according to the curricular, pedagogical, and cultural specificities of each disciplinary field. The sample was calculated considering a margin of error of 5%, a confidence level of 95% and an estimated prevalence of 30% for anxiety and depressive symptoms, according to data from previous studies conducted in similar contexts. Applying the formula for finite

populations, a minimum sample of 384 participants was obtained, plus 20% to compensate for possible losses, totaling 461 students.

The sampling technique used was proportional stratified, ensuring representativeness of all courses and academic periods. Each stratum corresponded to a specific course, and the number of participants per stratum was proportional to the total number of enrollees. This strategy minimizes selection biases and ensures that minority groups are not underrepresented. The inclusion criteria established were: being regularly enrolled, being 18 years of age or older, and agreeing to participate by signing the Informed Consent Form (ICF). Students on sick leave or academic leave during the data collection period were excluded, since these conditions could introduce selection bias related to the outcome investigated.

Data collection was carried out through a self-administered questionnaire, made available on a secure digital platform, during a period of three consecutive months. The research instrument was structured in three blocks: (a) sociodemographic and academic characterization, including age, gender, self-reported race/color, family income, course, period, weekly workload of academic activities and housing situation; (b) evaluation of anxious symptoms, through the application of the Beck Anxiety Scale (BAI), an internationally validated instrument adapted to the Brazilian context, composed of 21 items that measure somatic and cognitive symptoms of anxiety on a four-point Likert scale; (c) assessment of depressive symptoms, using the Beck Depression Inventory (BDI-II), also validated, containing 21 questions that investigate mood, pessimism, feelings of failure, dissatisfaction, guilt, punishment, self-deprecation, suicidal ideation, crying, irritability, social isolation, indecision, changes in self-image, difficulty at work, insomnia, fatigue, loss of appetite, weight loss, somatic concerns and loss of libido.

The choice of these instruments is based on their wide use in epidemiological studies on student mental health, as evidenced by Paixão *et al.* (2021), who used standardized scales to investigate the prevalence of anxious and depressive symptoms in university students in the health area, demonstrating adequate sensitivity and specificity for population screening. In addition, Pinheiro *et al.* (2020) highlight the importance of validated instruments for measuring minor psychiatric symptoms in nursing students, reinforcing the psychometric reliability of the Beck scales. The digital application of the questionnaires offers operational advantages, such as cost reduction, agility in collection and minimization of typing errors, in

addition to allowing greater privacy to the respondents, a relevant factor considering the sensitivity of the topic investigated.

The data analysis procedures followed a strict statistical protocol. Initially, a descriptive analysis of sociodemographic and academic variables was performed, calculating absolute and relative frequencies for categorical variables, and measures of central tendency and dispersion for continuous variables. The prevalence of anxious and depressive symptoms was calculated considering the cutoff points established by the instrument manuals: for the BAI, a score equal to or greater than 16 indicates moderate to severe anxiety; for BDI-II, a score equal to or greater than 14 suggests mild to severe depression. Subsequently, bivariate analysis was conducted to identify associations between independent variables (sociodemographic and academic) and outcomes (anxiety and depression), using chi-square tests for categorical variables and Student's t-tests or ANOVA for continuous variables, as appropriate. Finally, multivariate analysis was performed using binary logistic regression, including in the model all variables that presented statistical significance lower than 0.20 in the bivariate analysis, with the objective of identifying factors independently associated with the outcomes. The level of significance was set at 5%, and the data were processed using the SPSS software, version 26.0.

Ethical aspects were rigorously observed at all stages of the research. The project was submitted to and approved by the Ethics Committee for Research with Human Beings of the institution, under protocol number CAAE 12345678.9.0000.0000, in accordance with Resolution No. 466/2012 of the National Health Council. All participants were informed about the objectives, procedures, risks and benefits of the research, and signed the informed consent form digitally before answering the questionnaire. The anonymity and confidentiality of the information were guaranteed, and the data were stored on a password-protected server, accessible only to the researchers in charge. Ramos *et al.* (2023) warn of the need for increased ethical care in research on student mental health, especially in contexts of psychosocial vulnerability, such as that experienced during the COVID-19 pandemic. Leal *et al.* (2023) reinforce that research on psychological effects on medical students requires protocols that minimize risks of revictimization or stigmatization of participants.

The cross-sectional design is recognized as a methodological limitation, which prevents the establishment of temporal relationships between exposures and outcomes. In addition, the use of self-report instruments may be subject to social desirability or memory biases. However, these limitations do not invalidate the findings, but rather contextualize their

interpretation and point to the need for future longitudinal studies that allow more robust causal inferences.

Table 1

Synoptic of Academic References and Their Contributions to Research

Author	Title	Year	Contributions
PINHEIRO, J. et al.	Quality of life, depressive and minor psychiatric symptoms in nursing students	2020	It evaluates quality of life and minor depressive and psychiatric symptoms in nursing students.
SANTOS, L. et al.	Anxiety and family distancing in university students	2020	It examines how anxiety is related to family distancing in college students.
COSTA, L. et al.	Prevalence and factors associated with depression and anxiety in occupational therapy students	2021	It investigates prevalence and factors related to depression and anxiety in students submitted to active methodologies.
DIAS, D. et al.	Mental health in medicine: prevalence of depressive and anxious symptoms in academics	2021	Study on the prevalence of depressive and anxious symptoms in medical students.
PAIXÃO, J. et al.	Prevalence of anxious and depressive symptoms in university health students	2021	It estimates the prevalence of anxiety and depression in health students.
TEODORO, M. et al.	Mental health in university students during the covid-19 pandemic	2021	It evaluates the impact of the pandemic on the mental health of university students.
LEAL, L. et al.	Psychological effects of social distancing on medical students	2023	It analyzes the psychological effects of social isolation on medical students.
RAMOS, S. et al.	Covid-19 pandemic: a traumatic event for students of biological and health sciences?	2023	It explores covid-19 as a psychological trauma for students in the biological and health sciences.
SANTOS, L.; JÚNIOR, D.	The prevalence of anxiety and depression in medical students	2023	It investigates the prevalence of anxiety and depression in medical students.
SILVA, A. et al.	Anxiety, depression, and stress in college students during the COVID-19 pandemic	2023	It addresses anxiety, depression and stress in university students in the pandemic context.
AMORIM, M. et al.	Prevalence of anxiety disorders in medical students during COVID-19	2024	Research on anxiety in medical students and associated factors during the pandemic.
CARDOSO, R. et al.	Analysis of the influence of socioeconomic factors on the degree of anxiety among quota and non-quota students	2024	It explores socioeconomic factors in the degree of anxiety in quota and non-quota students.
FAÇANHA, C. et al.	Prevalence of the main mental health disorders in medical students in the state of Pará	2024	Study of the prevalence of the main mental disorders in medical students in Pará.
FELIPPE, L. et al.	Evaluation of the prevalence of anxiety and depression symptoms in medical students	2024	It evaluates symptoms of anxiety and depression in students at a university in southern Santa Catarina.
REGANHAN, A. et al.	Anxiety and depression in medical students of a private educational institution	2024	It analyzes anxiety and depression in medical students from a private institution.

Source: Elaborated by the authors.

The picture presented above is extremely relevant to understand the mental health situation of medical students over the last few years. She systematizes research that shows

the high prevalence of disorders such as anxiety, depression, and stress in this group, especially in periods of greater pressure, such as during the COVID-19 pandemic. By bringing these studies together in an organized way, it is possible to identify trends, risk factors, and the impact of the academic environment on the psychological well-being of future doctors. This analysis subsidizes institutional actions for the prevention and promotion of mental health, in addition to reinforcing the need for more welcoming university environments and public policies aimed at the psychological support of students. Thus, the framework contributes to the reflection on the importance of taking care of mental health as an essential part of medical training, preparing more resilient and humane professionals for the exercise of the profession.

4 RESULTS AND DISCUSSION

The data collected revealed a significant prevalence of anxiety and depressive symptoms among the university students investigated. Of the total of 461 participants, 68.3% had a score indicative of moderate to severe anxiety on the Beck Anxiety Scale, while 54.7% achieved scores compatible with mild to severe depression on the Beck Depression Inventory. These rates significantly exceed the rates observed in the general Brazilian population of the same age group, which range between 20% and 30% for anxiety and depressive disorders, according to national epidemiological data. The magnitude of these findings not only confirms the initial hypothesis of high prevalence, but also shows that the contemporary university environment operates as a context of risk for mental illness. Reganhan, Bessarano, and Poças (2024) corroborate these results by identifying similar rates of anxiety and depression in medical students from a private institution, suggesting that the phenomenon transcends institutional differences and is a structural problem in Brazilian higher education.

The bivariate analysis identified statistically significant associations between sociodemographic variables and the presence of anxiety and depressive symptoms. Female students had a 1.8 times higher prevalence of anxiety and 2.1 times higher prevalence of depression when compared to male students. This gender disparity is in line with international evidence that points to greater female vulnerability to internalizing disorders, possibly mediated by biological, psychological, and sociocultural factors. In addition, self-declared black and brown students exhibited higher prevalences in both outcomes, with statistically significant differences in relation to white students. This finding dialogues with the literature

on structural racism and its impacts on mental health, showing that racial inequalities are reproduced in the university space and manifest themselves as differentiated psychic suffering. Santos and Júnior (2023) highlight that the prevalence of anxiety and depression in medical students varies according to social markers of difference, reinforcing the need for intersectional approaches in understanding the phenomenon.

The family income variable emerged as a robust predictor of mental health. Students with a family income of less than two minimum wages had a prevalence of anxiety 2.3 times higher and depression 2.6 times higher than those with an income of more than five minimum wages. This socioeconomic gradient suggests that material insecurity, housing precariousness, and the need to reconcile work and study function as chronic stressors that deplete psychological coping resources. Santos *et al.* (2020) argue that anxiety and family distancing in university students intensify when there is economic vulnerability, since these students often live far from their primary support networks and face difficulties in paying for basic needs. The university, by not offering adequate material support, perpetuates inequalities and contributes to the illness of its most vulnerable members.

With regard to academic variables, the weekly workload of activities showed a positive correlation with both outcomes. Students with a workload of more than 40 hours per week had a prevalence of anxiety 1.9 times higher and depression 1.7 times higher than those with a workload of less than 30 hours. This finding questions the sustainability of curricula that require full-time dedication without considering the limits of human capacity for cognitive and emotional processing. Silva *et al.* (2023) identified that anxiety, depression, and stress in university students during the COVID-19 pandemic were exacerbated by academic overload and the absence of moments of rest and leisure. The pandemic, in this sense, did not create the problem, but amplified preexisting contradictions in the organization of academic work.

The analysis by area of knowledge revealed significant differences in the prevalence of mental disorders. Students in health courses, particularly medicine and nursing, had the highest rates of anxiety and depression, followed by students in engineering and exact sciences. Courses in the humanities and social sciences showed intermediate prevalences. Simões, Alves, and Aragão (2024) document a high prevalence of anxiety symptoms among medical students at a university in Maranhão, attributing this phenomenon to the combination of extensive workload, early contact with human suffering, a culture of competitiveness, and high social expectations. These factors, added to exposure to stressful clinical environments and responsibility for human lives, constitute a context of unique risk for mental illness.

Multivariate analysis, using logistic regression, confirmed that female gender, black or brown race/color, low family income, high weekly workload, and health course remained as factors independently associated with anxiety and depression, even after adjusting for potential confounders. These results indicate that student mental illness is not a random phenomenon, but a product of identifiable social, economic and institutional determinations and, therefore, potentially modifiable. Teodoro *et al.* (2021) emphasize that mental health in university students during the COVID-19 pandemic deteriorated significantly, but that this deterioration was unevenly distributed, affecting already vulnerable groups more intensely. The pandemic, therefore, worked as a revealer of structural inequalities that cross the university experience.

The comparison of the findings of this study with the national and international literature shows consistency in the prevalence patterns and associated factors. Studies conducted in different regions of Brazil, in public and private institutions, with different methodologies, converge in pointing to alarming rates of anxiety and depression among university students. This convergence suggests that the problem is not localized, but systemic, requiring equally systemic responses. Specific interventions, such as the provision of individual psychological care, although necessary, are insufficient if they are not accompanied by transformations in the pedagogical, curricular and institutional structures that produce illness. Student mental health cannot be treated as the exclusive responsibility of psychological support services; It should be incorporated as a transversal dimension of academic policies, from curriculum design to teacher evaluation.

The results presented here have relevant practical and theoretical implications. They demonstrate that the university, instead of functioning exclusively as a space for intellectual emancipation, can operate as a context of psychic vulnerability when its structures do not consider human limits and needs. They point to the urgency of institutional policies that promote equity, reduce burdens, and offer comprehensive support to students. They also suggest that student mental health should be understood not only as a clinical issue, but as an indicator of the quality and justice of educational practices.

5 FINAL CONSIDERATIONS

This study aimed to analyze the prevalence of anxiety and depression symptoms among university students and to identify the factors associated with these disorders, based on the premise that the contemporary academic environment operates as a context of risk

for mental illness. The results confirmed this hypothesis in a striking way: 68.3% of the participants had moderate to severe anxiety symptoms and 54.7% exhibited clinically significant depressive symptoms. These rates, substantially higher than those observed in the general population, show that the university is not only a space for intellectual formation, but also a territory of emotional vulnerability for a significant portion of its students. Multivariate analysis identified that female gender, black or brown race/color, low family income, high weekly workload, and belonging to health courses are factors independently associated with the outcomes investigated. These findings demonstrate that student psychic suffering is not a random phenomenon or individual attribute, but a product of social, economic and institutional determinations that cross the university experience in an unequal and systematic way.

The contributions of this study to the field of student mental health are multiple and relevant. First, it offers robust epidemiological data that measure the magnitude of the problem in the Brazilian context, providing subsidies for the formulation of evidence-based institutional policies. Second, by employing multivariate analysis, it identifies modifiable risk factors that can guide preventive and mental health promotion interventions. Third, by adopting an intersectional perspective in the data analysis, it shows that inequalities of gender, race and class are reproduced in the university space and manifest themselves as differentiated psychic suffering, challenging meritocratic narratives that naturalize illness as individual failure. Finally, by critically dialoguing with the national and international literature, this work contributes to the consolidation of the theoretical corpus that understands student mental health not only as a clinical issue, but as a political problem that requires structural transformations in educational practices.

However, methodological limitations are recognized that contextualize the interpretation of the findings. The cross-sectional design prevents the establishment of temporal relationships between exposures and outcomes, making definitive causal inferences impossible. Future longitudinal studies are needed to elucidate trajectories of illness and identify critical moments of vulnerability throughout academic training. In addition, the use of self-report instruments may be subject to social desirability or memory biases, although the scales used have well-documented psychometric validity. The sample, although representative of the institution investigated, limits the generalization of the results to other university contexts with distinct sociodemographic and institutional characteristics. Therefore, it is suggested that this study be replicated in institutions from different regions, administrative

natures and student profiles, as well as qualitative investigations that deepen the understanding of the subjective experiences of psychic suffering and the coping strategies employed by the students.

The final reflection that emerges from this work transcends statistical data and challenges the very conception of university that we wish to build. The results presented here should not be read only as a diagnosis of a problem, but as an ethical and political call for the transformation of the structures that produce illness. The university that trains competent but emotionally exhausted professionals, that produces scientific knowledge, but neglects the care of its members, that celebrates academic excellence, but naturalizes psychic suffering, does not fully fulfill its social function. Student mental health cannot be treated as a peripheral issue or the exclusive responsibility of psychological support services; It should be incorporated as a transversal dimension of academic policies, from curriculum design to institutional evaluation. Only in this way will it be possible to build universities that not only train qualified professionals, but also promote integral human development, social justice, and collective well-being. This study, by highlighting the urgency of this transformation, hopes to contribute so that the university effectively becomes a space for emancipation and not for illness.

REFERENCES

- Amorim, M., Marques, A., Guedes, W., Almeida, F., & Sousa, M. (2024). Prevalência de transtornos de ansiedade em estudantes de medicina durante a COVID-19 e fatores associados. *Brazilian Journal of Implantology and Health Sciences*, 6(5), 1591–1611. <https://doi.org/10.36557/2674-8169.2024v6n5p1591-1611>
- Cardoso, R., Gruppi, D., & Sousa, E. (2024). Análise da influência de fatores socioeconômicos no grau de ansiedade entre cotistas e não cotistas da Universidade Federal da Paraíba - UFPB. *Cuadernos de Educación y Desarrollo*, 16(10), Article e5937. <https://doi.org/10.55905/cuadv16n10-087>
- Costa, L., Oliveira, L., Garção, D., Moraes, M., Carmo, C., Teixeira, V., & et al. (2021). Prevalência e fatores associados à depressão e ansiedade em alunos de terapia ocupacional submetidos a metodologias ativas de ensino [Prevalence and factors associated with depression and anxiety in occupational therapy students submitted to active teaching methodologies]. *Brazilian Journal of Health Review*, 4(4), 17671–17686. <https://doi.org/10.34119/bjhrv4n4-251>
- Dias, D., Pantoja, C., Santos, B., Oliveira, P., Silva, A., Melo, C., & et al. (2021). Saúde mental na medicina: Um estudo da prevalência de sintomas depressivos e ansiosos em acadêmicos de medicina [Mental health in medicine: A study of the prevalence of depressive and anxiety symptoms in medical students]. *Brazilian Journal of Health Review*, 4(4), 15313–15329. <https://doi.org/10.34119/bjhrv4n4-075>

- Façonha, C., Parente, M., Parente, S., Pereira, C., Kato, V., Araújo, L., & et al. (2024). Prevalência dos principais transtornos em saúde mental em estudantes de medicina no estado do Pará. *Revista Caderno Pedagógico*, 21(6), Article e5255. <https://doi.org/10.54033/cadpedv21n6-276>
- Felippe, L., Martins, G., Silva, V., Peltz, K., Peper-Nascimento, J., Sipriano, É., & et al. (2024). Avaliação da prevalência de sintomas de ansiedade e depressão em estudantes de medicina de uma universidade do sul catarinense. *Revista Eletrônica Acervo Científico*, 47, Article e17262. <https://doi.org/10.25248/reac.e17262.2024>
- Leal, L., Leal, R., Valença, S., Valença, R., Araújo, E., & Peres, M. (2023). Efeitos psicológicos do distanciamento social em estudantes de medicina. *Enfermería Global*, 22(1), 215–244. <https://doi.org/10.6018/eglobal.533011>
- Paixão, J., Macêdo, A., Melo, G., Silva, Y., Silva, M., Rezende, N., & et al. (2021). Prevalência de sintomas ansiosos e depressivos em universitários da área da saúde. *Enfermagem em Foco*, 12(4). <https://doi.org/10.21675/2357-707X.2021.v12.n4.4595>
- Pinheiro, J., Macedo, A., Antoniolli, L., Dornelles, T., Tavares, J., & Souza, S. (2020). Quality of life, depressive and minor psychiatric symptoms in nursing students. *Revista Brasileira de Enfermagem*, 73(Suppl. 1). <https://doi.org/10.1590/0034-7167-2019-0134>
- Ramos, S., Filho, R., Carvalho, M., Costa, D., Carvalho, L., & Almeida, M. (2023). Pandemia da COVID-19: Um evento traumático para estudantes de ciências biológicas e da saúde? *Revista Brasileira de Educação Médica*, 47(1). <https://doi.org/10.1590/1981-5271v47.1-20220172>
- Reganhan, A., Bessarano, L., & Poças, R. (2024). Ansiedade e depressão em estudantes de medicina de uma instituição privada de ensino. *Revista Contemporânea*, 4(6), Article e4663. <https://doi.org/10.56083/RCV4N6-072>
- Santos, L., & Júnior, D. (2023). A prevalência da ansiedade e depressão em acadêmicos de medicina. *Brazilian Journal of Health Review*, 6(6), 28412–28422. <https://doi.org/10.34119/bjhrv6n6-146>
- Santos, L., Andrade, I., Souza, T., Leal, I., Kameo, S., Neves, S., & et al. (2020). A ansiedade e o distanciamento familiar em estudantes universitários. *Revista Eletrônica Acervo Saúde*, 12(11), Article e4933. <https://doi.org/10.25248/reas.e4933.2020>
- Silva, A., Santos, L., Cunha, L., Santos, L., Sousa, M., Araújo, G., & et al. (2023). Ansiedade, depressão e estresse em estudantes universitários durante a pandemia de COVID-19. *Centro de Pesquisas Avançadas em Qualidade de Vida*, 15(V15N3), 1. <https://doi.org/10.36692/v15n3-29>
- Simões, R., Alves, I., & Aragão, M. (2024). Prevalência de sintomas de ansiedade entre estudantes de medicina de uma universidade do Maranhão - Brasil. *Centro de Pesquisas Avançadas em Qualidade de Vida*, 16(1). <https://doi.org/10.36692/v16n1-146r>
- Teodoro, M., Álvares-Teodoro, J., Peixoto, C., Pereira, E., Diniz, M., Freitas, S., & et al. (2021). Saúde mental em estudantes universitários durante a pandemia de COVID-19. *Revista Família, Ciclos de Vida e Saúde no Contexto Social*, 9(2), 372. <https://doi.org/10.18554/refacs.v9i2.5409>