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Academic Stress Interventions for University Students: A Systematic Review

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A R T I C L E I N F O

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A B S T R A C T

Academic stress is a common issue among university students, affecting academic performance, mental health, and well-being. This systematic review aims to identify effective interventions to reduce academic stress. Using the SPIDER framework and PRISMA guidelines, 20 relevant articles (2015–2025) were selected from databases including Scopus, Google Scholar, and ScienceDirect. The findings highlight various strategies such as mindfulness, self-affirmation, social support, self-efficacy training, emotional intelligence, ACT, relaxation, yoga, and digital interventions. Creative methods like art therapy and self-compassion also proved beneficial. These interventions promote stress reduction, emotional regulation, and academic resilience. The review offers practical insights for students, educators, and institutions to implement evidence-based approaches in fostering a healthier academic environment.

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INTRODUCTION

Academic stress is one of the challenges commonly faced by university students in higher education. The responsibilities borne by students differ significantly from those at previous educational levels. University students encounter high levels of academic pressure, stemming from assignments, adjustments in learning strategies, peer relationships, academic expectations from both parents and themselves, as well as other academic-related demands, all of which can trigger stress (Tasalim & Cahyani, 2021). Individuals experiencing academic stress often exhibit symptoms such as difficulty concentrating, procrastination, skipping classes, anxiety, fear, and similar issues (Tasalim & Cahyani, 2021). Poor stress management can lead to numerous negative consequences, affecting academic performance, mental and physical health, and social functioning. Moreover, academic stress can impact students' Grade Point Average (GPA). Physiological effects of academic stress among students, including changes in nutritional status, gastrointestinal symptoms, functional dyspepsia syndrome, dysmenorrhea, sleep disturbances, acne vulgaris, sleep paralysis, and even obesity (Tasalim & Cahyani, 2021).

Given the wide-ranging impacts of academic stress, it is essential to address it through effective interventions. Managing academic stress is crucial for maintaining students' mental well-being, enhancing academic performance, and achieving academic success. Recent advancements in science have led to various strategies to cope with academic stress, such as mindfulness training, practicing gratitude, social support, and digital-based methods.

Based on the aforementioned discussion, this article aims to identify interventions for academic stress among university students through a systematic review approach. By referring to relevant prior studies, this research seeks to provide an overview of effective academic stress interventions, enabling both students and higher education institutions to collaboratively determine strategies that effectively reduce academic stress.

LITERATURE REVIEW

Academic Stress

Academic stress refers to the psychological distress experienced by students in response to academic-related demands that are perceived as challenging or exceeding their coping capacities. It involves emotional, cognitive, and physiological responses to stressors such as academic workload, exams, deadlines, and performance expectations (Pascoe et al., 2020). Academic stress is recognized as a significant factor influencing students' mental health, learning motivation, and academic outcomes.

Academic stress among university students is a growing concern, particularly due to increased academic demands, social expectations, and the transition to independent learning. Based on *Transactional Model of Stress and Coping*, stress arises when individuals perceive environmental demands as exceeding their coping resources (Lazarus & Folkman, 1984). In academic settings, this model has been widely used to understand how students appraise stressors and adopt coping mechanisms.

Several theoretical perspectives inform current academic stress interventions.

Mindfulness-Based Approaches emphasize present-moment awareness and have been shown to improve students' emotion regulation and reduce stress symptoms (Bamber & Schneider, 2016; Kabat-Zinn, 2003). In addition, the **Social Support Theory** highlights the buffering role of peer, family, and institutional support systems in managing stress levels (Lakey & Cohen, 2015). The emergence of **Digital Mental Health Interventions** also provides new modalities for stress reduction, offering accessible and scalable tools through mobile apps, online platforms, and virtual communities (Mohr et al., 2017).

Another widely used approach in managing academic stress is the application of **relaxation techniques**, which are grounded in the physiological theory of stress. Techniques such as diaphragmatic breathing, progressive muscle relaxation, guided imagery, and autogenic training aim to activate the parasympathetic nervous system, thereby reducing physiological arousal associated with stress (Varvogli & Darviri, 2011) .These methods are non-invasive, easy to learn, and have been shown to significantly reduce anxiety and enhance focus among students, making them suitable for academic settings.

This systematic review is grounded in these conceptual frameworks to explore and synthesize evidence-based academic stress interventions among university students, particularly those focusing on mindfulness, social support, relaxation techniques, and digital-based strategies.

METHODOLOGY

This study uses the SPIDER framework. The databases consulted include Scopus, Google Scholar, ResearchGate, Springer, ScienceDirect, and Neliti. The inclusion criteria cover both national and international journal articles that provide information related to academic stress interventions for university students. The selected articles were published between 2015 and 2025 and written in English. Only open-access articles were included; documents such as undergraduate theses, study protocols, systematic reviews, dissertations, and meta-analyses were excluded.

The article search was conducted using English keywords: *Academic Stress*, *University Student*, and *Intervention*. Article data were extracted and summarized in a table with the following columns: author(s), year of publication, study type, research sample, study design, measurement methods, and research findings. Prior to data synthesis, the PRISMA method was applied to analyze the literature review results, followed by content analysis techniques, as described below.

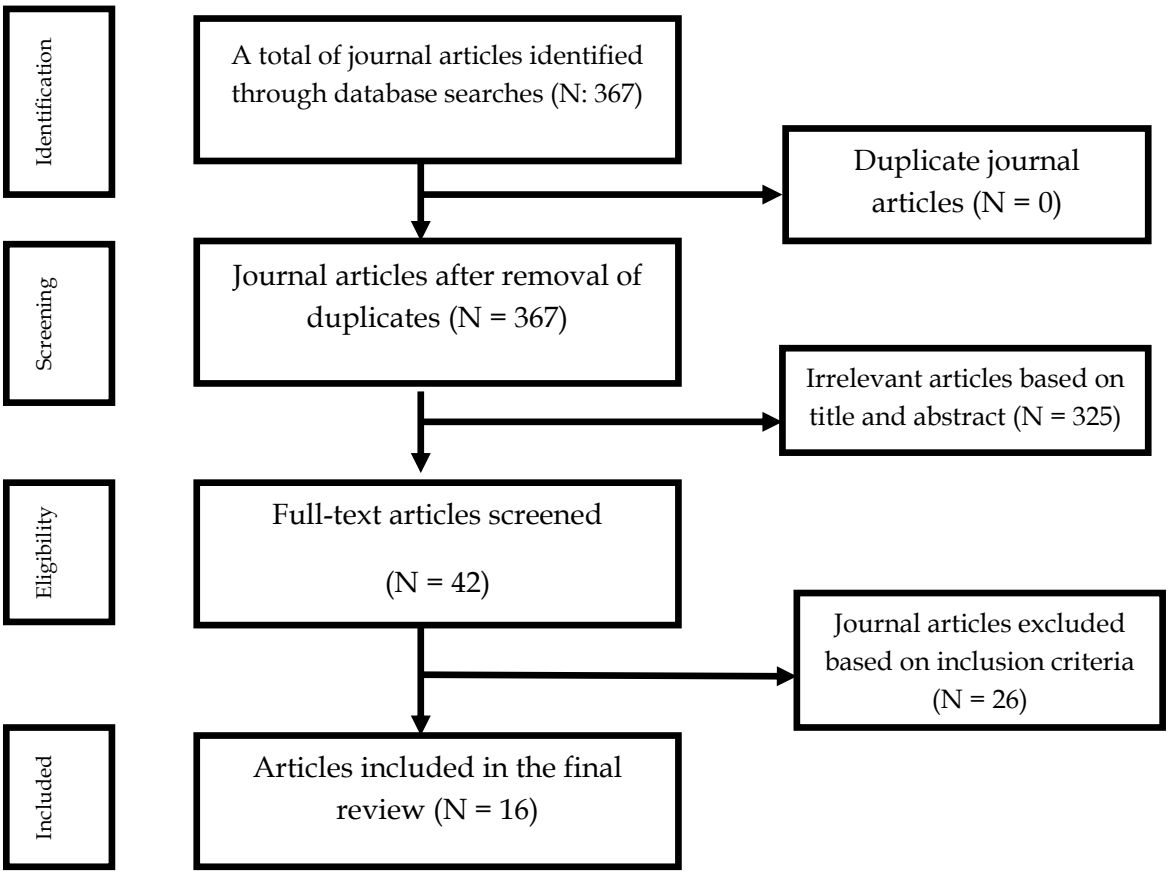

Figure 1. PRISMA Flow Diagram of Journal Selection Process

RESULTS AND DISCUSSION

The findings of the review conducted by the researcher from March 24, 2025, to March 27, 2025, resulted in 20 articles that met the criteria for this systematic review.

Table 1. Presents the Results Based on the Inclusion Criteria

Author, Year	**Research Objective**	**Sample**	**Method**	**Result**
Sajid et al, 2024	This study aims to examine the coping strategies for stress among medical students at Alfaisal University.	240-290 students	This study used the BDI (Beck Depression Inventory) scale to measure the level of depression before and after the Yoga intervention.	Findings showed social support and spirituality as the most effective coping strategies, with humor and acceptance also used.

Beri, 2024	Examining the Effectiveness of Self-Affirmation as an Intervention for Academic Stress in Enhancing Self-Integrity and Self-Control among University Students in Punjab	The participants were 64 female migrant students from three government schools in Jalandhar, Punjab, India.	The instruments used in this study included the Self-Integrity Scale, the Self-Control Scale, and the Academic Stress Inventory.	The results showed a significant decrease in academic stress in the experimental group, whereas no substantial difference was observed in the control group.
Paduraru et al, 2025	This study focuses on examining self-efficacy and social support as interventions to reduce academic stress among students in achieving academic performance.	The study involved 436 psychology students from the North-East region of Romania, with an average age of 19.99 years.	Academic Stress Scale (França and Dias, 2021). General Self-Efficacy Scale (GSE) Multidimensional Scale of Perceived Social Support (MSPSS)	The results showed that social support and self-efficacy had a significant positive effect on improving students' academic performance during periods of academic stress.
Khorasani et al, 2023	This study examined the effectiveness of emotional intelligence training among medical students in Iran.	The study involved 200 Iranian medical students, the majority of whom were female (72.3%), married (72%), and non-native	Gadzella's academic stress inventory Bradbury and graves emotional intelligence inventory (EI)	The sample consisted of 200 Iranian medical students, most of whom were female (72.3%), married (72%), and non-native

		residents (62.1%).		residents (62.1%)
Moreno et al, 2023	This study examined the comparison between Hatha Yoga and meditation in managing academic stress among medical students in Cali, Colombia.	The study involved 27 medical students from a private university in Cali, Colombia, who were divided into two intervention groups: the Hatha Yoga group and the Meditation group.	Salivary cortisol levels were measured, and anthropometric data were collected to assess physical status and its relation to chronic stress.	The results showed that Hatha Yoga significantly reduced academic stress, despite an increase in cortisol levels. In contrast, meditation did not result in a significant reduction in either academic stress or cortisol levels.
Nemati et al, 2023	This study aimed to examine the effectiveness of Acceptance and Commitment Therapy (ACT) training in reducing academic stress and academic burnout among students with Specific Learning Disabilities (SLD).	Female university students with Specific Learning Disabilities (SLD) in Tabriz, Iran. The exact number of participants was not specified.	Gadzella's Student-Life Stress Inventory (SLSI) dan School Burnout Inventory (SBI).	Acceptance and Commitment Therapy (ACT) training significantly reduced academic stress and academic burnout among students with Specific Learning Disabilities (SLD).
Figueroa et al, 2023	This study aimed to	Thirty-eight high-	Resilience to Stress Index	The results showed that

	evaluate the effectiveness of a multicomponent program in managing academic stress by enhancing the Resilience to Stress Index (RSI) among university students.	achieving undergraduate students receiving academic scholarships from the 'Leaders of Tomorrow' program at Tecnológico de Monterrey, Mexico.	(RSI). RSI was calculated by comparing changes in physiological signals during the stress phase with those during the calibration (baseline) phase. A higher RSI following the intervention indicates better physiological adaptability to stress.	66% of the participants experienced an improvement in managing academic stress after participating in the intervention program.
Yin et al, 2023.	This study investigated the effectiveness of group art therapy in reducing acculturative stress and academic stress among Chinese postgraduate students studying in South Korea.	Thirty participants were recruited and randomly assigned to two groups: an experimental group and a control group.	The Acculturative Stress for International Students (ASIS) dan Academic stress scales	The group that received group art therapy showed a significant reduction in acculturative stress and academic stress compared to the control group.
Garcia et al, 2023.	This study aimed to evaluate the effectiveness of an online mindfulness meditation program in reducing academic stress among	A total of 78 university students took part in the study and were randomly divided into experimental and control groups.	The SISCO Academic Stress Inventory	The results demonstrated that the online mindfulness meditation program was effective in reducing academic stress

	university students.			among university students.
Yusoff et al, 2015	This study aimed to evaluate the effectiveness of a DEAL-based intervention in reducing depressive symptoms, coping strategies, and perceived stress among medical students.	171 Malaysian public university medical students were randomly assigned to control (n=83) and intervention (n=88) groups.	Beck's Depression Inventory, Brief COPE dan Medical Student Stressor Questionnaire respectively	The results showed that the intervention group experienced a significant reduction in academic stress and depressive symptoms.
Ugwuozor et al, 2021	The aim of this study was to examine the effectiveness of a Critical Thinking Intervention (CTI) in reducing stress levels among university students in Nigeria.	The study involved 103 university students with high levels of stress from a public university in Nigeria; their ages were not specified.	The Academic Stress Questionnaire (ASQ) dan the Educational Stress Scale (ESSS)	The results showed a significant reduction in stress levels in the intervention group compared to the control group.
Cherry & Wilcox, 2020.	This study examined the effectiveness of a mindfulness intervention in improving emotion regulation, non-judgment, and reducing perceived and academic stress among	The study involved 209 trauma-exposed university students in the United States (66.5% female, 31.6% male), randomly selected based on	Perceived Stress Scale (PSS) dan Academic Stress Scale	The results indicated that the brief mindfulness intervention reduced both academic stress and perceived stress, particularly among participants

	trauma-exposed students.	class enrollment.		with subthreshold PTSD symptoms.
Manansingh et al, 2019	This study focused on evaluating the effects of relaxation techniques on academic stress, test anxiety, and nursing students' intention to remain in the profession.	The study involved 45 first-year students enrolled in an undergraduate nursing program; the study location was not reported.	Academic Stress Scale	Findings confirmed that the use of relaxation techniques led to a significant decrease in academic stress and exam anxiety.
Shadi et al, 2021	This study investigated the impact of a social media-based intervention, designed according to the Theory of Planned Behavior (TPB), in managing academic stress among university students.	320 students	Gadzella's Student-Life Stress Inventory and a researcher-developed questionnaire based on the Theory of Planned Behavior (TPB), both of which had confirmed validity and reliability.	The results showed that the intervention helped reduce academic stress among students and improved their subjective norms.
Ying et al, 2018.	The study aimed to assess the effectiveness of mindfulness training in improving university students' coping	38 students 58% female, 42% male.	Student-Life Stress Inventory	Findings from this study suggest that implementing mindfulness practices in university environmen

	abilities in response to academic stress.			ts can enhance students' stress responses and lower their perceived stress.
Purnawati et al, 2021.	This study examined the effects of a problem-focused stress management program on self-efficacy, psychological distress, and cortisol levels among first-year medical students.	Forty high-stress students with external locus of control were randomly assigned to intervention (n=26) and control (n=14) groups.	The instruments included the Student Self-Efficacy Questionnaire and a modified Indonesian adaptation of the Brief Job Stress Questionnaire (BJSQ) to measure academic stress.	The results showed that the problem-focused stress managemen t program improved self-efficacy and reduced psychologic al distress as well as cortisol levels among students.
Zhang et al, 2016	The study investigated how self-compassion contributes to students' ability to manage chronic academic stress.	The study involved 208 undergradua te students.	Self-Compassion Scale (SCS), Adolescent Self-Rating Life Event Check List (ASLEC), and Positive and Negative Affect Schedule (PANAS).	Self-compassion was found to mediate the relationship, contributing to a decrease in chronic academic stress.

This study reports that 16 articles were reviewed based on predetermined criteria. These articles were published between 2015 and 2026, comprising 14 quasi-experimental studies and 2 non-experimental studies. Among the reviewed articles, two studies reported that social support has a positive effect on reducing academic stress (Păduraru et al., 2024; Sajid et al., 2024). Relatedly, self-efficacy was found to significantly help students reduce academic stress (Păduraru et al., 2024). Purnawati et al., (2021) noted that self-efficacy can be

positively enhanced through stress management training programs, which aid students in lowering academic stress.

Mindfulness-based interventions were reported in four reviewed studies, including mindfulness meditation (Alvarado-García et al., 2023), mindfulness training (Cherry & Wilcox, 2020; Ying et al., 2018) and multicomponent training combining mindfulness, biofeedback, and biofeedback-assisted mindfulness (Figueroa et al., 2023). Group art therapy was also identified as an effective intervention for reducing academic stress among students (Yin & Ko, 2023). An experimental study (Khan & Beri, 2024) demonstrated that self-affirmation effectively decreases academic stress in students.

Emotional intelligence is essential for managing stress, including academic stress. This was evidenced in a study by Khorasani et al., (2023) which showed that emotional intelligence training is an effective intervention for reducing academic stress levels. Another intervention by Nemati et al., (2023) indicated that Acceptance and Commitment Therapy (ACT) training effectively lowers academic stress among students.

Yusoff & Esa, (2015) reported that the DEAL model training positively affects the reduction of academic stress. The DEAL model is a structured technique comprising Detection of Stressor (identifying stress sources), Evaluation of Stressor (constructively assessing stressors), Action (taking positive actions based on constructive thinking), and Learning from Stressor (gaining valuable lessons from stress sources).

An academic stress intervention using social media education based on the Theory of Planned Behavior (TPB), developed by Ajzen and Fishbein in 1980, was reported by Shadi et al., (2022).The TPB approach views intention as the determinant of behavior, consisting of three constructs: attitude, subjective norm, and perceived behavioral control. Their findings showed that TPB is a good predictor of behavioral intention, and that social media education interventions designed according to TPB can reduce academic stress to some extent and promote the development of students' subjective norms.

A different finding was reported by Ugwuozor et al., (2021), who used Critical Thinking Intervention (CTI) to reduce academic stress. This intervention is based on learning and cognitive theories developed by experts, including Beck, who explained that stress results from faulty learning processes, unrealistic assumptions, and inappropriate information use. CTI is built on three pillars: analyzing, evaluating, and creating. The study demonstrated that CTI can alter individuals' cognitive schemas, enabling participants to reframe stressors and thereby reduce their academic stress levels.

An experimental study by Moreno et al., (2023) reported that Hatha Yoga and meditation can help reduce academic stress. Hatha Yoga defined as a yoga technique involving physical skills, musculoskeletal conditioning, and cardiovascular improvement through breath control and meditation. Stress levels were measured using salivary cortisol scores, heart rate, and blood flow. This study confirmed that both Hatha Yoga and meditation reduce stress indicators.

Relaxation techniques can reduce academic stress at the tertiary education level. This was supported by Manansingh et al., (2019), who used relaxation techniques as an intervention to lower academic stress, especially for students facing exams. The intervention lasted six weeks and included focus group interviews to monitor progress.

The last study in this systematic review examined the use of self-compassion interventions to reduce academic stress (Zhang et al., 2016). Self-compassion was found to have a significant impact on decreasing academic stress. Although this study did not use an experimental design, it measured the extent to which self-compassion influences academic stress. Students with higher self-compassion tend to cope more effectively with academic stress.

CONCLUSIONS AND RECOMMENDATIONS

Based on the review of 16 articles published between 2015 and 2025, it can be concluded that interventions to reduce academic stress among university students involve various physiological, psychological, and social approaches. The reviewed interventions include mindfulness training, social support, self-efficacy enhancement, self-affirmation, emotional intelligence training, academic stress education using the Theory of Planned Behavior (TPB) approach, Acceptance and Commitment Therapy (ACT), relaxation techniques, yoga, as well as art therapy and self-compassion-based approaches.

Overall, these intervention approaches highlight the importance of emotion regulation, positive thinking patterns, strengthening social and spiritual connections, and proper physical management. Therefore, it is crucial for higher education institutions to implement integrated academic stress intervention programs.

It is recommended that higher education institutions develop comprehensive and multidisciplinary intervention programs that combine physiological, psychological, and social components to effectively address academic stress. Future research should also focus on longitudinal studies to evaluate the sustained impact of these interventions and explore culturally adapted strategies to enhance accessibility and relevance for diverse student populations.

FURTHER STUDY

Future research should focus on long-term effects of academic stress interventions and include larger, more diverse samples. Exploring combined interventions and culturally tailored approaches is recommended to enhance effectiveness and accessibility. Additionally, investigating students' perspectives can improve intervention relevance and acceptance.

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REFERENCES

Alvarado-García, P. A. A., Soto-Vásquez, M. R., Reyes-Sánchez, L. P., Sandoval-Bocanegra, V. A., Ullón-Ramírez, R. C., Vargas-Fernández, Y., & Inca-Reyes, K. A. (2023). An Online Mindfulness Meditation Program as a Means for Mitigating Academic Stress among University Students. *Academic Journal of Interdisciplinary Studies*, *12*(6), 141–149. https://doi.org/10.36941/ajis-2023-0159

Bamber, M. D., & Schneider, J. K. (2016). Mindfulness-based meditation to decrease stress and anxiety in college students: A narrative synthesis of the research. *Educational Research Review*, *18*, 1–32. https://doi.org/https://doi.org/10.1016/j.edurev.2015.12.004

Cherry, M. L., & Wilcox, M. M. (2020). Decreasing perceived and academic stress through emotion regulation and nonjudging with trauma-exposed college students. *International Journal of Stress Management*, *27(2)*, 101–110. https://doi.org/https://doi.org/10.1037/str0000138

Figueroa, C., Ayala, A., Trejo, L. A., Ramos, B., Briz, C. L., Noriega, I., & Chávez, A. (2023). Measuring the Effectiveness of a Multicomponent Program to Manage Academic Stress through a Resilience to Stress Index. *Sensors*, *23*(5), 1–19. https://doi.org/10.3390/s23052650

Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice*, *10*(2), 144–156. https://doi.org/10.1093/clipsy/bpg016

Khan, M., & Beri, N. (2024). Self-Affirmation: A Positive Psychological Approach to Self-Integrity, Self-Control and Academic Stress among Double Jeopardy Students of District Jalandhar, Punjab. *Cuestiones de Fisioterapia*, *53*(3), 260–270.

Khorasani, E. C., Ardameh, M., Sany, S. B. T., Tehrani, H., Ghavami, V., & Gholian-aval, M. (2023). The influence of emotional intelligence on academic stress among medical students in Neyshabur, Iran. *BMC Psychiatry*, *23*(1), 1–11. https://doi.org/10.1186/s12888-023-05344-0

Lakey, B., & Cohen, S. (2015). Social Support Theory and Measurement. *Social Support Measurement and Intervention*, *December*, 29–52. https://doi.org/10.1093/med:psych/9780195126709.003.0002

Lazarus, R. S., & Folkman, S. (1984). *Stress, Appraisal, and Coping*. Springer Publishing Company.

Manansingh, S., Tatum, S. L., & Morote, E.-S. (2019). Effects of Relaxation Techniques on Nursing Students' Academic Stress and Test Anxiety. *Journal of Nursing Education*, *58*(9), 534–537. https://doi.org/https://doi.org/10.3928/01484834-20190819-07

Mohr, D. C., Weingardt, K. R., Reddy, M., & Schueller, S. M. (2017). Three problems with current digital mental health research. and three things we can do about them. *Psychiatric Services*, *68*(5), 427–429. https://doi.org/10.1176/appi.ps.201600541

Moreno, S., Becerra, L., Ortega, G., Suarez-Ortegón, M. F., & Moreno, F. (2023). Effect of Hatha Yoga and meditation on academic stress in medical students—Clinical trial. *Advances in Integrative Medicine*, *10*(3), 122–130. https://doi.org/10.1016/j.aimed.2023.09.001

Nemati, S., Pourtaleb, N., BadriGargari, R., Hashemi, T., Deetjen, R., & Shojaeian, N. (2023). The Effectiveness of Acceptance and Commitment Training Program on the Level of Academic Stress and Academic Burnout in Students with Specific Learning Disability. *Advances in Neurodevelopmental Disorders*, *7*(4), 502–511. https://doi.org/10.1007/s41252-022-00307-0

Păduraru, A. E., Soponaru, C., Dîrțu, C., Gavrilovici, O., & Bucuță, M. D. (2024). What

do I need from myself as a student but also from others to reduce the impact of stress on academic performance? Self-efficacy and social support. *Frontiers in Education*, *9*. https://doi.org/10.3389/feduc.2024.1469865

Pascoe, M. C., Hetrick, S. E., & Parker, A. G. (2020). The impact of stress on students in secondary school and higher education. *International Journal of Adolescence and Youth*, *25*(1), 104–112. https://doi.org/10.1080/02673843.2019.1596823

Purnawati, S., Adiatmika, P. G., & Lesmana, C. B. J. (2021). The effect of a problem-focused coping stress management program on self-efficacy, psychological distress, and salivary cortisol among first-year medical students of udayana university. *Acta Medica Philippina*, *55*(6), 675–680. https://doi.org/10.47895/AMP.V55I6.3163

Sajid, M. R., Raddaoui, L., Abu Shagra, F., Shaikh, A. S., Shaikh, A. A., Tamim, H., & Al-Kattan, K. (2024). Faith, Friends, and Humor: How Medical Students Cope with Academic Stress in a Private Medical University in Saudi Arabia. *Advances in Medical Education and Practice*, *15*, 1205–1213. https://doi.org/10.2147/AMEP.S475224

Shadi, M., Peyman, N., Taghipour, A., Jafari, A., & Tehrani, H. (2022). Can Social Media be Used to Control Academic Stress? An Application of the Theory of Planned Behavior. *International Journal of Mental Health Promotion*, *24*(1), 25–38. https://doi.org/10.32604/ijmhp.2021.017343

Tasalim, R., & Cahyani, A. R. (2021). *Stres Adakemik dan Penanganannya* (Guepedia (ed.)). Guepedia.

Ugwuozor, F. O., Otu, M. S., & Mbaji, I. N. (2021). Critical thinking intervention for stress reduction among undergraduates in the Nigerian Universities [Intervención de pensamiento crítico para la reducción del estrés entre estudiantes universitarios en las universidades de Nigeria]. *Medicine*, *100*(11), 1–7. https://pubmed.ncbi.nlm.nih.gov/33725978/

Varvogli, L., & Darviri, C. (2011). Stress management techniques: Evidence-based procedures that reduce stress and promote health. *Health Science Journal*, *5*(2), 74–89.

Yin, Y., & Ko, K. S. (2023). The effect of group art therapy on acculturative and academic stress of Chinese graduate students in South Korea. *Frontiers in Psychology*, *14*(July), 1–9. https://doi.org/10.3389/fpsyg.2023.1179778

Ying, C., Liu, C., He, J., & Wang, J. (2018). Academic stress and evaluation of a mindfulness training intervention program. *NeuroQuantology*, *16*(5), 97–103. https://doi.org/10.14704/nq.2018.16.5.1311

Yusoff, M. S. B., & Esa, A. R. (2015). A DEAL-based intervention for the reduction of depression, denial, self-blame and academic stress: A randomized controlled trial. *Journal of Taibah University Medical Sciences*, *10*(1), 82–92. https://doi.org/10.1016/j.jtumed.2014.08.003

Zhang, Y., Luo, X., Che, X., & Duan, W. (2016). Protective effect of self-compassion to emotional response among students with chronic academic stress. *Frontiers in Psychology*, *7*(NOV), 1–6. https://doi.org/10.3389/fpsyg.2016.01802