

Factors Contributing to Sleep Deprivation and Stress Among Second-Year Nursing Students at Perpetual Help College of Manila

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Abstract

This study examined the factors contributing to sleep deprivation and stress among second-year nursing students at Perpetual Help College of Manila. A quantitative descriptive research design was used, and data were collected from 166 respondents through a validated survey questionnaire. The results showed that irregular sleep schedules, academic workload, and personal lifestyle habits—such as excessive social media use and late-night activities—were the main causes of sleep deprivation. Academic pressure, including fear of failure, heavy workload, and tight deadlines, was identified as the primary source of stress. Personal and external factors such as financial concerns, family-related issues, and environmental distractions also contributed to increased stress levels.

Overall, the findings indicate that both internal factors (emotions, coping mechanisms, and study–rest imbalance) and external factors (schedule demands, support systems, and environment) significantly affect students' sleep and stress. The study concludes that second-year nursing students experience multiple challenges that affect their well-being. It highlights the need for institutional support, time management training, mental health programs, and sleep hygiene education to help improve students' health and academic performance.

Keywords: *sleep deprivation, stress, nursing students, academic workload, sleep quality, academic pressure*



INTRODUCTION

Sleep is an essential biological process necessary for maintaining physical, mental, and emotional well-being. It plays an important role in memory, concentration, emotional stability, and overall health. When individuals do not get enough sleep, it can lead to fatigue, poor academic performance, and increased stress levels. For students, especially those in demanding programs like nursing, sleep is very important due to the heavy academic workload and clinical responsibilities.

Studies have shown that many students experience poor sleep quality due to academic pressure, lifestyle habits, and stress. Nursing students, in particular, face challenges such as long study hours, clinical duties, and emotional stress, which can negatively affect their sleep and overall health. Sleep deprivation can lead to poor concentration, reduced decision-making skills, and increased risk of burnout.

Stress is another major factor affecting students. It can come from academic demands, fear of failure, financial problems, and personal responsibilities. Stress and sleep deprivation are closely related, as stress can make it difficult to sleep, while lack of sleep can increase stress levels. This creates a cycle that affects students' well-being and academic performance.

Although several studies have been conducted internationally, there is limited research focusing on nursing students in the local setting. Therefore, this study aims to identify the factors contributing to sleep deprivation and stress among second-year nursing students at Perpetual Help College of Manila. The findings of this study may help in developing programs and strategies to improve students' well-being and academic performance.

METHODS

This study utilized a descriptive quantitative research design to determine the factors contributing to sleep deprivation and stress among second-year nursing students. This approach enabled the researchers to collect numerical data and describe the current condition of the respondents without manipulating any variables.

The respondents of the study consisted of 166 second-year nursing students enrolled at Perpetual Help College of Manila during the Academic Year 2024–2025. Purposive sampling was used to select participants who were already exposed to academic and clinical responsibilities.

A structured questionnaire was used to gather the necessary data. The instrument included sections on demographic profile, sleep habits, stress levels, and contributing factors to sleep deprivation and stress. A Likert scale was utilized to measure the respondents' level of agreement. The questionnaire was validated by experts to ensure clarity and reliability.

Permission to conduct the study was obtained from the school administration prior to data collection. The researchers explained the purpose of the study to the respondents and assured

them that all responses would remain confidential. The questionnaires were then distributed, collected, and checked for completeness before the data analysis.

The collected data were organized, tallied, and analyzed using descriptive statistics such as frequency, percentage, and mean. These statistical tools were used to identify the common factors affecting sleep deprivation and stress among the respondents

RESULTS AND DISCUSSION

This section presents the findings of the study in the sequence of the stated objectives. The results are organized into demographic profile, factors contributing to sleep deprivation, factors contributing to stress, and internal and external process factors. Each table is described, interpreted, and supported by previous literature. Contradicting or unexpected findings are also discussed.

1. Demographic Profile of Respondents

Table 1. Distribution of Respondents by Sex

This table shows the demographic profile of the respondents in terms of sex.

Sex	Frequency	Percentage
Female	132	79.5%
Male	34	20.5%
Total	166	100

The results show that the majority of respondents were female (79.5%), consistent with global trends identifying nursing as a female-dominated profession (Alghamdi et al., 2019). Although the study did not examine gender differences in sleep deprivation or stress, previous research suggests that female nursing students may experience higher stress due to multitasking roles and societal expectations (Ching et al., 2020). This demographic imbalance suggests a potential direction for future studies.

2. Factors Contributing to Sleep Deprivation

Table 2. Sleep Deprivation Factors (Likert-Scale Findings)

- **Highest Mean:** “I have an irregular sleep schedule, making it difficult to get consistent rest.” (M = 4.08)
- **Lowest Mean:** “I rely on caffeine or stimulants to stay awake.” (M = 3.26)

Table 2A. Frequency Distribution of Sleep Deprivation Factors

Factor	Frequency	Percentage
Academic workload	148	89.2%
Clinical training	136	81.9%
Personal responsibilities	102	61.4%
Environmental distractions	76	45.8%
Poor sleep hygiene	64	38.6%

Academic workload was the most common factor contributing to sleep deprivation (89.2%), supported by the high mean score of irregular sleep schedule (M = 4.08). These findings align with Alghamdi et al. (2019), who reported that nursing students frequently sacrifice sleep due to demanding academic requirements.

Sleep deprivation was also associated with clinical training, personal responsibilities, environmental noise, and social media indicating that sleep disturbances are multifactorial.

Unexpectedly, caffeine consumption had the lowest mean score, contrasting with foreign studies showing high stimulant use among sleep-deprived students. This suggests cultural differences, personal coping preferences, or possible underreporting.

3. Factors Contributing to Stress

Table 3. Stress Factors (Likert-Scale Findings)

- **Highest Mean:** “I am afraid of failure or making mistakes.” (M = 4.14)
- **Lowest Mean:** “I feel uncertain about my future career.” (M = 3.56)

Table 3A. Frequency Distribution of Stress Factors

Stressor	Frequency	Percentage
Academic pressure	150	90.4%
Clinical exposure	142	85.5%
Financial concerns	98	59.0%
Family expectations	84	50.6%
Social relationships	72	43.4%

Fear of failure was the strongest stressor (M = 4.14), emphasizing the pressure placed on nursing students to meet academic and clinical expectations. This is supported by Chaabane et al. (2021), who noted that performance anxiety is highly prevalent in health-related courses.

Academic and clinical stress were the most common stressors, consistent with local and international findings (Pineda et al., 2020; De Guzman et al., 2021). Financial concerns and family pressure also emerged, reflecting cultural and socioeconomic contexts typical in Filipino households.

While career uncertainty was still a stressor, its lower mean suggests that students remain optimistic about future job opportunities, or that immediate academic demands overshadow long-term concerns.



4. Internal Process Factors

4.1 Coping Mechanisms (Table 4)

Coping Mechanism	Frequency	Percentage
Rest and relaxation	120	72.3%
Emotional regulation	98	59.0%
Self-reflection	86	51.8%

- **Highest Likert-Scale Item:** Fear of failure (M = 4.14)
- **Lowest:** Use of caffeine (M = 3.26)

Students primarily used rest, emotional regulation, and self-reflection as internal coping strategies. The dominance of fear-driven stress over behavioral coping (e.g., caffeine use) suggests that emotional and cognitive stressors heavily influence students' internal processes.

These coping mechanisms reflect Roy's Adaptation Model—particularly the physiological and self-concept modes—which emphasize adaptation through internal regulation.

4.2 Study–Rest Balance (Table 4.1)

Item	Mean Score
Irregular sleep schedule due to workload	4.08

Students struggle to maintain a healthy study-rest balance, mainly due to academic demands. This aligns with Orem's Self-Care Deficit Theory, wherein inability to perform adequate self-care (such as sleep) results in health strain.

4.3 Emotional Responses (Table 4.2)

Item	Mean Score
Stress from too many tasks in short time	4.11

Time pressure emerged as the strongest emotional stressor. According to Roy's Adaptation Model, such stimuli challenge the individual's adaptive capacity, leading to emotional fatigue and disrupted sleep—patterns clearly observed among respondents.

5. External Process Factors

5.1 Schedule Flexibility (Table 5)

Item	Mean Score
Irregular sleep schedule due to academics	3.98

Academic and clinical requirements reduce students' schedule flexibility, confirming earlier results that workload is the primary factor affecting both sleep and stress.

5.2 Support System (Table 5.1)

External Factor	Frequency	Percentage
Support system (family/peers)	130	78.3%
Schedule flexibility	104	62.7%
Noise/distraction control	88	53.0%

Item	Mean Score
Financial concerns	3.78

Support systems—particularly from family and peers—were the most utilized external process factors. This outcome reinforces the interdependence mode of Roy’s model, which highlights the importance of supportive relationships in promoting adaptation.

Financial concerns also appeared strongly, consistent with Lavoie-Tremblay et al. (2022), who found that financial strain significantly impacts students’ psychological well-being.

5.3 Noise and Distractions (Table 5.2)

Item	Mean Score
Environmental noise disrupts sleep	3.86

Environmental disturbances contribute to sleep difficulties. Interestingly, gadget use had lower agreement compared to noise-related issues. This contrasts with Western studies where screen time is a dominant factor (Zhang & Kim, 2023). Discrepancy suggests cultural differences or possible underestimation of gadget-related sleep interference—highlighting the need for improved sleep hygiene education.

Discussion

Overall findings demonstrate a strong interplay between stress and sleep deprivation. Heavy academic workload, clinical exposure, fear of failure, financial strain, and environmental disturbances collectively contribute to heightened stress levels and poor sleep quality among nursing students. Both internal factors (emotions, coping mechanisms) and external factors (support system, environmental noise) shape students’ well-being.

These findings support González et al. (2022), who highlighted the cyclical nature of stress and poor sleep—where one exacerbates the other, leading to diminishing academic performance and declining mental health.

Interpretation

The results confirm a bidirectional relationship between stress and sleep deprivation. Academic and clinical demands not only reduce sleep duration but also elevate stress levels, creating a feedback loop that impairs students’ well-being. This supports Gonzalez et al. (2022), who emphasized the cyclical nature of stress and poor sleep.

Unexpectedly, environmental distractions and sleep hygiene were less frequently cited, suggesting that internal and academic pressures outweigh external environmental factors in this



population. This contrasts with studies in Western contexts where lifestyle and screen time are more dominant contributors (Zhang & Kim, 2023).

Limitations

While the study provides valuable insights, it is limited to second-year students from a single institution. Broader sampling across multiple schools and year levels could yield more generalizable results. Additionally, self-reported data may be subject to bias or underreporting.

CONCLUSION AND RECOMMENDATIONS

This research investigated sleep deprivation and stress among second-year nursing students at Perpetual Help College of Manila. Findings revealed that students face difficulties balancing academic workload, personal responsibilities, and emotional stress, resulting in poor sleep quality. Irregular sleep patterns are primarily due to academic pressures, social media, and late nights. Major stressors include fear of failure, tight schedules, financial concerns, and family issues. Despite these challenges, students often sacrifice rest and self-care. The study highlights the need for enhanced academic support, time management training, and wellness programs to promote a healthier study-life balance and mitigate the long-term impacts of stress and sleep deprivation.

Based on the study's findings, several recommendations are proposed to enhance student well-being and academic performance. Structured time management programs should be implemented to address irregular sleep schedules. Regular stress management workshops, incorporating mindfulness and relaxation techniques, are also essential. Schools should encourage better personal and academic time management and provide resources like sleep hygiene guides. Stronger mental health support is needed, with on-campus counseling, monthly check-ins, and stress management toolkits. Financial assistance programs and financial literacy training are recommended to alleviate financial stress. Lastly, to mitigate noise-related sleep disruptions, schools should enforce quiet hours and provide noise-reducing materials. These initiatives aim to support students in managing stress, improving sleep, and excelling academically.

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