

ISSN 2354-8428
e-ISSN 2598-8727

JURNAL KEPERAWATAN

KOMPREHENSIF

COMPREHENSIVE NURSING JOURNAL

Published by :

Vol. 10 Special Edition, August 2024

**Sekolah Tinggi Ilmu Keperawatan
PPNI Jawa Barat**



JURNAL KEPERAWATAN KOMPREHENSIF	VOL. 10	Special Edition	Bandung August 2024	ISSN 2354-8428	e-ISSN 2598-8727
------------------------------------	---------	--------------------	---------------------------	-------------------	---------------------



Research Article

The Relationship Between Social Media Dependency, Mental Health, and Academic Performance Among Adolescents in Indonesia

Benny Novico Zani^{1*} | Faridah Mohd Said² | Nisha Nambiar³ | Siti Sholihat⁴

^{1,4}Sekolah Tinggi Ilmu Kesehatan Raflesia - Indonesia

^{2,3}Lincoln University College, Malaysia

*contact

bennynovico.phd@gmail.com

Received : 26/07/2024

Revised : 10/08/2024

Accepted : 30/08/2024

Online : 31/08/2024

Published : 31/08/2024

Abstract

Aims : the purpose of this study was to investigate the relationship between social media addiction, mental health, and academic performance among adolescents in Depok, Indonesia.

Methods : A cross-sectional study was conducted in senior high school students in Depok, West Java, among teenagers aged 15-18 years. The Social Media Addiction Scale-Student Form (SMAS-SF) Questionnaire scale, the Depression Anxiety Stress Scale (DASS), and the Social Media and Academic Performance of Students (SMAAPOS) were the scales employed.

Results : The mean age of the 200 adolescents in the intervention group was 16.37 (SD+2.55), with 60% being male. With an average score of 88.43 (SD=24.53), respondents demonstrated a moderate level of social media dependency. The respondents' mental health score dropped from 21.37.78 to 90.2137.24, and their academic performance was mediocre. Social media dependency ($r=0.241$) and sadness ($r=0.405$) were found to be substantially related to academic performance.

Conclusions : correlation between social media addiction and mental health problems ($r=0.334$) was discovered. Supportive social environments and social networks, as well as improved emotional regulation and resilience in the face of stress and adversity, are central goals of interventions for the promotion and prevention of mental illness.

Keywords:

Academic Performance, Adolescent, Indonesia, Mental Health, Social Media Addiction.

INTRODUCTION

There are positive and bad consequences of social media use on one's psyche. The advantages of social media use, which include easier communication, access to a wider group of people who can offer emotional support, and higher rates of participation and adherence to treatment plans. However, the negative effects (challenge) of social media use include the aggravation of symptoms, the escalation of hostile interactions, and the disruption of daily life (1). According to a survey of people who use social media and who also suffer

from a mental health disorder, one of the most helpful aspects of these platforms is the ability to connect with others who can relate to one's experiences and offer advice on how to deal with one's own struggles (1), to seek support and hear about other people's experiences via Twitter (2), mental health awareness campaign on Twitter by providing further support with inspirational posts and tips (3).

High levels of social media use are associated with more anxiety while communicating with loved ones in person (4), the health and well-being of adolescents (5), and

adolescent psychosocial development (6). The use of social media is often related to the development of behavior such as addiction among adolescents (7). Internet addiction affects adolescent mental health and academic achievement, such as being lonely, embarrassed, tired and sleep deprived. Another impact of social media addiction can cause someone to avoid their social responsibility, isolate themselves, lose social support, work and perform poorly at school (8), Depression, anxiety, and other mental health problems are also common. (9). Research on "addictive technological behaviors" in 23,533 adults (average age 35.8 years, ranging in age from 16 to 88) found a significant correlation between technology addiction and co-occurring psychiatric problems. by means of random sampling in online surveys Using addictive technologies like social media and video games is correlated with increased rates of anxiety, depression, OCD, and other mental health issues across a wide range of demographics. In this case, it appears that older people are less likely to become dependent on this technology as they get older (10).

The other problem of social media use is influence on the academic performance of students because students are unable to manage between social media time and study time. The frequency of daily use of social media during lectures can be significant of decreased academic performance and health (11) or not significantly related to the Grade Point Average (12). Socio-demographic factors, social networking site usage, social networking profile, average connections of students in their social networking site, number of communities/groups of students, frequency log on to social networking service, favorite social networking site usage per session, and social networking addiction are all factors that have been shown to influence social media use on academic performance (13). Another study validated the favorable link between students' grades (point totals) and the number of times they

used Facebook as a learning tool in classes where Facebook was found to enhance instruction. Social media has become an integral part of the modern classroom, with students and instructors alike using it to discuss anything from course materials to assignments to tests to announcements and more. Students publish and share links to books, presentations, and video tutorials that they have found to be helpful online. When students find something helpful, they can "like" it to let the teacher know, and the teacher can also utilize "likes" and comments to call attention to particularly helpful or problematic student contributions. Teachers and students can share links and files online to make it simpler to obtain relevant reading materials (14).

According to a student study at China's Hangzhou Dianzi University, 97% said students use social media sites in class. And 88% of students feel disturbed by other participants who use social media (15). Researchers at both Saudi universities found no correlation between WhatsApp use and student performance at the medical school. Warnings about using WhatsApp before bedtime could help reduce the negative effects of social media on other areas of life. These results illuminate pedagogical uses of social media that may require further exploration on the part of teachers. Use of WhatsApp during school-related activities (like class) is correlated negatively with sleep duration in this study (16).

Indonesians spend an average of 8 hours and 51 minutes online every day, placing them fourth worldwide in terms of Internet usage time-intensity. 49% of all Internet users participate in some form of social media use, and those who do spend an average of 3 hours and 23 minutes per day doing so (17). Social media use among children, adolescents, and adults varies widely. However, a closer look at the phenomenon reveals that people aged 18–24 make up the bulk of its users. However, information about how social media use affects the mental health and academic performance of

adolescents in Indonesia is scarce. This study set out to answer the question, "How does social media use affect the mental health and academic success of adolescents in Depok, Indonesia?" through an examination of these factors. Policymakers and educators might use the study's findings to account for the impact of social media addiction on future initiatives to minimize the incidence of mental health problems.

METHODS

Study design and Setting

Adolescents (15-18) from a certain sub district in Depok, West Java, were the subjects of a cross-sectional study. The time frame is April-May 2022 for data collection.

Sample

Students at the senior high school level who were willing to participate in the study and who possessed a mobile phone (android preferred) meeting the minimum system requirements were included. Participants who did not meet the inclusion requirements (did not have a social media account, did not want to join, or did not fill out the questionnaire in its entirety) were not included in the analysis. Individuals who met the study's inclusion criteria were selected using a convenience sample method.

Ethical consideration

An affiliated university has given ethical permission for the study. Patients were given the opportunity to fill out questionnaires and informed consent forms. All participants were assured of their privacy throughout the study and were free to discontinue participation at any time.

Measures

The demographic datasheet reported age, gender, and educational level.

The SMAS-SF Questionnaire is a tool intended to assess a person's propensity

toward compulsive use of social networking sites. The SMAS-SF scale is a Likert scale with 29 items and 4 dimensions. Each item has 5 possible responses. Subdimensions 1-5 make up the virtual tolerance scale; 6-14 make up the virtual communication scale; 15-23 make up the virtual problem scale; and 24-29 make up the virtual information scale. The scale's maximum value was 145, and its minimum value was 29. If the agent scored higher, it meant that he identified as a "social media addict."

The Depression Anxiety Stress Scale (DASS) was created by (18) and is a common tool for measuring these mental health issues. The DASS-21 items are a collection of self-report scales used to assess the levels of depression, anxiety, and stress in a person's life. There are seven items across all three DASS scales.

The use of SMAAPOS (social media and academic performance of students) instruments adapts to the original SMAAPOS instruments from (19) which have been adapted into cross cultural in Indonesia by researcher (20) from 22 item become 21 items.

Procedure

Prior to data collection, ethical approval was obtained from the affiliated university, which was followed by data collection. Participants provided written informed consent, and all information was handled in an anonymous manner. The researcher was always available to assist survey takers with any issues they encountered.

Data analysis

Descriptive statistics included means, variances, and frequencies. Addiction to social media, mental health, and academic achievement were studied using Pearson correlation. The statistical tests were run in SPSS for Windows (22.0), and a p-value of 0.05 was used to indicate statistical significance.

RESULTS

Of 200 adolescents in the intervention group, the mean age was 16.37 (SD+2.55), 60% male (Table 1).

Table 1. Demographic characteristics of study participant (n=200)

Variables	n=200 (%)
Age, Mean \pm SD	16.37 \pm 2.55
Gender	
Male	120 (60)
Female	80 (40)
Education level	
Grade 1	120 (60)
Grade 2	60 (30)
Grade 3	20 (10)

Respondents showed moderate level of social media dependency, with an average score of 88.43 (SD=24.53). Mental health score decreased from 21.37 \pm 7.78 and respondents showed moderate level of academic performance, with an average score of 90.21 \pm 37.24 (Table 2).

Table 2. social media dependency, mental health, and academic performance among adolescent (n=200)

Variables	Mean \pm SD	Range
Social media dependency	88.43 \pm 24.53	35-105
Mental health	21.37 \pm 7.78	11-28
Academic performance	90.21 \pm 37.24	45-135

Table 3. Relationship between social media dependency, depression, and academic performance among adolescents in Depok, Indonesia

	Mental health	Academic performance
Social media dependency	0.334**	-0.241**
Mental health	-	-0.405***

Note: * p<0.05; **p<0.001, ***p<0.0001

Table 3 shows that social media dependency (r=0.241) and depression (r=0.405) significantly associated with academic performance. Moreover, social media dependency (r=0.334) was negatively associated with mental health problems.

DISCUSSION

The majority of teenagers in this survey were found to be moderately addicted to

using social media. In this light, it was shown that 29.5% and 36.9% of students in Singapore and India are addicted to social media. (21,22). A 2018 meta-analysis found that 31.1% of medical students around the world struggle with internet addiction (23). According to the findings of a 2017 meta-analysis, the incidence of internet addiction in Iran is modest (24). For many students, social media has become indispensable because of the wealth of resources it

provides, particularly in their chosen subject of study. These networks, however, are double-sided, like a pair of scissors. The ramifications, especially for their academic performance, of students' unchecked use of social networks are numerous.

Addiction to social media was found to have a positive correlation with school success in this investigation. Consistent with previous studies, this one found that adolescent social media use negatively affects teens' daily habits and productivity in the classroom (25,26). Another study confirmed the positive correlation between students' use of Facebook as a learning aid and their final grade point average in courses where Facebook was found to be effective in the classroom. Students create online discussion forums to connect with their professors, and professors respond with questions about course content, assignments, exams, and other important scheduling reminders and announcements. Students share links to online resources, such as books, presentations, and video guides, and discuss their usefulness. Students can utilize the "like" feature to show that the content has value to them, and teachers can use "likes" and comments to emphasize good work and draw attention to poor work. Teachers and students have easier access to crucial reading materials thanks to links and files submitted and shared by both groups.

According to the theory of behavioral explanation, a person joins social networks for incentives such as escapist and entertaining purposes (27). A user's excessive use of these networks might result in addiction. Our findings are in line with those of (28). In this regard, (28) shown in a study that social networking addiction negatively affects academic achievement by causing academic procrastination, diminishing sleep quality, and raising academic stress. However, (29) said that Twitter and other social media can be used as a teaching resource in the classroom. Academic participation from both students and teachers might benefit from these

networks. While it's true that social media can be a useful teaching tool, too much time spent there can have a negative impact on students' motivation and performance in the classroom. Therefore, it is essential to carefully plan how much time you spend on social media. In truth, kids' social media use must be curtailed for their academic performance to improve (30).

This study revealed the relationship between mental health issues and academic performance. Previous research demonstrated negative connections between the use of WhatsApp during academic activities (e.g., class) and the quantity of sleep (31). College students' mental health problems are linked to their academic performance during the school year and in their final grades. Multiple studies' worth of data must be analyzed to determine whether or not mental health is linked to academic success. An online poll of students at KU Leuven in Leuven, Belgium, found that there is a correlation between students' mental health problems and their academic functioning (measured by AYP and GPA) across disciplines. College GPA drops in proportion to the severity of mental health issues impacting students' ability to function academically (32).

Furthermore, mental health problems were linked to excessive use of social media. This finding is in line with previous studies that have linked social media use, especially heavy use intensity and time spent on social media platforms, to an increased risk of various mental health symptoms and poor well-being, especially among young people [33], including a greater propensity toward anxiety [34] and depressive symptoms [35-37]. Facebook addiction and intrusion are always co-occurring, and these labels are sometimes interchangeable, with the latter highlighting a more intense strain on social relationships. People who suffer Facebook intrusion spend an excessive amount of time on Facebook, which disrupts their daily tasks and interpersonal interactions. Due to the similarities between Facebook addiction

and Facebook intrusion, we might conclude that Facebook addicts are more susceptible to depression.

However, there are a number of limitations that need to be taken into consideration. It was not possible to determine with absolute certainty which of the variables in the study should be considered the cause and which should be considered the effect. Finally, by choosing a sample from the West Java region, we eliminated the possibility that the results were influenced by the quality of organizational assistance provided or other contextual variables. This led us to conclude that the outcomes were not impacted by the standard of the organizational support offered or by any other environmental variables.

CONCLUSION

Adolescents in Indonesia who spend an excessive amount of time on social media report poorer levels of enjoyment and academic performance. Promoting and preventing mental illness requires interventions that strengthen people's capacity to control their emotions, increase their access to positive social situations, give safer and healthier alternatives to high-risk behaviors, and teach them to be more resilient in the face of adversity. These initiatives need to use a multi-level approach that involves multiple points of contact with teenagers, especially the most at-risk ones, such as digital media, health or social care settings, schools, and the community.

REFERENCES

- Naslund JA, Bondre A, Torous J, Aschbrenner KA. Social Media and Mental Health: Benefits, Risks, and Opportunities for Research and Practice. *J Technol Behav Sci.* 2020;5(3):245-257. doi:10.1007/s41347-020-00134-x
- Berry N, Lobban F, Belousov M, Emsley R, Nenadic G, Bucci S. #WhyWeTweetMH: Understanding why people use Twitter to discuss mental health problems. *J Med Internet Res.* 2017;19(4). doi:10.2196/jmir.6173
- Saha K, Torous J, Ernala SK, Rizuto C, Stafford A, De Choudhury M. A computational study of mental health awareness campaigns on social media. *Transl Behav Med.* 2019;9(6):1197-1207. doi:10.1093/tbm/ibz028
- Berkman LF. The role of social relations in health promotion. *Psychosom Med.* 1995;57(3):245-254.
- Ferrari M, Schick A. Teenagers, screens and social media: a commentary on Orben's narrative review. *Soc Psychiatry Psychiatr Epidemiol.* 2020;55(8):973-975.
- Shah J, Das P, Muthiah N, Milanaik R. New age technology and social media: adolescent psychosocial implications and the need for protective measures. *Curr Opin Pediatr.* 2019;31(1):148-156.
- van den Eijnden R, Koning I, Doornwaard S, van Gurp F, ter Bogt T. The impact of heavy and disordered use of games and social media on adolescents' psychological, social, and school functioning. *J Behav Addict.* 2018;7(3):697-706.
- Kurniasih N. Internet addiction, lifestyle or mental disorder? a phenomenological study on social media addiction in Indonesia. *KnE Social Sciences.* Published online 2017:135-144.
- Schønning V, Hjetland GJ, Aarø LE, Skogen JC. Social media use and mental health and well-being among adolescents—a scoping review. *Front Psychol.* 2020;11:1949.
- Andreassen CS, Billieux J, Griffiths MD, et al. The relationship between addictive use of social media and video games and symptoms of psychiatric disorders: A large-scale cross-sectional study. *Psychology of Addictive Behaviors.* Published online 2016. doi:10.1037/adb0000160

11. Okyeadie Mensah S, Nizam DrI. the Impact of Social Media on Students' Academic. *International Journal Of Education, Learning & Training (IJELT)*. 2016;1(1):14-21. doi:10.24924/ijelt/2016.11/v1.iss1/14.21
12. AlFaris E, Irfan F, Ponnampereuma G, et al. The pattern of social media use and its association with academic performance among medical students. *Med Teach*. 2018;40(sup1):S77-S82.
13. Vicera CR, Ed D. Effects of Social Networking Sites on the Academic Performance of the First Year Bsed Students of Naval State University. *Int J Eng Sci Res Technol*. 2016;5(8):414-422.
14. Lambić D. Correlation between Facebook use for educational purposes and academic performance of students. *Comput Human Behav*. 2016;61:313-320. doi:10.1016/j.chb.2016.03.052
15. Shen J. Social-media use and academic performance among undergraduates in biology. *Biochemistry and Molecular Biology Education*. 2019;47(6):615-619. doi:10.1002/bmb.21293
16. Alkhalaf AM, Tekian A, Park YS. The impact of WhatsApp use on academic achievement among Saudi medical students. *Med Teach*. 2018;40(sup1):S10-S14. doi:10.1080/0142159X.2018.1464652
17. Yanica A. Hubungan Antara Intensitas Penggunaan Media Sosial Dan Komunikasi Interpersonal Pada Remaja. *Jurnal Komunikasi Islam*. 2019;4(3).
18. Lovibond Lovibond, Peter F., Psychology Foundation of Australia., SH. Manual for the Depression Anxiety Stress Scales. Psychology Foundation of Australia; 1995.
19. Osharive P. Social Media and Academic Performance.; 2015. doi:10.13140/RG.2.1.2407.1201
20. Sutarno S. The Impact of Social Media Usage On Students' Academic Performance (SAP). *Jurnal Smart*. 2019;5(2):139-148.
21. Li G, Hou G, Yang D, Jian H, Wang W. Relationship between anxiety, depression, sex, obesity, and internet addiction in Chinese adolescents: A short-term longitudinal study. *Addictive Behaviors*. 2019;90:421-427.
22. Masthi NRR, Pruthvi S, Phaneendra MS. A comparative study on social media usage and health status among students studying in pre-university colleges of urban Bengaluru. *Indian J Community Med*. 2018;43(3):180.
23. Wang X, Zhang Y, Hui Z, et al. The Mediating Effect of Regulatory Emotional Self-Efficacy on the Association between Self-Esteem and School Bullying in Middle School Students: A Cross-Sectional Study. *International Journal of Environmental Research and Public Health*. 2018;15(5). doi:10.3390/ijerph15050991
24. Modara F, Rezaee-Nour J, Sayehmiri N, et al. Prevalence of internet addiction in Iran: A systematic review and meta-analysis. *Addiction & health*. 2017;9(4):243.
25. Shen N, Sequeira L, Silver MP, Carter-Langford A, Strauss J, Wiljer D. Patient privacy perspectives on health information exchange in a mental health context: qualitative study. *JMIR Ment Health*. 2019;6(11):e13306.
26. Adelantado-Renau M, Moliner-Urdiales D, Cavero-Redondo I, Beltran-Valls MR, Martínez-Vizcaíno V, Álvarez-Bueno C. Association between screen media use and academic performance among children and adolescents: a systematic review and meta-analysis. *JAMA Pediatr*. 2019;173(11):1058-1067.
27. Kaplan HI, Sadock BJ, Grebb JA. Sinopsis psikiatri: Ilmu pengetahuan perilaku psikiatri klinis. Dr I Made Wiguna S Jakarta: Bina Rupa Aksara. Published online 2010:113-129.

28. Ahmadi J, Zeinali A. The impact of social network addiction on academic achievement of Students: The mediating role of sleep quality, academic procrastination and academic stress. *Research in School and Virtual Learning*. 2018;6(2):21-32.
29. Junco R, Cotten SR. Perceived academic effects of instant messaging use. *Comput Educ*. 2011;56(2):370-378.
30. Heffner AL, Antaramian SP. The role of life satisfaction in predicting student engagement and achievement. *J Happiness Stud*. 2016;17(4):1681-1701.
31. Alkhalaf AM, Tekian A, Park YS. The impact of WhatsApp use on academic achievement among Saudi medical students. *Med Teach*. 2018;40(sup1):S10-S14.
32. Bruffaerts R, Mortier P, Kiekens G, et al. Mental health problems in college freshmen: Prevalence and academic functioning. *J Affect Disord*. 2018;225:97-103