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ORIGINAL RESEARCH



CORRELATION STUDY OF SOCIAL MEDIA ACCESS WITH SLEEP OUALITY AND LEARNING CONCENTRATION TO MIDWIFERY STUDENT

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ABSTRACT	Keywords
Globalization has led to increased social media usage among adolescents, potentially disrupting their sleep schedules and affecting sleep quality. This study aims to determine the correlation between social media usage and sleep and concentration levels among students, highlighting the potential for addiction and excessive engagement on platforms. The employed methodology is descriptive correlational, utilizing a cross-sectional approach. The participants in this study consisted of 24 students enrolled in the Dian Husada Mojokerto Stikes Midwife Diploma Study Program, selected using total sampling. The data was gathered by a questionnaire and subsequently examined using the Chi Square Test and regression analysis, with a significance level of $\alpha=0.05$. The findings of the study indicated that 24 participants exhibited a significant level of social media usage, while also experiencing subpar sleep quality and diminished concentration whilst studying. A correlation has been found between the utilization of social media and the quality of sleep, with a resulting correlation coefficient of $\rho=0.000$, which is statistically significant at $\alpha=0.05$. There is a correlation between the usage of social media and study concentration, with a correlation coefficient (ρ) of 0.000, which is statistically significant at a significance level (α) of 0.05. The regression test findings indicate a significant relationship (sig value = 0.000) between the three variables: social media usage, sleep quality, and study concentration. This relationship is statistically significant at a significance level of $\alpha=0.05$. Increased utilization of social media is directly correlated with decreased sleep quality and diminished attention whilst studying.	Impact of Social Media , Learning Concentration , Sleep Quality

INTRODUCTION

The use of social media including Facebook, Twitter, Messenger, email, Line and others is rapidly increasing in every part of the world. Indonesia is also one of the countries that follows advances in technology and information (Yuan et al., 2021). The spread of social media sites makes it easy for people from various parts of the world to interact, exchange pictures, send voices, provide information. Various groups can now use social media. Starting from teenagers,

adults, parents and even children are familiar with social media. Many teenagers (students and college students) spend their time online on social media, even at night. This can disrupt the sleep process, so that they do not experience quality sleep at night (van der Schuur, Baumgartner, & Sumter, 2019).

Based on Bachelor (S1) or Diploma (D1/D2/D3) education level, 98.39% of internet users in Indonesia (Sánchez-Fernández & Borda-Mas, 2023). The We Are Social report shows that the number of active

social media users in Indonesia was 167 million people in January 2023. This number is equivalent to 60.4% of the population in the country (Borgohain & Borpatra Gohain, 2021). When the body lacks quality sleep at night it will result in various physiological balance disorders such as decreased daily activities. feeling tired. weak. neuromuscular conditions, decreased immune system, which can be caused by poor quality sleep (van den Eijnden, Geurts, Ter Bogt, van der Rijst, & Koning, 2021). Humans spend a third of their life sleeping. Factors that cause sleep disorders include changes in lifestyle, one of which is the use of gadgets, especially social media. So it is not surprising that nowadays many teenagers experience poor sleep quality. Someone who experiences poor sleep quality can cause a decrease in concentration (Simsek & Balaban Sali, 2020). One way that can be tried to improve respondents' sleep quality and study concentration is to increase their interest in reading, increase physical activities such as sports and engage in other useful hobbies.

The aim of this research is to determine the relationship between social media use and sleep quality and study concentration for students of the D III Midwife Stikes Dian Husada Mojokerto Study Program.

METHOD

This research was conducted descriptively, correlationally, using a cross sectional approach. The respondents in this study were all active D 3 Midwife students in 2023 STIKES Dian Husada Mojokerto, a total of 24 students taken by total sampling. This research was conducted during March 2023. Data was collected using a questionnaire for social media variables and sleep quality, and concentration was measured using the Stroop Test sheet. Data analysis used the Chi Square Statistical Test and regression (Pratama, Aisyah, Putra, Sirodi, & Afgan, 2023).

RESULTS

Table 1. Respondents' Frequency Distribution Based on sex, Age, using of social media, sleep qulity and learn consentration.

Category	N	%
Gender		
Woman	24	100
Age		
19	6	23
20	15	64
21	3	13
Social Media		
High	21	88
low	3	12
Sleep quality		
Bad (PSQI >5)	20	84
Good (PSQI≤5)	4	16
Learning concentration		
Buruk (>13 detik)	19	82
Baik <u>(≤13 detik)</u>	5	18

Based on Table 1 Sebagian besar responden berumur 20 tahun yaitu sebanyak 15 responden (64%). Sebagian besarpenggunaan media sosialnya dalam kategori tinggi 21 responden (88%). Demikian juga dengan kualitas tidur Buruk (PSQI >5) sebanyak 20 responden (84%). Dan konsentrasi belajar Buruk (>13 detik) sebanyak 19 responden (82%).

Table 2. corelation of using of social media and sleeping quality

N o	Use of	Sleep	Qua	lity		Tot	al
U	socia	poor		goo	d		
	l medi a	N	%	N	%	N	%
1	low	1	3	2	9	3	12
2	high	1 9	8 1	2	7	2	8
Total		2 0	8	4	1 6	2 4	10 0
		ρ = 0,000					

In table 2, it is known that 19 students (81%) had poor sleep quality or PSQI>5 of respondents whose sleep quality was high or PSQI≤5 and 2 students (7%) who had good

Table 4. Correlation of social medi use with sleep quality and study concentrationCoefficients^a

		dardize ficients	Standardize d Coefficients		
Model	В	Std. Error	Beta	t	Sig.
1 (Constant)	1.743	.099		7.56 7	.00
Sleep Quality	305	.080	349	3.81 6	.00
Konsentras i Belajar	414	.071	533	5.82 9	.00

a. Independent Variable: Media

Sosial

sleep quality or PSQI≤5 had high social media use. Meanwhile, 2 students (9%) had good sleep quality or PSQI<5 and 1 student (3%) had poor sleep quality or PSQI≤5. After data analysis, there was a relationship between the use of social media and sleep quality among respondents.

Table 3. Relationship between social media use and study concentration

No	Social media	Learning concentration			Total		
	used	poor good					
		N	%	N	%	N	%
1	Low	0	0	3	12	3	12
2	high	19	78	3	10	21	88
to	tal	19	78	5	22	24	100
			$\rho = 0$,000			

In table 3, it is known that 19 students (78%) of respondents who used social media had poor study concentration and 3 students who had good study concentration (10%). Meanwhile, 3 students (12%) of respondents whose use of social media was low had good study concentration and no students had poor study concentration.

There is a relationship between the use of social media and the study concentration of respondents. Woran K (2020) said that decreased concentration really interferes with daily activities. If it continues continuously it

can cause failure to focus when doing tasks and not being able to complete them well.

In table 4, the results of the regression coefficient for each variable obtained a value of sig (0.000) because the value of sig (0.000) $<\alpha$ (0.05), the regression coefficient is significant, which means there is a relationship between the use of social media and the quality of sleep and study concentration in program students. D III Midwife Stikes studies Dian Husada Mojokerto.

DISCUSSION

Correlation of Social Media Use and Sleep Quality

The results of the research show that there is a relationship between the use of social media and sleep disorders. Firstly, the use of social media will replace sleep, for example if someone is still busy with Instagram, then sleep time will be reduced. Second, the use of social media can increase emotional, cognitive and physiological arousal. Third, the bright light emitted by social media devices can delay circadian rhythms. If the regulation of the melatonin hormone is disturbed due to exposure to light, such as gadget light due to using social media for too long, it can cause a person's sleep quality to become poor or experience sleep disorders (Saffari et al., 2022).

Apart from that, there are many facilities available on social media, which makes respondents usually forget the time and respondents spend a lot of time using social media, forgetting to rest and not using the hours to sleep properly.

The relationship between the use of social media and sleep quality has a significant relationship because of social media in this era, especially online lectures where students are busy with social media all the time. Similar to research from (Hussain & Griffiths, 2019) have similarities in discussing the use of social media and sleep, the difference is, this research explains more about how social media can cause sleep disorders.

Correlation of social media use with learning concentration

Loss of concentration or lack of concentration can be caused by various factors, such as fatigue and boredom with daily routines. However, there are other factors that can reduce concentration, one of which is social media. Without realizing it, using social media excessively can make it difficult to concentrate. Currently, almost all students and workers use smartphones. At least, there are more than two social media used. Interesting information that appears on social media every second can kill someone's concentration. The more active you are and the more you interact on social media, the more difficult it is to stop playing on social media.

Social media was born as a result of technological developments. However, if not used wisely, social media can be detrimental, such as reducing productivity so that it can reduce concentration when carrying out activities during the day because they use social media too much. Having a negative impact doesn't mean we stop playing on social media. There are still positive impacts of social media that can be reaped and managed well, for example it can be used to upload inspiring content, inspiring stories, apart from that, social media can also make it possible to open up new environments and new communities. This is supported by research by (Dibben et al., 2023)regarding the relationship between social media and students' learning concentration during the Covid pandemic, namely if the use of social media is good enough, then students' learning concentration is also good enough. Use social media wisely with sufficient duration of use, even though the activity of using social media for the purpose of learning or looking for information related to lessons is not active enough, the students' ability to concentrate during the learning process is quite good, one of which is shown by the students' good attention to the lesson material.

Correlation of social media use with sleep quality and study concentration

From the results of research using regression tests, social media, sleep quality,

and study concentration are interconnected. Because each variable has a sig value (0.000). In the current era of advances in information and communication technology, everyone uses social media. Where exposure to light from gadgets while playing on social media can disrupt the regulation of the hormone melatonin in the body which can cause a person's sleep quality to be poor or experience sleep disorders. Apart from that, excessive use of social media or addiction can disrupt the regulation of thyroid hormones in the body so that metabolism becomes slow, reducing blood flow and cell function in various parts of the brain which can reduce a person's concentration or experience concentration problems. Currently, smartphones have become a necessity in life which causes them to use social media all the time, almost all respondents said they use social media ≥ 6 hours. The sleep process is disturbed due to teenagers who focus on playing social media until late at night and still ignore warnings from social media when students start to sleep. (Suranto, Johan Syah, Kristiana, & Puspita, 2020)said that decreased concentration really interferes with daily activities. If it continues continuously it can cause failure to focus when doing tasks and not being able to complete them well. Loss of concentration or lack of concentration can be caused by various factors, such as fatigue and boredom with daily routines. However, there are other factors that can reduce concentration, one of which is social media. Without realizing it, using social media excessively can make it difficult to concentrate.

CONCLUSIONS

The higher the time you use social media, the worse the quality of sleep you will experience, resulting in body fatigue and not getting the energy your body and brain need for activities during the day.

REFERENCES

Borgohain, M., & Borpatra Gohain, A. (2021). Impact of Social Media in The Student's Academic Performance: An Analysis of The State Universities of Assam. European Journal of Molecular & Clinical Medicine.

- Dibben, G. O., Martin, A., Shore, C. B., Johnstone, A., McMellon, C., Palmer, V., ... Simpson, S. A. (2023). Adolescents' interactive electronic device use, sleep and mental health: a systematic review of prospective studies. *Journal of Sleep Research*. https://doi.org/10.1111/jsr.13899
- Hussain, Z., & Griffiths, M. D. (2019). The Associations between Problematic Social Networking Site Use and Sleep Quality, Attention-Deficit Hyperactivity Disorder, Depression, Anxiety and Stress. *International Journal of Mental Health and Addiction*. https://doi.org/10.1007/s11469-019-00175-1
- Pratama, R., Aisyah, S. A., Putra, A. M., Sirodj, R. A., & Afgan, M. W. (2023). Correlational Research. *JIIP - Jurnal Ilmiah Ilmu Pendidikan*. https://doi.org/10.54371/jiip.v6i3.1420
- Saffari, M., Chen, H.-P., Chang, C.-W., Fan, C.-W., Huang, S.-W., Chen, J.-S., ... Lin, C.-Y. (2022). Effects of sleep quality on the association between problematic internet use and quality of life in people with substance use disorder. *BJPsych Open*. https://doi.org/10.1192/bjo.2022.557
- Sánchez-Fernández, M., & Borda-Mas, M. (2023). Problematic smartphone use and specific problematic Internet uses among university students and associated predictive factors: a systematic review. *Education and Information Technologies*. https://doi.org/10.1007/s10639-022-11437-2
- Simsek, E., & Balaban Sali, J. (2020). The Role of Internet Addiction and Social Media Membership on University Students' Psychological Capital. Contemporary Educational Technology. https://doi.org/10.30935/cedtech/6127
- Suranto, Johan Syah, M. F., Kristiana, D. N., & Puspita, R. W. (2020). Analysis of social networks utilization in student learning patterns. *International Journal*

- of Innovation, Creativity and Change.
- van den Eijnden, R. J. J. M., Geurts, S. M.,
 Ter Bogt, T. F. M., van der Rijst, V. G.,
 & Koning, I. M. (2021). Social media
 use and adolescents' sleep: A
 longitudinal study on the protective role
 of parental rules regarding internet use
 before sleep. *International Journal of Environmental Research and Public Health*.
 https://doi.org/10.3390/ijerph18031346
- van der Schuur, W. A., Baumgartner, S. E., & Sumter, S. R. (2019). Social Media Use, Social Media Stress, and Sleep: Examining Cross-Sectional and Longitudinal Relationships in Adolescents. *Health Communication*. https://doi.org/10.1080/10410236.2017. 1422101
- Yuan, D., Rahman, M. K., Issa Gazi, M. A., Rahaman, M. A., Hossain, M. M., & Akter, S. (2021). Analyzing of User Attitudes Toward Intention to Use Social Media for Learning. *SAGE Open*. https://doi.org/10.1177/2158244021106 0784