

The Psychological Consequences Of Exam Stress On University Students

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Abstract

Stress is defined as a mental state of tension or worry brought on by a difficult situation. Stress is an ordinary human reaction that drives us to confront challenges and dangers in our life. Everyone endures periods of stress. However, how we respond to stress has an immense impact on our overall wellness. Similarly, exam stress is the tense, anxious sensation that occurs while taking tests. It's common to experience some anxiety before major exams, papers, presentations, or assessments. In fact, a little stress can push you and motivate you to throw in additional effort. However, when exam stress affects the way you perform and prevents you from achieving your learning and academic goals, it becomes a problem. This meta-analysis aims to find out the effects on mental health by thoroughly exploring the psychological effects of exam stress on university students. This study includes multiple researches, encompassing diverse methodologies and sample sizes. It synthesizes prior research to provide insights into levels of anxiety, sleep quality, and coping strategies during periods of heightened academic pressure. The findings reveal that there is a strong link between exam stress and adverse psychological outcomes in students. High levels of anxiety, despair, and mental distress were often noted when there was increased pressure to perform well academically. A comprehensive review of numerous studies highlights the persistent and significant negative effects of exam-related stress on mental health. The significance of a holistic approach to student well-being during difficult academic periods is emphasized, with implications for university policies, mental health support systems, and future research possibilities explored. This will allow the establishment of effective plans to reduce the negative effects of exam stress on mental health in higher education institutions.

Keywords: Academic pressure, Anxiety, Depression, Exam stress, University students

INTRODUCTION

Concern over university students' mental health has grown in the last several years. Numerous researches have shown a higher prevalence of psychological symptoms linked to this educational period, with stress being one of the increasingly common psychosocial issues. Stress can have a serious negative impact on a student's physical and mental health in addition to their academic achievement. Stress can provoke a range of feelings, including concern and annoyance, which makes it difficult to relax. Stress can make it challenging for us to concentrate. Individuals may have nausea or difficulty sleeping, as well as headaches or other body symptoms. They may lose their appetite or overeat (Jagrati, 2014). Stressful situations can also cause or exacerbate mental health concerns, the most common of which are anxiety and depression, which require medical intervention. When a person develops mental health problems, it is possible that the stress symptoms become worse and are interfering with routine tasks, such as attending work or school. Exam stress can be characterized as a particular kind of elevated anxiety that affects students prior to, during, and following an exam due to the intense pressure of exams. Students must cope with this important issue all over their academic careers. Humans experience stress as a natural aspect of existence. It is the body's or mind's normal reaction to anything it perceives as dangerous. Bodies react in a variety of ways, including somatic (physical), emotional, and cognitive (thinking) when they feel threatened. Since all reactions are interdependent, any action taken to mitigate one will also mitigate the effects of the others (Pankhuri Pilania, 2017).

MATERIALS AND METHODS

This meta-analysis seeks to understand the consequences on mental health by thoroughly investigating the psychological effects of exam stress on university students. This study contains several studies with multiple methods and sample sizes. It builds upon previous studies to provide insights into anxiety levels, sleep quality, and coping methods during times of increased academic pressure. The inclusion criteria were all studies published between January 2014 and March 2024, with a university student focus, evaluating the psychological effects of exam stress, such as anxiety, insomnia, and coping mechanisms as well as studies with a full text review were considered, both quantitative and qualitative. The exclusion criteria were studies not offered in English, that weren't specifically aimed at exam stress or do not include university students, and studies that only takes academic achievement into account, ignoring psychological effects. The databases searched were: google scholar, research gate, ncbi, journals.

Review of Literature

S.No	YEAR	AUTHOR	TITLE	METHODOLOGY	FINDINGS
1	2024	Abdul Rashid Adul Aziz , noor isma alya hasbullah , Amin Al - Haadi shafie	Academic Stress and psychological well being among university students	Simple random sampling	The study examined academic stress experienced by undergraduate students, focusing on academic expectations, workload, exams, and self-perception. The majority were aged 18-25, with 23-year-olds being the highest. The relationship between academic stress and psychological well-being was moderately negative, with a slight positive correlation during the COVID-19 pandemic.
2	2024	Pratima Mishra	Stress , pressure , anxiety of competitive exams -an empirical study on students psychological approach	Stratified random sampling	High levels of stress among students are largely due to the outdated education assessment system in higher education institutions. Exams are used to gauge students' recall of material, with no focus on abilities like analysis, creativity, problem-solving, or knowledge application. Continuous assessments are not necessary, and the assessor is often distant, causing a disconnect between class content and test results

3	2024	Yash pal Azad, and Harbani kaur	Academic Stress and psychological well-being among boys and girls college students	Quantitative study	The study aimed to examine gender disparities in academic stress and psychological well-being among college students. Descriptive analysis showed no significant differences, except for male students who were more stressed in teaching approach. Correlation analysis found no significant relationships between academic stress and psychological well-being, suggesting that children with better environmental management tend to have greater psychological wellness
4	2023	Tom reschke, Thomas lounger , Katharina reschke	Impact of psychological stress among college students	Randomized control trial	The study investigated the short-and immediate-term effects of a brief psychological intervention on law students experiencing extended periods of academic stress. The intervention taught students psychological methods specific to their study environment, considering exam preparation's chronic stress features. The intervention was successful, indicating a clear pattern for stress and well-being associated with studying. Universities can make a significant difference in students' lives by implementing focused and efficient interventions.

5	2023	Elena Aleksandro vna	Considering pre examination study as a stressful situation among university students	Questionnaire Method	Students perceive their behavior as influenced by pre-examination study circumstances. Both college and high school students show consistent emotional, cognitive, and behavioral patterns under stress. However, these determinants vary based on anticipated outcomes and preexisting predictors. Efficient psychological support programs can be created by understanding the behavioral changes caused by stressful situations.
6	2023	Izolde Bouloukaki Loanna Tsiligianni, et al.,	Sleep Quality and Fatigue during Exam Periods and its Prevalence and Associated Factors.	Survey administered using digital form among university students	Exam seasons are a time when university students frequently suffer from poor sleep and increased weariness; risk factors include feminine gender, younger age, chronic illness, smoking, coffee consumption, lower activity levels, and depressed symptoms. Future studies ought to pinpoint the causes.
7	2022	DR. Sajid Mahmood Alvi, Parsa Muazzam	Exam Anxiety among University Students.	Quality research including surveys with questionnaires	Exam anxiety is quite common among university students. When it came to exam anxiety, university students did not significantly differ based on their department or gender. On the other hand, students' reported exam anxiety was strongly influenced by their semester of study

8	2022	Kdv Prasad	Pressure and Anxiety of competitive exams. An ethical study on students' psychological approach.	Stratified random sampling technique was used among university students.	Higher education institutions' outmoded evaluation methods, which prioritize memorizing and verbatim memory over creative and problem-solving abilities, induce stress.
9	2022	Pingzhan yang and Yong yang	Effect of college students academic stress on anxiety during covid	Questionnaire survey using Academic Stress Scale	The study found significant variations in academic stress among students and genders, with lower anxiety levels correlated with higher psychological capital. Anxiety levels were positively correlated with increased academic stress. Psychological capital partially mediated the association, suggesting that improving students' psychological capital could reduce stress related to their studies during the COVID-19 pandemic.
10	2022	Dr. Dinesh R. Chavda	Impact of psychological stress among college students	Questionnaire Method	In this research, the majority of students exhibit psychological stress, with the main contributing factors being temperament/anger, unwarranted concerns, fear of losing their job, perfectionism, and procrastination. The psychological effects of stress on college students do not appear to be correlated with their gender. This study has implications for the sources of psychological stress as well as the psychological effects of the psychological stress elements. The test does, however, demonstrate a considerable

					distinction between the psychological stressors and its effects.
11	2021	B. Sue Graves, et al.,	Gender differences in perceived stress and coping among college students.	Perceived Stress Scale and Brief Cope and T-tests were used to detect gender differences for the stress levels and coping strategies.	Females showed higher levels of stress. Both the individual coping strategies employed and the coping dimensions showed clear gender disparities. It was discovered that women used the emotion-focused coping component and supported the application coping mechanisms more frequently than did men. Self-distraction, emotional support, practical support, and venting were some of these.
12	2020	Senarath Samudra	Examination Stress, Stress Management Strategies, and Counseling Needs of College Level Students in Sri Lanka.	Survey design and random sample method were employed for this study.	Compared to male students, female students had much higher levels of stress, as well as physical and psychological challenges. Comparatively, female students employed more problem-solving techniques and had greater levels of social support. Stress management workshops, psychological awareness training programs, and professional counseling services should all be established in order to handle stress. This may lessen psychological stress and improve their ability to cope.

13	2020	Carlos Freire, et al.,	Coping strategies and self-efficacy in university students :A person-centered approach	Coping scale from the Academic Stress Questionnaire	Assuming that coping techniques are not mutually exclusive categories but rather function in unity, people's ability to respond appropriately to the challenges they face depends on their ability to maintain a repertoire of methods at their disposal.

14	2019	Sudha anbalagan	Evaluating level and various stressors contributing to examination Stress among university students	Random sampling	This study found that 70% of college students experience high levels of exam-related stress, with medical students experiencing significantly higher pre-examination anxiety. The stress levels vary across different departments, with most students experiencing moderate to severe stress. The study also found that exam stress levels are significantly correlated with department and English competence. Factors contributing to exam stress include fear of failing, strong parental expectations, household chores, and an unquiet atmosphere. Social and emotional elements account for the largest percentage of students' exam stress. The study also found a significant correlation between academic variables contributing to exam stress and demographics such as department, GPA, English proficiency, and educational attainment of parents.
15	2018	Monica Elisabeta Paduraru	Strategies for exam stress	Self-perceived stress assessment questionnaire.	Coping mechanisms, which students build over time and are impacted by their academic requirements and lifestyle, can help students feel less stressed during exams.

16	2018	Rachel Campbell, et al.,	Sleep during an exam period: the role of basic psychological needs and stress.	Online questionnaire was used among university students	It implies that sleep and daytime functioning may be negatively impacted by feelings of strain and disconnection. The study recommends teaching mindfulness and good sleep hygiene to students in order to lessen the negative effects of these upsetting experiences
17	2018	Dawit Yikealo, Werede Tareke, Ikali Karvinen	The Level of Stress among College Students: A Case in the College of Education, Eritrea Institute of Technology	Quantitative data was collected using a survey method.	Academic overload, poor subject matter, and personal problems are pressures. Stressors related to the environment include poor study spaces, problems with the water supply, internet availability, recreation areas, and medical services. There was no discernible gender difference in stress levels or relationship between stress and CGPA in the study.
18	2017	Satish G Patil, Manjunath a R Aithala	Exam anxiety: Its prevalence and causative factors among Indian medical students	Westside test anxiety scale to assess the exam anxiety among medical students	Exam anxiety is more common among students in Phases I and II, with men being more impacted. Exam systems, ineffective time management, and a demanding course load are among the contributing factors

19	2017	Jana Matošková	Sitting an Exam from the Students' Point of View	The study is based on data gathered during a research focused on the tacit knowledge of university students	Both problem-focused and emotional-coping coping strategies were mentioned by the participants. Additionally, the survey shows that students don't like cheating or taking a superficial approach to learning. Students' remarks regarding cutting back on drinking the night before an exam was an intriguing discovery that raises the question of how common it is for college students to use alcohol or other addictive substances. This is an additional subject that could be researched further.
20	2016	Sarath Rathnayake , et at.,	Depression, Anxiety and Stress among Undergraduate Students in a Public University in Sri Lanka.	The data collection instrument used in this study was a self-administered questionnaire consisting of 6 sections.	Adverse emotional states are associated with factors such as SRPH and SRMH. To lower psychological health issues among nursing students, effective policies, early detection, counselling, stress management programs, and long-term research are required
21	2015	Zulfiqar Ahmed	Pre-exam anxiety among students and its coping mechanism	Survey administered among university students	Students' behavioural, physical, and cognitive development is hampered by test anxiety. Counseling, behavioral therapy, yoga, medical rehabilitation, and simulation approaches are among the treatment options.

22	2015	Dr. Samina Mal	Assessing level and causes of exam stress among university students in Pakistan	Through convenient sampling technique 450 students studying at bachelors and master's level in public sector universities of Islamabad were selected for data collection.	Teaching time management techniques, assisting students with subject comprehension, and promoting conceptual clarity are some strategies. Utilizing instructional approaches is necessary to provide interest to the syllabus. Special orientations might help students who struggle with time management and finding time for extracurricular activities.
23	2014	Archana Kumar, et al	Examination stress and anxiety: A study of college students	The present study is a descriptive research. The data was collected from the primary sources.	College students who are under stress may exhibit high performance standards, anxiety, and self-criticism during exam preparation. Students in the Commerce stream have the lowest levels of stress and anxiety compared to those in the Arts, Science, and Commerce streams, which have the highest levels. Graduate and postgraduate students' stress and anxiety levels are comparable.
24	2014	Archana Kumari	Global Journal of Multidisciplinary Studies Examination stress and anxiety a study among college students.	The present study is a descriptive research. The data was collected from the primary sources	Stress in college students is indicated by excessive performance expectations, worry, and self-criticism during exam preparation. Exam stress is highest among students in the Arts, Science, Commerce, and Science streams, while it is lowest among science students.

25	2014	Archana Kumari and Jagrati Jain.	Exam stress and anxiety a study on college students	Stratified Random sampling	Studies show no correlation between anxiety and exam stress, but excessive stress can lead to high hopes, bad study habits, and consequences. Exam-related factors include favourable economic conditions, test anxiety, fear of failing, competition for grades, expectations, teacher attitudes, and overwhelming workload. However, undergraduate students in the commerce stream report higher levels of stress and anxiety compared to graduate students.
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RESULTS AND DISCUSSION

The Yerkes-Dodson law states that performance and arousal levels are linked. Raise in arousal basically helps students perform better on tests, but only to a certain extent. When stress levels go beyond that threshold, students' overly anxious states could hinder their ability to perform well on tests. Overwhelming dread can interfere with concentration and make it difficult for students to remember what they have learned. They may experience a mental disconnection from all the material they have spent a considerable amount of time going over (Marney A. White, 2020). They blank out the answers to the questions to which they know the answers. It becomes even more difficult for them to focus on the test as a result of their incapacity to concentrate and remember information, which also increases their worry and tension. Test anxiety is very common among university students. Regarding exam anxiety, university students' departmental and gender differences were not statistically significant (Anum Zahra, et al., 2022). An excessive amount of stress might affect a student's ability to focus, get ready, and perform. The study discovered a strong correlation between college students' levels of anxiety and test-related stress (Archana Kumar, Jagrati Jain, 2014). Coping strategies that can be used before, during, and after tests can help reduce the stress that comes with them. Over time, these coping mechanisms can be developed and used. While some of them have to do with the way of life of the students, others are more directly tied to the demands of academic life. These techniques are typically divided into two types: approach strategies, also known as active strategies, and evasive strategies, also known as disengagement strategies (Carlos Freire et al., 2020). Approach methods consist of cognitive and behavioural mechanisms that aim to change the problem (primary control) or the unpleasant emotions associated with it (secondary control) in order to respond actively to the stressor. These strategies are divided into five categories: preparation, targeted action, emotional and instrumental support seeking, positive situational assessment, and acceptance (Monica Elisabeta Paduraru 2019). Evasive methods refer to cognitive and behavioral techniques used to escape an unpleasant situation, such as denial, wishful thinking, and diversion. According to this classification, approach methods are widely considered to be connected with positive academic, physical, and psychological adjustment, whereas evasive measures frequently result in unfavorable consequences for students. (Senarath Samudra, 2020) explored the sources of stress, the degree of stress experienced by the students, the connection between the topic stream and the characteristics of the students as well as their challenges in managing different stress levels, demonstrating the link between different coping mechanisms and the need for counselling. Similarly, (Zulfiqar Ahmed,

2015) also noted that test anxiety is a well-known problem that hinders universities' ability to provide education. It has an impact on a student's behavioral, physical, and cognitive aspects of life. Low performance and school dropout are the results of not having strategies for coping. Undergraduate students' perceptions of stress and coping mechanisms were analyzed, offering educational solutions for the development of effective, healthy coping mechanisms and emphasizing aspects related to university authorities' well-being (B. Sue Graves, et al., 2021). In a study on coping mechanisms for test stress, (Monica Elisabeta Păduraru, 2018) found that coping mechanisms, which are shaped by a student's lifestyle and academic demands, can help students cope with exam stress. The practical implications of the study by (Jana Matošková, 2017) include how crucial it is for academic achievement to acquire self-management, decision-making, and communication skills. It implies that extracurricular activities and seminar assignments could aid in the development of abilities and that effective teaching methods are essential to lowering student worry and preserving motivation. Another study on the issue of evaluating exam stress and its causes among Pakistani university students, (Dr. Samina Malik, 2015) discovered that the majority of students suffer from moderate to high levels of stress, necessitating support from other students, educators, and administrators. Learning time management skills and gaining conceptual clarity in class are two ways to deal with stress. Having teacher support is essential for conceptual clarity development. (Izolda Bouloukaki, et al., 2023) revealed that university students often experience poor sleep quality and increasing levels of exhaustion during exam seasons. These problems are made worse by factors such as female gender, younger age, chronic illness, smoking, coffee intake, physical activity, and feelings of depression. It was observed that students' excessive levels of stress are caused by the old education assessment system in higher education institutions. While analytical, knowledge-application, problem-solving, and creative skills are rarely assessed, students' memorizing and verbatim memorization are frequently examined (Prasad, 2022). (Rachel Campbell, et al., 2018) suggested that sleep and daytime functioning may be negatively impacted by feelings of strain and disconnection. They recommended teaching mindfulness and good sleep hygiene to youngsters in order to lessen the negative effects of these upsetting encounters. Preventing psychological health difficulties among students requires effective interventions, early stress assessment, stress management programs, and adequate facilities (Sarath Rathnayake, 2016).

CONCLUSION

To conclude, it is crucial to acknowledge the seriousness of the high frequency of anxiety and insomnia among college students under exam stress. These issues with mental and physical health have a negative impact on well-being in general as well as academic achievement. Considering this, educators must use coping mechanisms to help students manage their mental health well by reducing stress and introducing coping mechanisms (B. Sue Graves, et al., 2021). Furthermore, the correlation that exists between anxiety, sleeplessness, and academic stress highlights the need for all-encompassing support systems in university environments. Faculty members can provide students with the skills they need to meet the demands of academics more skillfully by putting in place customized interventions like mindfulness training, counselling services, and stress management education seminars. We can try to create a culture of resilience and support that gives people the tools they need to succeed academically and emotionally by collaborating with faculty, students, and mental health experts (Zulfiqar Ahmed, 2015).

REFERENCES

1. Freire, C., Ferradás, M. D. M., Regueiro, B., Rodríguez, S., Valle, A., & Núñez, J. C. (2020). Coping Strategies and Self-Efficacy in University Students: A Person-Centered Approach. *Frontiers in psychology*, 11, 841.
2. Bouloukaki I, Tsiglianni I, Stathakis G, Fanaridis M, Koloi A, Bakiri E, Moudatsaki M, Pouladaki E, Schiza S. (2023). Sleep Quality and Fatigue during Exam Periods in University Students: Prevalence and Associated Factors. *Healthcare*. 2023; 11(17):2389.
3. Zahra, Anum & Sajid, Mahmood & Alvi, Sajid & Muazzam, Parsa. (2022). Exam Anxiety among University Students. 6. 19-29. 10.33152/jmphss-6.4.3.
4. Xxx, Kdv. (2022). STRESS, PRESSURE & ANXIETY OF COMPETITIVE EXAMS -AN EMPIRICAL STUDY ON STUDENT'S PSYCHOLOGICAL APPROACH. 11s. 1057-1067.

- 5.Graves, B. S., Hall, M. E., Dias-Karch, C., Haischer, M. H., & Apter, C. (2021). Gender differences in perceived stress and coping among college students. *PloS one*, 16(8), e0255634.
- 6.Samudra, Senarath. (2020). Examination Stress, Stress Management Strategies, and Counseling Needs of College Level Students in Sri Lanka. *Journal of Psychology and Behavioral Science*. 8. 10.15640/jpbs.v8n2a3.
- 7.Păduraru, M. E. (2018). Coping strategies for exam stress. *Mental Health: Global Challenges Journal*, 1(1), 64-66.
- 8.Campbell, Rachel & Soenens, Bart & Beyers, Wim & Vansteenkiste, Maarten. (2018). University students' sleep during an exam period: the role of basic psychological needs and stress. *Motivation and Emotion*. 42. 1-11. 10.1007/s11031-018-9699-x.
- 9.Yikealo, Dawit & Gebregergis, Werede & Karvinen, Ikali. (2018). The Level of Stress among College Students: A Case in the College of Education, Eritrea Institute of Technology. *Open Science Journal*. 3. 1-18. 10.23954/osj.v3i4.1691.
- 10.Patil, S. G., & Aithala, M. R. (2017). Exam anxiety: Its prevalence and causative factors among Indian medical students.
- 11.Matošková, Jana. (2017). Sitting an Exam from the Students' Point of View. *e-Pedagogium*. 17. 80-93. 10.5507/epd.2017.055.
- 12.Rathnayake, S., & Ekanayaka, J. (2016). Depression, anxiety, and stress among undergraduate nursing students in a public university in Sri Lanka. *International Journal of Caring Sciences*, 9(3), 1020-1032.
- 13.Zulfiqar Ahmed (2015). Pre-exam anxiety among students and its coping mechanism. *Rawal Medical Journal*, 40(2), 233-237.
- 14.Malik, Samina. (2015). Assessing Level and Causes of Exam Stress among University Students in Pakistan. *Mediterranean Journal of Social Sciences*. 6. 10.5901/mjss.2015.v6n4s1p11.
- 15.Kumari, Archana & Jain, Jagrati. (2014). EXAMINATION STRESS AND ANXIETY: A STUDY OF COLLEGE STUDENTS. *Global Journal of Multidisciplinary Studies*. 04.
- 16.Kumari, Archana. (2014). Global Journal of Multidisciplinary Studies EXAMINATION STRESS AND ANXIETY: A STUDY OF COLLEGE STUDENTS.