



Original Research

The Relationship between Internet Addiction and Insomnia in Student Class IX

La Rahmat Wabula¹, M. Taufan Umasugi¹, Wa Ode Nurlina², Angga Miftakhul Nizar², and Restiyana Agus²

¹ Nursing Study Programme STIKes Maluku Husada, Indonesia

² Faculty of Nursing, Universitas Airlangga, Surabaya, Indonesia

ABSTRACT

Introduction: Internet addiction can cause unfulfilled hours of sleep, which if left unchecked will lead to disruption of sleep patterns often called insomnia. The purpose of the research was to determine the relationship between internet addiction and insomnia.

Methods: The design of the research was descriptive-analytic with a cross-sectional approach. The population in the research consisted of as many as 217 respondents with a sample size of 141 respondents. The variables used in the research were insomnia as the dependent variable and internet addiction as the independent one. The instrument used was a questionnaire with a univariate and bivariate analysis.

Results: The results of the study used the Spearman Rho test with a value of $p = 0,000$.

Conclusion: From these results, it could be concluded that there is a relationship between internet addiction and the incidence of insomnia. Internet addiction can cause unfulfilled hours of sleep, which if left unchecked will lead to disturbed sleep patterns often called insomnia. The research suggests that students pay more attention to their health by limiting or reducing the use of the internet for unimportant issues as it can reduce learning productivity and academic value and cause insomnia.

ARTICLE HISTORY

Received: Feb 27, 2020

Accepted: April 1, 2020

KEYWORDS

insomnia; internet addiction; students

CONTACT

Wa Ode Nurlina

✉ wa.ode.nurlina-2019@fkip.unair.ac.id

📍 Faculty of Nursing, Universitas Airlangga, Surabaya, Indonesia

Cite this as: Wabula, L, R., Umasugi, M. T., Nurlina, W.O., Nizar, A.M., & Agus, R. (2020). The Relationship between Internet Addiction and Insomnia in Student Class IX. *Jurnal Ners, Special Issues*, 82-85.
doi:<http://dx.doi.org/10.20473/jn.v15i2.18943>

INTRODUCTION

The development of science, technology, and information is rapidly increasing at this time, making people inseparable from the use of the internet. Along with the development of the internet, the development of social media is also widely spread in the community. The rapid development of the internet and social media has a significant impact on all communities throughout the world (Sumedi, T., & Kuswati, 2010)

Data from the Ministry of Communication and Information Technology (Kemenkominfo) states that internet users in Indonesia in 2013 reached 63 million people. Of that number 95 per cent use the internet to access social networks. The most accessed social networking sites are Facebook and Twitter. Indonesia ranks 4th as the country with the most

Facebook users in the world, with 65 million active users after the USA, Brazil, and India. Indonesia ranks fifth as the country with the most Twitter users in the world, with 19.5 million active users after the USA, Brazil, Japan, and the United Kingdom. In addition to Facebook and Twitter, other social networks known in Indonesia is Path with 700,000 users in Indonesia, Line with 10 million users, Google+ 3.4 million users and LinkedIn with 1 million (Kominfo., 2015).

The results of the social survey conducted in Singapore in 2017 showed that the Indonesian population using social media reached 106 million out of a total population of 262 million. The popularity of the internet as a medium of communication has made it a part of everyday life for many people and led to an increase in the use of the internet by individuals. The number of internet users in Indonesia in 2017 reached 143.26 million from a

total of 262 million people. This means that 54.68% of Indonesians are internet users (Supratman, 2018). Globally, the highest prevalence of internet addiction is in the middle east (10.9%) and the lowest is in northern and western Europe (2.6%). an internet addiction (Supratman, L. P., & Wahyudin, 2017)

The experts agree that the use of the internet deserves serious attention given its usage in adolescents where there is an increasing tendency which tends to be excessive, and in the long run can lead to mental disorders in users such as antisocial disorders, anxiety disorders, and stress disorders (Dewi, N & Trikusumaadi, 2017; Raj, 2017)

Internet addiction can cause unfulfilled hours of sleep, which if left unchecked will lead to disturbed sleep patterns often called insomnia. Case studies from Young also found that people with internet addiction could spend up to 70 hours a week accessing the internet (Nur Rahmawati, 2018).. Most internet users are educated people, namely students. The development of the current era of globalization is encouraging the next generation, especially students as agents of change to keep abreast of the times. The inevitability of the internet as study equipment and job aids makes it play a role in the way humans think, communicate, relate, recreate, behave, and make decisi(Linda Pradani Agesti, Rizki Fitryasari, Ni Ketut Alit Armini, 2019)[8]ons[8]. Ironically, this useful tool also raises quite a number of problems for internet users (Lombogia, B. J., Kairupan, B. H. R., & Dundu, 2018). The study aims to determine the relationship between internet addiction with insomnia.

MATERIALS AND METHODS

This study used a descriptive-analytic research design where the researcher makes direct observations on respondents and distributes questionnaires using a cross-sectional approach to determine the relationship between internet addiction and insomnia in students class IX. This research was conducted at one of the campuses in Maluku on 7- 28 August 2019. This study uses a

stratified random sampling technique, which was a random sample selection concerning strata levels in the population, namely students of class IX, amounting to 141 people.

The data collection technique used primary data obtained directly from the use of a structured questionnaire with alternative answers provided and secondary data, that is supporting information obtained from the nursing study program which contains data about students.

The data analysis consisting of univariate and bivariate analysis used the Spearman Rho statistical test with a significance level of $p < 0.05$.

The ethical principles implemented in this study include the recruitment of respondents with awareness, without coercion, with informed consent, benefits for the subject, and confidentiality,

RESULTS

Table 1 shows that of the 141 respondents, the majority were respondents age 21 with a total of 63 respondents (44.7%), and the least were respondents age 22 with a total of 5 respondents (3.5%). There were 51 male respondents (36.2%) and 90 female respondents (63.8%).

Table 2 shows that of the 141 respondents studied, the respondents belonging to normal internet use were 28 (19.9%), as many as 56 respondents (39.7%) were classified as light , 53 as medium (37.6%) and 4 were severe (2.8%). There were 69 (48.9%) respondents who experienced insomnia and 72 (51.1%) other respondents who did not. 28 respondents used the internet normally, whereas 2 (7.1%) experienced insomnia and as many as 26 (92.9%) other respondents did not experience. 56 respondents were addicted to the internet, categorized as mild; there were 17 (30.4%) respondents who experienced insomnia and as many as 39 (69.6%) other respondents who did not. Of the 53 respondents who were addicted to the internet in the middle category, there were 46 (86.8%) respondents who experienced insomnia and 7

Table 1. Respondents' Characteristics (n=141)

Characteristics	Category	n	%
Age	19 year	21	14,9
	20 year	52	36,9
	21 year	63	44,7
	22 year	5	3,5
Gender	Man	51	36.2
	Woman	90	63.8

Source: primary data 2019

Table 2. Relationship between Internet Addiction and Insomnia (n=141)

Internet Addiction	Incident Insomnia				Total		P-Value
	Insomnia		No Insomnia				
	n	%	n	%	n	%	
Normal	2		26		28		0.000
Mild	17		39		56		
Intermediate	46		7		53		
Severe	4		0		4		
Totally	69	48.9	72	51.1	141	100	

Source: primary data 2019

(13.2%) did not. 4 respondents who were in the severe category were known to have overall insomnia.

Based on the results of the Spearman Rho test, the value of sig (2-tailed) is value = 0,000 which indicates $p < \alpha$ or $0,000 < 0.05$. The analysis shows that there is a significant relationship between internet addiction and the incidence of insomnia in class IX students.

DISCUSSION

There is a significant relationship between internet addiction and the incidence of insomnia experienced by students of class IX. Internet addiction can cause unfulfilled hours of sleep, which if left unchecked will lead to disturbed sleep patterns often called insomnia. There were 28 respondents with a normal use of the internet, 2 (7.1%) respondents experienced insomnia and as many as 26 (92.9%) others did not.

Teenagers have an unstable and egocentric behavior so teens have not been able to filter out good or bad things from the internet which means adolescents are vulnerable to its negative effects. Among the negative effects of internet use are decreased adolescent learning discipline, stress and anxiety, and loss of self-concept (Altamirano-Bustamante & Altamirano-Bustamante, 2016; Sumter, Bokhorst, Steinberg, & Westenberg, 2009).

Of the 56 respondents who were addicted to the internet categorized as mild, 17 (30.4%) experienced insomnia and as many as 39 (69.6%) did not. Of the 53 respondents who were addicted to the internet in the middle category, 46 (86.8%) experienced insomnia and as many as 7 (13.2%) did not. Whereas 4 respondents who were in the severe category were known to have overall insomnia.

The progress of science and technology is currently a very big influence in the community, especially among adolescents. The cell phone features that are often used by teenagers are video calls, social media and various social media sites such as Facebook which are very helpful as multifunctional tools, because these multifunctional teens use technology positively or negatively (Griffiths, 2000; Landtblom & Engström, 2014).

There is a relationship between the duration of social media use and the incidence of insomnia in adolescents in Public Senior High School Manado (Lombogia, B. J., Kairupan, B. H. R., & Dundu, 2018). Suggestions include reducing the use of social media and being able to manage sleep time. One of the internet addiction effects was smartphone behavior, being restless when not using a smartphone, and self-efficacy can be influenced by an anxious behavior. Academic achievement is influenced by environmental factors, and one of them is social media. (Linda Pradani Agesti, Rizki Fitriyarsari, Ni Ketut Alit Armini, 2019)

The biggest indicator of smartphone addiction is overuse. Respondents use smartphones excessively and uncontrollably. This excessive use can make students not concentrate on learning and lose

motivation (Young, 1998). Internet addiction has become a serious problem and is considered a psychological one. Internet addicts are individuals addicted to the internet with a strong tendency to carry out activities that are only solitary and limit social activities. Pathological internet use refers to psychological dependence on the internet (Dewi, N & Trikusumaadi, 2017; Nur Rahmawati, 2018).

CONCLUSION

There was a relationship between internet addiction and the incidence of insomnia in class IX students. Most respondents were in the moderate internet addiction category; however, some were included in the severe category. The higher the level of internet addiction, the higher the problem of insomnia experienced by adolescents. Further research needs to be done with a qualitative approach on the experience of families with teenagers who are internet-addicted.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

ACKNOWLEDGEMENT

The authors would like to thank the Faculty of Nursing and STIKes Maluku Husada for providing the opportunity to present this study.

REFERENCES

- Altamirano-Bustamante, N., & Altamirano-Bustamante, M. M. (2016). Teenager. *Gaceta Medica de Mexico*. <https://doi.org/10.4324/9780429485336-5>
- Dewi, N & Trikusumaadi, S. K. (2017). Bahaya Kecanduan Internet dan Kecemasan Komunikasi terhadap Karakter Kerjasama pada Mahasiswa. *Jurnal Psikologi*, 43(3), 220. <https://doi.org/https://doi.org/10.22146/jpsi.16829>
- Griffiths, M. (2000). Does Internet and computer "addiction" exist? Some case study evidence. *Cyberpsychology and Behavior*. <https://doi.org/10.1089/109493100316067>
- Kominfo. (2015). *Pengguna Internet di Indonesia Capai 82 Juta*. Kementerian Komunikasi dan Informatika Republik Indonesia. Jakarta: Kemkominfo.
- Landtblom, A. M., & Engström, M. (2014). The sleepy teenager - diagnostic challenges. *Frontiers in Neurology*. <https://doi.org/10.3389/fneur.2014.00140>
- Linda Pradani Agesti, Rizki Fitriyarsari, Ni Ketut Alit Armini, A. Y. (2019). Relationship of Smartphone Addiction and Self-efficacy with Academic Achievement in Adolescent. *Psychiatric Nursing Journal*, 1(1), 1-6.
- Lombogia, B. J., Kairupan, B. H. R., & Dundu, A. E. (2018). Hubungan Kecanduan Internet Dengan

- Kualitas Tidur Pada Siswa SMA Kristen 1 Tomohon. *Urnal Medik Dan Rehabilitasi (JMR)*, 1(1), 1–8.
- Nur Rahmawati, A. I. (2018). Internet Addiction pada Remaja Pelaku Substance Abuse: Penyebab atau Akibat? *Buletin Psikologi*, 26(1), 64–70. <https://doi.org/https://doi.org/10.22146/buletinpsikologi.31164>
- Raj, A. A. (2017). *Perilaku Kecanduan Internet terhadap Interaksi Sosial pada Remaja di Lingkungan Kos*. Fakultas Psikologi.
- Sumedi, T., & Kuswati, A. (2010). Pengaruh Senam Lansia Terhadap Penurunan Skala Insomnia Ada Lansia Di Panti Wredha Dewanata Cilacap. *Soedirman Journal of Nursing*, 5(1), 13–20.
- Sumter, S. R., Bokhorst, C. L., Steinberg, L., & Westenberg, P. M. (2009). The developmental pattern of resistance to peer influence in adolescence: Will the teenager ever be able to resist? *Journal of Adolescence*. <https://doi.org/10.1016/j.adolescence.2008.08.010>
- Supratman, L. P., & Wahyudin, A. (2017). Digital Media Literacy to Higher Students in Indonesia. *International Journal of English Literature and Social Sciences*, 2(5), 51–58.
- Supratman, L. P. (2018). Penggunaan Media Sosial oleh Digital Native. *Jurnal ILMU KOMUNIKASI*, 15(1), 47–60. <https://doi.org/https://doi.org/10.24002/jik.v15i1.1243>
- Young, K. S. (1998). Internet addiction: The emergence of a new clinical disorder. *Cyberpsychology and Behavior*, 1(3), 237–244. <https://doi.org/https://doi.org/10.1089/cpb.1998.1.237>