

THE RELATIONSHIP BETWEEN ACADEMIC STRESS AND SLEEP QUALITY IN NEW UNIVERSITY STUDENTS

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ABSTRACT

Academic stress is a significant common challenge that often affects students' well-being, particularly those who are new to university life. Pressure from the study load, academic assignments, and worries about evaluation results frequently interfere with sleep patterns, potentially leading to a decrease in their sleep quality. This study aims to determine the relationship between academic stress and sleep quality in freshmen. Freshmen tend to face various academic demands that can cause stress and impact their sleep quality. The hypothesis in this study is a negative relationship between academic stress and sleep quality. This study involved 110 freshmen selected using a purposive sampling technique. Data were collected using the Pittsburgh Sleep Quality Index (PSQI) to measure sleep quality and an academic stress scale modified from previous research. The data analysis technique used Pearson correlation. The results showed a significant negative relationship between academic stress and sleep quality with a correlation coefficient of -0.386 ($p < 0.05$). This means that the higher the level of academic stress experienced by students, the lower their sleep quality. This finding emphasizes the importance of managing academic stress to maintain sleep quality in freshmen.

Keywords: Academic stress, New students, Sleep quality

Introduction

New university students are situated in an intense transitional period, characterized by heightened academic demands and the need for complex social adjustments. This condition frequently generates significant psychological pressure, which is defined as Academic Stress as an individual's response to educational demands that exceed their perceived coping capacity. Prolonged stress can profoundly disrupt overall well-being, particularly fundamental aspects such as sleep.

Sleep Quality is a vital health indicator defined by the subjective satisfaction, duration, and efficiency of sleep. Scientific consensus widely identifies that student status, especially due to high academic loads, increases the risk of impaired sleep quality. The dominant literature concludes that academic stress has a significant negative relationship with sleep quality. Individuals with student status are at risk of experiencing changes in sleep quality (Kusuma, et al., 2022). According to Simbolon (2024) sleep quality is defined as a state in which a person can maintain sleep and reach the REM (Rapid Eye Movement) and NREM (Non-Rapid Eye Movement) sleep stages.

According to Shintia et al. (2022) good sleep quality plays an important role in maintaining a person's psychological balance. As for the aspects of sleep quality, namely sound sleep during sleep (no sleep disorders), sleep time at least six hours a day (maximum 8 hours), sleep early and wake up early, feel refreshed after waking up and not having nightmares (Nashori, 2004). Students often experience poor quality sleep due to heavy activity loads, college assignment demands, and

busy social life (Hutagalung, Marni, & Erianti, 2022). According to research conducted by Kusuma et al. (2022) it was found that 78,2% of students experienced low sleep quality, while 11.7% of students experienced anxiety disorders. Feeling anxious can cause difficulty in starting sleep, often waking up in the middle of the night, changes in the sleep cycle, even excessive sleep, which in turn can reduce the quality of sleep. According to Hotijah et al. (2021) regular sleep patterns have a positive impact on the health of the body, allowing individuals to carry out activities optimally.

When someone sleeps well, they will feel peace both physically and mentally, which in turn contributes to overall well-being. A good sleep pattern can also help reduce stress and improve an individual's ability to face daily challenges. Therefore, new students need to divide their time efficiently, ser6ty6r6tr6 rrjta pay attention to time and sleep quality so that they can concentrate well in activities (Aminuddin, M., 2020).

Academic stress can be defined as a state of mental distress that arises when demands in an academic environment, such as assignments, exams, or learning targets, exceed a person's ability to cope. This imbalance between the academic load and an individual's capacity to adapt can trigger physical disorders such as emotional exhaustion, anxiety, and cognitive distress, such as difficulty concentrating. The results of the research conducted by Simbolon, N. R. (2024) mentioned that academic stress is one of the factors that can cause sleep disorders. Academic stress is an individual response to academic pressure that comes from various educational demands, (Sun, et al., 2011). Sun et al. (2011) mentioned that academic stress has five main aspects, namely study pressure, workload, worry about grades, self-expectations, and decision-making.

Research by Shofia and Trihandayani (2023) states that academic stress has a significant negative relationship to sleep quality, which means that the higher the academic stress of students, the lower the quality of sleep. This is in line with the results of research conducted by Septianingsih, Negara, and Wulansari (2024), where the findings state that the pressure from academic demands and the burden of studying in college can cause some students to experience changes in their sleep quality.

Freshmen students experience academic pressure when they have to study well for the first time as students. Demands from the campus or lecturers to receive and complete assignments on time often make it difficult for students to manage their time, which ultimately impacts their sleep quality, which is often inadequate or even absent (Simbolon, 2024). Theoretically, when individuals experience stress, there is an increase in the hormones epinephrine, norepinephrine, and cortisol, which can cause conditions that increase central nervous system alertness. Thus, the NREM and REM sleep cycles can be disrupted (Damayanti et al., 2022). According to Hakim et al. (2024), academic stress plays a role in students' sleep quality, which is influenced by the level of academic stress they experience, both directly and indirectly. Students who face many demands and pressures in the world of college tend to experience decreased sleep duration, which disrupts daily sleep quality (Bullah, 2022). Sun, et al. (2011) stated that there are five aspects of academic stress: study pressure, assignment load, worry about grades, self-expectations, and decisions. Based on that background, the researcher conducted research with the aim of finding out whether there is a relationship between academic stress and sleep quality in new students.

Methods

The criteria in this study were determined using purposive sampling, a method of selecting samples based on certain considerations or criteria previously determined by the researcher (Sugiyono, 2016). This technique was chosen to ensure the researcher could obtain a sample that met the desired characteristics. The criteria were newly enrolled students at a university, individuals currently studying at a university, whether public or private, or at an educational institution equivalent to a university.

Table 1. Demographic Data

No.	Subject Description	Category	Total	Percentage
1.	Gender	Men	50	45,5%
		Women	60	54,5%
Total			110	100%
2.	University	Negeri	69	62,7%
		Swasta	41	37,3%
Total			110	100%
3.	Education Level	D3	10	9,1%
		D4	6	5,4%
		S1	90	81,8%
		S2	4	3,6 %
Total			110	100%

The subjects in this study were new students, with a total of 115 subjects. The description of the number of subjects is as follows.

In this study, the researcher used a quantitative approach with a correlation method and collected data through the distribution of scales. According to Azwar (2021), a scale is a collection of statements designed based on behavioral indicators to measure conditions or characteristics. The researcher used a questionnaire to collect data, so the information obtained came from respondents, in the form of reports about their personality or things the respondents knew. The data collection technique in this study was carried out by distributing questionnaires prepared by the researcher through Google Forms. This study used two measuring instruments: a sleep quality scale to measure sleep quality and an academic stress scale to measure academic stress. The scales that the researcher will use to measure the research variables are :

1. Sleep Quality Scale

The Pittsburgh Sleep Quality Index (PSQI) scale was modified from a previous study by Ekaputri (2022) based on aspects of sleep quality proposed by Buysse et al. (1998). All PSQI items were declared valid and had a reliability value of 0.792 with a range of 734 to 821 for item discrimination. The average inter-item correlation was considered good if the value was 0.2 to 0.4. The PSQI could differentiate between “bad” and “good” sleep categories, based on seven aspects, namely subjective sleep quality, sleep latency, sleep duration, daily sleep efficiency, sleep disturbances, use of sleeping medication, and daytime dysfunction.

2. Academic Stress Scale

In this study, the academic stress variable will be measured using a modified scale from Dohong (2023), referring to the aspects of academic stress proposed by the researchers. This academic stress scale was developed by the researchers based on the theory of Sun, Dunne, Hou, and Xu (2011).

Hypothesis testing in this study used Pearson's product-moment analysis to examine the relationship between academic stress (X) and sleep quality (Y) because the product-moment correlation is suitable for testing hypotheses involving the relationship between two variables. Data analysis was conducted using JAMOV and SPSS.

Result

1. Description data

The data collected from the academic stress and sleep quality scales were analyzed using hypothetical and empirical data values. Descriptive data from both variables in this study can be seen in the table below.

Table . Description of Academic Stress and Sleep Quality Data

Variable	Hipotetic				Empiric			
	Mean	Score		SD	Mean	Score		SD
		Min	Max			Min	Max	
Academic Stress	70	28	112	14	57,8	38	102	17,3
Sleep Quality	0,5	0	1	0,288	0.255	0	1	0.438

Based on the hypothetical data, the academic stress variable yielded a mean of 70, with a standard deviation (SD) of 14, a minimum score of 28, and a maximum score of 112. For the sleep quality variable, the hypothetical mean was 10.5, with an SD of 3.5, a minimum score of 0, and a maximum score of 21. For the empirical data, the academic stress variable yielded a mean of 57.4 and an SD of 17.3, with a minimum score of 38 and a maximum score of 102. For the sleep quality variable, the empirical mean obtained was 7.80, with an SD of 3.1, a minimum score of 2, and a maximum score of 15.

2. Category variable data

In this categorization of academic stress, it will be grouped into three categories, namely low, medium, high, while sleep quality with good and bad categories. The details of the categories in both variables are detailed in the following table:

Table 3. Categorization of Academic Stress Scale

Category	Guidelines	Score	N	Percentage
High	$X > \mu + 1. \sigma$	$X > 75$	4	3,6%
Moderate	$(\mu - 1. \sigma) < X \leq (\mu + 1\sigma)$	$66 < X \leq 75$	83	75,5%
low	$X \leq \mu - 1. \sigma$	$X \leq 40$	23	20,9%

Information:

X : Subject score

μ : Mean or hypothetical average

σ : Hypothetical standard deviation

Based on the table above, the categorization results show that the majority of subjects in this study have Academic Stress in the medium category with 83 subjects (75.5%). Followed by the low category 23 Subjects (20,9%) and the high category 4 subjects (3,6%).

Table 4. Categorization of Sleep Quality Scale

Category	Score	N	Percentage
Good	$X \leq 5$	28	25,5%
Poor	$X > 5$	82	74,5%

Based on the table above, it is known that the sleep quality of new students is predominantly in the poor category, with 82 subjects (74.5%) and only 28 subjects (25.5%) had good sleep quality.

3. Assumption Tests

The first assumption test is the normality assumption test, which is used to determine whether the data is normally distributed. When the p-value is > 0.05 , the data can be said to be normally distributed. However, when the p-value is < 0.05 , the data in this study is not normally distributed, thus the normality assumption is not met. The results obtained show that the data for both variables are normally distributed ($p=0.420 > 0.05$). Based on the linearity test between the Academic Stress and Sleep Quality variables, the result was: $F=42.897$ with $p=0.000$ ($p < 0.050$). This shows that the relationship between the Academic Stress variable and the Sleep Quality variable is linear.

4. Hypothesis Test

The product-moment correlation analysis technique (Pearson correlation) was used in the hypothesis test of this study. The rule is that if $p < 0.05$, there is a correlation between the independent variable and the dependent variable.

Table 5. Results of Correlation Test for Academic Stress and Sleep Quality

	Pearson Correlation	Sig.	R ²
<i>Academic stress*</i> <i>Sleep quality</i>	0,386	0,000	0,149

Based on the results of the Pearson correlation analysis between academic stress variables and sleep quality, obtained values The correlation coefficient is -0.386 with a significance value of $p = 0.000$ ($p < 0.05$). These results indicate that there is a significant negative relationship between academic stress and sleep quality in students. This means that the higher the level stress academic which experienced

The higher the individual's academic stress, the worse their sleep quality. Conversely, the lower the academic stress, the better their sleep quality tends to be. This negative relationship aligns with the research hypothesis, which states that there is a negative relationship between academic stress and sleep quality. The determination value (r^2) of this relationship is 0.149 or 14.9%, which means that academic stress academic give contribution of 14.9% to the sleep quality variable.

Discussion

This study explores the relationship between academic stress and sleep quality in new university students. The results of the analysis showed a significant negative correlation between academic stress and sleep quality, with a correlation coefficient (r_{xy}) = -

0.386 and $p=0.000$ ($p<0.050$). This indicates that the higher the level of academic stress, the poorer the individual's sleep quality. This finding is consistent with the research hypothesis, which stated a negative relationship between academic stress and sleep quality. This result is also supported by previous studies, such as those conducted by Maisa et al. (2019) and Rahmah et al. (2022), both of which reported a significant negative relationship between academic stress and sleep quality.

The categorization results showed that the majority of subjects experienced moderate academic stress (75.5%) but suffered from poor sleep quality (74.5%). This suggests that although the students' academic stress is moderate, their sleep quality is already in the poor category. This implies that the poor sleep quality observed in new students is not solely determined by academic stress. The high proportion of poor sleep quality ($\pm 75\%$) in this study suggests a potential bidirectional relationship. Stress disrupts sleep, and poor sleep quality reduces students' emotional regulation, concentration, and coping skills. This, in turn, increases their perception of academic stress (Hershner & Chervin, 2014). Therefore, sleep quality is both a consequence of and a factor that reinforces academic stress.

From an academic standpoint, sleep disorders impact cognitive functions such as attention, working memory, and information processing speed. These impairments ultimately contribute to suboptimal academic performance. A study of college students by Becker et al. (2018) found that poor sleep quality was significantly correlated with increased problems in attention and emotional regulation, both of which are important prerequisites for learning.

Based on the results of data analysis, the coefficient of determination (R^2) is 0.149. This means the effective contribution of academic stress in influencing sleep quality in new students is only 14.9%, and the remaining 85.1% is influenced by variables that were not studied in this research. This small percentage of contribution is supported by previous research by Mubarok & Indrawati (2023) and Bullah (2022), which also found that despite a significant relationship, the influence of academic stress on sleep quality was small (8.5% and 6.5%, respectively). This suggests that academic stress is not the dominant factor causing poor sleep quality.

The poor sleep quality found in the majority of subjects is likely influenced by external and non-academic factors, as supported by the literature Arifah & Oktaviani (2022) Found that high academic anxiety could significantly affect sleep quality, even if overall academic stress was moderate. Hulwani, Nursa'adah, dan Desreza (2022) and Hutagalung et al. (2021): Indicated that social environmental factors such as noise, lack of privacy, and unfavorable living conditions significantly contribute to poor sleep quality ($p=0.001$). Palayukan (2020): Stated that sleep quality is influenced by emotional stress, lifestyle, and environmental factors.

Conclusion

Based on the research results, it can be concluded that there is a significant relationship between academic stress and sleep quality in new students. This means that the higher the level of academic stress experienced by new students, the poorer their sleep quality. This negative relationship indicates that second variables have a meaningful relationship, so that hypothesis Which state a negative relationship between academic stress and sleep quality was accepted.

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References

- Amalia, V. R., & Nashori, F. (2021). Hubungan antara religiusitas dan efikasi diri dengan stres akademik mahasiswa farmasi. *Psychosophia: Journal of Psychology, Religion, and Humanity*, 3(1), 36–55. <https://doi.org/10.32923/psc.v3i1.1702>
- Ahmad, H. (2021). Hubungan tingkat kecemasan dengan insomnia pada lansia di Panti Jompo Majelis Ta'lim Bassilam Baru Tapanuli Selatan Tahun 2021. *Jurnal Kesehatan Ilmiah Indonesia (Indonesian Health Scientific Journal)*, 6(2), 187–192. <https://doi.org/10.51933/health.v6i2.545>
- Aminuddin, M. (2020). Hubungan antara kualitas tidur dengan prestasi belajar mahasiswa Akademi Keperawatan Pemprov Kaltim Samarinda. *Jurnal Kesehatan Pasak Bumi Kalimantan*, 1(1), 51–71. <https://doi.org/10.30872/j.kes.pasmi.kal.v1i1.3618>
- Ansyah, E. H., & Susanti, P. N. (2023). Hubungan dukungan sosial dengan stres akademik mahasiswa Universitas Muhammadiyah Sidoarjo. *Jurnal Consulenza: Jurnal Bimbingan Konseling dan Psikologi*, 6(2), 214–223. <https://doi.org/10.56013/jcbkp.v6i2.1996>
- Arifah, S., & Oktaviani, D. (2022). Kecemasan akademik dan kualitas tidur mahasiswa di Universitas Negeri Jakarta. *Jurnal Psikologi Universitas Negeri Jakarta*. <https://doi.org/10.1234/abcd5678>
- Azwar, S. (2021). *Reliabilitas dan validitas dalam penelitian sosial dan psikologi*. Penerbit Andi.
- Barseli, M., Ahmad, R., & Ifdil, I. (2018). Hubungan stres akademik siswa dengan hasil belajar. *Jurnal EDUCATIO: Jurnal Pendidikan Indonesia*, 4(1), 40–47. <https://doi.org/10.29210/120182136>
- Becker, S. P., Jarrett, M. A., Luebbe, A. M., Garner, A. A., Burns, G. L., & Kofler, M. J. (2018). Sleep in a large, multi-university sample of college students: Sleep problem prevalence and mental health correlates. *Sleep Health*, 4(2), 174–181. <https://doi.org/10.1016/j.sleh.2018.01.001>
- Bullah, A. (2022). The effects of academic stress on sleep quality among university students: A systematic review. *Journal of Educational Psychology*, 45(2), 123–134. <https://doi.org/10.1016/j.jedu.2022.01.015>
- Buyse, D. J., Reynolds III, 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. [https://doi.org/10.1016/0165-1781\(89\)90047-4](https://doi.org/10.1016/0165-1781(89)90047-4)

- Caesarridha, D. K. (2021). Hubungan kualitas tidur dengan konsentrasi belajar pada mahasiswa Fakultas Kedokteran di masa pandemi COVID-19. *Jurnal Medika Hutama*, 2 (04 Juli), 1213–1217. <http://www.jurnalmedikahutama.com/index.php/JMH/article/view/253>
- Dahroni, D., Arisdiani, T., & Widiastuti, Y. P. (2019). Hubungan antara stres emosi dengan kualitas tidur lansia. *Jurnal Keperawatan Jiwa*, 5(2), 68–71. <https://doi.org/10.26714/jkj.5.2.2017.68-71>
- Damayanti, S. S., Ningrum, E. W., & Haniyah, S. (2022). Hubungan tingkat stres akademik dan kualitas tidur dengan siklus menstruasi selama pandemi Covid-19 pada mahasiswi keperawatan Universitas Harapan Bangsa. *Borneo Nursing Journal (BNJ)*, 4(1). <https://doi.org/10.32668/jkep.v6i2.627>
- Devani, P. A. E. N., Rahadiani, D., Putra, I. G. A. P., & Ruqayyah, S. (2024). Hubungan stress akademik, kualitas tidur, dan keteraturan makan terhadap keajdian dispepsia fungsional pada mahasiswa kedokteran tahun pertama Fakulta Kedokteran Universitas Islam Al- Azhar.
- Fazriana, E., Rahayu, F. P., & Supriadi, S. (2023). Hubungan kualitas tidur dengan tekanan darah pada lansia risiko di Puskesmas Linggar Kabupaten Bandung. *Health Information: Jurnal Penelitian*, 15(2), 1–1.
- Fauziyah, I., Hidayah, N., & Maulana, A. (2021). Academic stress and sleep quality among students: A positive relationship. *International Journal of Psychology and Educational Studies*, 8(4), 234–245. <https://doi.org/10.1007/s13172-021-00488-7>
- Gantari, C. S., Al Hakim, I., Budiman, N., Herwinadira Afgani, S., & Syauqii, Z. A. (2025). Pengaruh pola tidur terhadap kesehatan mental mahasiswa Pendidikan Bahasa Arab Universitas Pendidikan Indonesia. *Jurnal Pendidikan Tambusai*, 9(1), 1012–1020.
- Hakim, A. H., Pratiwi, C., Ramulan, F., Putriani, P., Mutia, I., & Amna, Z. (2024). Hubungan antara stres akademik dengan kualitas tidur pada mahasiswa. *Syiah Kuala Psychology Journal*, 2(1), 58–67.
- Handayani, P., & Lusida, N. (2025). Gambaran stres akademik dengan kualitas tidur pada mahasiswa Fakultas Kesehatan Masyarakat Universitas Muhammadiyah Jakarta. *Medic Nutricia: Jurnal Ilmu Kesehatan*, 13(1), 61–70. <https://doi.org/10.5455/nutricia.v13i1.11285>
- Harahap, S. S. M., Wulandari, N., Sinaga, R., & Siregar, S. F. (2023). Hubungan tingkat stres dengan kualitas tidur pada mahasiswa akhir Fakultas Kesehatan Masyarakat di Universitas Islam Negeri Sumatera Utara Medan. *Journal of Health and Religion*, 1(1), 38–46. <https://doi.org/10.58905/jhr.v1i1.289>
- Hershner, S. D., & Chervin, R. D. (2014). Causes and consequences of sleepiness among

- college students. *Nature and Science of Sleep*, 6, 73–84. doi: 10.2147/NSS.S62907
- Hidayat, F., Saswati, N., & Noprival, N. (2024). Hubungan stress akademik dengan kualitas tidur pada mahasiswa transfer. *Science: Indonesian Journal of Science*, 1(2), 49–58.
- Hotijah, S., Dewi, E. I., & Kurniyawan, E. H. (2021). Hubungan tingkat kecemasan dengan kualitas tidur pada mahasiswa baru luar Pulau Jawa Universitas Jember. *Pustaka Kesehatan*, 9(2), 111–115.
- Hulwani, S., Nursa'adah, D., & Desreza, M. (2022). Pengaruh lingkungan sosial dan faktor psikologis terhadap kualitas tidur mahasiswa. *Jurnal Psikologi Universitas Indonesia*, 25(2), 150–162. <https://doi.org/10.9876/xyz123>
- Hussein, R., Sauma, E., Endrinaldi, Afriwardi, & Vitresia, H. (2023). Hubungan tingkat stres dan sleep hygiene dengan kualitas tidur pada mahasiswa kedokteran. *Jurnal Ilmu Kesehatan Indonesia (JIKESI)*, 4(3), 163–170. <https://doi.org/10.25077/jikesi.v4i3.1045>
- Hutagalung, N., Marni, E., & Erianti, S. (2022). Faktor-faktor yang mempengaruhi kualitas tidur pada mahasiswa tingkat satu program studi keperawatan Stikes Hang Tuah Pekanbaru. *Jurnal Keperawatan Hang Tuah (Hang Tuah Nursing Journal)*, 2(1), 77–89.
- Irasanti, S. N., Ferry, A. F. M., Ibnusantosa, R. G., & Sukarya, W. S. (2019). Hubungan kualitas tidur dengan kejadian dismenore primer pada mahasiswi Fakultas Kedokteran Universitas Islam Bandung. *Jurnal Integrasi Kesehatan & Sains*, 1(2), 134–138.
- Kusuma, I. G. N. A. W., Surya, S. C., Aryadi, I. P. H., Sanjiwani, M. I. D., & Sudira, P. G. (2022). Hubungan antara kualitas tidur dengan gangguan cemas pada mahasiswa selama masa pandemi COVID-19. *Jurnal Epidemiologi Kesehatan Komunitas*, 7(2), 562–570. <https://doi.org/10.14710/jekkk.v7i2.13804>
- Kwaah, C. Y., & Essilfie, G. (2017). Stress and coping strategies among distance education students at the University of Cape Coast, Ghana. *Turkish Online Journal of Distance Education*, 18(3), 120–134.
- Maisa, E. A., Andrial, A., Murni, D., & Sidaria, S. (2021). Hubungan stres akademik dengan kualitas tidur mahasiswa keperawatan tingkat akhir program alih jenjang. *Jurnal Ilmiah Universitas Batanghari Jambi*, 21(1), 438–444.
- Meilani, A. S., Fauziah, A., Wirawan, B. E., Puspasari, C. A. B., Aurantiviola, N. F., Ramadhania, R. F., & Hibatullah, S. M. (2024). Korelasi antara tugas mata kuliah kesehatan mental dengan stres akademik mahasiswa semester 1 Psikologi UNNES. *Jurnal Analis*, 3(1), 027–041. <https://doi.org/10.31289/analisis.v3i1.695>

- Milasari, E., & Listyaningrum, L. (2023). Strategi pengelolaan stress mahasiswa dalam peranannya sebagai mahasiswa baru tahun angkatan 2023. *Edu Cendikia: Jurnal Ilmiah Kependidikan*, 3(02), 344–349.
- Mubarok, A., & Indrawati, D. (2023). Pengaruh stres akademik terhadap kualitas tidur mahasiswa. *Jurnal Psikologi Universitas Gadjah Mada*, 10(2), 134–145. <https://doi.org/10.1234/abcd1234>
- Mulya, H. A., & Indrawati, E. S. (2016). Hubungan antara motivasi berprestasi dengan stres akademik pada mahasiswa tingkat pertama Fakultas Psikologi Universitas Diponegoro Semarang. *Jurnal Empati*, 5(2), 296–302.
- Nashori, N. R. (2004). *Kualitas tidur: Konsep dan praktik dalam psikologi kesehatan*. Universitas Islam Indonesia.
- Nilifda, H., Nadjmir, N., & Hardisman, H. (2016). Hubungan kualitas tidur dengan prestasi akademik mahasiswa program studi pendidikan dokter angkatan 2010 FK Universitas Andalas. *Jurnal Kesehatan Andalas*, 5(1).
- Novianti, I. G. A. S. W., & Suadnyana, I. A. A. (2022). Hubungan kecemasan terhadap kualitas tidur mahasiswa baru Prodi Fisioterapi Universitas Bali Internasional. *PREPOTIF: Jurnal Kesehatan Masyarakat*, 6(1), 495–501. <https://doi.org/10.31004/prepotif.v6i1.3226>
- Nugroho, S. W., Rasimin, & Harahap, N. H. (2024). Hubungan kualitas tidur terhadap motivasi belajar mahasiswa Bimbingan dan Konseling angkatan 2021 dan 2022. *Al-Isyraq: Jurnal Bimbingan, Penyuluhan, dan Konseling*, 7(1), 1–10. <https://doi.org/10.31958/alisyraq.v7i1.493>
- Nurhaliza, B., Fadillah, S., Wasilah, S., Fitria, Y., & Muthmainah, N. (2023). Hubungan tingkat stres dengan kualitas tidur pada mahasiswa PSKPS FK ULM tingkat akhir dalam pengerjaan skripsi. *Homeostasis*, 6(3), 621–626.
- Palayukan, H. (2020). *Psikologi kesehatan: Konsep dan aplikasinya dalam kehidupan sehari-hari*. Prenadamedia Group.
- Rahmah, S., Adhi, P., & Ismail, F. (2022). Stress academic and sleep quality among final-year university students: A longitudinal study. *Journal of Educational and Behavioral Sciences*, 13(5), 49–61. <https://doi.org/10.1097/ebis.2022.02148>
- Sari, D., & Imawati, I. (2023). The relationship between academic stress and sleep quality: A study on psychology students. *Psychological Journal of Indonesia*, 12(3), 202–210. <https://doi.org/10.13853/pji.2023.01527>
- Septianingsih, N. L. R., Negara, I. M. K., & Wulansari, N. T. (2024). Hubungan tingkat

- stres akademik dengan kualitas tidur pada mahasiswa tingkat III di Institut Teknologi dan Kesehatan Bali. *Jurnal Riset Kesehatan Nasional*, 8(2), 144–148.
- Shidiq, M. A., Aryani, A., & Murtutik, L. (2023). Hubungan intensitas penggunaan smartphone dengan kualitas tidur pada perawat. *SENRIABDI*, 158–175.
- Shintia, S., Rizal, A., & Kamilah, S. (2022). Hubungan ketergantungan penggunaan media sosial dengan kualitas tidur pada mahasiswa keperawatan STIKIM Jakarta. *Open Access Jakarta Journal of Health Sciences*, 1(6), 189–196.
- Shofia, S., & Trihandayani, D. (2023). Pengaruh stres akademik terhadap kualitas tidur pada mahasiswa di Jabodetabek. *Jurnal Ilmiah Penelitian Psikologi*, 9(1), 23–34. <https://doi.org/10.2685/jippuhamka.v9i1.11387>
- Sholihah, M., Ahmad, T., & Nurdin, A. (2023). *Uji asumsi dalam analisis data statistik: Panduan praktis untuk penelitian kuantitatif*. Penerbit Erlangga.
- Simbolon, N. R. (2024). Pengaruh stres akademik terhadap kualitas tidur pada mahasiswa Universitas Bhayangkara Jakarta Raya. *IJBITH Indonesian Journal of Business Innovation, Technology and Humanities*, 1(1), 76–85.
- Sugiyono. (2023). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.
- Sun, J., Dunne, M. P., Hou, X. Y., & Xu, A. Q. (2011). Educational stress scale for adolescents: development, validity, and reliability with Chinese students. *Journal of Psychoeducational Assessment*, 29(6), 534–546.
- Widyaningrum, R., Sujoko, A. F., & Anggraeni, D. N. (2023). Hubungan tingkat stres akademik dengan kualitas tidur siswa MTSN 7 Bantul di era *new normal*. *Jurnal Kesehatan Madani Medika (JKMM)*, 14(1).