

The Relationship between Self-Esteem and Nomophobia Among Students in Yogyakarta

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ABSTRACT

This study explores the relationship between self-esteem and nomophobia, an overreliance on smartphones that can impact psychological well-being, among university students in Yogyakarta. With 100 respondents from various universities, the research examines whether higher self-esteem is associated with lower levels of nomophobia. Data were collected through a 34-item self-esteem scale and a 20-item nomophobia scale. Analytical methods included descriptive analysis, classical assumption tests, and hypothesis testing. Results showed a significance value of $0.000 < 0.05$ and a correlation of -0.878 , indicating a strong negative relationship between self-esteem and nomophobia. Students with higher self-esteem exhibited lower dependency on smartphones, suggesting they are more inclined to engage in face-to-face interactions and are less reliant on digital communication.

INTRODUCTION

The city of Yogyakarta is a big city that is famous as a student city in Indonesia. This student city has at least 84 universities, both public and private. Meanwhile, the number of students studying in Yogyakarta (2021) amounted to 714,610 students (Bappeda jogja, 2022). The academic atmosphere in Yogyakarta also encourages every student to think critically in everything and the friendly atmosphere of Yogyakarta makes this city very suitable for higher education. The city also has students from Sabang to Merauke (Aziz, 2019) In the learning process, learning through internet media facilities is a permanent part that cannot be left out in the learning life of students. Internet facilities today have been simplified through the process of using them, namely with smartphone media (AlBarashdi et al., 2016).

Smartphones are able to make communication easier anywhere, anytime and in a fun way (Agnawijaya, 2019) Communication and information technology has significantly changed the way individuals live and has become an integral part of life and has grown to become an important part, many individuals especially young people use communication and information technology every day for various purposes (Berolo et al., 2015) Smartphones allow users to stay in touch with others through the phone and the internet together (Bekaroglu E, 2020)

According to (Farhan & Rosyidah, 2021), the number of mobile internet users was 4.28 billion in 2020, indicating that more than 90% of the world's internet population uses mobile devices to get online. The increase in the number of mobile internet users is in accordance with the research of (Bragazzi & Del Puente, 2014) which explains that changes in the habits and behavior of individuals on a daily basis during ini terjadi seiring dengan meningkatnya penetrasi teknologi perantaranya adalah ponsel/ smartphone.

Smartphones as a means of communication are not always viewed positively. There are some people who believe that the presence of smartphones has a negative effect, namely excessive use of smartphones, which can affect daily life and the people around them. The fear of staying away from mobile phones is called nomophobia and is considered a contemporary phobia due to interaction between humans, information technology especially on smartphones (Billieux et al., 2015).

Smartphones are so valuable to college students that they cause many negative effects on their users if they use too much, such as anxiety, depression, the feeling of having to look at the phone all the time, feelings of addiction, lack of social interaction, reduced empathy for the people around them, distracted behavior and bad feelings, and prejudice that leads to social isolation and even isolation (Brailovskaia & Margraf, 2018). This is an example of nomophobia, which can interfere with academic life and social relations. A person who

experiences nomophobia will be more involved with his smartphone than talking to his interlocutor directly (Lestari & Sulian, 2020)

(Bianchi & Phillips, 2005) in his study found that young people aged 18-24 years were 77% more susceptible to nomophobia, compared to 68% of people aged 25-34 years and the rest aged 55 years. A study conducted (Chen & Yan, 2016) reported that 49% of nomophobia sufferers feel angry and upset when their partner sees the message, so they set security on their mobile device, namely 46% do not use security, 41% use security codes and 10% change their devices. Research (Chóliz M, 2012) on the incidence of nomophobia experienced by Universitas Airlangga students explained that of the 380 students, 34 students had very severe nomophobia, 92 students had severe nomophobia, 148 students had moderate nomophobia, 88 students had mild nomophobia, and 17 students did not experience nomophobia.

THEORITICAL REVIEW

A person who has nomophobia in fact shows certain aspects (Clayton et al., 2015) Aspects of nomophobia according to (Clayton et al., 2015) include anxiety of not being able to communicate, disconnection, anxiety of not being able to receive information, and feelings of discomfort when the smartphone is not held or reached. At the same time, factors that affect nomophobia according to Yildirim (2015) include age, gender, extraversion, neuroticism, and self-esteem. According to the definition above, self-esteem is one of the factors that affect a person's behavior. Because self-esteem is one of the aspects that contribute to a person's behavior (Yogi Damai Syaputra et al., 2022)

On October 30, 2023, researchers surveyed 16 students who were actively using smartphones. Based on the results of the interview, researchers found that smartphone users check their smartphones less than once every 30 minutes. With this interview, students who use smartphones feel anxious, lonely, bored, empty, and anxious when they cannot access information through smartphones. In fact, they admitted that they were lost because they could not communicate through their smartphones. This is related to the aspect of feeling unable to communicate in nomophobia. Smartphone users through this interview also feel that there is something missing when they cannot update information in the media, and they also feel confused, anxious and upset when they cannot use their smartphone services. This has to do with the disconnection of nomophobia. Then students who use smartphones are afraid when their smartphones turn off because they cannot access social media and miss information. Respondents said that controlling a smartphone is a feeling of security, even smartphones can eliminate boredom to forget time and not be aware of the surrounding environment, this is in accordance with the aspect of

nomophobia, namely resignation. Based on the results of the interview above, there are indications of nomophobia experienced by students and this can be seen in the fulfillment of four aspects of nomophobia.

People with low self-esteem are more likely to call and send messengers, in contrast to people with higher self-esteem who prioritize communication by meeting in person (Hong et al., 2012) Then added (Dhir et al., 2015; Dixit et al., 2010) that low self-esteem can predict problematic cell phone use. Cell phones give everyone the ability to stay connected at all times, and it's no surprise that people who use their phones inappropriately or excessively can develop nomophobia.

(Griffiths & Kuss, n.d.) stated that self-esteem is self-evaluative consisting of positive and negative self-evaluation. (Ehrenberg et al., 2008) adds that the purpose of individual evaluation is to show how the individual evaluates himself, whether his skills and achievements are recognized or not. This evaluation is called self-esteem, both positive and negative. In our daily lives, we can receive many judgments from the nearest social environment, such as family, friends, and others. Cell phones can provide communication with others, self-esteem can influence the behavior of mobile phone users in establishing relationships (Elhai et al., 2017)

Refers to one aspect of self-esteem, namely meaning. People feel important when they are valued, accepted, cared for and loved by the people closest to them, such as family, friends or the community. Significance or approval based on the judgment of others. Meaningfulness is characterized by the attention and affection that a person receives from others. In this context, people feel less accepted by the environment and lose this context, people feel less accepted by the environment and lose contact with their environment (Sudarji, 2018) so people with low self-esteem use smartphones as reassurance or confirmation ((Wang & Suh, 2018) People with negative self-image can change their lives with the help of smartphones because smartphones allow them to express their emotions well and provide comfort (GUNAWAN, 2019)

Research conducted by (Khairunniza et al., 2021) states that excessive use of smartphones due to low self-esteem contributes to the emergence of nomophobia because it makes it difficult for a person to manage time in using smartphones. Farhan & (King et al., 2010) added that if a person has low self-esteem, they will use more device-mediated communication tools than face-to-face communication, causing high nomophobia.

Based on the explanation above, this study aims to find out the relationship between self-esteem and nomophobia in students in Yogyakarta.(Kubrusly et al., 2021)

METHODOLOGY

The variables in this study are the criterion variable (nomophobia) and the predictor variable (self-esteem). The characteristics of the subjects in this study are students aged 18-21 years, active smartphone users and studying in Yogyakarta. The subjects in this study are 100 students.

The data collection method used in this study uses the scale method. The scale used in this study is the Likert model attitude scale, which is a scale that contains attitude statements, which is a statement about the object of attitude. Attitude statements consist of two types, namely favourable statements and unfavourable statements (Azwar, 2017). The psychological scale used is divided into two, namely the nomophobia scale and the self-esteem scale.

The nomophobia scale used in this study is the nomophobia scale compiled by Lestari & Sulian (2020) based on the aspects put forward by Yildirim (2015). This scale amounts to 20 items consisting of 20 favorable items. This nomophobia scale uses a criterion limit of 0.30. The score of the difference power coefficient of the item ranges from 0.35 to 0.84 and the reliability coefficient of alpha is 0.950.

The self-esteem scale used in this study uses a self-esteem scale adapted from Liskasiwi, (2020) based on the aspects presented by Coopersmith (1967). The self-esteem scale consists of 36 statement items consisting of 18 favorable items and 18 unfavorable items. The coefficient of the differential power test of the moving item from 0.342 - 0.781 and the reliability of the scale in this study was tested using the Cronbach Alpha procedure with an alpha reliability coefficient (α) of 0.947.

The hypothesis test in this study uses Spearman rank correlation analysis to test the relationship between self-esteem and nomophobia in students in Yogyakarta. The researcher uses this analysis technique because the spearman rank correlation analysis is suitable to test hypotheses regarding the relationship between one predictor variable and the criterion variable.

RESULTS AND DISCUSSION

Based on the results of spearman rank correlation analysis, a correlation coefficient of $(r_{xy}) = -0.878$ with $p = 0.000$ ($p < 0.05$), which means that there is a negative relationship between self-esteem and nomophobia in students in Yogyakarta, so the hypothesis is accepted. This means that the higher the self-esteem, the lower the nomophobia in students in Yogyakarta. On the other hand, the lower the self-esteem, the higher the nomophobia in students in Yogyakarta.

People who experience nomophobia or have a high level of nomophobia can be motivated by many things, one of which is low self-esteem (Donnelly in

Khairunniza et al., (2021). People with low self-esteem experience social anxiety and excessive interpersonal sensitivity, making it difficult for people to form good relationships in the real world (Yang et al., 2010). People with low self-esteem feel that there are no barriers in communicating face-to-face online, so they prefer to communicate indirectly (online) to avoid emotional injury (AlBarashdi et al., 2016).

Nomophobia experienced by a person can be influenced by several aspects such as Coopersmith's opinion (in Nabilah & Rosalina, 2019) where there are 4 aspects in self-esteem, namely power or behavior that can control pressure in oneself, significance (meaning) that assesses a person's care, attention and affection, virtue (virtue) which assesses a person's adherence to moral and ethical standards, and competence (ability) which assesses the things a person wants to achieve in his life. The results of this study were obtained novelty after being associated with previous research that was used as a reference in this study, namely the Agnawijaya study (in Hamidah 2019 & Lestari 2017) which both showed that most students had a high level of nomophobia, but in this research the results were obtained if students had a low level of nomophobia.

Based on the results of the descriptive analysis of the self-esteem variables in this study, it can be seen that the researcher collected 100 student respondents in Yogyakarta. The level of self-esteem scores was mostly in the high category, namely 59 respondents (59%). The results of the descriptive analysis also explained that there were 36 people (36%) in the moderate category and 5 respondents (5%) in the low category. By dimiki, it can be known if each student in this study has been able to control or master the four aspects of self-esteem, namely power, significance, virtue and competence.

Nomophobia is the anxiety or fear that a person experiences when separated from a mobile phone or unable to access it, the relationship between self-esteem and nomophobia can be explained through several psychological mechanisms and although there is no direct research that explicitly examines the relationship between aspects of self-esteem i.e. power) with nomophobia, various studies show that individuals who feel they have the power to control their lives and feel independent tend to have high self-esteem, where empowerment provided by power can provide a positive feeling of control over the surrounding environment, including dependence on technology (Lestari, 2017). The findings in this study show that low self-esteem, loss of strength in a person can be a predictor of excessive social media use, related to nomophobia, where it was found that subjects felt excluded by their friends.

Then, an aspect of self-esteem called significance indicates the extent to which a person feels important or valuable in social and interpersonal contexts,

individuals who feel that their meaning depends on online social interaction or recognition in the virtual world may be more susceptible to nomophobia (Heriyani, 2021). Findings on the ground suggest that self-meaning expressed through social media can be a predictor of technology use and fear of separation from devices, individuals who feel their meaning depends on social acceptance or validation from others through online platforms may be more likely to experience anxiety if separated from their devices, according to this study where subjects felt unfamiliar to many people in the environment campus and his home. Research by Brailovskaia & Margraf, (2018) found that the fear of negative judgments online can be related to excessive use of mobile phones. Research by Griffiths & Kuss, (2017) found that high levels of self-meaning are associated with levels of social media addiction, which can be a risk factor for nomophobia.

Furthermore, a third aspect of self-esteem called virtue refers to the extent to which a person feels they have moral qualities or positive values in themselves, individuals with high levels of virtue may be more likely to use technology ethically and responsibly, ethical use can help reduce the risk of fear of separation if individuals feel that their online interactions are in line with moral values. Virtue can correlate with the level of self-control, which can affect the extent to which a person tends to depend on technological devices (Sudarji, 2018). Research by Hoffman et al., (2014) shows that high self-control correlates with more balanced and less obsessive use of technology. Research by Chen & Yan, (2016) found that high virtue correlates with more positive and balanced use of social media, which can affect nomophobia levels. The findings in the field, concluding that virtue can moderate the relationship between social media use and anxiety, suggest that individuals with high virtue may experience lower negative impacts, according to the results of this study, which is that subjects find it not difficult to obey applicable regulations.

The aspect of self-esteem called competence refers to the extent to which a person feels competent, effective and capable in various aspects of life. Individuals who feel they have the ability to use technology effectively may be more likely to see their phones as a tool for improving capabilities and productivity (Amiri, 2022). Research by Wilmer & Chein, (2016) shows that impulse control abilities, which are related to self-esteem and ability, can moderate the relationship between smartphone use and cognitive impairment. Individuals who feel socially competent and feel needed in online interactions may be more susceptible to fear of separation from devices. Research by Wegmann et al., (2017) found that a lack of social competence can worsen nomophobia symptoms. Individuals with high self-esteem in terms of ability may be better able to overcome challenges or failures in using technology.

Findings in the field showed that high coping skills could correlate with lower levels of nomophobia, in this study it was found that subjects were able to make decisions that stick to the decisions made. Research by Billieux et al., (2015) found that a person who feels has high self-control and self-regulation is more likely to experience healthy mobile phone use and is less dependent on technology. A study by Berolo et al., (2011) concluded that the ability to manage technology needs can reduce the risk of discomfort and physical symptoms associated with technology use.

This study has several limitations, namely that this study is focused on differences in self-esteem and nomophobia behavior based on gender in general. These limitations may result in an inability to dig into more specific differences or factors that may contribute to the variability of the results. The limited age range of students between 18-21 years old can limit the generalization of research results to a wider student population with a more diverse age range. While this study has not yet in-depth addressed additional factors such as religiosity or other factors that can influence nomophobia levels, taking into account these additional variables could provide a more comprehensive picture of the relationship between self-esteem and nomophobia. Time limitations and difficulties in collecting 100 respondents can affect the representativeness of the sample and generalization of results, limited data collection can limit the external validity of this study. The use of self-esteem scales and nomophobia as measurement tools may not represent all dimensions of these concepts. Data collection that focuses only on specific instruments can reduce the accuracy of the analysis, the study is correlational, so it is not possible to draw causal conclusions or establish causality between self-esteem and nomophobia. Other factors that are not directly measured may play a role in this relationship, this study is limited to students at several universities in Yogyakarta, so the results may not be directly applicable to the student population in other locations.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the analysis and discussion that has been carried out, it can be concluded that this study shows that there is a significant negative relationship between self-esteem and nomophobia in students in Yogyakarta with a correlation coefficient of $(r_{xy}) = -0.878$ with $p = 0.000$ ($p < 0.05$). Self-esteem and nomophobia in students in Yogyakarta have a strong correlation. The higher the self-esteem, the lower the nomophobia in students in Yogyakarta. Students who have a high level of self-esteem will spend more time communicating in person and not relying on smartphones. Then, the results of the categorization showed that the research subjects had a nomophobia level

category in the low to moderate category, while the average self-esteem variable of the subjects was in the high to medium category.

FUTURE STUDY

Future studies could investigate the effectiveness of intervention programs designed to increase self-esteem and reduce nomophobia. For instance, self-esteem building workshops or digital detox programs might help reduce students' reliance on smartphones. Such studies would be beneficial for developing practical strategies that educational institutions can implement to support students' mental well-being.

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