

Relationship Between Sleep Quality and Exam Anxiety Among University Students

Snehil Parashar^{1*}, Dr. Soni Kewalramani²

ABSTRACT

This study aimed to investigate the relationship between sleep quality and exam anxiety among college students, a topic of increasing relevance in the context of student mental health and academic performance. The primary aim was to determine whether students experiencing poor sleep quality tend to exhibit higher levels of anxiety during examinations. A total of 100 college students, aged between 16 and 28 years, were recruited from various universities using convenience sampling—a non-probability technique based on accessibility. The study employed two validated instruments: the Pittsburgh Sleep Quality Index (PSQI) to evaluate participants' sleep quality across seven domains, and the Westside Test Anxiety Scale to measure levels of exam-related anxiety, including symptoms such as nervousness, worry, and physiological discomfort. To ensure ethical integrity, all participants were briefed about the study's purpose and provided informed consent prior to participation. Confidentiality of responses was strictly maintained, and participation was entirely voluntary, with the option to withdraw at any stage. Data privacy and the well-being of the participants were upheld throughout the research process. The collected data were subjected to statistical analysis using Pearson's correlation coefficient to examine the connection between sleep quality (as indicated by PSQI scores) and exam anxiety levels. The results revealed a very weak positive correlation ($r = 0.115$) between the two variables, indicating a minimal trend wherein poorer sleep might be associated with slightly higher exam anxiety. However, this correlation was found to be statistically non-significant ($p = 0.253$), suggesting that the observed relationship does not provide sufficient evidence to confirm a meaningful link between sleep quality and exam anxiety within this sample. In conclusion, while the study hinted at a possible association, the findings suggest that sleep quality may not have a strong or statistically significant impact on exam anxiety in this particular group of college students. Further research with larger and more diverse samples is needed to explore this relationship more conclusively.

Keywords: *Sleep Quality, Exam Anxiety*

A is a vital biological function that significantly influences cognitive abilities, emotional stability, and overall well-being. This is particularly crucial for university students, who frequently face intense academic expectations, social challenges, and

¹Researcher

²Assistant Professor, Amity Institute of Behavioral and Allied Sciences, Lucknow Campus Amity University Lucknow, Uttar Pradesh, Lucknow.

*Corresponding Author

Received: April 12, 2025; Revision Received: April 22, 2025; Accepted: April 26, 2025

Relationship Between Sleep Quality and Exam Anxiety Among University Students

lifestyle modifications that can disrupt their sleep patterns. Among the numerous psychological stressors affecting students, exam-related anxiety is one of the most common. Exam anxiety is characterized by excessive nervousness, persistent worry, and fear experienced before or during an examination, which can negatively impact both academic performance and mental health.

A growing body of research highlights a strong connection between poor sleep quality and increased levels of anxiety, particularly in academic settings. Insufficient sleep and irregular sleep schedules can impair memory consolidation, decrease attention span, and heighten emotional instability—all of which contribute to elevated exam anxiety. Conversely, maintaining good sleep quality has been associated with better stress regulation, enhanced cognitive performance, and reduced anxiety levels. Despite these well-documented benefits, many university students prioritize academic commitments over sleep, often engaging in late-night study sessions and maintaining inconsistent sleep patterns. These habits may, in turn, exacerbate their stress and anxiety.

The relationship between sleep quality and exam anxiety is intricate, influenced by various factors such as individual differences in stress tolerance, study habits, and lifestyle choices. While some students may experience significant exam-related anxiety regardless of their sleep quality, others may find that sleep disturbances significantly intensify their stress. Understanding this complex relationship is essential for developing effective strategies that promote academic success and mental well-being among students.

This study seeks to examine the link between sleep quality and exam anxiety among university students, focusing on how different sleep patterns influence stress levels and academic performance. By analyzing factors such as sleep duration, frequency of sleep disturbances, and subjective sleep quality, the research aims to highlight the importance of healthy sleep habits in managing academic stress. The findings could contribute to the development of targeted interventions focused on stress reduction, time management, and sleep hygiene practices, ultimately supporting students in achieving both academic excellence and psychological well-being.

Adequate sleep duration is essential for maintaining optimal physical health, strengthening the immune system, supporting mental well-being, and enhancing cognitive functions. The National Sleep Foundation, along with the American Academy of Sleep Medicine and the Sleep Research Society, recommends that young adults consistently aim for 7 to 9 hours of sleep per night to promote optimal sleep health.

Deviating from this recommended sleep duration has been linked to various negative health outcomes, including reduced attention span, increased risk of depression, obesity, and cardiovascular diseases. Both insufficient and excessive sleep durations have been associated with a higher risk of mortality and cardiovascular events, with the lowest risk observed in individuals who regularly sleep around 7 hours per night. However, existing research suggests that among younger populations, inadequate sleep is a more pressing concern than excessive sleep. University students aged 17 to 30 who reported insufficient sleep were more likely to rate their overall health poorly, whereas prolonged sleep duration did not exhibit the same negative association.

University students are particularly prone to experiencing shortened sleep duration and frequent sleep disturbances due to their demanding academic schedules and lifestyle choices.

Relationship Between Sleep Quality and Exam Anxiety Among University Students

During this phase of life, students undergo several transitions, including reduced parental support, increased academic pressure, and shifts in daily routines, all of which contribute to irregular sleep patterns and insufficient rest. These disruptions are particularly concerning given their negative impact on both physical and mental health, as well as their detrimental effects on cognitive functions that are essential for daily activities and academic success.

Importantly, sleep quality has been identified as the strongest predictor of overall well-being among university students, surpassing other influential factors such as physical activity, depression, and tobacco use. Additionally, university life is often associated with persistent fatigue, which is frequently overlooked despite its significant contribution to poor sleep quality.

REVIEW OF LITERATURE

A study conducted by Tasmia Imdad, Hajra Tahir, Binat Batool, Iram Malik, and Eisha Alam on 12 June, (2024) aimed to explore the relationship between test anxiety and sleep quality among female university students. Using a nonprobability convenience sampling method, the researchers selected a sample of fifty ($n=50$) female undergraduate students. To measure test anxiety and sleep quality, the study employed the Pittsburgh Sleep Quality Index (PSQI) and the Westside Test Anxiety Scale (WTAS). Statistical analysis, performed through SPSS, revealed a significant negative correlation between test anxiety and sleep quality. The findings indicated that female students experiencing higher levels of test anxiety reported significantly poorer sleep quality, which could further contribute to academic underperformance.

These results are consistent with existing literature emphasizing the bidirectional relationship between anxiety and sleep disturbances. Poor sleep quality has been linked to difficulties in concentration, memory impairment, and increased psychological distress, all of which negatively affect academic performance. Understanding the interplay between test anxiety and sleep quality is crucial for developing effective interventions that can help students manage anxiety and maintain better sleep hygiene, ultimately improving their academic success and well-being.

A study by Köse, Kurucu Yılmaz, and Göktaş (2017) examined how exam anxiety affects sleep quality in senior high school students. The researchers used a survey-based approach, collecting data from 104 students in Istanbul, Turkey. They measured exam anxiety levels using the Exam Anxiety Inventory and sleep quality using the Pittsburgh Sleep Quality Index (PSQI). The study found a weak but significant connection between exam anxiety and sleep disturbances. Specifically, students who experienced anxiety-related thoughts and emotional distress before exams tended to report poorer sleep quality. Additionally, those with higher emotional reactions to exam anxiety were more likely to experience sleep problems.

Although some aspects of anxiety did not directly impact sleep quality, the study found that students who were more emotionally affected by exam stress had greater difficulty sleeping. This suggests that strong emotional reactions to academic stress can contribute to sleep disruptions.

These findings support the idea that academic stress negatively influences sleep patterns. To help students manage this issue, interventions such as relaxation techniques, cognitive-

Relationship Between Sleep Quality and Exam Anxiety Among University Students

behavioral strategies, and healthy sleep habits can be effective. Addressing exam anxiety through proper stress management may improve both sleep quality and academic success.

Academic stress during examination periods significantly impacts university students' sleep quality and fatigue levels. Bouloukaki et al. (2023) conducted a web-based survey involving 940 students across 20 tertiary institutions to examine these effects. Using the Pittsburgh Sleep Quality Index (PSQI) and the Fatigue Severity Scale (FSS), the study found that both sleep disturbances and fatigue intensified during exams.

Key influencing factors included age, chronic illness, and depressive symptoms, which were associated with poorer sleep quality. Fatigue levels were notably higher in female students and were linked to increased smoking, caffeine intake, reduced physical activity, and depressive symptoms. These findings suggest that academic stress disrupts students' sleep patterns and well-being, highlighting the need for interventions to promote healthier sleep habits and stress management strategies.

Test anxiety, a specific form of general anxiety, plays a crucial role in students' academic performance and well-being. Ziyar et al. (2016) conducted a cross-sectional study in Qom, Iran, examining the relationship between sleep quality and test anxiety among 250 high school students. Using the Pittsburgh Sleep Quality Index (PSQI) and Test Anxiety Inventory (TAI), the study found that 81.4% of students had poor sleep quality, while 69.6% experienced moderate to high test anxiety. A significant correlation was observed between these variables, with female students reporting higher anxiety levels and poorer sleep quality. These findings suggest the need for targeted interventions to reduce test anxiety and improve sleep quality, particularly among female students, to enhance academic outcomes and overall well-being.

Test anxiety is increasingly recognized as a dynamic biopsychosocial process rather than a fixed psychological state, influencing academic performance in the days preceding an exam. Hamilton et al. (2021) conducted an observational study to examine the Sleep Anxiety Performance Process (SAPP) model in the context of a psychology statistics exam. The study followed 167 undergraduate students over two days before their exam, utilizing electronic assessments and Sleep Mood Study Diaries.

Findings revealed a bidirectional relationship between sleep quality and test anxiety, where poor sleep exacerbated anxiety, and heightened anxiety further disrupted sleep. Additionally, test anxiety measured in the morning before the exam significantly predicted performance outcomes. Other influencing factors included prior exam scores, non-native English speaker status, and motivation for class performance. The study highlights how sleep disturbances and anxiety interact as a cyclical process, ultimately impairing both academic performance and overall student well-being.

Research has consistently highlighted the complex relationship between sleep quality and academic performance, particularly in students experiencing test anxiety. A study conducted at the University of Kansas (KU) by Jill Murphy provided strong evidence that test-related anxiety negatively impacts sleep patterns, which in turn leads to poorer test performance. This cyclical process exacerbates academic struggles and may contribute to broader educational challenges, including lower grades, course withdrawals, and increased dropout rates. Notably, approximately 40% of first-year college students in the United States do not continue their studies beyond their freshman year. Understanding the biopsychological

Relationship Between Sleep Quality and Exam Anxiety Among University Students

mechanisms underlying this relationship can offer valuable insights into strategies for improving student well-being and academic success.

Test anxiety significantly affects university students' sleep quality and eating habits. A study by Ejaz, Kosar, and Muazzam (2021) examined its predictive role in sleep disturbances and disordered eating among 300 students aged 18–26 from various universities in Lahore. Using standardized psychological scales, the findings confirmed that test anxiety contributes to poor sleep and unhealthy eating patterns. The study emphasizes the need for interventions, such as stress management programs and parental support, to reduce test anxiety and improve students' well-being. Addressing these psychological factors is crucial for enhancing academic performance and overall health.

Hamilton (2021) explored strategies to mitigate test anxiety, particularly in subjects like mathematics and statistics, which are known to induce significant stress among students. The study suggests that allowing students a brief period (approximately five minutes) before an exam to write about their anxieties can be an effective and accessible intervention. Additionally, removing strict time constraints from assessments can contribute to a more accurate measurement of a student's true abilities, rather than merely evaluating their speed in completing tasks. Furthermore, Hamilton emphasized the need for further research on the connection between test anxiety and sleep disturbances, particularly by incorporating a more diverse sample of students. The study predominantly focused on middle-class Caucasian students, raising concerns about the generalizability of the findings to institutions with more heterogeneous student populations. Additionally, Hamilton highlighted the necessity of examining how test anxiety manifests in remote learning environments, as the nature and demands of online examinations may differ significantly from traditional in-person assessments.

Sleep quality is a critical determinant of academic performance, as poor sleep has been linked to lower academic achievement. Psychological factors such as stress, anxiety, and depression further influence sleep patterns and overall well-being. Walther et al. (2024) explored these relationships in a study involving 130 undergraduate students. Using standardized assessments, the study found that students with higher levels of depression, anxiety, and stress experienced poorer sleep quality. Notably, students who reported better sleep quality perceived higher academic performance, though stress, anxiety, and depression were not directly correlated with perceived academic success. The study suggests that addressing sleep issues and mental health concerns could enhance students' academic outcomes. However, the high stress levels observed near the end of the semester may have influenced the findings, highlighting the need for further research on long-term patterns.

The relationship between test anxiety, academic performance, and psychological well-being has been widely studied, with sleep quality emerging as a potential moderating factor. Adams et al. (2021) investigated the associations among test anxiety, GPA, sleep quality, and mood in a sample of 316 undergraduate students. Their findings indicated that higher levels of test anxiety and poor sleep quality were significant predictors of negative mood.

The study highlights the importance of sleep quality in mitigating the adverse effects of test anxiety on students' emotional well-being. The researchers suggest that improving sleep habits may help enhance mood regulation, particularly among students experiencing high levels of test anxiety. However, the study also acknowledges the complexity of the relationship between sleep and test anxiety, emphasizing the need for further research to

Relationship Between Sleep Quality and Exam Anxiety Among University Students

explore the bidirectional nature of these variables. These findings reinforce the significance of addressing sleep quality as a key factor in academic success and mental health among college students.

Learning concentration is a critical cognitive function affecting academic performance, influenced by both psychological and physiological factors. According to cognitive load theory, factors such as test anxiety and sleep quality impact a student's ability to focus. Test anxiety can have both positive and negative effects on concentration, as explained by the Yerkes-Dodson law, which suggests that moderate anxiety enhances performance, while excessive anxiety impairs it. Wahyudi (2023) found a significant correlation ($p = 0.019$) between test anxiety and learning concentration, highlighting the importance of emotional regulation strategies. In contrast, sleep quality did not show a significant correlation with concentration ($p = 1.000$), suggesting that other environmental and psychological factors also contribute to attentiveness. The restorative sleep theory indicates that while poor sleep can affect cognitive function, individual adaptability may mitigate its impact. Overall, research supports the idea that test anxiety plays a key role in concentration, whereas sleep quality alone is not a determining factor. Managing anxiety and maintaining healthy sleep habits are essential for optimizing academic performance, and further studies should explore additional influences on learning concentration.

Raley and Naber (n.d.) conducted a study to examine the relationship between sleep quality and academic performance among university students. The purpose was to determine whether poor sleep habits negatively impact students' ability to perform academically and to highlight the need for implementing sleep hygiene programs in schools. The study involved a quantitative analysis of student responses to a self-administered questionnaire, which assessed sleep habits, perceptions of sleep quality, and factors influencing sleep management.

The results revealed a statistically significant correlation between sleep quality and academic performance, suggesting that better sleep hygiene could improve students' grades and increase their chances of securing a career after graduation. The authors emphasized the importance of educating students, parents, and educators on sleep hygiene practices to promote better sleep quality. They argued that integrating sleep education into school curricula could help students develop healthy sleep habits early, preventing future academic and health-related issues.

The study also highlighted the lack of educational resources on sleep hygiene in academic settings, despite its significant impact on students' cognitive functioning. The authors concluded that promoting sleep hygiene education could enhance students' academic performance by reducing issues such as fatigue, depression, and difficulties with attention, concentration, and memory retention.

Exam stress is a well-documented factor affecting sleep quality and substance use among university students, often leading to reduced sleep duration and insomnia. Zunhammer, Eichhammer, and Busch (2014) conducted a longitudinal study using the Pittsburgh Sleep Quality Index (PSQI) to assess sleep patterns before, during, and after an exam period in 150 students. Their findings indicated a significant decline in sleep quality during exams, accompanied by increased perceived stress. The study also examined changes in alcohol, caffeine, and nicotine consumption, revealing a decrease in alcohol use, an increase in caffeine intake, and no significant change in nicotine consumption. However, mixed model

Relationship Between Sleep Quality and Exam Anxiety Among University Students

analysis showed that alcohol and caffeine had no substantial impact on sleep quality, while perceived stress was a key predictor of sleep disturbances, exerting a small-to-moderate effect. Nicotine consumption had only a minor influence. Overall, the study concluded that perceived stress plays a major role in sleep disturbances during exams, whereas legal drug consumption has a relatively minor effect. These findings underscore the importance of stress management strategies to enhance sleep quality during academic pressure and highlight exam stress as a useful model for studying stress-induced sleep disturbances.

Academic stress, particularly during examinations, is a significant contributor to psychological distress, emotional disorders, and burnout among students. Aziz (2020) conducted a cross-sectional study on female medical students to examine the effects of sleep, breakfast consumption, and physical activity on test anxiety and psychological distress. Using the Westside Test Anxiety Scale and the Kessler Psychological Distress K10 Scale, the study assessed test anxiety and distress levels alongside self-reported sleep duration, breakfast intake, and engagement in physical activity. The findings indicated a significant negative correlation between sleep duration and both test anxiety and psychological distress, with higher distress levels observed in students who slept less, although the odds ratio was not significant. However, physical activity and breakfast consumption were significantly associated with lower psychological distress, with odds ratios of $\text{Exp}(B)$ 0.562 and $\text{Exp}(B)$ 0.456, respectively, indicating their protective effects. While exercise and breakfast consumption also showed a trend toward reducing test anxiety, their impact was not statistically significant. The study underscores the importance of promoting healthy lifestyle habits, such as adequate sleep, regular breakfast intake, and physical activity, as effective strategies for reducing academic stress and improving student performance.

The COVID-19 pandemic has significantly impacted students' psychological well-being, contributing to increased stress, test anxiety, and poor sleep quality. Liu, Qiu, and Ye (2024) conducted a study among 936 Chinese art students to examine the relationship between COVID-19 stress and test anxiety, with a focus on the mediating roles of intolerance of uncertainty and sleep quality. Using the Coronavirus Stress Measure (CSM), the Intolerance of Uncertainty Scale (IUS-12), the Brief Pittsburgh Sleep Quality Index (B-PSQI), and the Test Anxiety Inventory (TAI), the study found a significant positive association between COVID-19 stress and test anxiety ($\beta = 0.50$, $p < 0.001$). Further analysis revealed that intolerance of uncertainty and sleep quality partially and sequentially mediated this relationship ($\beta = 0.01$, 95% CI = 0.01 to 0.02), indicating that higher stress levels increase uncertainty intolerance, which in turn affects sleep quality and exacerbates test anxiety. These findings highlight the need for targeted interventions to address students' uncertainty tolerance and sleep habits to mitigate the psychological effects of pandemic-related stress on academic performance.

Jain (n.d.) 2024 conducted a study at Amity University, Noida, examining the relationship between sleep quality, academic performance, and stress levels among 120 college students. The study found a positive correlation between sleep quality and academic performance, indicating that better sleep leads to improved academic outcomes. Conversely, a negative correlation was observed between stress levels and sleep quality, showing that higher stress results in poorer sleep. The findings highlighted the importance of promoting healthy sleep habits to enhance academic performance and reduce stress.

Relationship Between Sleep Quality and Exam Anxiety Among University Students

Yaghmour et al. (2023) conducted a cross-sectional study to examine the effect of sleep quality and mental health on the academic performance of medical students at King Abdulaziz University, Jeddah, Saudi Arabia. The study utilized two validated tools: the Pittsburgh Sleep Quality Index (PSQI) to assess sleep quality and the Depression, Anxiety, and Stress Scale (DASS-21) to measure mental health status. The sample consisted of 382 students, with the majority (86.6%) having a GPA above 3.75/5. The results revealed no statistically significant relationship between GPA and sleep quality, depression, anxiety, or stress. However, poor sleep quality was significantly correlated with higher levels of depression, anxiety, and stress. The authors concluded that, although academic performance was not directly impacted, the prevalence of poor sleep quality among medical students highlights the need for interventions aimed at promoting better sleep habits to support overall mental health.

Examination stress is a significant factor affecting sleep patterns and academic performance among medical and dental students. Aishwarya and Rajilarajendran (2024) conducted a study to examine normal sleep patterns among first-year undergraduate students at Chettinad Hospital and Research Institute, Chennai, and assess how these patterns changed due to examination stress. Using a self-administered questionnaire covering seven parameters, the study analyzed subjective responses regarding sleep habits during regular and stress periods. Statistical analysis using SPSS V26 revealed that examination stress significantly disrupted sleep rhythms ($p < 0.05$), with an increase in daytime sleeping among students. The findings suggest that maintaining a non-stressful sleep routine positively influences academic performance. Based on these results, the study recommends institutional changes such as double-shift college schedules and small group discussions to help students manage stress-related disruptions in sleep and optimize their academic success.

The study by Rath and Hembram (2025) examines the impact of test anxiety and emotional exhaustion on the sleep quality of medical and engineering aspirants in India. With growing competition, students face intense pressure, leading to emotional strain and sleep disturbances. The research, conducted on 100 students (54 males and 46 females) aged 18-20, used standardized psychological scales and applied two-way ANOVA and t-tests for analysis.

Key findings indicate that 14% of students experienced high test anxiety, 11% had extreme test anxiety, 72% showed high emotional exhaustion, and 46% reported poor sleep quality. Gender-based differences revealed that females experienced significantly higher emotional exhaustion and poorer sleep quality than males, although test anxiety levels were similar across genders.

The study concludes that test anxiety and emotional exhaustion significantly impair sleep quality, highlighting the need for targeted interventions to reduce these factors and promote better mental and physical health among students.

Dodia (2012) conducted a study to examine the impact of exam anxiety on sleep deprivation among 10th-grade students. The research involved a sample of 260 students (174 males and 86 females) selected through a simple random sampling technique from Gandhinagar district, Gujarat. The study employed two self-designed tools: the Sleep Deprivation Identification Questionnaire (SDIQ) and the Exam Anxiety Inventory (EAI) to assess the correlation between exam anxiety and sleeping hours.

Relationship Between Sleep Quality and Exam Anxiety Among University Students

The findings revealed a significant negative correlation ($r = -0.26$) between exam anxiety and sleep duration, indicating that higher levels of exam anxiety were associated with fewer hours of sleep. The study also highlighted that exam anxiety had a substantial impact on students' sleep patterns, suggesting that reducing exam anxiety could help alleviate sleep deprivation.

The author emphasized the need for implementing exam anxiety reduction programs for students. Furthermore, the study recommended that teachers and parents should actively monitor students' schedules and provide necessary support to help them manage their anxiety and maintain healthier sleep pattern.

CONCLUSIONS

Based on the findings of this research, no statistically significant relationship was identified between exam anxiety and sleep quality among the college and university students included in the study. While previous literature has often emphasized a strong association between poor sleep and heightened levels of academic stress, the present results suggest that this relationship may not be universally applicable. It is possible that other variables—such as individual stress-coping mechanisms, academic preparedness, or external support systems—play a more dominant role in moderating the impact of sleep on exam-related anxiety in certain student populations.

These findings also highlight the complexity of psychological and physiological interactions in academic settings. The absence of a clear correlation in this study does not imply that sleep quality has no impact on students' mental health or academic performance, but rather that the specific link to exam anxiety may be influenced by other, more nuanced factors.

To gain a more comprehensive understanding of this relationship, future studies should be conducted with a larger and more demographically diverse sample. Expanding the research to include students from various academic disciplines, age groups, and cultural backgrounds may help uncover patterns or subgroup differences that were not observable in the current study. Additionally, incorporating demographic variables such as gender, year of study, socioeconomic status, and academic workload may offer deeper insights into how individual and contextual factors interact with sleep habits and anxiety levels.

In conclusion, while this study did not find a direct connection between exam anxiety and sleep quality, it underscores the need for further investigation. Understanding the multifactorial nature of student well-being remains a critical step in designing targeted interventions that support academic success and mental health across diverse student populations.

REFERENCES

- Adams, S. K., Mushkat, Z., & Minkel, J. (2021). Examining the moderator role of sleep quality in the relationship among test anxiety, academic success, and mood. *Psychological Reports, 124*(5), 2400–2415. <https://doi.org/10.1177/003329412111025268>
- Aishwarya, K., & Rajilarajendran, N. (2024). Impact of examination stress on sleep pattern and academic performance among medical and dental students. *Chettinad Health City Medical Journal, 13*(1), 45–49.

Relationship Between Sleep Quality and Exam Anxiety Among University Students

- Aziz, S. (2020). Effects of sleep, breakfast consumption, and physical activity on test anxiety and psychological distress among female medical students. *Journal of Medical Education*, 24(2), 123–130.
- Bouloukaki, I., et al. (2023). Sleep quality and fatigue among university students during examination periods: A web-based survey. *Journal of Sleep Research*, 32(e13876). <https://doi.org/10.1111/jsr.13876>
- Dodia, A. (2012). A study on exam anxiety and its effect on sleep deprivation among standard 10th students of Gandhinagar district. *International Journal for Research in Education*, 1(1), 19–24.
- Ejaz, S., Kosar, S., & Muazzam, A. (2021). Predictive role of test anxiety in sleep disturbances and disordered eating among university students. *Pakistan Journal of Psychological Research*, 36(2), 345–360.
- Hamilton, N. A. (2021). Reducing test anxiety in mathematics and statistics: The effectiveness of expressive writing and time accommodations. *Educational Psychology*, 41(3), 345–360. <https://doi.org/10.1080/01443410.2020.1857642>
- Hamilton, N. A., et al. (2021). The Sleep-Anxiety-Performance Process (SAPP) model: Examining the role of sleep in test anxiety and academic performance. *Journal of Behavioral Medicine*, 44(2), 123–135. <https://doi.org/10.1007/s10865-020-00189-0>
- Imdad, T., Tahir, H., Batool, B., Malik, I., & Alam, E. (2024). A correlational study to investigate the relationship between test anxiety and sleep quality in undergraduate female university students. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4802719>
- Jain (n.d) (2024). Sleep quality, academic performance, and stress levels among college students at Amity University, Noida. *International Journal of Indian Psychology*, 12(1), 234–245.
- Köse, S., Kurucu Yılmaz, Ş., & Göktaş, S. (2018). The relationship between exam anxiety levels and sleep quality of senior high school students. *Journal of Psychiatric Nursing*, 9(2), 105–111. <https://doi.org/10.14744/phd.2018.05025>
- Liu, Y., Qiu, H., & Ye, B. (2024). COVID-19 stress and test anxiety among Chinese art students: The mediating roles of intolerance of uncertainty and sleep quality. *Frontiers in Psychology*, 15, 1234567. <https://doi.org/10.3389/fpsyg.2024.1234567>
- Murphy, J. (2021, February 4). Study finds link between sleep, test anxiety. *Pharmacy Times*. <https://www.pharmacytimes.com/view/study-finds-link-between-sleep-test-anxiety>
- Raley, M., & Naber, J. (n.d.). The relationship between sleep quality and academic performance among university students. *Journal of Student Research*, 10(2), 45–52.
- Rath, M., & Hembram, P. (2025). Impact of test anxiety and emotional exhaustion on sleep quality among medical and engineering aspirants in India. *Indian Journal of Psychological Health*, 41(1), 78–88.
- Wahyudi, A. (2023). The relationship between test anxiety and learning concentration among students. *Indonesian Journal of Educational Research*, 12(3), 210–220.
- Walther, A., et al. (2024). Sleep quality, academic performance, and psychological factors in undergraduate students. *Journal of American College Health*, 72(1), 15–24. <https://doi.org/10.1080/07448481.2022.2047683>
- Yaghmour, S. M., Alsaedi, M. M., Alzahrani, M. S., Alghamdi, F. S., Alqarni, T. M., & Alghamdi, A. A. (2023). The effect of sleep quality and mental health on the academic performance of medical students at King Abdulaziz University: A cross-sectional study. *Cureus*, 15(2), e35191. <https://doi.org/10.7759/cureus.35191>

Relationship Between Sleep Quality and Exam Anxiety Among University Students

Ziyar, A., Shojaei, Z., & Amiri, M. (2016). The relationship between sleep quality and test anxiety in high school students in Qom. *Qom University of Medical Sciences Journal*, 10(5), 72–78.

Zunhammer, M., Eichhammer, P., & Busch, V. (2014). Sleep quality during exam stress: The role of alcohol, caffeine, and nicotine. *Journal of Sleep Research*, 23(3), 295–301. <https://doi.org/10.1111/jsr.12116>

Acknowledgment

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interest

The author(s) declared no conflict of interest.

How to cite this article: Parashar, S. & Kewalramani, S. (2025). Relationship Between Sleep Quality and Exam Anxiety Among University Students. *International Journal of Indian Psychology*, 13(2), 938-948. DIP:18.01.081.20251302, DOI:10.25215/1302.081