

# Intensity of Social Media Use on Anxiety Level of Preclinic Students, Faculty of Medicine, Muslim University of Indonesia

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**Abstract.** *Social media, which was originally created to facilitate communication and strengthen relationships between individuals, sometimes has a negative impact. Several factors have contributed to the increase in symptoms. anxiety and decreased individual well-being, such as increased time spent on sites, comparing social status, receiving negative feedback, posting related news stress, and feelings of being under pressure. Research Objectives This to determine the intensity of social media use on the anxiety level of preclinical students of the Faculty of Medicine. The sample in this study were participants in the Medical Education Program of the Faculty of Medicine, Muslim University of Indonesia. The research subjects then filled in questionnaire that has been given in the form of Google Form. The collected data was processed and analyzed using SPSS 23. The results of the study show that the distribution of respondents' answers and the variable correlation test obtained a p value (0.003) <0.05, which means that there is a correlation between SNAIS and GAD with an r value of 0.225. Thus, according to the hypothesis, the higher the intensity of social media use, the higher the anxiety. Based on results Research There is a significant correlation between GAD and SNAIS scores, so the higher the intensity of social media use, the higher the anxiety.*

**Keywords:** Social Media, Anxiety, SNAIS, GA

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## INTRODUCTION

The condition of medical faculty students is considered different from students in other faculties. This is because medical education is known as an environment full of stressors and often has negative effects on academic achievement, physical health and also students' psychology. Students are required to always follow the development of medical science and the assignments given also require the latest literature as a source of reference (Ketut et al., 2016). Nowadays, this condition is greatly helped by the internet. The development of internet technology provides many conveniences for its users, both old and young in terms of work, education and communication (Choi & DiNitto, 2013). Indonesia is one of the countries with the most internet users. Based on data from APJII (Association of Indonesian Internet Service Providers) in 2019, around 196 million

Indonesians actively use the internet and data from we are social as many as 202 million. The majority of internet users in Indonesia are 18 years of age and over and students are included in that age group.

Around 170 million internet users in Indonesia access social media. Most people in various parts of the world have social media accounts. Based on age, the distribution of social media users is 18-34 years old. Several social media, such as Facebook, Instagram, Twitter, and Whatsapp are examples of applications that are most frequently accessed by millions of users every day. Internet users in Indonesia have an average of more than one social media account and access them for around 1-3 hours per day. Social media, which was originally created to facilitate communication and strengthen relationships between individuals, sometimes has a negative impact (Chu & Kim, 2011).

Several factors have contributed to increased anxiety symptoms and decreased individual well-being, such as increased time spent on the site, social comparison, receiving negative feedback, posting stressful news, and feeling depressed about being updated. In general, the decrease in quality of life between generalized anxiety and other anxiety disorders such as social phobia and panic disorder was found to be very similar (Wilmer et al., 2021; Szuhany & Simon, 2022). However, at the individual level, generalized anxiety has been reported to be a poor condition, which can lead to poorer health-related quality of life, impaired activity, and poorer work performance resulting in disruption to the individual's life (Mahroofi et al., 2020; Blank & Dutton, 2012) Social media refers to computer-mediated technologies that allow individuals to create and share information and other forms of expression through virtual communities (e.g., Facebook, Twitter, and Instagram). The increasing popularity of social media platforms among adolescents and young adults is not without associated risks, one of which is social media anxiety.

## **METHODS**

The type of research used is descriptive correlation research with a quantitative approach. This research was conducted within the scope of education for students of the Medical Education Program, Faculty of Medicine, Muslim University of Indonesia. The population in this study were all students of the Pre-Clinical Medical Education Program, Faculty of Medicine, Muslim University of Indonesia, Class of 2020. The sample in this study were participants of the Medical Education Student Program, Faculty of Medicine, Muslim University of Indonesia who met the inclusion criteria and exclusion criteria. The sampling technique was carried out using Simple Random Sampling is the random sampling of population members without considering the strata in the population. The type of data in this study is primary data obtained directly from the research subjects. The research instrument is in the form of an online SNAIS and GAD-7 questionnaire based on Google Form. Data collection by asking respondents to fill out the SNAIS and GAD-7 questionnaires online based on Google Form. Processing is carried out after recording the research instrument using the SPSS 24.0 and Microsoft Excel computer programs so that the expected statistical results are obtained. The processed data will be presented in the form of tables, diagrams, and correlation values and their significance.

## **RESULT AND DISCUSSION**

This study was conducted at the Faculty of Medicine, Muslim University of Indonesia, with the subjects of the study being students of the Faculty of Medicine Class of 2020 totaling 175 respondents. This study was conducted by filling out an identity questionnaire, SNAIS questionnaire and GAD questionnaire.

Table 1. Demographic Characteristics

<b>Demographics</b>		<b>n</b>	<b>%</b>
<b>Age</b>	17	2	1.1
	18	10	5.7
	19	54	30.9
	20	82	46.9
	21	20	11.4
	22	3	1.7
	23	1	0.6
	25	3	1.7
<b>Gender</b>	Man	37	21.1
	Woman	138	78.9
<b>Access Duration</b>	< 1 Hour	16	9.1
	1-3 hours	41	23.4
	> 3 hours	118	67.4
<b>GAD Questionnaire</b>	Minimum	95	54.3
	Light	47	26.9
	Currently	20	11.4
	Heavy	13	7.4
<b>Total</b>		<b>175</b>	<b>100.0</b>

Based on the table above, it shows the distribution of respondents based on characteristics and research variables. In age characteristics, the highest proportion is at the age of 20 years as many as 82 respondents (46.9%) and the lowest proportion is at the age of 23 years as many as 1 respondent (0.6%). Based on gender, women as many as 138 respondents (78.9%). Based on the access duration variable, 118 respondents (67.4%) accessed > 3 hours and 16 respondents (9.1%) accessed < 1 hour. Based on the GAD category, the category with the highest proportion is the minimal category with 95 respondents (54.3%) while the lowest proportion is the severe category with 13 respondents (7.4%).

Table 2. Characteristics of Social Media Usage Types

<b>Types of Social Media</b>	<b>Yes</b>		<b>No</b>	
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
FB	26	14.9	149	85.1
Twitter	40	22.9	135	77.1
WA	32	18.3	143	81.7
Instagram	164	93.7	11	6.3
Tik Tok	122	69.7	53	30.3
Another	16	9.1	159	90.9

The table above shows that Instagram is the social media with the highest proportion of 164 respondents (93.7%) compared to other social media, while other social media (Mi Chat, Line) have the lowest proportion of 16 respondents (9.1%).

Table 3. Distribution of Intensity of Social Media Use Based on the SNAIS Questionnaire

SNAIS	Skor 0		Skor 1		Skor 2		Skor 3		Skor 4		Skor 5	
	n	%	n	%	n	%	n	%	n	%	n	%
No 1	9	5.1%	15	8.6%	15	8.6%	33	18.9%	48	27.4%	55	31.4%
No 2	3	1.7%	6	3.4%	12	6.9%	36	20.6%	47	26.9%	71	40.6%
No 3	19	10.9%	43	24.6%	43	24.6%	43	24.6%	14	8.0%	13	7.4%
No 4	20	11.4%	53	30.3%	46	26.3%	36	20.6%	13	7.4%	7	4.0%
No 5	2	1.1%	37	21.1%	37	21.1%	36	20.6%	35	20.0%	28	16.0%
No 6	7	4.0%	37	21.1%	45	25.7%	35	20.0%	33	18.9%	18	10.3%
No 7	24	13.7%	77	44.0%	33	18.9%	22	12.6%	16	9.1%	3	1.7%
No 8	18	10.3%	47	26.9%	44	25.1%	31	17.7%	21	12.0%	14	8.0%
No 9	67	38.3%	55	31.4%	27	15.4%	21	12.0%	4	2.3%	1	0.6%
No 10	0	0.0%	3	1.7%	9	5.1%	28	16.0%	51	29.1%	84	48.0%
No 11	10	5.7%	27	15.4%	44	25.1%	52	29.7%	28	16.0%	14	8.0%
No 12	1	0.6%	7	4.0%	15	8.6%	49	28.0%	53	30.3%	50	28.6%
No 13	26	14.9%	34	19.4%	44	25.1%	24	13.7%	25	14.3%	20	11.4%
No 14	33	18.9%	27	15.4%	30	17.1%	42	24.0%	25	14.3%	18	10.3%

The table shows the distribution of respondents' answers on the SNAIS instrument. In questions 1, 2, and 10, the highest proportion of answers was at score 5. In statement no. 3, each score 1, score 2, and score 3 had a frequency of 43 respondents (24.6%). In statements 4, 7, and 8, the highest proportion was at score 1.

Table 4. Distribution of respondents based on the GAD questionnaire

GAD	Skor 0		Skor 1		Skor 2		Skor 3	
	n	%	n	%	n	%	n	%
No 1	64	36.6%	89	50.9%	9	5.1%	13	7.4%
No 2	93	53.1%	65	37.1%	9	5.1%	8	4.6%
No 3	70	40.0%	72	41.1%	15	8.6%	18	10.3%
No 4	84	48.0%	61	34.9%	12	6.9%	18	10.3%
No 5	120	68.6%	39	22.3%	7	4.0%	9	5.1%
No 6	81	46.3%	59	33.7%	20	11.4%	15	8.6%
No 7	62	35.4%	68	38.9%	25	14.3%	20	11.4%

The table shows the distribution of respondents' answers based on the GAD instrument. In statements 1, 3, and 7, the highest proportion is the answer with a score of 1.

Table 5. GAD Categories in Respondents

GAD	Minimum	95	54.3%
	Light	47	26.9%
	Currently	20	11.4%
	Heavy	13	7.4%
Total		175	100%

Based on the GAD category, the category with the highest proportion is the minimal category with 95 respondents (54.3%), while the lowest proportion is the severe category with 13 respondents (7.4%).

Table 6. Correlation Test of SNAIS and GAD

Variable	r value	p value
SNAIS	0.225	0.003
GAD		
* Spearman Correlation Test		

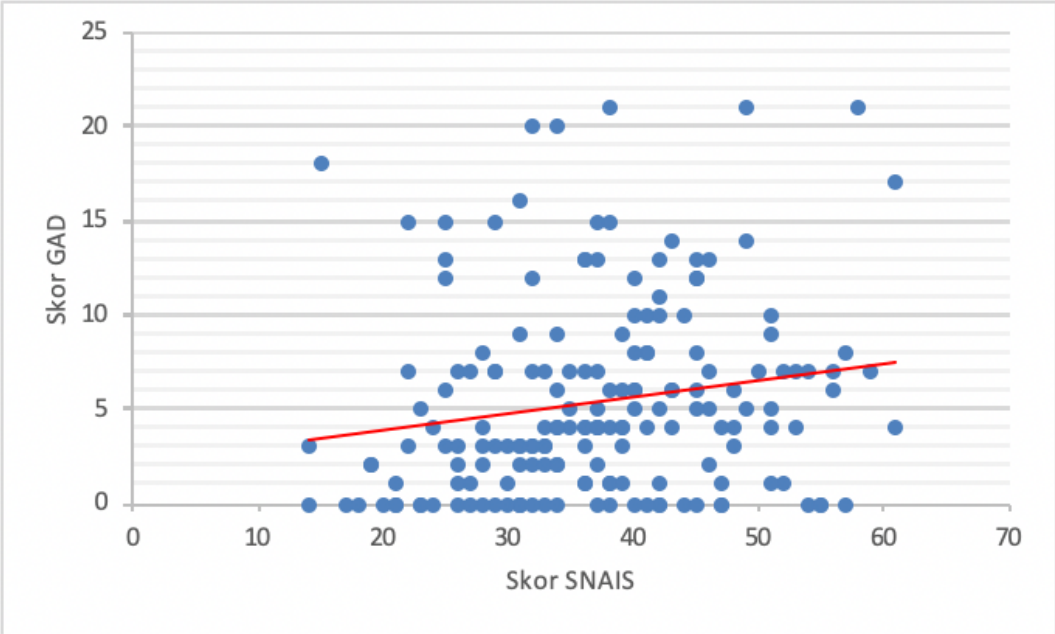


Figure 1. Correlation Test of SNAIS and GAD

The table and graph show the correlation between SNAIS and GAD. From the statistical test results, the p value (0.003) <0.05 was obtained, which means that there is a correlation between SNAIS and GAD with an r value of 0.225 which is in the weak correlation category and the direction is positive (the higher the SNAIS score, the higher the GAD score or vice versa).

Table 7. Distribution of respondents based on duration and GAD

			Category (Kat.GAD)				
			Minimal	Mild	Moderate	Severe	Total
Access Duration	< 1 hour	n	12	2	1	1	16
		%	75.0%	12.5%	6.3%	6.3%	100%
	1-3 hour	n	24	12	3	2	41
		%	58.5%	29.3%	7.3%	4.9%	100%
	> 3 hour	n	59	33	16	10	118
		%	50.0%	28.0%	13.6%	8.5%	100%
							175

This table reflects the distribution of individuals across different levels of access duration and their corresp. This table shows the percentage of access duration less than 1 hour with the highest GAD, namely the minimum category of 75.0%. At the access duration of 1 to 3 hours with the highest GAD, namely the minimum category of 58.5%. At the access duration > 3 hours with the highest GAD, namely the minimum category of 50.0%.

Table 8. Distribution of respondents based on type of social media and GAD questionnaire

Types of Social Media	Answer	n	Minimum	Light	Currently	Heavy	Amount
<b>Facebook</b>	Yes	n	10	9	3	4	175
		%	38.5%	34.6%	11.5%	15.4%	100%
	No	n	85	38	17	9	175
		%	57.0%	25.5%	11.4%	6.0%	100%
<b>Twitter</b>	Yes	n	18	10	6	6	175
		%	45.0%	25.0%	15.0%	15.0%	100%
	No	n	77	37	14	7	175
		%	57.0%	27.4%	10.4%	5.2%	100%
<b>WA</b>	Yes	n	21	9	2	0	175
		%	65.6%	28.1%	6.3%	0.0%	100%
	No	n	74	38	18	13	175
		%	51.7%	26.6%	12.6%	9.1%	100%
<b>Instagram</b>	Yes	n	87	45	19	13	175
		%	53.0%	27.4%	11.6%	7.9%	100%
	No	n	8	2	1	0	175
		%	72.7%	18.2%	9.1%	0.0%	100%
<b>TikTok</b>	Yes	n	56	41	15	10	175
		%	45.9%	33.6%	12.3%	8.2%	100%
	No	n	39	6	5	3	175
		%	73.6%	11.3%	9.4%	5.7%	100%
<b>Lainnya</b>	Yes	n	11	2	1	2	175
		%	68.8%	12.5%	6.3%	12.5%	100%
	No	n	84	45	19	11	175
		%	52.8%	28.3%	11.9%	6.9%	100%

This table shows the GAD Category based on the type of social media accessed, namely, Facebook with the highest GAD category, namely a minimum GAD of 38.5%, Twitter with the highest GAD category, namely a minimum GAD of 45.7%, Whatsapp with the highest GAD category, namely a minimum GAD of 65.6%, Instagram with the highest GAD category, namely a minimum GAD of 53.0%, Tiktok with the highest GAD category, namely a minimum GAD of 45.9%, Others with the highest GAD category, namely a minimum GAD of 68.8%.

Social media as an online media that makes it easier for users to communicate and participate and build public profiles exploring the list of connections through applications or communities in the media. Bosse et al. (2020) stated that internet usage, especially social media, is seen based on the intensity of using social media, which can be seen from the frequency (how long and how many times to access social media). According to ICCA (Indonesian Contact Center Association), it was concluded that the use of social media in Indonesia spends 3 hours a day, so in one-week social media users use their time for 21 hours. The intensity of social media use includes a tendency towards Heavy Users (Wahyuni, 2022).

Students are one of the active social media user groups as well as the age group with the largest number of social media users. Based on the survey results, social media users reached 89.7%, in the student group, the majority of whom are aged 18-25 years,



they have the largest number compared to other groups (Abidah & Aziz, 2020; Wickramanayake & Muhammad Jika, 2018).

Anxiety is an unpleasant (Putra Lape et al., 2021). mood accompanied by worry and anxiety about the future, functioning to signal that there is danger, and if no appropriate action is taken, the danger will increase. When someone's use of social media increases, they will become less mobile so that they are physically weak. In addition, they will continue to use social media and find it difficult to get away from it, reducing sleep time, forgetting to eat, and inhibiting daily activities (Montag & Diefenbach, 2018). Internet addiction can also cause obesity, circulatory disorders, developmental disorders, and other physical illnesses. In addition to causing physical illness, social media addiction also has a negative impact on mental health, such as the emergence of envy which can result in depression and anxiety disorders (Zaida & Anggreni, 2020).

In this study, based on the distribution of respondents' answers and the variable correlation test, the p value (0.003) <0.05 was obtained, which means that there is a correlation between SNAIS and GAD with an r value of 0.225 which is in the weak correlation category. Thus, according to the hypothesis, the higher the intensity of social media use, the higher the anxiety. The results of other studies show that social media has a positive effect of 0.657 on anxiety levels (Wahyuni, 2022) Anxiety in social media users arises due to obsession and excessive use of social media. Social media is a means to share, store and activities and experiences, but if the exposure obtained from social media is excessive, it can cause users to feel dissatisfied with the reality of their own lives (Maier et al., 2015). This is reinforced by research conducted by Fox & Moreland (2015) who explained that excessive use of social media causes greater anxiety in its users. They will feel emotional distress such as mood swings. dysphoric, insomnia, irritability, and restlessness when not connected to social media (Gunawan & Shalahuddin, 2022).

Based on the access duration variable, 118 respondents (67.4%) accessed > 3 hours with the highest GAD category, namely GAD of at least 50.0% and 16 respondents (9.1%) accessed < 1 hour with the highest GAD category, namely GAD of at least 75%. From these results, it can be seen that the duration of access does not affect anxiety. In contrast to the results we found, (Iga Utami) who conducted a study on students of the Faculty of Medicine, Udayana University, Denpasar, Bali, found that the independent variable was the duration of social media use and the dependent variable was anxiety. The results showed that respondents who used social media more than 3 hours per day were more likely to experience anxiety compared to other respondents (Ketut et al., 2016).

The type of social media Instagram is the social media with the highest proportion of 164 respondents (93.7%) with the highest GAD category, namely GAD of at least 53.6% compared to other social media while other social media (mi chat, line) are the lowest proportion of 16 respondents (9.1%). So in this study the type of social media is not significant in increasing a person's anxiety. In other studies it was found that anxiety correlates higher with the use of Whatsapp, Facebook, and Instagram. The use of social media intensity when the tendency when accessing social media is high (Gunawan & Shalahuddin, 2022; Indrawati & Nuswantoro, 2021).

## CONCLUSION

From the results study there is significant relationship between GAD score with SNAIS score, so that the moretall intensity use Social Media then in line with improvement anxiety. Duration social media access No influential significant to anxiety.

Social media use No influential significant to anxiety. Need existence further research area and variables control that influences anxiety besides variables studied researchers to be able to obtained maximum results.

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