

THE RELATIONSHIP OF INTERNET ADDICTION WITH SLEEP QUALITY IN STUDENTS

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Abstract

Internet usage too much is one of the things that can make it hard to get a good night's sleep. The purpose of this study was to determine the relationship between internet addiction and sleep quality in SMA Negeri 2 Putussibau students. This type of research in an analytic study with a cross-sectional design. The sample used were students of SMA Negeri 2 Putussibau with total sampling technique. This research was conducted 452 students in grades X-XII using the Internet Addiciton Test(IAT) questionnaire to measure internet addiciton and the Pittsburgh Sleep Quality Index (PSQI) questionnaire to asses sleep quality in students of SMA Negeri 2 Putussibau. The test statiscal anaylsis that was employed was the Chi Square . The achieved P value = 0,001 (P values < 0.05). So it can be concluded that there is a relationship between internet addiction and sleep quality in students of SMA Negeri 2 Putussibau.

Keywords: internet; addiction; sleep quality

INTRODUCTION

The Internet is a network that connects millions of people and makes it easy for users to exchange and access information at any time (Makdis, 2021). The use of the Internet has become common, such as for entertainment, communication, education and others. However, excessive internet use can cause problems such as, compulsive behavior that can interfere with a person's quality of life, cause dependence, cause stress on family and friends (Marpaung, 2018). Affects education, and leads to physical health problems, depression, poor sleep quality, mood swings, obesity, and lack of confidence (Kolhar et al., 2021).

Students spend several hours a day on the internet for learning purposes, online entertainment, playing games, using social networking sites (SNSs) and other means of communication (Adiarsi et al., 2015). This increases the risk of problems occurring. A review to look at the prevalence of South-East Asia Region (SEAR) students found internet addiction results ranging from 0 to 47.4%, while the prevalence of internet addiction ranged from 7.4% to 46.4%. Research by Cellini et al found that excessive internet use is associated with poor sleep quality, can increase psychological distress such as stress, depression and anxiety in a person (Cellini et al., 2020). Internet addiction can also interfere with daily activities which can lead to decreased productivity and neglect of work.

RESEARCH METHODS

This research is included in the type of quantitative research by analyzing the picture of the relationship between the two variables, namely the independent variable (Internet Addiction) and the dependent variable (Sleep Quality). This study used a cross-sectional research design. This research was conducted on students of SMA Negeri 2 Putussibau on January 22-24, 2022. Research instruments used to measure Internet Addiction variables using Internet Addiction Test (IAT) and Sleep Quality variables (PSQI).

The population of this study was all students of grades X-XII 599 students. Sampling using non-random sampling techniques with the Total sampling method by obtaining a minimum number of calculations of 117 students and those included in the sample according to inclusion criteria amounted to 452 students. Data analysis using descriptive statistics and inferential statistics with chi-square test (Sugiyono, 2015).

RESULT AND DISCUSSION

The majority of respondents were female (57.7%), for the average age of respondents 17 years (33.0%), and class XI social studies 2 respondents as many as 33 (7.3%).

Table 1. Internet addiction and gender

Internet addiction	Man	Girl	Total
	N (%)	N (%)	
Normal	25(61,0)	16(39,0)	41(100)
Light	86(40,6)	126(59,4)	188(100)
Keep	76(40,4)	112(59,6)	212(100)
Heavy	4(36,4)	7(63,6)	11(100)
Total	191(42,3)	261(57,7)	452(100)

From the table above, it was found that respondents who experienced the most internet addiction were women (57.7%).

Table 2 Sleep Quality and Gender

Sleep quality	Bad	Good	Total
	N (%)	N (%)	N(%)
Gender			
Man	(55,0)	86(45,0)	191(100)
Girl	175(67,0)	86(33,0)	261(100)
Total	280(61,9)	172(38,1)	452(100)

Table 3. Internet Addiction Data

Variable	N	%
Internet addiction		
Normal	41	9,1
Light	212	46,9
Keep	188	41,6
heavy	11	2,4
Total	452	100

Table 3 shows respondents who experience the heaviest internet addiction are (2.4%).

Table 4. Sleep quality and age

Age	Sleep quality		Total N(%)
	Bad N (%)	Good N (%)	
15	31(72,1)	12(27,9)	43(100)
16	62(62,6)	37(37,4)	99(100)
17	83(55,7)	66(44,3)	149(100)
18	80(67,2)	39(32,8)	119(100)
19	20(60,6)	13(39,4)	33(100)
20	4(44,4)	5(55,6)	9(100)

Based on the table above, the age of 17 years experienced the most poor sleep quality 55.7%.

Table 5. Sleep quality data

Variable	N	%
Good	172	38,1
Bad	280	61,9
Total	452	100

From the table above, respondents experienced more poor sleep quality (61.9%) compared to experiencing good sleep quality (38.1%).

Table 6. The Relationship of Internet Addiction with Sleep Quality

Addiction N (%)	Sleep quality			P _{value}	PR(95%CI)	Internetrn(%)
	Good	Bad	Total			
Normal	26(63,4)	15(36,6)	41(100)	0,001	1,762(1,170 2,654)	
Addiction	146(35,5)	265(64,5)	41(100)			
Total	172(38.1)	280(61.9)	452(100)			

Based on table 10, from the results of the chi square hypothesis test, a p value of 0.001 is obtained so that the p value < 0.05. Based on these statistical tests, Ho was rejected and HA was accepted, so it can be concluded that there is a relationship between internet addiction and sleep quality in students of SMA Negeri 2 Putussibau.

Internet addiction

In this study, more female respondents (57.7%) than men 42.3%. Students of SMA Negeri 2 Putussibau were found (9.1%) not to experience internet addiction, to experience mild internet addiction (46.9%), to experience moderate internet addiction (41.6%), to experience severe addiction (2.4%). Based on research data obtained demographic data and research results, factors that influence a person to become addicted to the internet are age, gender and other factors (Durkee et al., 2012). The results of this study showed that someone experienced internet addiction when viewed from the age of most 17 years old as much as (47.7%).

Research Normandin et al., (2021) At this stage of development, adolescents are in a phase of identity crisis and curiosity so they want to try new things. In adolescence tend to experience internet addiction. Researchers assume entering adolescence is a very vulnerable period, because adolescence is a stage to search for

identity and identity, which makes them look for information, especially that which makes them wonder what the internet is and how to use it. This greatly affects emotional, social and personality development. If teenagers are addicted to the internet, they will affect their surroundings such as reduced interaction with the real environment, become a closed person, and prefer to communicate with social media.

According to Handika & Darma, (2018) women are more familiar with terms on social media and often use social media than men. Women tend to use social media to share photos, while men are more involved in content-sharing discussions. Researchers believe that in the era of rapid globalization, women, especially teenagers, have an interest in fashion which is given the convenience of internet applications to shop online without having to queue, most women choose to visit the shopping site (Zheng et al., 2016). This causes a person to have an addictive nature, consumptive behavior if done consistently will make a person become compulsive buying disorder or called compulsive shopping disorder, this disorder is categorized as bipolar disorder.

Sleep Quality

In this study, more female respondents (57.7%) than men (42.3%). It was found that respondents who had poor sleep quality as much as (61.9%), good sleep quality as much as (31.8%). In research conducted by Kocas & Şaşmaz, (2018) showed that (58.6%) respondents had poor sleep quality where most female respondents experienced poor sleep quality (63.7%) than men (53.6%). Because internet use is not restricted at home and has no conflict with parents about internet use.

In the study Utari et al., (2021) stated that respondents experienced poor sleep quality (54.2%)⁵⁴ this was caused by the use of electronic media such as smartphones, laptops, computers which can encourage psychological and physiological adolescents to use the internet longer so that it interferes with sleep. The Turkish study reported a significant ratio of poor sleep quality in SMA with (34.1%) in women and (24.5%) in men, with women's risk factors 1.95 times greater for sleep disorders. Because women are more assigned home-related work than men, and great pressure from family, biological, hormonal differences can result in female students having poor sleep quality compared to men.

Research Bakker et al., (2016) where as many as (54%) adolescents spend time online using social media. This is associated with chat notifications and the latest content coming in at any time of the day or night. Therefore, it is possible that teenagers choose not to go to bed when it's time to go to bed because of anxiety or fear of missing chat notifications and latest content. Sleep deprivation can affect the physical and psychological health of adolescents such as cardiovascular function, immune system, metabolism, mood swings or mood swings, decreased concentration, increased anxiety, depression, anxiety and can affect interpersonal relationships.

The Relationship Between Internet Addiction and Sleep Quality

In this study, a p value of 0.001 was obtained so that the value ($p < 0.05$). based on these statistical tests, H_0 was rejected and H_A was accepted, so it was concluded that in this study there was a relationship between internet addiction and sleep quality in students of SMA Negeri 2 Putussibau.

Research conducted by Lin & Zhu, (2019) in Taiwan on 503 adolescent girls found a significant relationship between internet addiction and adolescent sleep quality. Adolescents who experienced moderate and severe internet addiction

showed poor sleep quality with P value results of 0.001 (P value <0.05). This also shows that the higher the use of the internet, the quality of adolescent sleep will be more disturbed.

Research conducted by Lombogia et al., (2021) on 93 students of SMA 1 Kristen Tomohon and found that 78.5% of adolescents experienced moderate internet addiction and as many as 62.4% of students had poor sleep quality. After statistical test analysis, the P value of 0.018 (P value <0.05) was obtained, so there is a relationship between internet addiction and adolescent sleep quality.¹² Research was also conducted by Wahyuningsih & Susanti (2021) found that if internet use is low, adolescent sleep patterns are good, on the contrary, the higher the internet use, it will cause reduced sleep patterns and for a long time, it will cause sleep pattern disturbances.

CONCLUSION

In this study, it was found that students of SMA Negeri 2 Putussibau mostly experienced mild internet addiction (47.7%), and a total of 90.9% experienced internet addiction. While those who had poor sleep quality (61.9%). The p value was obtained at 0.001 so that the p value < 0.05 so that it was concluded that there was a relationship between internet addiction and sleep quality in students of SMA Negeri 2 Putussibau. The epidemiological association is shown through the PR value (95%CI), in this study the PR value (95%CI) was 1,762 (1,170-2,654). The conclusion was that students who experienced internet addiction had a risk of 1,762 times to get poor sleep quality compared to students who did not have internet addiction

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