Review Article

**THE IMPACT OF CHRONIC STRESS ON THE MENTAL HEALTH OF 9TH AND 1ST-YEAR STUDENTS AND ITS IMPLICATIONS FOR THE DEVELOPMENT OF ANXIETY AND DEPRESSION DISORDERS**

.

**ABSTRACT**

|  |
| --- |
| **ABSTRACT**  **Introduction:** Chronic stress has become an increasing concern among adolescents, being linked to neurological disorders, mental illnesses, and risky behaviors. Evidence shows that factors such as bullying, poverty, domestic violence, and discrimination significantly contribute to the development of anxiety, depression, and post-traumatic stress disorder in young people. The lack of early interventions and effective public policies worsens this scenario, especially in vulnerable socioeconomic contexts. **Objective:** This study aimed to analyze the impact of chronic stress on the mental health of 9th and 1st-year students at the Centro Integrado de Educação Assis Chateaubriand, located in Feira de Santana, and its implications in the development of anxiety and depression disorders, in addition to proposing evidence-based interventions. **Methodology:** This is a bibliographic, descriptive study with a mixed approach, based on scientific articles published between 2020 and 2025. The search was conducted in the PubMed and BVS databases, using DeCS descriptors combined with Boolean operators. After a careful selection, three thematic axes were defined to guide the critical analysis of the data and support the discussion. **Results and Discussion:** The analyzed literature identified direct associations between chronic stress and the worsening of mental symptoms such as suicidal ideation, self-harm, depression, and anxiety. Factors such as excessive screen time, school violence, family neglect, and toxic school environments were determinant. Bullying, especially verbal and sexual, showed a high correlation with PTSD. The COVID-19 pandemic also intensified levels of psychological distress, especially among the poorest. **Conclusion:** Chronic stress severely affects adolescents' psychological development. The implementation of policies such as Law 14.819/2024, which proposes psychosocial actions in schools, and the use of approaches such as Cognitive Behavioral Therapy are promising strategies. It is concluded that investing in prevention, support, and mental health in the school environment is urgent in order to promote well-being and healthy development for students. |

*Keywords: Chronic stress; Mental health; Adolescents; Mental disorders; School.*

**1. INTRODUCTION**

The rising number of individuals diagnosed with chronic stress has become increasingly common, raising concern in our society. This condition is closely linked to neurological disorders and often triggers various other psychosocial issues, particularly among school-aged children and adolescents. Although not a new disorder, chronic stress began to be studied between 1907 and 1982 by Hans Selye, marking the beginning of efforts to understand its causes and consequences. Fields such as pediatrics are directly affected, especially when it comes to marginalized youth, as highlighted in the article *“Understanding Adolescent Mental Health Disparities Through the Lens of Environmental Stress Exposure”* by Ran Barzilay and Nadine Michel. According to the article *“Early Life Stress and Substance Use Disorders: The Critical Role of Adolescent Substance Use”* by Dylan E. Kirsch and Elizabeth T.C. Lippard, 95% of individuals with comorbid Substance Use Disorder (SUD) and mental health problems experienced a traumatic event during childhood, which subsequently triggered chronic stress.

Within this context, there is a clear need for more research into the biological mechanisms of chronic stress and the importance of early interventions to mitigate its consequences. The lack of such research hampers the development of effective treatments, adversely impacting public health and slowing scientific progress. Advancing research in this area could improve existing treatments and lead to new techniques that promote health. Therefore, it is urgently necessary to deepen our understanding of chronic stress to mitigate its effects, enhance treatments, and improve the population’s well-being.

Recent epidemiological studies on adolescent mental health have provided updated data on the prevalence, incidence, and specific rates of impairments, highlighting areas of greater vulnerability. In a Danish national cohort, Lindholdt et al. (2021) found that 2.1% of 11,929 adolescents with no previous mental disorder diagnosis were diagnosed with a mental disorder (F00–F99) within a 16-month follow-up period. The adjusted odds ratio was 2.0 for moderate perceived stress and 6.0 for high perceived stress (Lindholdt et al., 2021, p. 413). In the school setting, Xu et al. (2023) reported that about 30% of students had experienced some form of bullying (verbal, physical, relational, or cyber), and among these victims, 50% developed symptoms of post-traumatic stress disorder (PTSD), with 20% showing significant severity (Xu et al., 2023, p. 3). In a sample of preadolescent Americans, Petti et al. (2025) found a 9% prevalence of subclinical psychotic-like experiences (PLEs) with associated distress, with higher rates among Black and Hispanic groups (12–14%) compared to white students (8%). Furthermore, Kirsch and Lippard (2022) documented that 53% of adults reported at least one adverse childhood event (ACE), with each adversity increasing the probability of early substance use (before age 14) by 2–3 times and raising the risk of alcohol use disorder by up to 7.2 times and of problematic use of other drugs by 5–10 times (Kirsch & Lippard, 2022, p. 1).

The most affected groups include adolescents with high perceived stress, victims of bullying, members of ethnic-racial minorities, and those with a history of childhood adversities. There is a growing trend toward recognizing perceived stress as a predictor of mental disorders and bullying as an expanding risk factor, along with the persistence of racial-ethnic disparities in subclinical psychotic experiences. Key epidemiological risk factors include high perceived stress levels (OR = 6.0), bullying victimization (50% PTSD development), socio-environmental discrimination, and the number of adverse childhood events (2–3 times increased risk per event).

Childhood poverty has been consistently associated with mental disorders in adulthood, indicating that low-income individuals are among the most vulnerable social groups to these impacts, as cited in the article *“Childhood poverty and mental health disorders in early adulthood: evidence from a Brazilian cohort study”* (Ziebold et al., 2023). Similarly, the article *“Examining Economic Risks in Adolescents’ Families, Neighborhoods, and Schools: Implications for Mental and Behavioral Health in Early Adulthood”* (Sims J, Coley R.L. et al., 2022) emphasizes that adolescents exposed to economic risks—such as financial instability at home and poor school environments—are significantly more likely to develop depressive symptoms and antisocial behaviors, highlighting the long-term social impacts of structural inequalities. Additionally, the article *“Perceived stress among adolescents as a marker for future mental disorders”* (Lindholdt et al., 2022) presents data indicating that adolescents with high levels of perceived stress—often stemming from precarious socioeconomic conditions—face a higher risk of developing mental disorders in adulthood. This study analyzed data from over 11,000 young people, linking psychological stress to social and economic determinants such as family precariousness and unequal access to mental health services.

Given this context, the reviewed studies and articles also present public policy proposals as potential interventions. These include poverty reduction, child- and adolescent-focused interventions, interinstitutional actions in humanitarian crises, and alcohol use prevention strategies, as discussed in the articles *“Childhood Poverty and Mental Health Disorders in Early Adulthood”* and *“Examining Economic Risks in Adolescents’ Families, Neighborhoods, and Schools.”* However, these studies also highlight significant shortcomings in social interventions, particularly the lack of evidence supporting the prevention of mental disorders. The low quality of the available evidence and the scarcity of eligible prevention studies undermine confidence in the findings. The authors stress the importance of such studies due to the persistent health risks associated with income levels, the need to address childhood poverty, and the need for prevention studies to assess the long-term impact of mental disorder incidence. Therefore, there is an urgent need for new research focused on evaluating the effectiveness of the previously proposed strategies and eliminating less effective approaches to resolve this social dilemma.

Based on the analysis of the cited articles, it is clear that chronic stress in adolescents is linked to ethnic, socioeconomic, and interpersonal factors—issues directly connected to the objectives of this article, which seeks to assess the impact of chronic stress on 9th and 1st-year students and its implications for the development of anxiety and depression disorders. This study thus aims to provide a broad view of the psychological reality and stress levels of students at the Centro Integrado de Educação Assis Chateaubriand in Feira de Santana, along with an analysis of interpersonal factors, to confirm findings such as those of Xu et al. (2023) regarding school bullying and its relationship with stress-related disorders. Therefore, this article seeks not only to investigate a school psychological reality but also to serve as a basis for developing more precise and effective proposals. The project aims to transform the school environment into a more welcoming space capable of addressing adolescents' emotional needs, promoting health and well-being at a decisive stage of life.

**2. Methodology**

This was a bibliographic, descriptive study with a mixed approach, and the data collected served as the foundation for the development of the scientific article. Data collection was based on a bibliographic survey conducted through research on scientific publications related to the proposed theme, covering the period from 2020 to 2025. The inclusion criteria for content selection were: full-text publications aligned with the topic of the impact of chronic stress on students’ mental health and its implications for the development of anxiety and depression disorders, including documents, regulations, health authority standards, scientific articles, and institutional guidelines, all published in English. Exclusion criteria included: articles not directly related to the topic, duplicate or incomplete materials, reviews, abstracts, debates, and content not available in full.

The literature search was carried out in the following databases: PubMed and BVS. These databases were accessed through the Virtual Health Library (BVS). Searches were conducted using Health Sciences Descriptors (DeCS) from the Regional Library of Medicine (BIREME), as shown in Table [01]: “Transtornos Mentais” OR “Mental Disorders” AND “Estresse Psicológico” OR “Psychological Stress” AND “Instituições Acadêmicas” OR “Academic Institutions,” using the Boolean operators “AND” and “OR.”

The methodology employed in this study began with the careful selection of descriptors in DeCS, followed by searches in indexed databases. Using the main terms and their equivalents, tables were created listing the articles found in each database. Duplicate articles were eliminated, and the remaining titles were screened for relevance. After this step, abstracts were read, and then the full articles that met the established criteria were reviewed.

For data analysis, three thematic axes were defined, built around the study’s specific objectives and formulated as guiding questions. These questions directed the reading and critical analysis of the selected articles, forming the conceptual basis for discussion and interpretation of the data. The answers obtained provided the theoretical foundation for the construction of the results and reflections proposed in this study.

**3. Results and Discussion**

**Methodologies Used to Measure Stress in Adolescents** The research involved questions regarding alcohol and drug use problems within students’ families, as well as experiences of physical and psychological abuse, using the *Brief Symptom Inventory* to assess mental health (Johansson et al., 2024). The short-form DASS-21 questionnaire evaluated symptoms of depression, anxiety, and stress. Adjusted analyses (for age, sex, and maternal education) were conducted using generalized linear regressions with Poisson distribution, with a significance level set at p<0.05 (Carolina et al., 2024). A descriptive analysis based on clinical interviews and self-reports was also applied, using DSM-5 criteria for depression diagnosis (Zhang et al., 2023).

Using multistage cluster sampling, 862 adolescents (65% girls, average age 15) from public and private schools in São Gonçalo were selected. Structured questionnaires assessed sociodemographic profiles, exposure to physical and psychological violence (in family, school, and community), sexual abuse, social support, functional impairment, resilience, and PTSD. Data were analyzed using chi-square tests, Fisher’s exact test, and logistic regression (Avanci et al., 2022).

Data from the Swedish HBSC 2017/18 study were used to build an index of psychological complaints based on four items, analyzing both individual and collective exposure to sexual jokes through two-level linear regressions (Låftman et al., 2021).

In a multicenter study with 12,192 students from 17 secondary schools in China, cluster sampling was used to collect general demographic data, psychological abuse and neglect (CPANS), sleep quality (PSQI), symptoms of depression, anxiety, and stress (Chinese version of DASS-21), and suicidal ideation (Chinese version of PANSI). Analyses included t-tests, chi-square tests, correlations, and structural equation modeling (Cen et al., 2025).

In an intervention with the *Mindfulness Virtual Community (MVC)*, 154 students were randomized to evaluate outcomes using the PHQ-9, *Beck Anxiety Inventory (BAI)*, *Perceived Stress Scale (PSS)*, and *Five Facets Mindfulness Questionnaire Short Form (FFMQ-SF)*, with generalized equations under an AR(1) structure (Ritvo et al., 2020).

A longitudinal cohort study with 2,263 high school students in Los Angeles administered three questionnaires over one academic year (Riehm et al., 2021). The DASS-42 scale was used with 885 university students to measure perceived stress related to multiple factors (Fruehwirth et al., 2023). Another study recruited 81 patients with exhaustion disorders at Swedish health centers, using the *Karolinska Exhaustion Disorder Scale (KEDS)* and additional validated questionnaires for anxiety and depression (Gunnarsson et al., 2024).

In the UK and Ireland, adolescents were randomized into training sessions using the *Experiences Questionnaire* (a decentering inventory) and momentary sampling analysis, evaluating depression and anxiety symptoms through hierarchical linear analysis (Bennett et al., 2022).

Finally, the Cochrane review sought randomized controlled trials involving university students to evaluate psychological interventions focused on resilience, anxiety, depression, and perceived stress, using international databases (Papola et al., 2020; Kunzler et al., 2020).

**Consequences of Chronic Stress in Youth**

A significant portion of individuals with depression reported feeling apathetic, lonely, and unable to carry out daily activities such as studying or working normally (75.18%). Among these, a high proportion attempted or committed suicide (80.85%) and engaged in self-harm (51.77%) (Zhang et al., 2023). The results also highlight differences in life trajectories between boys and girls exposed to violence (Avanci et al., 2022). Direct or indirect exposure to sexual jokes negatively impacts students' mental health, indicating that school environments free of such practices benefit everyone (Låftman et al., 2021). There is evidence that good sleep habits and interventions targeting depressed mood can reduce the risk of suicidal ideation in adolescents who have experienced neglect or psychological abuse (Cen et al., 2025).

Stress and anxiety arising from academic demands threaten students’ well-being, being associated with depression and procrastination, which impair educational performance and lead to insecurity as well as physiological and behavioral disorders (Markiewicz & Kaczmarek, 2024b). Specific types of stress, such as those related to appearance, health, and romantic relationships, have been linked to symptoms of eating disorders, insufficient sleep, and low levels of vigorous physical activity (Jane Cooley Fruehwirth et al., 2023). Stress-related illnesses also affect work capacity, social relationships, concentration, and sleep, reducing individuals’ ability to manage daily tasks and lowering overall well-being (Gunnarsson et al., 2024).

Chronic exposure to stress in healthcare education settings increases the risk of physical and mental disorders, including depression and burnout. This not only harms academic and clinical performance but also raises school dropout rates (Kunzler et al., 2020). Traumatic events affect individuals’ sense of safety in the world, leading to interpersonal insecurity, social difficulties, and reduced emotional support from others (Xu et al., 2023). These events also increase the risk of both internalizing and externalizing psychopathologies, such as impulsivity and emotional disturbances (Eppelmann et al., 2019).

Low academic performance, aggressiveness, delinquency, and psychological issues are direct consequences of chronic stress in young people (Alvarez-Jimenez et al., 2020). Youth facing exhausting routines often turn to the internet as an escape, heightening the risk of digital addiction and self-destructive behaviors (Pagerols et al., 2020). Stress can also trigger additional comorbidities in students already diagnosed with mental disorders, hindering their academic completion, professional integration, and ability to maintain healthy relationships (Seung Yeon Baik et al., 2024; Mario Alvarez-Jimenez et al., 2020).

Prolonged exposure to bullying leads to high rates of depression, anxiety, and aggressive behavior, and may develop into chronic stress (Ngo et al., 2021). Stressed adolescents are at greater risk of developing eating disorders, substance dependencies, and gambling addictions, especially if these behaviors are used as coping mechanisms—resulting in academic, financial, and interpersonal problems (Chai et al., 2024; Wang et al., 2020). Finally, repeated exposure to stressful school environments can lead to Post-Traumatic Stress Disorder (PTSD), significantly impairing academic and professional performance (Harel et al., 2023).

**Causes of Chronic Stress in Youth**

Psychological abuse was identified as the most significant factor contributing to psychological distress among adolescents (Johansson et al., 2024). High levels of depressive symptoms were observed in adolescents with daily screen time between 4–6 hours (PR 1.35) and greater than or equal to 6 hours (PR 1.88). Similar symptoms of anxiety (PR 1.23 and 1.50) and stress (PR 1.25 and 1.49) were found within these same screen-time ranges when compared to youth with less than 2 hours per day (Carolina et al., 2024). Additional contributing factors included genetics, school violence, academic stress, sleep disorders, and family issues—especially among adolescents who felt neglected or misunderstood by their families (Zhang et al., 2023).

Exposure to physical and psychological violence resulted in a high prevalence of Post-Traumatic Stress Disorder (PTSD), indicating that adolescents in violent environments experience cumulative stress that can evolve into complex, long-lasting trauma (Avanci et al., 2022; Ćurčić-Hadžagić, 2020). The presence of sexual jokes in schools also significantly increased psychological complaints—even among students not directly targeted—undermining the school climate (Låftman et al., 2021). Sleep problems and depressed mood were crucial mediating factors in the development of suicidal ideation, underscoring their importance in suicide risk prevention (Cen et al., 2025).

Frequent concerns about school violence were strongly linked to generalized anxiety and panic symptoms, particularly among Black and non-Latino white youth, highlighting the role of racial context in stress perception (Riehm et al., 2021). Additionally, complex traumatic events related to armed conflict, forced displacement, and childhood sexual abuse increased the risk of not only PTSD but also other mental health comorbidities (Bennett et al., 2022). Extreme academic stress—especially common among health science students—can lead to debilitating sleep disorders, burnout, and declines in both clinical and academic performance (Kunzler et al., 2020).

School bullying is directly associated with persistent PTSD symptoms, affecting up to 50% of individuals who experience severe bullying (Xu et al., 2023). Changes in academic routine can prompt students to use the internet as an escape mechanism, increasing the risk of addiction and reinforcing chronic stress (Pagerols et al., 2020). The pressure associated with entering adulthood intensifies responsibilities and worries, reducing quality of life and increasing youth vulnerability to both physical and mental health issues (Seung Yeon Baik et al., 2024).

The COVID-19 pandemic intensified stressors among adolescents, especially due to social isolation and school closures, leading to a significant increase in depression and widespread mental health issues (Liu et al., 2024; Lu et al., 2024). Socioeconomically disadvantaged adolescents reported a higher incidence of psychosomatic symptoms, lower life satisfaction, and reduced quality of life compared to their more privileged peers (Cosma et al., 2020). Lastly, prolonged exposure to multiple traumatic events during youth is associated with a higher prevalence of PTSD and other emotional disorders, which negatively affect social, occupational, and academic development throughout life (Allen et al., 2021).

**4. Conclusion**

Chronic stress has become an increasingly common issue in students’ lives, especially among those from underprivileged backgrounds, highlighting the urgent need for further research. According to a PubMed article titled “Physiology, Stress Reaction”, chronic stress is defined as prolonged exposure to stressors, leading to cumulative physiological and psychological effects. This condition can heighten the risk of health problems such as cardiovascular disease, anxiety, and depression (Chu, Brianna; Marwaha, Komal; Sanvictores, Terrence; et al.). Based on this, intervention strategies are increasingly necessary—Cognitive Behavioral Therapy (CBT), for example, aims to restructure negative thought patterns, modify dysfunctional behaviors, and teach coping skills. This can improve students’ mental health, reduce anxiety and depression rates, and increase emotional self-awareness, resilience in the face of failure and criticism, and problem-solving abilities.

The National Policy for Psychosocial Care in School Communities (Law No. 14.819/2024) establishes guidelines for promoting mental health in public schools, including preventive and psychosocial care actions. These measures include creating spaces for reflection and dialogue, hiring school psychologists, and promoting activities that strengthen family and community bonds—all of which are crucial to reducing chronic stress among students.

In short, understanding what chronic stress is, how it affects students, and developing effective prevention strategies are essential steps toward creating a healthier, more supportive educational environment.

**References**

AKRAM, U. et al. Prevalence of anxiety, depression, mania, insomnia, stress, suicidal ideation, psychotic experiences, & loneliness in UK university students. Scientific Data, v. 10, n. 1, 13 set. 2023.

ALLEN, L. et al. DECRYPT trial: study protocol for a phase II randomised controlled trial of cognitive therapy for post-traumatic stress disorder (PTSD) in youth exposed to multiple traumatic stressors. BMJ Open, v. 11, n. 7, p. e047600, jul. 2021.

ALOTAIBI, N. M. et al. Psychological Disorders and Coping among Undergraduate College Students: Advocating for Students’ Counselling Services at Kuwait University. International Journal of Environmental Research and Public Health, v. 21, n. 3, p. 245–245, 21 fev. 2024.

ALVAREZ-JIMENEZ, M. et al. A Novel Multimodal Digital Service (Moderated Online Social Therapy+) for Help-Seeking Young People Experiencing Mental Ill-Health: Pilot Evaluation Within a National Youth E-Mental Health Service. Journal of Medical Internet Research, v. 22, n. 8, p. e17155, 13 ago. 2020.

ARAGÓN, K. M. et al. Identifying what educators need to support trauma-informed practices in the schools: A community needs assessment. School psychology, 8 fev. 2024.

ASTITENE, K.; BARKAT, A. Prevalence of posttraumatic stress disorder among adolescents in school and its impact on their well-being: a cross-sectional study. Pan African Medical Journal, v. 39, 2021.

AVANCI, J. Q. et al. Posttraumatic stress disorder among adolescents in Brazil: a cross-sectional study. BMC Psychiatry, v. 21, n. 1, 5 fev. 2021.

AWAD, M. S. A. et al. Assessment of displaced Sudanese school-age children’s mental health at Ad-Damar, River Nile, Sudan, 2024: a descriptive cross-sectional study. BMC Public Health, v. 24, n. 1, 18 dez. 2024.

BACARO, V.; CARPENTIER, L.; CROCETTI, E. Sleep Well, Study Well: A Systematic Review of Longitudinal Studies on the Interplay between Sleep and School Experience in Adolescence. International Journal of Environmental Research and Public Health, v. 20, n. 6, p. 4829, 9 mar. 2023.

BADRFAM, R.; ZANDIFAR, A.; ARBABI, M. Mental Health of Medical Workers in COVID-19 Pandemic: Restrictions and Barriers. Journal of Research in Health Sciences, v. 20, n. 2, p. e00481–e00481, 18 jun. 2020.

BAKA, E. et al. A Scoping Review of Digital Interventions for the Promotion of Mental Health and Prevention of Mental Health Conditions for Young People. Oxford Open Digital Health, v. 3, 2 fev. 2025.

BATTERHAM, P. J. et al. Psychometric properties of the Distress Questionnaire-5 (DQ5) for measuring psychological distress in adolescents. Journal of psychiatric research, v. 169, p. 58–63, 1 jan. 2024.

BENNETT, M. P. et al. Protocol for a randomised controlled trial investigating an intervention to boost decentering in response to distressing mental experiences during adolescence: the decentering in adolescence study (DECADES). BMJ open, v. 12, n. 3, p. e056864–e056864, 1 mar. 2022.

BERTOLINI, F. et al. Early pharmacological interventions for universal prevention of post-traumatic stress disorder (PTSD). Cochrane Database of Systematic Reviews, v. 2022, n. 2, 10 fev. 2022.

BOUCHER, E. et al. Effects of a Digital Mental Health Intervention on Perceived Stress and Rumination in Adolescents Aged 13 to 17: A Randomized Controlled Trial (Preprint). JMIR. Journal of medical internet research/Journal of medical internet research, v. 26, p. e54282–e54282, 29 mar. 2024.

CAROLINA, M. et al. Associations of screen time with symptoms of stress, anxiety, and depression in adolescents. Revista Paulista de Pediatria, v. 43, 10 set. 2024.

CEN, Y. et al. The mediating role of sleep problems and depressed mood between psychological abuse/neglect and suicidal ideation in adolescent childhood: a multicentred, large sample survey in Western China. BMC Psychiatry, v. 24, n. 1, 23 jan. 2024.

CHAI, Y. et al. The relationship between stress, anxiety and eating behavior among Chinese students: a cross-sectional study. Frontiers in Public Health, v. 12, 9 out. 2024.

CHEN, Y.; HINTON, C.; VANDERWEELE, T. J. School types in adolescence and subsequent health and well-being in young adulthood: An outcome-wide analysis. PLOS ONE, v. 16, n. 11, p. e0258723, 10 nov. 2021.

CHONG, D. K. S. et al. Adolescent self-harm and suicide attempts: An analysis of emergency department presentations in Singapore. Annals of the Academy of Medicine, Singapore, v. 54, n. 2, p. 78–86, 2025.

COSMA, A. et al. Cross-National Time Trends in Adolescent Mental Well-Being From 2002 to 2018 and the Explanatory Role of Schoolwork Pressure. Journal of Adolescent Health, v. 66, n. 6, p. S50–S58, jun. 2020.

COVENTRY, P. A. et al. Psychological and pharmacological interventions for posttraumatic stress disorder and comorbid mental health problems following complex traumatic events: Systematic review and component network meta-analysis. PLOS Medicine, v. 17, n. 8, 19 ago. 2020.

ĆURČIĆ-HADŽAGIĆ, N. Psychological Consequences in Abused and Neglected School Children Exposed to Family Violence. Psychiatria Danubina, v. 32, n. Suppl 3, p. 367–370, 1 out. 2020.

EPPELMANN, L. et al. Stress, mental and physical health and the costs of health care in German high school students. European Child & Adolescent Psychiatry, v. 29, n. 9, p. 1277–1287, 6 dez. 2019.

GARBERS, S. et al. Psychosocial stress, sleep quality and interest in mind-body integrative health sleep intervention among urban adolescents in the school-based health setting. Complementary Therapies in Medicine, v. 58, p. 102714, maio 2021.

GARDANI, M. et al. A systematic review and meta-analysis of poor sleep, insomnia symptoms and stress in undergraduate students. Sleep Medicine Reviews, v. 61, n. 101565, p. 101565, nov. 2022.

GUNNARSSON, A. B. et al. Photo-supported conversations about well-being (BeWell TM) for patients with exhaustion disorders – a controlled clinical intervention study. Scandinavian Journal of Primary Health Care, v. 43, n. 1, p. 194–204, 6 nov. 2024.

HAMDANI, S. U. et al. Improving psychosocial distress for young adolescents in rural schools of Pakistan: study protocol of a cluster randomised controlled trial. BMJ Open, v. 12, n. 9, p. e063607, set. 2022.

HAREL, O.; HEMI, A.; EINAT LEVY-GIGI. The role of cognitive flexibility in moderating the effect of school-related stress exposure. Scientific Reports, v. 13, n. 1, 31 mar. 2023.

HOGE, E. A. et al. Mindfulness-Based Stress Reduction vs Escitalopram for the Treatment of Adults With Anxiety Disorders: A Randomized Clinical Trial. JAMA Psychiatry, v. 80, n. 1, p. 13–21, 9 nov. 2022.

HOPE-BELL, J.; DRAPER-RODI, J.; EDWARDS, D. J. Applying an osteopathic intervention to improve mild to moderate mental health symptoms: a mixed-methods feasibility study protocol. BMJ Open, v. 13, n. 6, p. e071680–e071680, 1 jun. 2023.

HOPE-BELL, J.; DRAPER-RODI, J.; EDWARDS, D. J. Applying an osteopathic intervention to improve mild to moderate mental health symptoms: a mixed-methods feasibility randomised trial. Chiropractic & Manual Therapies, v. 32, n. 1, 6 nov. 2024.

HOPPE, P. et al. Physical and psychological strain in upper Austrian elementary school teachers – an observational study. Ergonomics, p. 1–15, 29 jul. 2022.

JANE COOLEY FRUEHWIRTH et al. Perceived stress, mental health symptoms, and deleterious behaviors during the transition to college. PLOS ONE, v. 18, n. 6, p. e0287735–e0287735, 27 jun. 2023.

JIANG, Y. et al. The Longitudinal Effect of Psychological Distress on Internet Addiction Symptoms Among Chinese College Students: Cross-Lagged Panel Network Analysis. Journal of medical Internet research, v. 27, p. e70680, fev. 2025.

JOHANSSON, C. et al. Associations between adverse childhood experiences and psychological distress among Swedish upper secondary school students. Child Abuse & Neglect, v. 158, p. 107089, dez. 2024.

KAGEYAMA, M. et al. [Previous experiences of Japanese children with parents who have a mental illness, and their consultation situation at school: A survey of grown-up children]. Nihon koshu eisei zasshi/Nihon kōshū eisei zasshi, v. 68, n. 2, p. 131–143, 26 dez. 2020.

KOSCHMANN, E. et al. Mental health needs in a large urban school district: Findings from a web‐based survey. Health Services Research, v. 57, n. 4, 4 mar. 2022.

KULKARNI, P.; GAJANAN VELHAL. Low Emotional Intelligence: A Precursor of Mental Health Derangements Among Adolescents. Cureus, v. 15, n. 10, 1 out. 2023.

KUNZLER, A. M. et al. Psychological Interventions to Foster Resilience in Healthcare Students. Cochrane Database of Systematic Reviews, v. 7, n. 7, 20 jul. 2020.

KUWATO, M.; HIRANO, Y. Sense of coherence, occupational stressors, and mental health among Japanese high school teachers in Nagasaki prefecture: a multiple regression analysis. BMC Public Health, v. 20, n. 1, 4 set. 2020.

LÅFTMAN, S. B. et al. Sexual jokes at school and psychological complaints: Student- and class-level associations. Scandinavian Journal of Public Health, v. 49, n. 3, p. 285–291, 1 maio 2021.

LEE, C. S.; BOWMAN, M.; WU, J. L. Preliminary Outcomes from a Single-Session, Asynchronous Online, Stress and Anxiety Management Workshop for College Students. Trends in Psychiatry and Psychotherapy, 2022.

LIU, Y. et al. Time patterns in online survey completion and offline psychological symptoms among college students in China. Frontiers in Public Health, v. 12, 23 jul. 2024.

LU, H. et al. Association between interpersonal resources and mental health professional help-seeking among Chinese adolescents with probable depression: mediations via personal resources and active coping. BMC psychiatry, v. 24, n. 1, p. 840, Spring 2024.

LUNDQVIST, C. et al. Elite Lean Athletes at Sports High Schools Face Multiple Risks for Mental Health Concerns and Are in Need of Psychosocial Support. PLOS ONE, v. 18, n. 4, p. e0284725–e0284725, 21 abr. 2023.

MARKIEWICZ, K.; KACZMAREK, J. Implemental delay as a mediator of the relationship between depression, anxiety, stress and school burnout. PLoS ONE, v. 19, n. 12, p. e0316082–e0316082, 31 dez. 2024.

MENZIES, R. E. et al. Randomised controlled trial of cognitive behaviour therapy versus mindfulness for people with rheumatoid arthritis with and without a history of recurrent depression: study protocol and design. BMJ Open, v. 12, n. 5, p. e056504, maio 2022.

MILLS, K. L. et al. Randomised controlled trial of integrated trauma-focused psychotherapy for traumatic stress and substance use among adolescents: trial protocol. BMJ Open, v. 10, n. 11, p. e043742, 1 nov. 2020.

MIYAKAWA, M.; HAMASHIMA, Y.; MINAMI, T. [Psychological distress of young carers: A questionnaire survey among Saitama prefectural high school students]. [Nihon koshu eisei zasshi] Japanese journal of public health, v. 69, n. 2, p. 125–135, 1 mar. 2022.

MOHD, R. et al. Association between Parenting Styles and Adolescents’ Mental Disorders: Findings among Pre-University Students. Malaysian Journal of Medical Sciences, v. 31, n. 3, p. 149–159, 27 jun. 2024.

NGO, A. T. et al. Bullying experience in urban adolescents: Prevalence and correlations with health-related quality of life and psychological issues. PLOS ONE, v. 16, n. 6, p. e0252459, 8 jun. 2021.

NÍ CHOBHTHAIGH, S.; JAY, M. A.; BLACKBURN, R. Emergency hospital admissions for stress-related presentations among secondary school-aged minoritised young people in England. The British Journal of Psychiatry, p. 1–9, 11 nov. 2024.

OBIWELUOZO, P. E. et al. Stress in teachers of children with neuro-developmental disorders: Effect of blended rational emotive behavioral therapy. Science Progress, v. 104, n. 4, p. 003685042110502, out.2021.

PAGEROLS, M. et al. The impact of psychopathology on academic performance in school-age children and adolescents. Scientific Reports, v. 12, n. 1, 11 mar. 2022.

PAPOLA, D. et al. Psychological and social interventions for the prevention of mental disorders in people living in low- and middle-income countries affected by humanitarian crises. Cochrane Database of Systematic Reviews, 8 set. 2020.

PERSSON, R. et al. Prevalence of exhaustion symptoms and associations with school level, length of work experience and gender: a nationwide cross-sectional study of Swedish principals. BMC Public Health, v. 21, n. 1, 10 fev. 2021.

RAUSCHENBERG, C. et al. Bullying victimization and stress sensitivity in help-seeking youth: findings from an experience sampling study. European Child & Adolescent Psychiatry, 13 maio 2020.

RICHARDS, D. et al. A pragmatic randomized waitlist-controlled effectiveness and cost-effectiveness trial of digital interventions for depression and anxiety. npj Digital Medicine, v. 3, n. 1, 15 jun. 2020.

RIEHM, K. E. et al. Adolescents’ Concerns About School Violence or Shootings and Association With Depressive, Anxiety, and Panic Symptoms. JAMA Network Open, v. 4, n. 11, p. e2132131, 1 nov. 2021.

RITVO, P. et al. Randomized Controlled Trial of Mindfulness - Based Intervention For Student Depression, Anxiety and Stress: Observations on a Disrupted Campus (Preprint). JMIR Mental Health, v. 8, n. 1, 13 set. 2020.

ROJO, M. et al. Linking Psychosocial Stress Events, Psychological Disorders and Childhood Obesity. Children, v. 8, n. 3, p. 211, 10 mar. 2021.

SARA BROLIN LÅFTMAN et al. Perceived problematic alcohol use in the family and adolescents’ stress-related complaints: examining the buffering role of the school’s degree of student focus as rated by its teachers. BMC Public Health, v. 23, n. 1, 9 set. 2023.

SCHEINER, C. et al. LessStress - how to reduce stress in school: evaluation of a universal stress prevention in schools: study protocol of a cluster-randomised controlled trial. Trials, v. 24, n. 1, 19 jan. 2023.

SCHRAMM, E. et al. Interpersonal vs. supportive group psychotherapy for depression attributed to work stress: study protocol of the multicentre, cluster-randomised, controlled IPT-Work trial. BMC Psychiatry, v. 25, n. 1, 19 fev. 2025.

SEUNG YEON BAIK et al. The relationship of race, ethnicity, gender identity, sex assigned at birth, sexual orientation, parental education, financial hardship and comorbid mental disorders with quality of life in college students with anxiety, depression or eating disorders. Journal of Affective Disorders, v. 366, 1 ago. 2024.

SMITH, P. et al. Therapist-supported online cognitive therapy for post-traumatic stress disorder (PTSD) in young people: protocol for an early-stage, parallel-group, randomised controlled study (OPTYC trial). BMJ Open, v. 12, n. 3, p. e054852, 1 mar. 2022.

STEWART, R. W. et al. A Pilot Trial of Universal School‐Based Mental Health Screening in El Salvador: Traumatic Stress in an Underresourced School Environment. Journal of Traumatic Stress, v. 34, n. 5, p. 955–966, 23 jul. 2021.

VILAPLANA-PÉREZ, A. et al. Assessment of Posttraumatic Stress Disorder and Educational Achievement in Sweden. JAMA Network Open, v. 3, n. 12, p. e2028477, 8 dez. 2020.

WANG, C. et al. Stressful life events and gambling: The roles of coping and impulsivity among college students. Addictive Behaviors, v. 107, p. 106386, ago. 2020.

WANG, P.; CHEN, C.; YIM, I. S. The role of acculturative stress and self-construal in maladaptive eating behaviors among female young adults in diverse college settings. Appetite, v. 206, p. 107844, 30 dez. 2024.

WINSTONS MUHWEZI, W. et al. Assessment of the relationship between life events with psychosocial competence of students in selected secondary schools in Northern and Central Uganda. African Health Sciences, v. 20, n. 3, p. 1426–1437, 7 out. 2020.

XU, Y. et al. School bullying victimization and post-traumatic stress symptoms in adolescents: the mediating roles of feelings of insecurity and self-disclosure. BMC Psychology, v. 11, n. 1, 31 jan. 2023.

YANG, X. et al. Short sleep duration and daytime outdoor activities effects on adolescents mental health: A stress susceptibility-recovery model analysis. Journal of Affective Disorders, v. 382, p. 428–437, 22 abr. 2025.

ZHAI, X. et al. Mediating Effect of Perceived Stress on the Association between Physical Activity and Sleep Quality among Chinese College Students. International Journal of Environmental Research and Public Health, v. 18, n. 1, p. 289, 2 jan. 2021.

ZHANG, S.; YU, C. The Link between Sleep Insufficiency and Self-Injury among In-School Adolescents: Findings from a Cross-Sectional Survey of Multi-Type Schools in Huangpu District of Shanghai, China. International Journal of Environmental Research and Public Health, v. 19, n. 23, p. 15595–15595, 24 nov. 2022.

ZHANG, X. et al. Descriptive analysis of depression among adolescents in Huangshi, China. BMC Psychiatry, v. 23, n. 1, 16 mar. 2023.

ZHONG, Y. et al. Burnout and its relationship with depressive symptoms in primary school teachers under the “Double Reduction” policy in China. Frontiers in Public Health, v. 12, 7 jan. 2025.

ZHOU, M. et al. A Network Structure of Mental Health and Problematic Mobile Phone Use Among Middle School Students. Psychology Research and Behavior Management, v. Volume 17, p. 3533–3542, out. 2024.

ZHUKOVSKY, P. et al. Generalizability of Treatment Outcome Prediction Across AntidepressantTreatment Trials in Depression. JAMA Network Open, v. 8, n. 3, p. e251310, 20 mar. 2025.

ZVOLENSKY, M. J. et al. Pain-Related Anxiety Among Latinx College Students: Relations to BodyVigilance, Worry, Anxious Arousal, and General Depression. Journal of Racial and Ethnic Health Disparities, v. 7, n. 3, p. 498–507, 16 dez. 2019.