

STUDENTS' EXPERIENCES AND PERCEPTIONS OF THE HABIT OF STAYING UP LATE

Egidius Christianto Nugroho^{1*}, Kluit Ferrieli Daeli²,
Benedictus Satrio Adi Wicaksono³, Lucia Wiwid Wijayanti⁴

¹⁻⁴Chemistry Education Study Program, Sanata Dharma University, Indonesia
diosegi3@gmail.com¹, rielidaeli@gmail.com², wicaksanasatrioadi@gmail.com³,
lwijayanti@usd.ac.id⁴

*Correspondence: diosegi3@gmail.com

Received: 4 November 2025; Accepted: 25 November 2025

Abstract

A person can be considered responsible if they consciously and intentionally do things that have a positive impact on the body. Unfortunately, in today's modern era, staying up late or sleeping late is a habit considered common among college students. This literature review aims to explore students' experiences and views on the habit of staying up late, identify its impacts on physical and mental health as well as academic activities, and formulate strategies for improving healthy lifestyle behaviors in an effort to reduce or avoid the habit of staying up late. This literature review method consists of the collection, examination, and objective analysis of data regarding the habit of staying up late in college students. The results of the literature review reveal that staying up late in college is influenced by academic demands, social activities, and ineffective time management patterns, which can disrupt sleep cycles, reduce productivity, increase the risk of emotional disorders, and worsen concentration. The findings indicate that the habit of staying up late has a significant impact on students' well-being, both physically and mentally.

Keywords: experience, health, perception, staying up late, students

Introduction

A person can be said to be responsible if they consciously and deliberately engage in actions that have a positive impact on their body. One form of responsibility toward oneself is maintaining good health. Health is the stable condition of a person's body and mind. Maintaining physical health can begin with managing sleep patterns, exercising regularly, and eating nutritious, healthy foods. However, nowadays, responsibility for maintaining one's health is often neglected. One habit that is common among young people, especially university students, is staying up late or sleeping very late at night. Staying up late has become a trend that is difficult to avoid. High academic demands, poor time management, addiction to online games, and social pressures are often the main reasons why many students stay up late. Without realizing it, this habit, if done continuously over a long period, can have adverse effects on health, such as increasing the risk of heart disease, stroke, and diabetes, as well as causing depression, lowering the immune system, and reducing cognitive ability. Long-term inadequate sleep patterns are thought to disrupt hormonal balance and the body's recovery process. In women, this condition can make the body more vulnerable and potentially increase the risk of breast cancer



(Naqeeb et al., 2024). Therefore, staying up late has a significant impact on health. To prevent the various negative effects of staying up late, getting sufficient sleep provides important benefits for maintaining the balance of bodily functions (Zahrani, 2022).

To avoid these negative effects, getting enough sleep has significant benefits for maintaining health and the body's balance. Sleep is a state in which the body is in a resting phase, characterized by a decrease in consciousness and responsiveness to stimuli. Sleep affects almost every type of tissue, organ, and system in the body. It plays a crucial role in regulating brain function, including how nerve cells (neurons) communicate with each other so that the brain can process information effectively. Everyone needs sufficient sleep. For adults, the recommended amount of sleep per day is seven to eight hours. During sleep, the body quickly produces immune system components, restores energy, and repairs damaged cells. This literature aims to explore students' experiences and perspectives on the habit of staying up late, as well as to identify its impact on physical health, mental well-being, and academic performance. Thus, this study is expected to raise students' awareness of the importance of maintaining healthy sleep patterns.

Method

This study used a literature review method to objectively collect, review, and analyze data regarding students' perceptions and sleep habits. A literature review is a method conducted by searching, reviewing, analyzing, and drawing conclusions from various sources. This method provides an overview of students' perceptions and sleep habits based on previous research and existing theories. Data collection was conducted by reviewing academic sources such as scientific articles, journals, and reports using Google and Google Scholar, using the keywords staying up late, students, experience, perception, and health. The criteria for inclusion were articles published within the last 15 years, from 2010 to 2025, and journal titles and content that align with the research objectives. The collected data were categorized based on factors contributing to students' sleep habits, including academic, psychological, technological, and environmental factors. The information obtained from these various scientific sources was then used as a basis for formulating strategies to promote healthy lifestyles, specifically efforts to reduce or avoid staying up late.

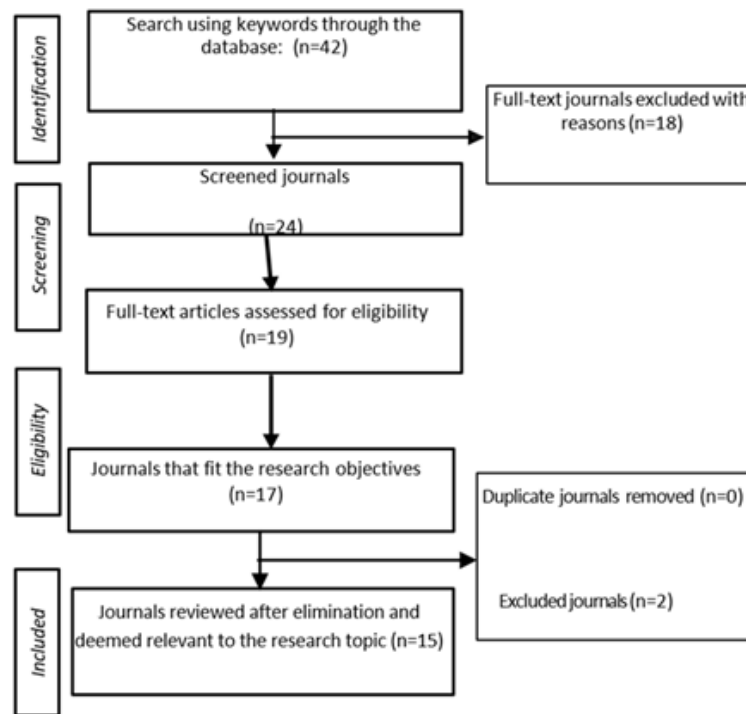


Figure 1. Data Collection

Findings and Discussion

This section presents the findings from the literature review related to the habit of staying up late among university students. Based on the review of various sources, it was found that most students tend to stay up late due to various internal and external factors. Students' perceptions of their ability to stay up late are the initial factors influencing the formation of this habit.

Students' Perceptions of the Habit of Staying Up Late

Based on the research findings, many university students perceive staying up late as a condition in which someone delays their nighttime rest, goes to bed past midnight, or even remains awake until morning (Madelu et al., 2025). Many students consider going to bed late as something normal because they are already accustomed to academic assignments, organizational activities, and social engagements. According to Zahrani, some students still lack awareness of the risks and consequences associated with staying up late (Zahrani, 2020).

Factors Affecting the Habit of Staying Up Late

The literature review shows that one of the main factors influencing students' habit of staying up late is excessive use of mobile phones or gadgets, which can cause them to lose track of time. A study conducted among nursing students found that gadget use is negatively correlated with sleep quality (Bees & Haro, 2022). In addition, Lubis et al. (2021) reported that medical students who used smartphones for more than two hours at night had poorer sleep quality compared to those who used them for a shorter duration. Smartphone addiction has also been shown to be associated with impaired sleep quality among medical students at Nusa Cendana University (Firmansyah et al., 2019). Additional factors, such as academic stress,

further worsen this relationship. A study by Fazril et al. (2024) found that smartphone addiction and academic stress together contribute to decreased sleep quality among students.

The Impact of the Habit of Staying Up Late on Student Activities

Sleep quality and duration have a significant relationship with students' academic performance. The study by Okano et al. (2019), which examined first-year university students, found that their average sleep duration was only about 6 hours and 37 minutes per night—far below the recommended 8–10 hours of sleep for adolescents and young adults. In addition, research by Lund et al. (2010) reported that first-year students are more prone to experiencing sleep disturbances because they are in a transitional phase that requires adaptation to increased academic demands and a new social environment. Findings from other studies also indicate that students with poor sleep quality in the early semester tend to experience decreased academic productivity, heightened stress levels, and reduced concentration ability (Gilbert & Weaver, 2010). The study further revealed that shorter sleep duration is associated with lower GPA outcomes, whereas students with sufficient sleep duration tend to achieve higher GPAs at the end of the semester, as also supported by Baert et al. (2015).

Discussion

Based on the findings that describe students' perceptions of staying up late, this habit has become normalized among many university students, even though it actually has harmful effects that are often overlooked. It can be clearly observed that students' understanding of the risks associated with staying up late is still very limited, making it important to increase their awareness of its negative consequences. Without awareness that comes from within themselves, students tend to continue engaging in this habit, which has the potential to negatively impact their health (Madelu et al., 2025).

In addition, differences in students' ability to cope with staying up late also influence this behavior. Not all students feel comfortable staying awake until late at night. Some students are unable to maintain focus and feel extremely fatigued when attempting to stay up late, leading them to choose to sleep earlier. Conversely, other students feel capable and do not experience significant difficulty when staying up late, which makes them more likely to do so. These differing perceptions often arise from habits such as completing assignments late at night or participating in demanding campus activities. Going to bed late is frequently viewed as an act of responsibility to complete academic tasks or as the only available time to relax after a busy day. This mindset reinforces the continuation of staying up late, even when students are aware of its negative effects (Zahrani, 2020).

Excessive smartphone use, academic stress, and poor time management are the main factors influencing students' habit of staying up late. This discussion illustrates how these variables are interconnected and contribute to the deterioration of students' sleep patterns. There is a direct correlation between nighttime smartphone use and poorer sleep quality. This aligns with the findings of Bees & Haro (2022), who reported a negative relationship between electronic device usage and sleep quality. Lubis et al. (2021) further support this by showing that medical students who use smartphones for more than two hours each night experience lower sleep quality.

According to Firmansyah et al. (2019), smartphone addiction among students at Universitas Nusa Cendana negatively impacts their ability to sleep well and the duration of their sleep. Additionally, social media addiction also contributes to delayed bedtime, as constantly updated content, curiosity-triggering notifications, and habitual scrolling unintentionally make time pass quickly.

Academic stress from tasks such as coursework, lab reports, thesis writing, and exam preparation can also influence students to stay awake late at night. Students with poor time management are more likely to procrastinate, which forces them to stay up late to complete their responsibilities (Wiratama & Bustamam, 2022). Furthermore, the social environment around students' residences plays a role. For example, students living in dormitories or boarding houses often engage in group activities such as playing, watching shows, or chatting late at night. Noisy or uncondusive environments can make it difficult for students to get sufficient rest. Another contributing factor is students' physical condition, such as experiencing difficulty sleeping or having irregular sleep rhythms. Daytime napping for extended periods can also result in staying awake longer at night (Adharina et al., 2015). This discussion demonstrates that these variables are interconnected and can exacerbate poor sleep patterns. When academic demands, social media use, and environmental influences occur simultaneously, the likelihood of staying up late increases.

Findings from various journals indicate that the habit of staying up late and sleep deprivation is not merely a poor lifestyle choice but a significant factor affecting students' ability to engage in academic activities. The average sleep duration of first-year students, which is only around 6 hours and 37 minutes (Okano et al., 2019), reflects a discrepancy between the body's biological needs and the actual sleep patterns formed during college life. This sleep insufficiency should be understood in the context of the transitional phase of new students' lives, characterized by increased academic workload, social adaptation demands, and suboptimal time management (Lund et al., 2010). Such conditions make students more susceptible to sleep disturbances and cognitive fatigue.

The consistent association between poor sleep quality and decreased academic productivity, increased stress, and reduced concentration ability (Gilbert & Weaver, 2010) reinforces the understanding that sleep is an essential part of cognitive recovery. When students sleep for shorter durations, the brain does not have sufficient time for memory consolidation and neural system recovery, affecting daily learning abilities. This explains why shorter sleep duration is associated with lower GPA, while students with optimal sleep quality and duration tend to achieve better academic performance (Baert et al., 2015).

Sleep quality plays a very important role in students' physical health, mental well-being, and academic performance. Adequate sleep duration has a positive effect on academic achievement (GPA). Health guidelines state that adolescents should get 8 to 10 hours of sleep per night. However, a study focusing on the sleep duration of first-year university students found that their average sleep duration at night was around 6 hours and 37 minutes. First-year students are generally in a transitional phase and face significant adaptation pressures, such as increasing academic workloads, causing their sleep patterns to be more disrupted than those of senior students, who are usually better at managing their time and sleep routines. Sleep disturbances among first-year students can negatively affect academic performance and overall health. Other studies have added that the quality, duration,

and consistency of sleep are closely related to students' ability to maintain concentration in learning and their psychological well-being. Students with poor sleep quality in their first semester tend to experience a decline in academic productivity and higher levels of stress. Shorter sleep duration among first-year students may result in lower GPA scores at the end of the semester, while adequate sleep duration is associated with higher GPA outcomes.

Table 1. The relationship between sleep duration and GPA

| TST | n | Spring term GPA | GPA change |
|----------|-----|-----------------|------------|
| <6 h | 107 | 3.25 | -0.13 |
| 6 to 7 h | 262 | 3.48 | 0.02 |
| 7+ h | 188 | 3.51 | 0.01 |

(Creswell *et al.*, 2023)

Notes: GPA change is the spring term GPA minus the student's baseline GPA

In the study by Creswell *et al.* (2023), the sample consisted of first-year students from three different universities, totaling more than 600 participants. Sleep duration data were collected using actigraphy, a sleep-tracking device worn on the wrist, over approximately one month at the beginning of the semester. The average sleep duration of students during this period was around 6 hours and 37 minutes per night, well below the recommended sleep duration for adolescents and young adults, which is 8–10 hours per night. Based on the table, it can be observed that nighttime sleep duration is related to the academic performance of first-year university students. Students who sleep less than six hours per night have an average GPA of 3.25, showing a decrease of 0.13 compared to the previous semester. However, students who sleep between six and seven hours or more than seven hours per night have higher average GPAs of 3.48 and 3.51, respectively. This indicates that sufficient sleep duration has a positive impact on improving students' academic achievement and performance (Creswell *et al.*, 2023).

Students who frequently stay up late report experiencing various negative effects the following day. They feel less energetic, find it difficult to concentrate, struggle to wake up in the morning, become easily drowsy during lectures, and often experience headaches. If these conditions persist, they not only affect physical well-being but also have an impact on students' academic performance and emotional state. When the body feels weak and lacks energy, daily activities become less optimal. Students' focus and attention tend to decrease when their bodies are fatigued. In comparison, students who get enough sleep are generally more capable of maintaining focus and concentration during lectures.

Sleep quality and learning concentration are two interrelated aspects. Good quality sleep can improve students' focus and concentration. Poor sleep quality often leads to decreased concentration and memory ability, which can negatively affect critical thinking skills. When students have difficulty concentrating due to staying up late, they tend to feel sleepy and experience headaches, which can lower their academic performance. Students may also experience stress due to insufficient rest, which can affect their overall well-being. In addition to headaches, staying up late can weaken the immune system, making individuals more susceptible to illness, and it can also lead to mood changes. Mood refers to a person's internal emotional

state or feelings, which can only be fully understood by the individual themselves. Mood changes are one of the psychological effects of the habit of staying up late. A lack of adequate rest can disrupt hormonal balance in the body, especially hormones such as serotonin and cortisol, which play key roles in regulating emotions. When someone frequently stays up late, levels of the stress hormone cortisol increase, while the production of serotonin, the hormone responsible for maintaining feelings of happiness, decreases. This imbalance causes individuals to become more prone to feelings of anxiety, sadness, anger, or loss of motivation. Prolonged sleep deprivation can even lead to psychological disorders such as depression and anxiety (Nurlela et al., 2023).

According to the literature, negative moods tend to appear in the morning when students do not get enough rest. These negative moods include feelings of anger, irritability, sadness, fatigue, headaches, and weakened immunity. However, each student experiences mood changes differently, so many are still able to manage and control their emotional states despite insufficient rest.

Mood in a State of Fatigue or Laziness

Students who stay up late report that their mood can become an obstacle when carrying out important activities or tasks. Mood fluctuations often lead to feelings of laziness, which in turn cause delays in completing activities. Fatigue resulting from frequent late nights can be observed through several physical and behavioral signs. Individuals who have the habit of staying up late usually show symptoms such as difficulty falling asleep early, decreased appetite, oversleeping in the morning, increased vulnerability to illness, and the appearance of dark circles under the eyes.

Mood in a State of Anger or Irritability

Mood refers to a person's internal emotional state, which can only be fully understood by themselves. After staying up late, a person's mood can change drastically, with the most common impact being increased sensitivity, such as becoming easily irritated or angry without a clear reason. This negative mood is reflected in everyday behaviors, including restlessness, lack of motivation, decreased self-confidence, and even depression. Staying up late not only affects emotions but also has serious consequences for physical health.

Sleep deprivation can make the body easily fatigued, disrupt deep sleep, and weaken immunity. Several studies on adults have shown that insufficient sleep may be linked to diseases such as diabetes, obesity, or heart problems, although these findings may not directly apply to university students. Among students, the most common effects are fatigue, difficulty concentrating, and increased susceptibility to illness. Lack of sleep can also affect the body's energy regulation, potentially leading to weight gain. If this pattern of insufficient sleep continues, the body does not have enough time to recover, which may trigger health problems in the future. The impact on mental health includes mood instability, stress, anxiety, and depression. According to the American Psychological Association, insufficient sleep can impair a person's ability to cope with stress and worsen mental conditions, such as reduced concentration, memory problems, and poor decision-making due to inadequate rest (Cappuccio et al., 2010).

How to Eliminate the Habit of Staying Up Late

Based on the findings that have been summarized, there are several ways to reduce the habit of staying up late. The first step is to get used to sleeping earlier and avoid using mobile phones before bedtime. The use of mobile phones should be limited by turning them off or placing them away from the bed to avoid the temptation of checking social media or responding to notifications. If there are assignments that need to be completed, students can apply good time management by scheduling their work in the afternoon or evening so that they do not have to stay up late to finish it. In addition, making a personal commitment to determine bedtime and wake-up time can help establish a regular sleep rhythm (Harahap & Siregar, 2023).

Efforts to overcome the habit of staying up late not only depend on personal intentions but also require support from academic and social environments. This support is important because the intention to change often arises from understanding gained through education and social interaction. The campus environment can play an active role by organizing seminars or educational programs that discuss the importance of sufficient and quality sleep. Topics that can be addressed in such activities include effective time management, relaxation techniques to reduce stress, and ways to build healthy sleep routines (Arifin et al., 2024).

Furthermore, a psychologically based strategy is needed to encourage behavioral change among students regarding sleep patterns. Dautovich et al. (2021), in the *International Journal of Environmental Research and Public Health*, developed a classroom-based learning strategy using the Self-Determination Theory approach. This approach helps students improve their sleep patterns by strengthening internal motivation and positive environmental support. In the study, students participated in a short 20-minute classroom intervention designed to meet three main psychological needs: competence, autonomy, and social connectedness. In the initial stage, students were asked to reflect on their sleep habits and write down positive things they had already done well. Next, they developed three SMART goals (*Specific, Measurable, Achievable, Realistic, and Time-bound*) related to improving sleep quality, such as maintaining consistent sleep schedules, fulfilling seven to nine hours of sleep per night, and reducing electronic device usage before bedtime. After setting these goals, students selected one main goal that was most relevant and discussed it with classmates to find solutions to possible obstacles. Through this activity, students were encouraged to take greater responsibility for their sleep patterns while also receiving social support from their learning environment.

The research findings indicate that most students focus on improving sleep hygiene, tech hygiene, consistency in sleep schedules, and stimulus control. Sleep hygiene involves habits such as avoiding caffeine or nicotine in the evening, reducing daytime naps, and creating a calm and comfortable bedroom environment. At the same time, tech hygiene emphasizes the importance of limiting the use of mobile phones or digital devices before bedtime, for example, by turning off laptops and televisions or keeping gadgets away from the bed. Consistent sleep schedules and stimulus control encourage students to go to bed and wake up at the same time every day and to use the bed only for resting. The implementation of these simple

steps has been proven to help students reduce late-night sleeping habits and improve overall sleep quality.

Table 2. Analysis results from a survey or questionnaire on sleep habits

| Theme | Representative Response | % of Sample |
|--|--|-------------|
| Rhythmicity/Timing of Wake and Sleep | “Something that I already do well regarding sleep habits is that I sleep and wake up around the same time every day.” | 24.21% |
| Prioritizing Sleep Duration | “I get the suggested amount of sleep for my age every night.” | 22.14% |
| General Sleep Timing | “I try to go to sleep no later than 1 am, that’s my stopping point.” | 11.43% |
| Tech Hygiene | “I don’t look at my phone before going to sleep, as the blue light emitted from a cell phone can make it hard to go to sleep and keep me up longer.” | 10.71% |
| Sleep Hygiene | “I don’t drink caffeine towards the end of the day.” | 7.86% |
| Bedtime Routine | “I have a nightly routine that helps prepare my body and mind for rest.” | 7.14% |
| Other (monitoring, substances) | “Take melatonin to fall asleep faster/easier.” | 7.14% |
| Daytime Activities | “I always try to do my homework early so that I am not up late at night working on it.” | 3.57% |
| Stimulus Control | “Something I already do well regarding my sleep habits is sleep when sleepy. When I get really tired, I just head to bed and slump.” | 2.86% |
| Creating an Environment Conducive to Sleep | “I sleep with two fans on and have many pillows and blankets in my comfy bed.” | 2.86% |

In addition to the quantitative results, the qualitative analysis in this study also illustrates that students already had several positive habits related to sleep patterns before participating in the intervention. Based on the table above, most respondents reported maintaining regular sleep and wake times each day (24.21%) and making efforts to achieve sleep durations appropriate for their age (22.14%). Some students also reported going to bed before 1:00 a.m. (11.43%) and limiting phone usage before bedtime to avoid blue light exposure, which can disrupt sleep (10.71%). Additionally, some practiced healthy habits such as avoiding caffeine in the evening, maintaining a consistent bedtime routine, and creating a comfortable bedroom environment to facilitate rest (7.86%). These results indicate that a self-motivation-based approach is effective in helping students abandon the habit of staying up late and replace it with healthier sleep patterns (Dautovich et al., 2021). Overall, the findings show that staying up late is a common behavior among university students, but it has negative consequences for physical, mental, and academic health. Therefore, students need to develop awareness of maintaining healthy sleep patterns as a form of responsibility toward themselves and their overall well-being.

Conclusion

Based on the literature review conducted, it can be concluded that the habit of staying up late among university students is largely caused by excessive phone use, academic assignments, and poor time management. These factors lead students to sleep later at night, reducing their overall sleep quality. Many students consider staying up late to be normal, even though they are not fully aware of the negative impacts of this habit. Findings from the literature indicate that lack of sleep has a direct impact on students' physical condition and learning ability. Several studies show that many students sleep less than the normal requirement, making them more prone to fatigue and sleep disturbances, especially during the early years of college when academic demands increase. In addition, poor sleep quality can cause students to experience stress, difficulty concentrating, and potentially lower academic performance compared to those who get sufficient sleep. Sleep deprivation affects not only the body but also the mood, often resulting in irritability, fatigue, and a lack of motivation.

References

- Adharina, N., Siswandi, E., & Kustimah. (2015). Intensi perilaku begadang pada mahasiswa. *Prosiding Konferensi Nasional Psikologi Kesehatan II*, 2(1), 150-163.
<https://academicjournal.yarsi.ac.id/index.php/knpk/article/view/5347>
- Arifin, N. M., Al-atsariyah, N., Pradani, A. P., Latif, N. N., & Supriyono, S. (2024). Pengaruh kualitas tidur terhadap konsentrasi belajar mahasiswa pendidikan ekonomi 2024 Universitas Pendidikan Indonesia. *Jurnal Pendidikan Tambusai*, 8(3), 49725–49731.
<https://jptam.org/index.php/jptam/article/view/23683>
- Baert, S., Omey, E., Verhaest, D., & Vermeir, A. (2015). Mr. Sandman, bring me good marks! On the relationship between sleep quality and academic achievement. *Social Science & Medicine*, 130, 91-98.
<https://doi.org/10.1016/j.socscimed.2015.02.011>

- Bees, G., & Haro, M. (2022). Penggunaan gadget berhubungan dengan kualitas tidur mahasiswa keperawatan. *Jurnal Penelitian Perawat Profesional*, 4(1), 325-332. <https://doi.org/10.37287/jppp.v4i1.879>
- Cappuccio, F. P., D'Elia, L., Strazzullo, P., & Miller, M. A. (2010). Sleep duration and all-cause mortality: A systematic review and meta-analysis of prospective studies. *Sleep*, 33(5), 585-592. <https://doi.org/10.1093/sleep/33.5.585>
- Creswell, J. D., Tumminia, M. J., Price, S., Sefidgar, Y., Cohen, S., Ren, Y., Brown, J., Dey, A. K., Dutcher, J. M., Villalba, D., Mankoff, J., Xu, X., Creswell, K., Doryab, A., Mattingly, S., Striegel, A., Hachen, D., Martinez, G., & Lovett, M. C. (2023). Nightly sleep duration predicts grade point average in the first year of college. *Proceedings of the National Academy of Sciences of the United States of America*, 120(8), Article e2209123120. <https://doi.org/10.1073/pnas.2209123120>
- Dautovich, N. D., MacPherson, A. R., Ghose, S. M., Williams, C. M., Reid, M. P., Sabet, S. M., & Dzierzewski, J. M. (2021). Examining and promoting sleep health in the undergraduate classroom: A mixed-methods approach. *International Journal of Environmental Research and Public Health*, 18(23), Article 12297. <https://doi.org/10.3390/ijerph182312297>
- Fazril, R. A., Ulfa, F., & Widiningsih, Y. (2024). Peran kecanduan smartphone dan stres akademik terhadap kualitas tidur pada mahasiswa. *Al-Hikmah: Jurnal Agama dan Ilmu Pengetahuan*, 21(2), 228-237. [https://doi.org/10.25299/al-hikmah:jaip.2024.vol21\(2\).19037](https://doi.org/10.25299/al-hikmah:jaip.2024.vol21(2).19037)
- Firmansyah, M. F., Rante, S. J. T., & Hutasoit, R. M. (2019). Hubungan kecanduan penggunaan smartphone terhadap kualitas tidur mahasiswa Fakultas Kedokteran Universitas Nusa Cendana tahun 2019. *Cendana Medical Journal*, 8(1), 535-543. <https://ejurnal.undana.ac.id/CMJ/article/view/2664>
- Gilbert, S. P., & Weaver, C. C. (2010). Sleep quality and academic performance in university students: A wake-up call for college psychologists. *Journal of College Student Psychotherapy*, 24(4), 295-306. <https://doi.org/10.1080/87568225.2010.509245>
- Harahap, Y. F., & Siregar, P. A. (2023). Persepsi mahasiswa terhadap begadang malam di Fakultas Kesehatan Masyarakat Universitas Islam Negeri Sumatera Utara. *Indonesian Journal of Public Health*, 1(3), 239-246. <https://jurnal.academiacenter.org/index.php/IJOH/article/view/211>
- Lubis, N. F., Hanum, F. J., & Reza, M. (2021). Hubungan penggunaan smartphone pada malam hari terhadap kualitas tidur mahasiswa Program Studi Pendidikan Dokter Fakultas Kedokteran Universitas Andalas. *Jurnal Ilmu Kesehatan Indonesia*, 1(3), 379-385. <https://doi.org/10.25077/jikesi.v1i3.78>
- Lund, H. G., Reider, B. D., Whiting, A. B., & Prichard, J. R. (2010). Sleep patterns and predictors of disturbed sleep in a large population of college students. *Journal of Adolescent Health*, 46(2), 124-132. <https://doi.org/10.1016/j.jadohealth.2009.06.016>
- Madelu, R., Adam, M. W. S., Pakaya, A., Lapasatu, M., & Arsyandi, N. (2025). Dampak kurang tidur akibat begadang terhadap fungsi kognitif dan konsentrasi pada mahasiswa. *Jurnal Pendidikan dan Sastra Inggris*, 5(2), 93-101. <https://doi.org/10.55606/jupensi.v5i2.5160>

- Naqeeb, H., Zia-Ud-Din, Khan, I., Haq, I. U., Zeb, F., Hajira, B., Alam, I., Iqbal, Z., Masood, R., & Aftab, M. (2024). Association between sleeping quality and risk of breast cancer among women: A case-control study from Pakistan. *Cancer Control*, 31. <https://doi.org/10.1177/10732748241293640>
- Nurlela, Sulvinajayanti, & Afiah, N. (2023). Studi suasana hati di pagi hari pada mahasiswa yang memiliki kebiasaan begadang dengan yang tidak begadang di Fakultas Ushuluddin, Adab dan Dakwah. *Indonesian Journal of Islamic Counseling*, 5(2), 138-153. <https://doi.org/10.35905/ijic.v5i2.6678>
- Okano, K., Kaczmarzyk, J. R., Dave, N., Gabrieli, J. D. E., & Grossman, J. C. (2019). Sleep quality, duration, and consistency are associated with better academic performance in college students. *NPJ science of learning*, 4, Article 16. <https://doi.org/10.1038/s41539-019-0055-z>
- Wiratama, M. D., & Bustamam, N. (2022). Gangguan sosial media dan kualitas tidur pada mahasiswa kedokteran. *Jurnal Kesehatan Kusuma Husada*, 13(2), 135–143. <https://doi.org/10.34035/jk.v13i2.827>
- Zahrani, D. A. (2022). Bahaya begadang terhadap kesehatan masyarakat. *Jurnal Ilmu Kesehatan Masyarakat Berkala*, 4(1), 7-12. <https://journal.univetbantara.ac.id/index.php/jikemb/article/view/2132>