

Intensity of Social Media Use and Loneliness in University Students

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Abstract. The purpose of this study is to determine the relationship between the intensity of social media use and loneliness among students at Muhammadiyah Sidoarjo University. The study used a correlational quantitative method. The sampling technique used in this study was the quota sampling technique, with a sample size of 347 based on the Isaac and Michael table and a tolerance of 5%. Data collection uses a psychological scale with a Likert scale model, namely the intensity of social media use scale and the loneliness scale. Data analysis used Spearman's rho product moment correlation technique with the help of SPSS 26.0 for Windows. The results showed that there is a positive relationship between the intensity of social media use and loneliness in students ($r_{xy} = 0.922$), which means that the hypothesis in this study can be accepted. The higher the intensity of social media use by students, the higher the loneliness felt; on the contrary, the lower the intensity of social media use, the lower the loneliness felt by students.

Keywords: Intensity of Social Media Use, Loneliness, College Students.

1 Introduction

Among the emotions that people experience is loneliness (Ramadhan & Coralia (1)). According to Anggraeni (2), loneliness is a bad state brought on by the lack of fulfilling interactions and is accompanied by psychological discomfort symptoms. Andromeda and Kristiant claim that this sense of loneliness is a reflection of the person's subjective experience and takes the shape of feelings of alienation and loss, which are marked by a disconnect between the person's desires and their experiences in interpersonal connections.

Research conducted by Ramadhan and Coralia (1) with the title "The Relationship Between Self Disclosure and Loneliness in Instagram User Students in Palembang City" shows that 53.6% of students have loneliness in the high category (Ramadhan & Coralia (1)). Research conducted by Candra with the title "Loneliness and Intensity of Social Media Use in College Students" shows that 49.8% of students have loneliness in the high category (Candra (4)).

Based on an initial survey conducted through interviews with two students related to loneliness problems Students feel that there is no intimate emotional relationship with their friends. Students do not trust each other in the group and choose to do tasks individually. And many students who are not of the same mind or have different opinions will be ostracized in their group. This shows the indicators that exist in loneliness, namely emotional isolation and social isolation. As quoted from Kompas.id, loneliness contributes 21% to the tendency toward student depression. Loneliness is an individual's perception of social isolation or subjective experience

of solitude that has longitudinally been shown to predict depression (Fauziyyah & Ampuni (5)). According to Al Aziz (6) loneliness is not a psychological disorder, but when someone experiences loneliness continuously, it will have an impact on psychological well-being, such as depression, and can increase the risk of suicide.

Social media use intensity has been linked to loneliness, according to research by Cahyanti and Neviyarni titled "Relationship between Intensity of Social Media Use and Loneliness in Junior High School Students" (Cahyanti & Neviyarni (7)). Candra's research indicates that students' feelings of loneliness are significantly impacted by the amount of time they spend on social media (Candra (4)). Andromeda and Kristant's research also demonstrates that students' level of social media use has a big impact on making them feel lonely (Andromeda & Kristant (3)). Students who use social media intensely and consistently for extended periods of time may feel lonely (Azzahra (8)).

According to Budi Rinjani & Prasetyaningrum (9), the extent of an individual's attention and interest in social media as measured by their level of proficiency or strength in utilizing it, is the measure of their intensity of use. The way that people use social media depends on their requirements. Desires and needs are connected to the reason behind accessing social media (Palipung, 10). The quality and quantity of social media use intensity are the two characteristics that make up the concept of addressing demands in social media (Olufadi, 2011). Perceived ease of use and benefits have an impact on the frequency and intensity of social media use. Thus, attentiveness, appreciation, duration, and frequency of use are indicators of the intensity of social media use (Nenandha, 2012).

The background information provided above serves as the rationale for the research, which aims to ascertain the correlation between the degree of social media usage among Muhammadiyah Sidoarjo University students and their loneliness. This study closes the gap left by earlier research on the relationship between social media use and loneliness at Muhammadiyah Sidoarjo University, which was done on students in Riau and junior high school.

2 Literature Review

2.1 Loneliness

Weiss states that loneliness is a condition not caused by the individual being alone but by the lack of a relationship or set of relationships needed (Sønderby & Wagoner (13)). Loneliness is a response to the loss or absence of a close relationship. Another definition of loneliness is the feeling of psychological unease that individuals feel when social relationships are lacking in some important aspect. This deficiency can be quantitative, namely the lack of relationships, or qualitative, such as unpleasant relationships (Taylor et al (14)). In addition, according to Myers (15), loneliness, whether chronic or temporary, is the painful realization that social relationships are less meaningful than expected.

According to Hidayati & Muthia (16), there are two types of loneliness: emotional loneliness and social loneliness. One type of loneliness that might develop in the absence of a close relationship is emotional loneliness. This kind of loneliness is frequently felt by adults who are unmarried, divorced, or abandoned by their relationships (Febrina, 17). A person experiences social loneliness when they are not fully involved in themselves and do not engage in communities or groups that value togetherness, shared interests, planned activities, or

significant roles. a type of loneliness that can cause someone to feel uneasy, bored, and alienated (Febrina, 17).

A person who experiences loneliness feels that his expectations about his social ties are not met. If someone is unable to develop interpersonal interactions to the required degree of closeness, they will likely feel lonely (Prihatin, 18). The measure of loneliness is based on a scale developed by Mare that takes into account several factors: emotional isolation, which is the result of not having a mooring figure or someone to look up to; social isolation, which is the result of not having friends or associations; and loneliness due to the absence of intimate affection figures, such as those that parents can show to their children or close friends.

2.2 Intensity of Social Media Use

Social media serves as a bridge that facilitates communication between people and different parties worldwide (Enke & Borchers, 20). The goal of social media engagement is the same as that of social interaction in real life: making friends and forming social networks with other people or specific communities, but through indirect or non-face-to-face means (Wellman, 21).

According to Kaplan & Haenlein, social media is a collection of web-based programs developed on the principles and technological framework of Web 2.0, which enables the development of interactive websites (Kaplan, 22). Social media is an online platform where people can engage, exchange, and produce content (Gündüz, 23). Social media can be defined as a platform for human-to-human social interaction in the creation, sharing, and exchange of information, including concepts and different types of material in online communities (Akram & Kumar, 24).

The force or depth of the brush against an object determines its intensity (Thomas et al., 25). According to Wulandari, the term "intensity" describes how time is used to perform a specific task (duration) with a specific number of repetitions inside a specific time frame (frequency) (Azhari et al., 26). The act of using something is what Salim interprets as the definition of the term "use" (Kircaburun et al., 27).

Social media, as determined by how well or deeply they use it. The Uses and Gratification Theory (UGT), also known as the theory of use and fulfillment of satisfaction, is the theoretical framework that guides the use of social media. The motivation behind social media usage behavior, according to UGT theory, is to satisfy the requirements or satisfaction of the user. The reason for utilizing social media is connected to needs and desires (Rachubińska et al., 28). The quality and quantity of social media use intensity are the two factors that make up the idea of addressing requirements in social media (Sutcliffe et al., 29). The Technology Acceptance Model (TAM), which includes perceived utility (PU) and perceived ease of use (PEU), is another theory. According to this hypothesis, people who utilize social media do so because it's a convenient and helpful tool for them (Sutcliffe et al., 29). PEU and PU may have an impact on how frequently or intensely people use social media. Thus, the degree of appreciation and attention paid to social media use, as well as the length and frequency of use, are indicators of the intensity of social media use (Park et al., 30).

The degree to which an individual uses social media on a regular basis because they enjoy doing so is known as their intensity of use (Bikriyah (31)). The intensity of social media use is determined by using a scale developed by Putri that takes into account the following factors: duration: how long an individual needs to perform the targeted behavior; appreciation: how much the individual understands and absorbs the information as new knowledge; attention: the

individual's interest in specific objects that are the target of behavior; and frequency: the number of times the targeted behavior is repeated (Putri (32)).

3 Method

This research is a correlational quantitative study that aims to determine the relationship between variables and other variables (Azwar (33)). The subject in this study were students of the Muhammadiyah University of Sidoarjo. The research sample amounted to 347 students, 156 male students, and 191 female students, based on the Isaac & Michael table with a tolerance of 5%. The sampling technique used was quota sampling. The use of quota sampling is because the sample of the population used has certain characteristics until it reaches the desired number (quota) (Sugiyono (34)). The characteristics of the sample used in this study are active students in the 2021–2022 academic year and those who use social media.

The data collection technique used was a psychological scale in the form of a Likert model scale for the variable intensity of social media use adopted from research (Putri (32)) with a reliability of 0.904 and the loneliness variable adopted from research (Misyaroh (19)) with a reliability of 0.920. Data analysis used Spearman's rho product moment correlation technique with the help of SPSS 26.0 for Windows.

4 Result

Table 1. Subject Score Category

Category	Subject Score			
	Intensity of Social Media Use		Loneliness	
	\sum Mahasiswa	%	\sum Mahasiswa	%
Very Low	20	6%	11	3%
Low	96	28%	124	36%
Medium	137	39%	110	32%
High	67	19%	74	21%
Very High	27	8%	28	8%
Total	347	100 %	347	100 %

Based on table 1, it shows that out of 347 students there are 20 students (6%) with very low intensity of social media use, 96 students (28%) low, 137 students (39%) moderate, 67 students (19%) high, and 27 students (8%) the intensity of social media use is very high.

Loneliness categorization: there are 11 (3%) students who have a level of loneliness that can be said to be very low; low loneliness is 124 (36%) students; 110 (32%) students have a moderate level of loneliness; there are 74 (21%) students who have a high level of loneliness; and there are 28 (8%) students who have a very high level of loneliness. Before conducting hypothesis testing, researchers conduct assumption tests, which include normality tests and linearity tests.

Table 2. Assumption Test

Assumption Test	Sig	Description
Normality Test		
Intensity of Social Media Use	0.004	(p < 0.05) Not Normal
Loneliness	0.000	(p < 0.05) Not Normal
Linierity Test		
Intensity of Social Media Use - Loneliness	0.215	(p > 0.05) Liniear

Based on the Kolmogorof-Smirnov table data above, it can be seen that the significance value of the intensity of social media use is 0.004, which means that the value is less than 0.05 ($0.004 < 0.05$), and it can be said that the data distribution is not normal. While in the loneliness data, it is known that the significance value is 0.000, which means that the data is less than 0.05 ($0.000 > 0.05$), and it can be said that the data distribution is not normal.

In the table above, it is known that the significance value of linearity of the intensity of social media use with loneliness is 0.000, which means that the linearity value is smaller than 0.05 ($0.000 < 0.05$), and the significance value of deviation from linearity is 0.215, which means that the value of deviation from linearity is greater than 0.05 ($0.215 > 0.05$). So it can be concluded that both data are linear.

Based on the two tests above, the hypothesis test was carried out with the Spearman's rho correlation test.

Table 3. Hypothesis Test

Spearman's Rho Test	Correlation	Sig	Description
Intensity of Social Media Use - Loneliness	0.922	0.000	H ₀ Rejected

Based on the table above, it is known that the correlation coefficient value $r_{xy} = 0.922$ has a significance value of 0.000 (< 0.05). Thus, it can be interpreted that the hypothesis proposed by the researcher can be accepted: that there is a positive relationship between the intensity of social media use and loneliness. So the higher the intensity of social media use by students, the higher the loneliness felt; on the contrary, the lower the intensity of social media use, the lower the loneliness felt by students.

In addition to hypothesis testing, researchers also calculated the intensity of social media use on loneliness.

Table 4. Effective Contribution

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.944 ^a	.890	.890	6.589

a. Predictors: (Constant), Intensity of Social Media Use

Based on the results of the table above, it is known that the R square value is $0.890 \times 100\%$, and the result is 89%. These results indicate that the effect of the intensity of social media use on loneliness is 89%. Thus, there are other factors that have an influence of 11% on loneliness.

5 Discussion

The purpose of this study is to ascertain whether students at Muhammadiyah Sidoarjo University's use of social media and their loneliness are related. University students' feelings of loneliness are significantly influenced by how much they utilize social media. According to Rachuńska et al. (28) college students are frequently ensnared in a virtual world where they spend endless hours on social networking sites like Facebook, Instagram, and Twitter. College students often experience loneliness due to a decrease in in-person social connections, even when they are linked to their peers virtually. When individuals see the allegedly flawless lifestyles of others displayed on social media, they could get envious, but in reality, they might feel abandoned or underappreciated (Thomas et al., 25).

The examination of the data reveals a positive correlation between students' levels of social media use and loneliness. Students experience more loneliness the more intensely they use social media; conversely, the less intensely they use social media, the less lonely they feel.

The results of this study are in accordance with previous research on "loneliness and intensity of social media use in college students," which showed positive results (Ningsih (35)). Students who use social media with high intensity have a higher level of loneliness; this has an impact on social interactions in the real world, thus increasing the loneliness experienced by students (Candra (4)). Another study conducted by Karimah and Setiowati with the title "Intention to use social media in adolescents in terms of loneliness and affiliation needs" showed that there is a positive relationship between the intensity of social media use and loneliness (Karimah & Setiowati (36)).

Social media is become a vital component of students' everyday lives and their primary means of communication, information gathering, and access to academic materials (Novianita et al., 37). Nonetheless, pupils' emotional health is impacted by excessive social media use. High social media user students frequently experience loneliness in the actual world (Astuti et al., 38). Students who use social media constantly run the risk of becoming socially isolated and receiving less social support from others around them (Pasaribu, 39).

Excessive use of social media can affect one's sleep quality and mental health (Haniza (40)). Spending too long on social media, especially at bedtime, then sleep patterns disrupted and result in a lack of adequate rest. A continued lack of sleep can affect mood and lead to more intense feelings of loneliness. Research conducted by Ningsih with the title "The relationship between loneliness and the intensity of social media use in college students" also shows that

there is a significant positive relationship between the intensity of social media use and loneliness (Ningsih (34)).

There are several aspects that can measure whether students have a high or low intensity of social media use. These aspects include attention, appreciation, duration, and frequency (Putri (32)). Students who are able to control attention, appreciation, duration, and frequency will be able to maintain emotional and social isolation so that they do not feel lonely (Andromeda & Kristant (3)). Students who are overly involved in social media can replace more real social interactions, triggering social comparisons that can be detrimental and reduce sleep quality and mental health. It is important for individuals to maintain a balance in their social media use and engage in deeper and more meaningful social interactions in the real world (Andromeda & Kristant (3)).

One of the main reasons is that social interactions through social media are often superficial and do not replace life social interactions. College students may have many friends and followers online, but that doesn't always result in strong or deep relationships. They may feel lonely due to the lack of real emotional contact and genuine social support.

In addition, the intensity of social media use can lead to adverse social comparisons. College students often see other people's seemingly perfect lives showcased on social media but rarely see the darker side or the challenges they face. This can lead to feelings of inadequacy or lack of success, which can also increase levels of loneliness.

It is important for college students to maintain a healthy balance between online and offline interactions and to maintain deep social connections in the real world. Awareness of the impact of intense social media use is the first step in overcoming loneliness and achieving better social and emotional well-being.

Other factors that can influence loneliness besides the intensity of social media use include levels of depression, mental health, and peer support. Research conducted by Aziz shows that the level of depression has an influence on loneliness, where the higher a person's level of depression, the higher the level of loneliness experienced by a person (Al Aziz (6)). Taqwa also mentioned that mental health also has an influence on loneliness, where the more someone experiences mental health problems, the more loneliness the individual will feel (Taqwa (41)). Another study conducted by Hidayatun showed that peer support has an influence on loneliness, where the more peer support provided, the more loneliness experienced by a person will be reduced (Hidayatun (42)).

The limitations of this study are that it only uses one X variable to measure loneliness and only uses correlational quantitative methods. Researchers only use student subjects where there are still levels of education at the elementary, junior high, high school, and boarding school levels.

6 Conclusion

The study's hypothesis can be accepted because the findings demonstrated a positive correlation between students' levels of social media use and loneliness. For students, loneliness increases with the amount of social media use they engage in; conversely, they experience less loneliness when they use social media less frequently. A tiny percentage of other characteristics can affect loneliness, however the intensity of social media use can have a dominant effect.

In order to prevent loneliness, it is anticipated that students would utilize the study's findings to control how much time they spend on social media and instead choose to interact in person with their peers. The study's scope can be increased by future researchers who have an interest in related subjects pertaining to the intensity of social media use. For instance, increasing the population or including variables—like depression severity, mental health, and peer support—that are not covered in this study.

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