

Original Research Article

The effect of social media uses on mental health: study among health vocational student at Universitas Esa Unggul, Jakarta, Indonesia

Puteri Fanny*, Laela Indawati, Daniel H. Putra

Faculty of Health Sciences, Universitas Esa Unggul, Jakarta, Indonesia

Received: 14 August 2024

Revised: 22 August 2024

Accepted: 27 August 2024

*Correspondence:

Dr. Puteri Fanny,

E-mail: puteri.fanny@esaunggul.ac.id

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: Social media has growth significantly in terms of quality, consumption, and quantity. Social media consumers have made online social communication an important part of their daily lives, as evidenced by the increasing number of daily users. Many studies on the effects of social media have been conducted, and it has been found that frequent use of social media sites can be linked to negative symptoms and indicators of depression, anxiety, and stress. The purpose of this study is to determine the impact of social media use on the mental health of vocational students at the Faculty of Health Sciences, Esa Unggul University.

Methods: This study used a cross-sectional design with a Chi-square test. Data were collected using the General Health Questionnaire 12 (GHQ-12) to assess mental health levels. Data on characteristics and social media usage behaviour were collected by asking a series of questions through a questionnaire.

Results: The results of this study showed that 60.2% of the 108 respondents used 3-4 social media applications. A total of 47.2% of respondents accessed social media for more than 4 hours per day, and only 22.2% accessed social media for less than 2 hours per day. There was a significant relationship between the duration of social media use and mental health levels (p value=0.001). Meanwhile, there was no significant relationship between the number of applications used and mental health levels (p value=0.475).

Conclusions: Based on the above study results, it is expected that students can limit the intensity of their daily social media use.

Keywords: Health, Media, Mental, Social

INTRODUCTION

Merriam-Webster describes social media as “forms of electronic communication such as websites for social networking and microblogging through which users create online communities to share information, ideas, personal messages, and other content.” Recently, social media has experienced sporadic growth in terms of quality, consumption, and quantity. Social media consumers have made online social communication an important part of their daily lives, as evidenced by the increasing number of daily users.¹ According to

Facebook’s own data, there were approximately 1 billion active users as of August 27, 2015. Other major social media platforms with large user bases include Twitter, Instagram, YouTube, TikTok, and others. It can be said that the current generation is one that has been greatly influenced by excessive use of social media.²

Mental health is characterized as a state of well-being in which individuals realize their capacities, successfully navigate through daily challenges, work well, and significantly enhance the quality of life in their communities. The advantages and disadvantages of social media for mental health are currently being discussed.

Social media is a key component of mental health protection. Mental health, behavioural health, physical health, and the risk of mortality are all influenced by the quantity and quality of social contacts.³ The link between social media and mental health can be explained by behavioural theory. Numerous studies on the effects of social media have been conducted, and it has been found that frequent use of sites like Facebook can be linked to negative symptoms and indicators of depression, anxiety, and stress.⁴ Social media can also place significant pressure on users to project stereotypes that others want to see and to gain as much popularity as possible.

Social media has a profound influence on daily activities in the current era, from communication, health, marketing, education, and politics, to many other areas. It has also been associated with damage and long-term side effects on human behaviour. The purpose of this study is to determine the impact of social media use on the mental health of vocational students at the Faculty of Health Sciences, Universitas Esa Unggul.

METHODS

This study is quantitative research using a cross-sectional design. The study was conducted from September 2023 until March 2024. The Independent variables are number of applications used and the duration of social media use. The dependent variable is the level of mental health.

The population in this study are vocational students from the Faculty of Health Sciences, Universitas Esa Unggul. The number of respondents involved in the study was 108. Inclusion criteria of respondents are: 1. Students from health vocational department, 2. Students have at least one social media account. Exclusion criteria of respondents are: 1. Student in the first semester of the program, 2. Student are not willing to be a respondent. There was no ethical approval in this research.

Data were collected using the General Health Questionnaire 12 (GHQ-12) to assess the level of mental health. Data on characteristics and social media usage behaviour were gathered by asking a series of questions through a questionnaire. Mental health levels were measured using a Likert scale. A score of "0" was given if respondents answered "better than usual," a score of "1" if they answered "same as usual," a score of "2" if they answered "less than usual," and a score of "3" if they answered "much less than usual".⁵ Mental health levels were categorized into three: "normal" if the score was 0-12, "showing symptoms of mental distress" if the score was 13-20, and "high mental distress" if the score was >20.⁶

Descriptive analysis by describe the frequency distribution of each variable, and analytic analysis to identify the relationship between the independent and dependent variables.

RESULTS

The characteristics of the respondents can be described as follows: more than half of the respondents were aged 18-20 years (54.6%). Overall, the age group of 18-23 years constituted 97.2% of the respondents. In terms of gender, the majority of respondents were female, with a percentage of 75.9% (Table 1).

The social media platforms used by the respondents were highly varied. Based on the data in Table 1, the most widely used applications by the respondents were WhatsApp (100%), Instagram (96.3%), and TikTok (88.9%). Meanwhile, the least used applications were Facebook (16.7%) and other applications (5.5%).

Table 1: Respondent characteristics.

Characteristic	N	%
Age (year)		
18-20	59	54.6
21-23	46	42.6
≥24	3	2.8
Total	108	100
Gender		
Male	27	24.1
Female	81	75.9
Total	108	100
Media social used		
Facebook	18	16.7
Instagram	104	96.3
Youtube	66	61.1
Tiktok	96	88.9
Whatsapp	108	100
Twitter	37	34.3
Telegram	20	18.5
Others	6	5.5

Table 2: Number of applications using by respondents.

Number of applications	N	%
1-2 applications	8	7.4
3-4 applications	65	60.2
>5 applications	35	32.4
Total	108	100

Table 3: Duration of social media used.

Duration per day	N	%
<2 hours	24	22.2
2-4 hours	33	30.6
>4 hours	51	47.2
Total	108	100

Regarding social media usage behavior, more than half of the respondents (60.2%) used 3-4 social media applications. Only 7.4% of respondents used 1-2 social

media applications. A total of 47.2% of respondents accessed social media for more than 4 hours per day, while only 22.2% of respondents accessed social media for less than 2 hours per day (Table 2 and 3).

Table 4: Level of mental health.

Level of mental health	N	%
Normal	46	42.6
Evidence of distress	55	50.9
Severe psychological distress	7	6.5
Total	108	100

Mental health levels were found that more than half (50.9%) of the respondents exhibited symptoms of mental distress. This indicates that a significant portion of the respondents may experience symptoms of mental distress, but these do not interfere with their daily activities. Meanwhile, 6.5% of the total respondents had high levels of mental distress (Table 4).

More than half (53.8%) of the respondents who used 3-4 applications were in the “Evidence of distress” level. Meanwhile, 51.4% of respondents who used ≥ 5 applications were in the “normal” level. Based on the chi-square test results, p value was 0.475, indicating that there is no significant relationship between the number of applications used and mental health levels at the 0.05 significance level (Table 4).

More than half (64.7%) of respondents who accessed social media for more than 4 hours per day were in the “Evidence of distress” level. Additionally, 54.5% of respondents who accessed social media for 2-4 hours per day were also in the “Evidence of distress” level. Based on the chi-square test results, p-value was 0.001, indicating that there is a significant relationship between the duration of social media use and mental health levels at the 0.05 significance level (Table 5).

Table 5: Relationship between number of applications used, duration of using media social and level of mental health.

Variables	Tingkat Kesehatan mental						Total	P value	
	Normal		Evidence of distress		Severe psychological distress				
	N	%	N	%	N	%			
Number of applications									
1-2 applications	4	50	4	50	0	0	8	100	0.475
3-4 applications	24	36.9	35	53.8	6	9.2	65	100	
≥5 applications	18	51.4	16	45.7	1	2.9	35	100	
Total	46	42.6	55	50.9	7	6.5	108		
Duration of using media social									
<2 hours	19	79.2	4	16.7	1	4.2	24	100	0.001
2-4 hours	14	42.4	18	54.5	1	3	33	100	
>4 hours	13	25.5	33	64.7	5	9.8	51	100	
Total	46	42.6	55	50.9	7	6.5	108		

DISCUSSION

The study showed that 59 respondents (54.6%) were in the age group of 18-20 years. The majority of respondents were in the age range of 18-23 years, with a total of 105 people (75.9%). The largest group of respondents were late adolescents. According to Wilson & Hockenberry, adolescence is a period when individuals want to grow without being controlled by their parents, but at the same time, they are also anxious about understanding the responsibilities associated with independence. According to Hamzah, the higher a person's age, the lower the stress level, as stress management improves with age.⁷

The majority of respondents were in the age range of 18-23 years because they were students who directly continued their education to university after graduating from high school, leading to a relatively close age range.

The age distribution would be more varied if the respondents included employees, as they come from diverse age groups.

In terms of gender characteristics, the majority of respondents were female, with a percentage of 75.9%. In the overall population of the Faculty of Health Sciences, the majority of students are female, which influenced the number of respondents obtained.

The types of social media used by the respondents were highly diverse. The most widely used applications were WhatsApp (100%), Instagram (96.3%), and TikTok (88.9%). Meanwhile, the least used applications were Facebook (16.7%) and other applications (5.5%). According to the researcher's assumption, these three applications are the most popular among young people in Indonesia today. The primary function of WhatsApp is

for conversations and sharing information and ideas, both in academic and non-academic contexts. Meanwhile, Instagram and TikTok are primarily used for self-expression, interaction, and obtaining the latest information.

The study showed that more than half of the respondents (60.2%) used 3-4 social media applications. This indicates that the majority of respondents feel comfortable and that their needs are met with 3-4 applications. On the other hand, only 8 respondents (7.4%) used 1-2 social media applications, indicating that limited social media usage is uncommon among students. Meanwhile, 35 respondents (32.4%) used 5 or more social media applications, indicating a high level of dependency on these applications.

The study also found that 51 respondents (47.2%) spent more than 4 hours per day accessing social media, indicating that respondents were very active in using social media. In contrast, only 24 respondents (22.4%) used social media for less than 2 hours per day.

The study results showed that more than half (50.9%) of the respondents exhibited symptoms of mental distress, though not severe enough to interfere with daily activities. A total of 6.5% of respondents experienced high levels of mental distress. Although this is the smallest group, it is important to note as they may require more intensive intervention or support from professionals.

The study also showed that the number of applications used was not related to mental health levels, with a p value of 0.475 (>0.05). This finding does not align with previous research, which found that anxiety, depression, and feelings of loneliness are influenced by the number of social media applications used. The overstimulation from using multiple social media platforms can lead to addictive behaviour.

The researcher's assumption regarding this finding is that even if many applications are used, if the duration of use is short or the frequency of accessing these applications is low, it will not affect mental health.

The study results showed that there was a relationship between the duration of social media use and mental health levels, with a p-value of 0.001 (<0.05). This finding is consistent with Esti's (2021) research, which found a relationship between social media use and mental health, with a p value of 0.000 (<0.05). The relationship between these two variables is positive and of moderate strength, meaning that the higher the social media usage, the more problematic the mental health becomes.⁸

Social media is a platform that allows people to interact with each other online within the application. These interactions can take the form of conversations, conferences, videos, images, sounds, ideas, and information.⁹ Social media is one of the external factors

that affect mental health. Excessive exposure to social media can have negative impacts on mental health, including anxiety and depression by Rosmalina et al.¹⁰ Anxiety arises from an individual's inability to meet their desire to create a perfect image on social media. The mismatch between expectations and reality can lead to anxiety. Meanwhile, depression can be triggered by envy that arises from seeing others' achievements, lifestyles, or frequent displays of activities on social media. Another trigger for depression is the desire to appear perfect in front of the opposite sex, leading to a loss of self-identity by Rosmalina et al.¹⁰

The abundance of information available through various social media channels can lead to feelings of overwhelm and potential negative consequences for well-being. When individuals interact with various platforms and accounts, continuous exposure to curated content and comparisons with others can exacerbate feelings of inadequacy and jealousy, further contributing to mental health issues.¹¹ Therefore, it is crucial for users to manage their social media usage, engage in positive activities, and prioritize mental health to mitigate the risks associated with overstimulation.

There was a limitation in conducting this study. Many factors can affect someone's mental condition such as academic load, relationship related to family and friend, economic, etc. But in this study, the target variable was behaviour in using social media. It is recommended to future research to study the effect of others variable to mental health, so that we can determine what variables have more contributions in mental health, especially in college student.

CONCLUSION

Based on the results of this study, it can be concluded that the duration of social media use is related to mental health levels, but the number of different types of social media used is not. Therefore, as students, it is important to set boundaries on the duration of social media use and to be selective about the content on social media to avoid negative impacts on both physical and mental health.

ACKNOWLEDGEMENTS

We would like to thank Research dan Community Service Department Esa Unggul University, as well as all of those who have assisted in the implementation of this research.

Funding: This study funded by Research dan Community Service Department Esa Unggul University

Conflict of interest: None declared

Ethical approval: Not required

REFERENCES

1. Sherlock M, Wagstaff DL. Exploring the relationship between frequency of instagram use,

- exposure to idealized images, and psychological well-being in women. *Psychol Pop Media Cult*. 2019;8(4):482-90.
2. Bekalu MA, McCloud RF, Viswanath K. Association of social media use with social well-being, positive mental health, and self-rated health: disentangling routine use from emotional connection to use. *Health Educat Behavior*. 2019;46(2_suppl):69-80.
 3. Fardouly J, Magson NR, Rapee RM, Johnco CJ, Oar ER. The use of social media by Australian preadolescents and its links with mental health. *J Clin Psychol*. 2020;76(7):1304-26.
 4. Davila J, Hershenberg R, Feinstein BA, Gorman K, Bhatia V, Starr LR. Frequency and quality of social networking among young adults: Associations with depressive symptoms, rumination, and corumination. *Psychol Pop Media Cult*. 2012;1(2):72-86.
 5. Primasari I, Hidayat R. General Health Qquestionnaire-12 (GHQ-12) sebagai instrumen skrinning gangguan penyesuaian. *J Psikol*. 2016;43(2):121-34.
 6. Chaitali, Gohri J, Hegde S, Sahana KS, Doddaiiah SK. Social media and mental health of undergraduate medical students of Mysuru: cross sectional study. *Int J Commu Med Publ Heal*. 2023;10(8):2863-7.
 7. Hamzah R, Kunci K, Kuliah B. Factors related to academic stress levels in students of STIKES Graha Medika. *Indon J Heal Sci*. 2020;4(2):59-67.
 8. Esti A, Ramadhan R. The relationship between social media use and mental health of adolescents at SMK N 1 Sintoga. *Nan Tongga Health And Nursing*. 2021;16(1):25-33.
 9. Kaspani A. The Influence of WhatsApp Social Media as a Media for Socializing Islamic Broadcasting Communication Students of IAIN Syekh Nurjati Cirebon Class of 2015. Thesis. Cirebon: Undergraduate Program of IAIN Syekh Nurjati Cirebon. 2019.
 10. Rosmalina A, Khaerunnisa T. The use of social media in adolescent mental health. *Prophetic: Profess Emp Islam Counsel J*. 2021;4(1):49-58.
 11. Maharani AC. The influence of excessive use of social media. *Indo J Soci Sci*. 2021;13(1):11.

Cite this article as: Fannya P, Indawati L, Putra DH. The effect of social media uses on mental health: study among health vocational student at Universitas Esa Unggul, Jakarta, Indonesia. *Int J Community Med Public Health* 2024;11:3429-33.