

Investigating the Relationship between Procrastination and Sleep Quality among Hostellers: A Correlational Study

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ABSTRACT

Procrastination and sleep quality are two factors that significantly affect students' mental health, academic performance, and daily functioning (Kroese et al., 2014; Andrade and Shukla, 2023). Procrastination is the voluntary delay of important tasks despite expecting negative consequences, while sleep quality reflects how well a person sleeps, including duration, restfulness, and overall satisfaction. Sleep is essential for cognitive, emotional, and physical well-being, while procrastination is a behavioral tendency that can disturb healthy routines and lead to stress. Hostel students often face unique environmental, social, and lifestyle pressures that can increase these effects. Current study aims to examine the relationship between procrastination and sleep quality among hostellers, focusing on how higher procrastination levels may impact sleep patterns. A correlational research design was used to collect data from 102 hostellers aged 18 to 22 years through Google Forms. The Procrastination Assessment Scale (PASS) and the Pittsburgh Sleep Quality Index (PSQI) were administered to measure procrastination levels and sleep quality, respectively. Spearman's rho correlation was used to analyse the data. The results revealed a significant positive correlation ($\rho = .338, p < .01$) between procrastination and sleep quality, indicating that students with higher procrastination levels tend to experience poorer sleep quality. The findings highlight the need for targeted interventions to address procrastination and improve sleep hygiene among hostel students. Strategies such as time management training, digital discipline programs, and psychological support can help enhance both sleep quality and academic performance.

Keywords: Procrastination, Sleep Quality, Hostel Students, Correlation

In today's competitive academic world, students residing in hostels face unique challenges that can significantly affect their well-being and academic success (Damle & Colleagues, 2015; Fauzi et al., 2021; Deepanshu & Mirkhamidova, 2023). Two interlinked variables that often emerge to be studied with regard to the life of hostellers are procrastination and sleep quality (Kroese et al., 2014).

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Procrastination

Procrastination, which is defined as the intentional delay of a task despite anticipating negative consequences (Steel, 2007). Procrastination is not merely poor time management but is often considered a failure of self-regulation, used to temporarily avoid uncomfortable emotions such as performance anxiety or fear of failure (Tice & Baumeister, 1997).

The concept of Bedtime Procrastination (BTP), a recently recognized extension, explains how individuals choose short-term pleasures over the long-term benefit of sleep (Kroese et al., 2014). The Temporal Motivation Theory further explains the mechanisms of procrastination by suggesting that motivation is a function of expectancy, value, impulsiveness, and delay (Steel, 2007). According to this theory, tasks with distant deadlines or low perceived value are more likely to be postponed, particularly by individuals with higher impulsiveness. Recent studies also show that procrastination increased among students during the COVID-19 pandemic due to disrupted schedules and higher screen time (Yang, Wang, & Zhao, 2021). In India, Andrade and Shukla (2023) reported that nearly 20% of university students experienced high levels of bedtime procrastination, highlighting the relevance of this construct in the student population.

Sleep Quality

Sleep quality refers to how well an individual sleeps, including factors such as sleep duration, time taken to fall asleep, and disturbances during sleep (Pilcher & Walters, 1997). The Pittsburgh Sleep Quality Index (PSQI) is widely used to measure sleep quality (Buysse et al., 1989). Poor sleep has wide-ranging effects on both physical and psychological health, including memory issues, poor concentration, low academic performance, and mental health problems such as anxiety and depression (Medic, Wille, & Hemels, 2017).

Sleep quality is explained by models such as the two-process model, which suggests that it is regulated by: (1) the duration of prior wakefulness, and (2) irregular sleep times or late-night activities that can disrupt the natural rhythm (Medic, Wille, & Hemels, 2017). The cognitive model also highlights that worrying, late-night thinking, or emotional arousal before bedtime can make it harder to fall asleep and reduce sleep quality.

Studies in India also report high prevalence of poor sleep among students. For example, a cross-sectional study on clinical postgraduate students in Kerala found that 62.7% of participants experienced poor sleep quality, with strong associations noted with stress, academic load, inactivity, and family or social issues (Gopika et al. 2025).

Relationship between Procrastination and Sleep Quality

Research over the past decade has highlighted a strong interconnection between procrastination and sleep quality. Procrastination, particularly bedtime procrastination (BTP), refers to delaying the act of going to bed without any external reason, often leading to sleep deprivation and poor rest (Kroese et al., 2014). Individuals who procrastinate at bedtime frequently engage in passive or stimulating activities such as scrolling through social media, watching videos, or chatting online, which delay sleep onset and reduce total sleep duration.

Recent daily-measure studies using objective sleep tracking have provided strong evidence for this connection. For instance, “Bedtime procrastination and chronotype differentially predict adolescent sleep on school nights and non-school nights” (Sleep Health, December

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2022) used actigraphy to show that higher BTP among adolescents predicted later lights-out times and shorter total sleep duration on school nights. These findings confirm that bedtime procrastination results in tangible sleep loss and disturbed sleep patterns.

In the Indian context, research also supports this association. Studies by Andrade and Shukla (2023) and Singh et al. (2022) found a strong relationship between procrastination and sleep quality, revealing that higher procrastination scores were linked with poorer sleep outcomes, such as insomnia symptoms and irregular sleep schedules.

Rational and significance of the study

Despite these findings, most Indian studies have been conducted on general student populations rather than hostelers, who often experience additional lifestyle disturbance, peer influence, and irregular routines. Therefore, a specific focus on hostel students is necessary to understand how procrastination behaviors directly affect sleep quality in this unique environment. Western studies show strong links between procrastination and poor sleep (Li & Colleagues, 2020; Cui & Colleagues, 2021; Alshammari et al., 2023). However, cultural differences in lifestyle, technology use, and hostel living in India may change the intensity of this relationship. There are less studies focused specifically on hostel students in India. Therefore, more focused research on hostel populations is needed. Therefore, exploring this relationship can provide useful insights for student well-being among hostelers in Indian context. Therefore, current study attempts to fill that gap by directly examining the link between procrastination and sleep quality among hostelers in especially in the Indian Context.

MATERIALS AND METHODS

The current study utilizes correlational design in order to examine the relationship between procrastination and sleep quality without manipulating variables. Data was collected at a single point in time via standardized self-report measures through Google Forms.

Objectives

1. To assess the level of procrastination among hostelers.
2. To assess the level of sleep quality among hostelers.
3. To examine the relationship between procrastination and sleep quality among hostelers.

Hypotheses

High levels of procrastination will lead to high disturbance in sleep quality among hostelers.

Participants

The sample consisted of 102 hostelers (51 males, 51 females). Participants were aged 18 to 22. Non-probability convenient sampling was used for selection, based on accessibility and willingness to participate.

Variables

The present study focused on two key variables: procrastination and sleep quality. Procrastination refers to the tendency to delay or postpone tasks despite knowing that it may lead to negative consequences (Steel, 2007). In this study, procrastination was specifically measured using the Procrastination Assessment Scale for Students (PASS), which assesses both academic and general procrastination behaviors. Sleep quality reflects the overall

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effectiveness and restfulness of sleep, including factors such as duration, latency, disturbances, and daytime dysfunction (Pilcher & Walters, 1997). It was measured using the Pittsburgh Sleep Quality Index (PSQI), a widely used and validated instrument in sleep research (Buysse et al., 1989).

Materials

- 1. Procrastination Assessment Scale-Students (PASS):** Developed by Clarry Lay (1986), this tool measures general tendencies toward delaying tasks. Participants rate their agreement on a 5-point Likert scale. Part 1 of the scale assesses six different areas with 3 items each. Part 2 of the scale assesses procrastination again on a 5-point Likert scale (Mortazavi, Mortazavi, & Khosrorad, 2015). The test shows adequate psychometric evidence of Cronbach's Alpha ranging from .65 to .74 with test-retest reliability. Higher total scores on both parts of the scale indicate greater levels of procrastination (Mortazavi, Mortazavi, & Khosrorad, 2015).
- 2. Pittsburgh Sleep Quality Index (PSQI):** Developed by Buysse, Reynolds, Monk, Berman, and Kupfer (1989), this is a self-rated questionnaire assessing sleep quality and disturbances. It is a self-rated questionnaire which assesses sleep quality and disturbances over a 1-month time interval. A global PSQI score over 5 indicates poor sleep relative to clinical and laboratory measures, and higher scores indicate poorer sleep quality. The 19 self-rated items are combined to form seven "component" scores, each of which has a range of 0-3 points. Total scores were calculated for the Procrastination Assessment Scale (PASS) and the Pittsburgh Sleep Quality Index (PSQI). For PASS, the individual item scores were summed to obtain a total score, with higher scores indicating greater procrastination tendencies. For the PSQI, the global score was derived by summing the seven component scores that assess domains such as sleep duration, latency, efficiency, disturbances, daytime dysfunction, and overall sleep quality. Higher PSQI scores indicate poorer sleep quality, while lower scores reflect good sleep.

Procedure for data collection

Contact with participants was initiated through social media and through hostel visits. The scales, compiled into a Google Form, included an informed consent statement at the beginning. Participation was voluntary and anonymous to maintain the ethical aspects.

RESULTS AND DISCUSSION

The aim of the study is to investigate the relationship between procrastination and sleep quality among hostelers. It follows a correlation research design. Was conducted on a sample of 102 hostel students (51 male and 51 female) in the age group of 18 to 22 years. Participants were undergraduate students residing in hostels across Maharashtra and Karnataka. A sample size of 102 is considered appropriate for correlational studies in behavioral research, providing adequate statistical power to detect medium effect sizes. The hostelers are important section of society. They have to leave their comfort zone, face many problems like irregular routine, bad mess food, etc. thus, it effects their physical health and mental health too. The contact with the participants was made through hostel visits and social media platforms. The questionnaires were compiled into a Google Form along with consent. Participation was voluntary and anonymous. The study examined two key variables: procrastination and sleep quality. Descriptive statistics for the variables are presented below:

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Variable	Mean	Median	Std. Deviation	Minimum	Maximum
Procrastination	50.79	52.00	14.47	18.00	90.00
Sleep Quality	15.80	14.50	11.59	0.000	51.00

Descriptive statistics indicated that the mean procrastination score was 50.79 (SD = 14.47) with a median of 52.00, suggesting moderate variability in procrastination levels. The mean PSQI score was 15.80 (SD = 11.59) with a median of 14.50, indicating high variability in sleep quality among participants. The minimum and maximum PSQI scores ranged from 0.00 to 21.00, which suggests that while some hostelers experienced good sleep, a considerable number faced significant sleep difficulties. Since higher PSQI scores indicate poorer sleep quality, these findings reflect a prevalent pattern of sleep-related problems in the sample. Suggests many hostelers experience sleep difficulties.

Spearman's Correlations			
Variable		Procrastination	Sleep disturbance
1. Procrastination	Spearman's rho	—	
	p-value		
2. Sleep Disturbance	Spearman's rho	0.338	—
	p-value	< .001	

A Spearman's rho correlation was calculated to examine the relationship between procrastination and sleep quality among hostelers. This non-parametric test was selected because the data did not meet the assumption of normality. The results showed a positive and statistically significant correlation between procrastination and sleep quality, with a correlation coefficient (ρ) of 0.338 and a p-value of $<.001$. This indicates that higher levels of procrastination are significantly associated with poorer sleep quality among hostel students. The strength of this correlation suggests a moderate positive relationship, it means as procrastination scores increase, sleep quality tends to worsen. These findings support the study's hypothesis. The present study findings align with existing literature on both procrastination and sleep quality. Procrastination, defined as delaying tasks despite potential negative consequences, has been widely studied, with bedtime procrastination (BTP) emerging as a significant extension of this concept (Steel, 2007; Kroese et al., 2014). Studies have shown that higher levels of procrastination are associated with poorer sleep outcomes, including shorter sleep duration and lower sleep quality (Hill et al., 2022; Yang, Wang & Zhao, 2021; Andrade & Shukla, 2023). The results of the present study similarly indicate a positive relationship between procrastination and sleep disturbance among hostel students, confirming the trends reported in both global and Indian research. These finding highlight the need for interventions that simultaneously address procrastination behaviors and sleep quality.

Implications

The present study addressed a significant knowledge gap by examining the relationship between procrastination and sleep quality among Indian hostelers within the age range of 18 to 22 years. The findings ($\rho = 0.338$, $p < .001$) indicates that higher levels of procrastination are associated with high sleep disturbance i.e. poorer sleep outcomes. A reduction in procrastination tendencies is likely to enhance sleep quality. These results suggest that reducing procrastination can lead to healthier sleep quality, which may enhance students' overall wellbeing, academic performance, and daily functioning. These findings highlight

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the need for interventions that simultaneously address procrastination behaviors and sleep quality. The development of integrated intervention modules that combine procrastination management with sleep practices is necessary. Structured time-management workshops, digital discipline programs, and awareness sessions on sleep hygiene should be organized in colleges as could be effective in improving both variables. Additionally, College can have a separate counselling cell and cognitive-behavioral strategies, self-regulation training, and stress management techniques should be introduced to students. This may further support students in breaking the cycle of procrastination and poor sleep. Such efforts can enhance not only sleep quality and academic performance but also the overall psychological well-being of hostel students.

Limitations

Although this study provides useful insights, there are some limitations that should be considered. Participants were selected from less than 20 hostels, which may introduce selection bias. The sample was restricted to hostels in Maharashtra and Karnataka regions, reducing the applicability of results to broader populations. The study used self-report questionnaires, such as PSQI. Which may be affected by participants' desire to give socially acceptable answers or by their own perception of themselves. These limitations suggest what we can do to improve the results of future research on Investigating the relationship between procrastination and sleep quality.

CONCLUSION

From this research, it is concluded that procrastination has a significant and adverse association with sleep quality among hostellers. Higher levels of procrastination are linked with more disturbed sleep quality. The findings indicate that procrastination contributes to delayed sleep onset, fragmented sleep, and overall sleep disturbances.

Future recommendations

Based on this study, there are several ways further research can be improved. Those ways include suggestions like researchers should include a larger geographical region. Longitudinal studies that follow participants' progress over longer time would help to understand the relationship between procrastination and sleep quality among hostellers. Further studies may look at other psychosocial factors such as financial constraints that may influence both the variables. The researchers could try experimental studies to reduce procrastination and enhance sleep quality.

REFERENCES

- Ackerman, D. S., & Gross, B. L. (2005). My instructor made me do it: Task characteristics of procrastination. *Journal of Marketing Education*, 27(1), 5–15.
- Aitken, M. (1982). A personality profile of the college student procrastinator (Unpublished doctoral dissertation). University of Pittsburgh.
- Buysse, D. J., Reynolds, C. F., Monk, T. H., Berman, S. R., & Kupfer, D. J. (1989). The Pittsburgh Sleep Quality Index: A new instrument for psychiatric practice and research. *Psychiatry Research*, 28(2), 193–213.
- Damle, P., Jog, Y., Vora, P., & Das, S. (2015). Adjustment to hostel-health issues encountered by a new boarder. *International Journal of Research in Social Sciences*, 5(2), 560.
- Deepanshu, T., & Mirkhamidova, S. M. (2023). Problems and challenges faced by hostel students.

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- Fauzi, A., & Triaswati, R. (2021). The effect of intradialytic stretching training on restless legs syndrome and sleep quality in hemodialysis patients. *Korean Journal of Adult Nursing*, 33(1), 37-43.
- Grossman, J. C. J. D. (2019). Sleep quality, duration, and consistency are associated with better academic performance in college students. *NPJ Science of Learning*, 4(1), 1–5. <https://doi.org/10.1038/s41539-019-0050-0>
- Kroese, F. M., De Ridder, D. T., Evers, C., & Adriaanse, M. A. (2014). Bedtime procrastination: introducing a new area of procrastination. *Frontiers in psychology*, 5, 89333.
- Pilcher, J. J., & Walters, A. S. (1997). How sleep deprivation affects psychological variables related to college students' cognitive performance and mental health. *Journal of American College Health*, 46(3), 121–126.
- Shukla, A., & Andrade, C. (2023). Prevalence of bedtime procrastination in university students and reexamination of the Bedtime Procrastination Scale. *The Primary Care Companion for CNS Disorders*, 25(1), 45936.
- Steel, P. (2007). The nature of procrastination: A meta-analytic and theoretical review of quintessential self-regulatory failure. *Psychological Bulletin*, 133(1), 65–94. <https://doi.org/10.1037/0033-2909.133.1.65>
- Tice, D. M., & Baumeister, R. F. (1997). Longitudinal study of procrastination, performance, stress, and health: The costs and benefits of dawdling. *Psychological Science*, 8(6), 454–458.

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Conflict of Interest

The author(s) declared no conflict of interest.

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