CASE STUDY



The Relationship Between Social Media Addiction and Medical Students' Self-Esteem

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ABSTRACT

Background: According to the most recent report, social media users in Indonesia have reached 40% of the country's total population, or about 106 million, based on the 2017 Tetra Pax Index survey. Numerous studies have shown that social media addiction exists in light of the increased usage of social media. Addiction to social media is one of the things that can damage one's self-esteem. Addiction to social media can make someone compare themselves to other people, which lowers their self-esteem.

Aims: The purpose of this research is to ascertain how social media addiction and self-esteem relate to Universitas Andalas medical study program students in batches 2019, 2020, and 2021.

Case Discussion: This study used a cross-sectional design, employed the Social Media Disorder Scale and Rosenberg Self-Esteem Scale questionnaires, and included 141 respondents in total. The results showed that 24.8% of respondents were classified as social media addicts and 31.9% as having low self-esteem. The rank Spearman's analysis test revealed a significant correlation between social media addiction and self-esteem (r=-0.0168, p=0.024).

Conclusion: Due to the constant advancement of new technologies and the significant growth in applications, social media addiction will continue to be a severe problem that can negatively impact a person's self-esteem even though using social media is a common and accepted modern behavior.

Keywords: social media addiction, self-esteem, social media use, social network, negative feedback

ABSTRAK

Latar belakang: Laporan terbaru berdasarkan survei Tetra Pax Index tahun 2017 menyebutkan bahwa pengguna media sosial di Indonesia kini berjumlah 40% dari total penduduk atau kurang lebih 106 juta orang. Ketika penggunaan media sosial semakin meluas, banyak peneliti telah mengungkapkan adanya kecanduan penggunaan media sosial. Kecanduan media sosial merupakan salah satu faktor yang dapat mempengaruhi harga diri. Kecanduan media sosial dapat menyebabkan seseorang membandingkan dirinya dengan orang lain sehingga berujung pada penurunan harga diri

Tujuan: Penelitian ini bertujuan untuk mengetahui hubungan antara kecanduan media sosial dengan harga diri pada mahasiswa program studi kedokteran Universitas Andalas angkatan 2019, 2020, dan 2021.

Diskusi Kasus: Penelitian ini menggunakan desain cross-sectional dengan menggunakan kuesioner Social Media Disorder Scale dan Rosenberg Self Esteem Scale dengan jumlah sampel sebanyak 141 responden. Hasil penelitian menunjukkan bahwa responden tergolong memiliki kecanduan media sosial sebanyak 24,8%, dan

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harga diri.

harga diri rendah sebanyak 31,9%. Hasil uji analisis rank spearman menunjukkan adanya hubungan yang signifikan antara kecanduan media sosial dengan harga diri dengan nilai (r=-0.0168, p=0.024). **Kesimpulan:** Meskipun menggunakan media sosial adalah perilaku modern yang normal dan tersebar luas, dengan kemajuan teknologi baru yang terus berlanjut, dan peningkatan penggunaan media sosial yang

signifikan, kecanduan media sosial akan terus menjadi masalah besar yang dapat berdampak negatif terhadap

Kata kunci: kecanduan media sosial, harga diri, penggunaan media sosial, jejaring sosial, feedback negatif

PRACTICE POINTS

- The issue of social media addiction warrants greater attention due to its potential to undermine students' self-esteem.
- Students are more susceptible to social media addiction due to the rising use of social media and the annual launch of new platforms.

INTRODUCTION

According to the Indonesian Internet and Mobile User Statistics Site, in 2014, about 15.0%, or 38.2 million people, in Indonesia used the Internet out of a total population of about 251.2 million people. By extension, almost all internet users in Indonesia had social media accounts, as demonstrated by the country's 15% social media user percentage. However, the most recent results of the Tetra Pax Index survey conducted in 2017, the percentage of Indonesians using social media has increased to about 40% of the country's total population, or about 106 million people. Given how quickly social media is developing now, it is inevitable that the number of users will rise annually. An increasing number of social media actors appear every year. Numerous studies have shown that social media addiction exists as a result of the increased usage of social media.1 The term "social media addiction" describes an ongoing obsession with social media, driven by a strong need to stay connected to it, and an excessive amount of time and energy spent using it. This can cause disruptions to a number of areas of life, such as relationships with others, academic or professional endeavors, physical health, and psychological well-being.²

The impact can cause students to experience various problems due to excessive use of social media, including not doing coursework, dropping grades, sleeping during lecture hours, and not understanding lecture material. Students who suffer from intense social media addiction symptoms typically exhibit diminished academic success when compared to students who do not.1 Self-esteem is a person's positive and negative self-evaluations or the extent to which they believe they are valuable. Selfesteem serves to help motivate people to achieve life goals; high self-esteem increases the individual ability to manage stress, and low self-esteem causes problem avoidance.3 Social media users often face online selfpresentation of other people who are more successful and better. That life is unfair, especially if they do not know the person offline, which can reduce social media users' self-esteem.⁴ Nonetheless, there is a dearth of studies exploring the link between social media addiction and self-esteem among medical students in Indonesia. Hence, it is crucial to investigate the relationship between social media addiction and self-esteem within this specific population.

CASE DESCRIPTION

The type of this research is an analytical study with a cross-sectional approach with data from a questionnaire given to students of the Universitas Andalas Medical Study Program class of 2019 - 2021 with a time. The research was carried out from July to October 2022 with a total population of 718. The population consists of the 2019 batch of 242 people, the 2020 batch of 225 people, and the 2021 batch of 251 people, which consists of 57 from 2019 students, 41 from 2020 students, and 43 from 2021 students, with a total of 141 respondents. Determination of the minimum sample size in this study using the Slovin formula. The sampling technique uses a proportionate stratified random sampling technique which takes samples randomly from each batch of the Universitas Andalas of Medical Study Program.

This study used the Social Media Disorder questionnaire that Van den Eijnden et al created in 2016.5 The 9-item Social Media Disorder scale is a standard instrument for all social media platforms translated into Indonesian and has a validity of r = 0.513 - 0.614 and Cronbach Alpha = 0.734. The 9-item Social Media Disorder consists of preoccupation, tolerance, withdrawal, persistence, displacement, problems, deception, escape, and conflict, with responses dichotomized as yes=1 and no=0; the cut-off of ≥ 5 positive responses indicates social media disorder.6 The Rosenberg Self-Esteem Scale questionnaire can determine a person's self-esteem level. It has a clinical focus that uses self-esteem levels to compare research subjects. The Rosenberg Self-Esteem Scale is a valuable tool for assessing an individual's overall self-esteem. It has been translated into Bahasa Indonesia and demonstrates a validity range of r = 0.373 - 0.758, with a Cronbach Alpha coefficient of 0.854, indicating a high level of internal consistency. The scale consists of 10 items that measure global self-worth by capturing both positive and negative feelings towards oneself. Respondents rate each item on a 4-point Likert scale, ranging from strongly agree to strongly disagree. The total score on the scale ranges from 0 to 30, with higher scores indicating greater levels of self-esteem.⁷

Respondents were asked to complete the informed consent and questionnaires via the Google form.



The results of the questionnaire were inputted into Microsoft Excel. Furthermore, descriptive data using univariate analysis to see the frequency of age. After that, a bivariate analysis was performed using the Spearman rank test to determine the relationship between social media addiction and self-esteem. This research has received permission from the research ethics team at the Faculty of Medicine, Universitas Andalas, with letter number 1004/UN.16.2/KEP-FK/2022.

Table 1. Respondent Characteristics

Age	Frequency	(%)
18	7	5
19	34	24,1
20	48	34
21	40	28,4
22	12	8,5
Total	141	100

Table 2. Frequency Distribution of Respondents'Social Media Addiction

Social Media Addiction	Frequency	(%)
Not addicted	106	75,2
Addicted	35	24,8
Total	141	100

Table 3. Frequency Distribution of Respondents' Self-Esteem

Self-esteem	Frequency	(%)
Low	45	31,9
High	96	68,1
Total	141	100

Table 4. The Relationship Between Social Media Addiction And Self-Esteem

	Self-esteem
Social Media Addiction	r = -0,168
	p = 0,024
	n = 141

The results of the univariate analysis in Table 1 show that the respondents' data is in the form of age presented in the frequency distribution table



indicating that the respondents are mostly 20 years old, with a proportion of 34%. In Table 2, the respondents' data are in the form of the frequency distribution of social media addiction; the majority are not addicted to social media, with a percentage of 75.2%. In Table 3, the respondents' data are in the form of frequency distribution of self-esteem, with the majority of respondents having high self-esteem at a percentage of 68.1%. Based on Table 4, the Spearman rank correlation test yielded a P value of 0.024 (p <0.05), indicating a significant relationship with a correlation coefficient of -0.168. This indicates a pattern of a weakly negative relationship between social media addiction and self-esteem.

DISCUSSION

Social media addiction among Universitas Andalas medical students in this study based on the Social Media Disorder Scale score was 24.8% in the addiction category of all respondents. This is in line with research conducted by Tang et al., who reported the prevalence of social media addiction among university students in Singapore at 29.5%.8 Within this investigation, participants ranged from 18 to 22 years of age, encompassing individuals classified as young adults. Young people, especially those aged 15 to 24, are more prone to social media addiction than their older counterparts. The utilization of social media platforms enables the youth to freely delve into self-expression and self-discovery without external interference. Young people are more often exposed to technological developments such as smartphones, which make them more vulnerable to excessive use or addiction to social media. Young people adapt to new technologies faster than older people.9 Peer pressure to always follow trends on social media is also a factor in social media addiction at a young age. As people age, social media use tends to decrease due to a reduced need to compare oneself to others, which is often achieved in youth when setting and achieving life goals.¹⁰

The level of self-esteem of Universitas Andalas medical students in this study was found to be low, with a percentage of 31.9%. The relatively high percentage of 31.9% indicating low self-esteem is noteworthy because medical students are typically

regarded as high achievers, possessing at least average or high intellectual capabilities. Consequently, it is expected that they would possess elevated levels of self-esteem. This observation aligns with the findings of Shreshta et al., who discovered a lower prevalence of self-esteem issues among medical students in Nepal, specifically at 18.9%. The underlying causes for this lower prevalence of self-esteem issues can be attributed to burdensome academic stress, inadequate familial support, and difficulties in adapting to a highly competitive learning environment.¹¹

The research on 141 respondents obtained the results of a significant relationship (p=0.024) and a negative relationship pattern r=(-0.168) between social media addiction and self-esteem in Universitas Andalas medical students in 2019 – 2021. A negative relationship pattern suggests that individuals with a high dependency on social media platforms typically experience reduced levels of self-esteem. Additionally, the researchers discovered a weak correlation between these two variables. The results of this study are in line with the investigation conducted by Hawi et al., showing that the students who displayed an elevated level of social media addiction have a lower level of self-esteem, although the correlations were weak.¹²

Studies have revealed that individuals who have a long history of using Facebook and those who use the platform frequently are inclined to view others as happier and leading more fulfilling lives than themselves, while also perceiving life as unfair.12 The findings of a research conducted in Sweden, encompassing a sample of 1,011 participants, revealed that individuals frequently utilize Facebook as a platform to exhibit favorable facets of their lives, including thrilling occasions and joyous festivities. This tendency can lead to negative social comparisons, where individuals perceive their own lives as less successful in comparison, thereby adversely affecting their self-esteem.¹³ The quantity of friends, followers, or likes on social media platforms can influence addictive behaviors. There is a misconception that a high number of social connections or likes signifies social success and popularity, which can drive individuals to engage excessively with social media. However, the reality is the individual's self-worth may be negatively impacted.



Increasing one's social circle or likes on social media is often seen as an investment where external validations shape one's self-perception. By associating with these external validations, individuals may view themselves as accomplished and recognized, leading to compulsive social media usage. Additionally, social media serves as a tool for establishing social connections. Those who fear rejection in face-to-face interactions may choose social media as a platform for interaction.¹⁴

Research has indicated that using the internet can affect a person's cognitive functioning. This is because people are more likely to pay attention to online social environments since they mimic social interactions in real life. As a result, an individual's interactions with the internet can influence their social life, as well as their sense of self and selfworth. The most recent study focuses on how social interaction affects people's perceptions of the relationship between social media addiction and self-esteem. People's sense of ownership can shift as a result of participating in social processes in pertinent online settings. Social media platforms can also satisfy a person's psychological needs because getting "likes" in an online social setting can be interpreted as a form of social validation, which heightens the inclination to compare oneself to others. Nevertheless, an excessive amount of social media use can have negative effects on a person's sense of value and self-esteem.¹⁵

Two mechanisms—social comparison and receiving feedback-can be used to explain how social media affects people's changes in self-esteem. People who are exposed to social media content tend to present themselves in the best possible light, which makes the social comparison information that other people receive more positive in general. Consequently, social media frequently leads people to believe that others are more successful than they are. Social media users' low self-esteem is caused by their impressions of other, more successful people's profiles. A person's self-esteem is influenced by social comparisons as well as elements on social media such as comments and uploads as feedback. The presence of unfavorable feedback, like few likes and offensive remarks from other users, can lower someone's self-esteem.¹⁶

The lack of comparison between the number of friends and followers and the gender and social media platforms that can lead to addiction is this study's main limitation. Additional research is required in a different part of Indonesia to give general information about gender, platform, number of followers, and particular activities that may have an impact on self-esteem.

CONCLUSIONS

The emergence of new technologies and their exponential growth in applications will make social media addiction a significant concern in the future. Because of the psychology of social media's growing attraction, it is anticipated that the problem will get worse. As a result, further research is necessary to fully understand these relationships, since weak relationships may eventually become moderate, and moderate relationships may eventually become strong. Overall, Universitas Andalas medical students' social media addiction and self-esteem show a very weak correlation, indicating a negative and significant relationship pattern.

RECOMMENDATIONS

It is suggested that future researchers investigate the connection between particular behaviors on the newest popular platform and social media addiction. Using makeup apps or filters before uploading a photo, feeling let down by the lack of likes or followers, and sharing selfies or intimate moments online are some examples of these activities. Further research into the psychological effects of these behaviors on self-esteem is imperative. Future research endeavors ought to build upon these discoveries by delving into preventive and therapeutic measures, all the while keeping an eye on the previously mentioned associations.

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COMPETING INTEREST

All authors declare that there is no conflict of interest.



AUTHORS' CONTRIBUTION

- *Mochammad Rizka Gustianda* the main researcher who made the proposals and led the research.
- *Laila Isrona* a member of the research team, who prepared the research analyzed the data, and drafted the manuscript.
- *Julizar* as a member of the research team, who developed the research proposal and analyzed data.
- *Mustafa Noer* a member of the research team who developed the research proposals and analyzed data.
- *Eldi Sauma* a member of the research team who developed the research proposal and analyzed data.

REFERENCES

- 1. Hartinah S, Sriati A, Kosasih CE. Gambaran tingkat gejala kecanduan media sosial pada mahasiswa keperawatan universitas padjadjaran. Jurnal Keperawatan BSI. 2019 April 1; 7.
- 2. Andreassen CS. Online social network site addiction: a comprehensive review. Curr Addict Rep. Springer; 2015; 02. p. 175–84.
- Hagen R, Havnen A, Hjemdal O, Kennair LEO, Ryum T, Solem S. Protective and vulnerability factors in self-esteem: the role of metacognitions, brooding, and resilience. Frontiers in Psychology. 2020 Jul 3; 11.
- 4. Hou Y, Xiong D, Jiang T, Song L, Wang Q. Social media addiction: its impact, mediation, and intervention. Cyberpsychology. 2019; 13(1).
- Van Den Eijnden RJJM, Lemmens JS, Valkenburg PM. The Social Media Disorder Scale: Validity and psychometric properties. Comput Human Behav. 2016 Aug 1; 61: 478–87.
- 6. Dewi SY, Lestari YM. Validity and reliability of Indonesian social media disorder (SMD) scale in adolescent. Jurnal Profesi Medika : Jurnal Kedokteran dan Kesehatan. 2020 Dec 16; 14(2).
- 7. Ralampi DA, Soetjiningsih CH. Keberhargaan diri dan resiliensi sebagai prediktor successful

aging pada lansia di panti wreda. Jurnal Psikologi Ulayat. 2019 Apr 14; 102–16.

- Tang CS kum, Koh YYW. Online social networking addiction among college students in Singapore: Comorbidity with behavioral addiction and affective disorder. Asian J Psychiatr. 2017 Feb 1; 25: 175–8.
- 9. Andreassen CS, Pallesen S, Griffiths MD. The relationship between addictive use of social media, narcissism, and self-esteem: findings from a large national survey. Addictive Behaviors. 2017 Jan 01; 64: 287–93.
- Abbasi IS. Social media addiction in romantic relationships: Does user's age influence vulnerability to social media infidelity? Pers Individ Dif. 2019 Mar 1; 139: 277–80.
- Shrestha B, Yadav S, Dhakal S, Ghimire P, Shrestha Y, Singh Rathaure E. Status of selfesteem in medical students of a college in Kathmandu: A descriptive cross-sectional study. F1000Res. 2021 Oct 11; 10: 1031.
- Hawi NS, Samaha M. The relations among social media addiction, self-esteem, and life satisfaction in university students. Sage OPEN. 2017 Oct 1; 35(5): 576–86.
- Denti, L, Barbopuolos, I, Nilsson, I, Holmberg, L, Thulin, M, Wendeblad, M, et al. Sweden's largest Facebook study. Gothenburg Research Institute, 2012; 3.
- Buran Köse Ö, Doğan A. The relationship between social media addiction and self-esteem among Turkish university students. Addicta: The Turkish Journal on Addictions. 2019 Apr 11; 6(1): 175–90.
- 15. Kavakli M, Ünal G. The effects of social comparison on the relationships among social media addiction, self-esteem, and general belongingness levels. Current Issues in Personality Psychology. 2021; 9(2): 114–24.
- Adishesa E. Hubungan intensitas penggunaan Instagram dan self-esteem pada remaja (Instagram use and self-esteem among adolescents). Mind Set 2020; 11(1): 26–36.