

Understanding and implementation of nighttime sleep among FIKK UNM students in the sedentary lifestyle era

Sulaeman Sulaeman^{1*}, Wahyana Mujari Wahid¹, and Nur Fady Alamsyah¹

¹ Faculty of Sports and Health Sciences, Universitas Negeri Makassar, 90222 Rappocini, Kota Makassar, Sulawesi Selatan, Indonesia.

Abstract. This study aims to examine whether FIKK students, whose social identity is tied to sports education, understand and practice one essential aspect of a healthy lifestyle: nighttime sleep. The research employed a quantitative descriptive design. A total of 110 FIKK UNM students aged 17 to 25 years were recruited through accidental sampling. Data were collected using a short questionnaire assessing students' nighttime sleep conditions. Regarding the understanding of the importance of nighttime sleep, results indicated that 49 male respondents demonstrated adequate understanding, while 17 did not. Among female respondents, 24 showed adequate understanding and 20 did not. In terms of sleep practices, 42 male respondents reported meeting both sleep duration and quality, 7 reported sufficient duration but poor quality, 14 reported insufficient duration but adequate quality, and 3 reported inadequate duration and quality. Among female respondents, 26 reported meeting both duration and quality, 9 reported sufficient duration but poor quality, 10 reported insufficient duration but adequate quality, and 1 reported inadequate duration and quality. This study provides novel insights into the gap between knowledge and practice of healthy sleep among students in a sports and health education context. The findings underscore the importance of targeted campus-based interventions to improve students' sleep health, with practical implications for academic performance, mental well-being, and physical recovery.

1 Introduction

Adequate and good-quality night-time sleep is an essential component of recovery, contributing significantly to both physical and mental health. For students in the Faculty of Sport and Health Sciences (FIKK) at Universitas Negeri Makassar, sleep holds particular importance because it influences academic performance, well-being, and the ability to sustain daily physical activity. The American Academy of Sleep Medicine (AASM) recommends that young adults aged 18–60 years maintain 7–9 hours of sleep each night

* Corresponding author: sulaemanfik@unm.ac.id

to optimize cognitive processes, emotional balance, metabolism, and physical endurance [1].

Despite these guidelines, studies have reported that a large proportion of university students experience insufficient sleep, with many also suffering from daytime drowsiness that affects concentration, academic outcomes, and long-term health [2]. One factor often highlighted is the phenomenon of social jetlag, which refers to the discrepancy between biological rhythms and social sleep schedules. This condition, particularly prevalent during weekends, disrupts memory consolidation and recovery processes [3].

Sleep hygiene practices, such as limiting blue light exposure before bedtime, maintaining appropriate room conditions, and establishing consistent routines, are also frequently overlooked, further reducing sleep quality. For FIKK students engaged in physically demanding activities, sufficient and restorative sleep is especially critical. Strategies like “sleep banking,” or extending sleep prior to periods of high activity, have been shown to improve alertness and performance, while short restorative naps of 10–20 minutes can serve as effective compensatory practices when nighttime sleep is inadequate [4].

Research also demonstrates strong associations between sleep quality, academic performance, self-efficacy, and psychological well-being. Students who report consistent and satisfactory sleep patterns often display greater academic confidence, career adaptability, and life satisfaction [5]. Furthermore, addressing fundamental psychological needs alongside promoting healthy sleep behaviors has been recommended as a key intervention for student populations [6].

Nevertheless, observations in the FIKK UNM context indicate that many students still neglect recommended sleep practices, as seen from complaints of fatigue, drowsiness in lectures, and the habit of staying awake late into the night. Previous research supports these observations by emphasizing the links between sleep, academic outcomes, mood regulation, energy, and injury prevention among student-athletes [4, 7].

Given these issues, the present study seeks to evaluate both the understanding and implementation of nighttime sleep among FIKK UNM students as part of their recovery strategies. Findings are expected to inform future initiatives aimed at strengthening healthy lifestyle practices within the university setting.

2 Method

This study employed a quantitative descriptive approach and was conducted at the Faculty of Sport and Health Sciences (FIKK), Universitas Negeri Makassar. A total of 110 students aged 17 to 25 years participated in the study. The participants were selected using an accidental sampling technique, in which individuals encountered directly and willing to participate were included.

Data were collected through a questionnaire consisting of two main questions. The first addressed students’ understanding of nighttime sleep, including its duration and characteristics of quality sleep. The second question examined students’ sleep practices. For this item, four response options were provided to reflect different sleep conditions:

(1) sufficient duration and quality, (2) sufficient duration but poor quality, (3) insufficient duration but good quality, and (4) insufficient duration and quality.

The collected data were analyzed using descriptive statistics to generate an overview of FIKK UNM students' understanding and implementation of nighttime sleep. Participation in this study was voluntary, and informed consent was obtained from all respondents prior to data collection. Participants were assured of the confidentiality and anonymity of their responses, and all data were used solely for academic and research purposes. The study was conducted in accordance with general ethical guidelines for research involving human participants.

3 Result and Discussion

3.1 Sample Description

As shown in Table 1, a total of 110 students participated in the study. As presented in Table 1, the majority of respondents were male (66.6%), while females accounted for 33.4%. Participants' ages ranged from 17 to 25 years. The largest proportion was 18 years old (30.9%), followed by 17 years old (20%) and 20 years old (13.6%). Only one respondent was aged 23, representing the smallest group in the sample.

Table 1. Sample Description Analysis.

Sample Description	Total Samples	Frequency	Percentage
Gender			
Male	110	66	60
Female		44	40
Age			
17	110	22	20.0
18		34	30.9
19		14	12.7
20		15	13.6
21		13	11.8
22		4	3.6
23		1	0.9
24		4	3.6
25		3	2.7
Average		19.15	

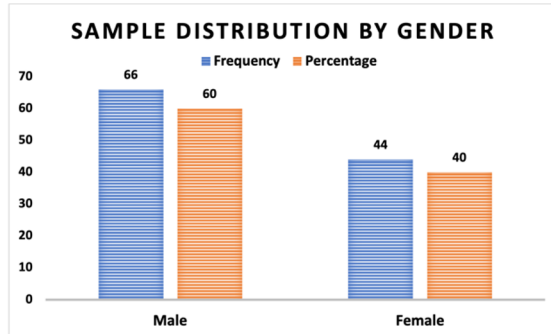


Fig. 1. Descriptive Graph of Samples by Gender

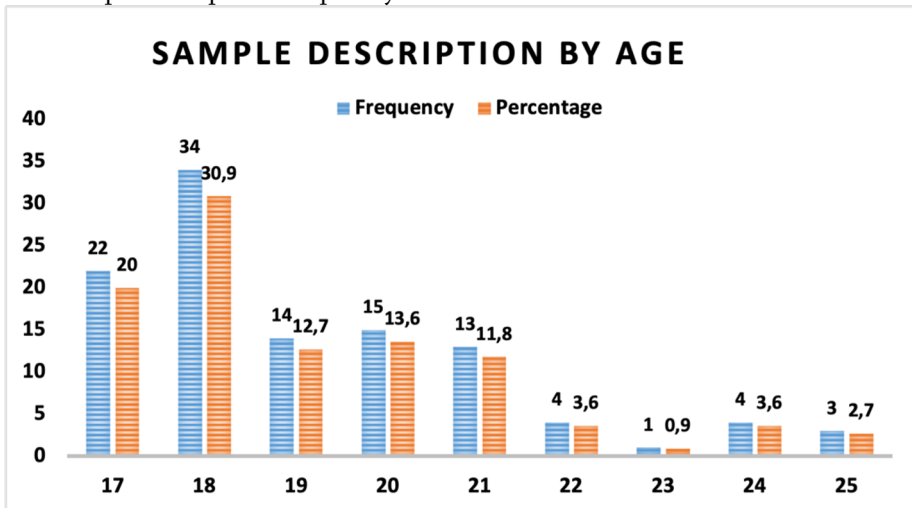


Fig. 2. Descriptive Graph of Samples by Age

3.2 Understanding of Night Sleep among FIKK UNM Students

As shown in Table 2, most respondents (n = 73; 66.4%) demonstrated an understanding of the importance of nighttime sleep, while 37 students (33.6%) did not. When disaggregated by gender, 49 male students (44.6%) reported adequate understanding compared to 17 (15.5%) who did not. Among female students, 24 (21.8%) reported understanding, whereas 20 (18.2%) did not.

Table 2. Analysis of Nighttime Sleep Understanding

Overall Sample	
Understand	73
Don't understand	37
By Gender	
Men (Understand)	49
Men (Do not understand)	17
Women (Understand)	24
Women (Do not understand)	20

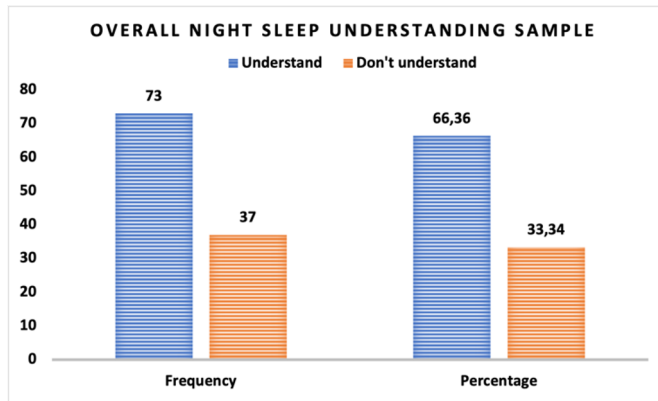


Fig. 3. Graph of Overall Analysis of Nighttime Sleep Understanding among Samples

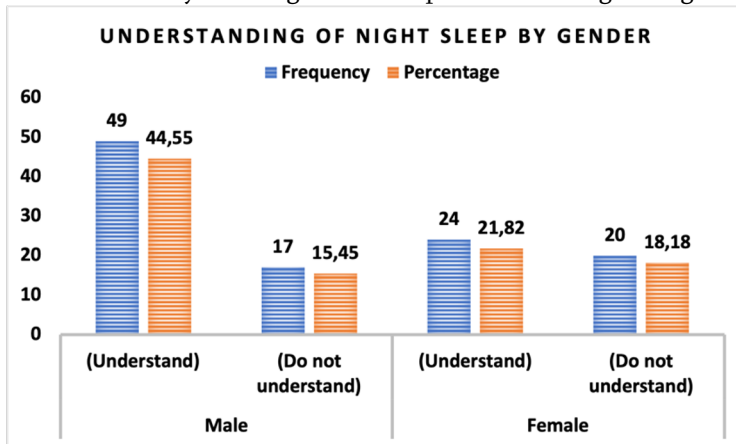


Fig. 4. Graph of Nighttime Sleep Understanding Analysis Based on Gender

3.3 Implementation of Nighttime Sleep FIKK UNM Students

Findings regarding the implementation of nighttime sleep are presented in Table 3. A majority of students (n = 66; 60.0%) reported achieving both adequate duration and quality of sleep. Meanwhile, 16 students (14.5%) indicated sufficient duration but poor quality, and 24 students (21.8%) reported insufficient duration but satisfactory quality. Only 4 students (3.6%) experienced both insufficient duration and poor sleep quality.

Table 3. Analysis of Nighttime Sleep Understanding

Overall Sample	
Sufficient Duration and Quality	66
Sufficient Duration but Poor Quality	16
Insufficient Duration but Good Quality	24
Insufficient Duration and Quality	4

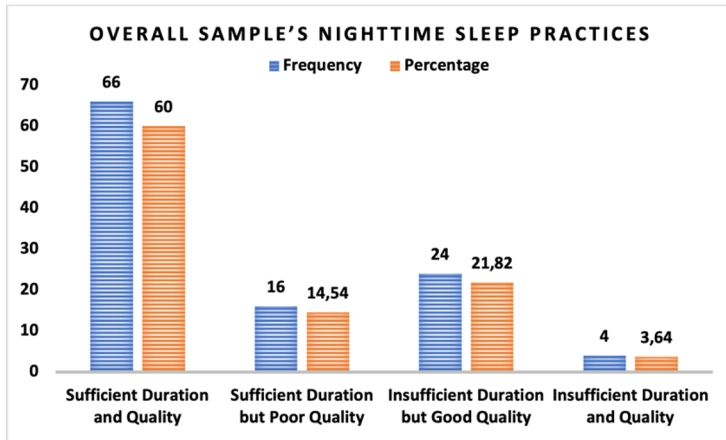


Fig. 3. Descriptive Graph of Samples by Age

As presented in Table 4, the majority of both male and female students reported achieving adequate sleep duration and quality, with 42 male students (38.2%) and 24 female students (23.6%) meeting these criteria. A smaller proportion indicated sufficient duration but poor quality, including 7 male (6.4%) and 9 female students (8.2%). Meanwhile, 14 male (12.7%) and 10 female students (9.1%) reported insufficient duration but satisfactory quality. Only 3 male (2.7%) and 1 female student (0.9%) reported inadequate sleep in both duration and quality.

Table 4. Analysis of Nighttime Sleep Implementation by Gender

Application of Night Sleep	Male	Female
Sufficient Duration and Quality	42	24
Sufficient Duration but Poor Quality	7	9
Insufficient Duration but Good Quality	14	10
Insufficient Duration and Quality	3	1

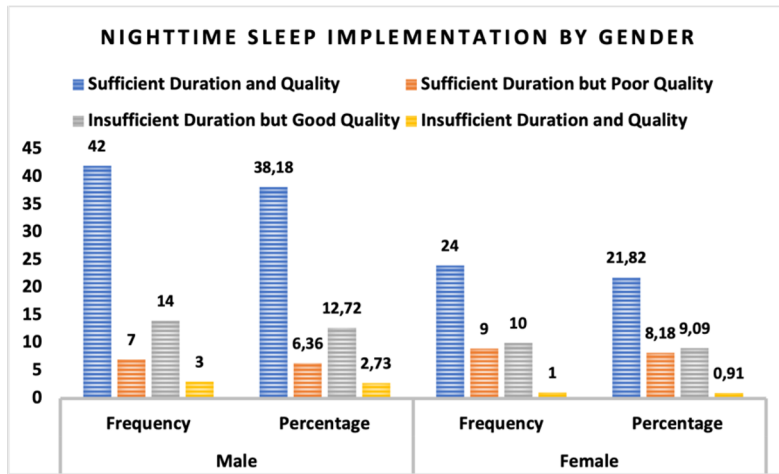


Fig. 3. Graph of Nighttime Sleep Practices by Gender

3.4 Discussion

In the current era of sedentary lifestyles, students face significant challenges in maintaining healthy sleep behaviors. The widespread use of technology has led to decreased physical activity, while extended screen time—particularly on smartphones and laptops late at night has been shown to negatively affect both sleep duration and sleep quality.

The results of this study indicate that most students at the Faculty of Sport and Health Sciences, Universitas Negeri Makassar, recognize the importance of nighttime sleep, including its recommended duration and markers of quality (66.4% compared to 33.6%). This finding supports earlier evidence suggesting that “students enrolled in health- and sport-related fields often possess relatively higher levels of health literacy” [8].

When examined by gender, 74.2% of male participants demonstrated adequate knowledge of nighttime sleep, whereas only 54.6% of female participants showed similar understanding. This discrepancy may be attributed to differences in lifestyle habits, such as regular exercise, study patterns, and the way health information is accessed through social media platforms. Male students, in particular, may be more frequently exposed to discussions on health and fitness, thereby strengthening their awareness.

Regarding actual practices, the majority of respondents reported obtaining sufficient sleep duration; however, the quality of sleep remained an issue. Gender variations were less evident in practice compared to knowledge, though a greater proportion of female students reported poor sleep quality despite fulfilling recommended sleep hours. This outcome could be influenced by biological and psychosocial aspects, including hormonal changes (e.g., menstruation), heightened stress, and greater vulnerability to sleep disturbances. Previous literature supports this observation, noting that “women are more likely to experience poor sleep quality due to biological, hormonal, and psychosocial influences” [9]. Additionally, the gap between knowledge and behavior suggests that

“external pressures, including academic workload, nighttime screen exposure, and social engagement, play a critical role in shaping student sleep habits” [2].

A novel contribution of this study lies in its focus on sport and health science students in Indonesia, a demographic often assumed to possess superior health literacy and recovery practices. Nevertheless, the findings highlight persistent inconsistencies between knowledge and actual behavior, particularly with respect to sleep quality. This underscores the importance of incorporating sleep-related behavior as a fundamental component of health promotion within sport and health education.

Overall, the results emphasize the urgent need to enhance awareness and education surrounding recovery, with an emphasis on nighttime sleep, among university students. Such initiatives should extend beyond classroom-based instruction and be incorporated into practical and extracurricular activities. Faculty members, coaches, and campus health professionals can actively contribute by implementing structured interventions—such as targeted workshops, digital awareness campaigns, and wellness programs—that encourage better sleep hygiene and support holistic student well-being.

4 Conclusion

The findings of this study indicate that the majority of students at the Faculty of Sport and Health Sciences, Universitas Negeri Makassar, recognize the importance of nighttime sleep as a key component of a healthy lifestyle. Nevertheless, a proportion of students still demonstrated insufficient understanding. In terms of practice, most students met the recommended duration of nighttime sleep; however, sleep quality remains a concern, particularly among female students. Variations in understanding and practice are influenced by biological, psychosocial, as well as academic and social factors.

This study underscores the need for enhanced education and targeted interventions regarding healthy sleep habits within the university setting. Such efforts may improve students' physical and mental health, while also supporting academic performance and sports-related activities. Future research is recommended to explore additional factors influencing sleep quality and to design more effective intervention strategies.

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