Social Alienation of Students in Palembang

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ABSTRACT
This paper to analyze the effect of nomophobia on powerlessness, meaninglessness, normlessness, social isolation, and self-estrangement of students in Palembang. The method used is a survey with a cross-sectional study approach. The sample of this study were students of Junior High School, Senior High School, and College in Palembang, aged 12-21 years as many as 241 students. The sampling technique used is multistage random sampling. Test analysis carried out by Manova test. The results showed that all samples were student nomophobia, even 68.1% at a moderate level, and 51.9% had relatively high levels of social alienation. This nomophobia has a significant effect on simultaneous with a P-value <0.05. The influence of nomophobia on powerlessness, meaninglessness, normlessness, social isolation, or self-estrangement each have P-value <0.05, so that is significant. However, there is a difference between nomophobia mild and moderate or vice versa, both based on powerlessness, meaninglessness, normlessness, social isolation, and self-estrangement. The tendency is that students have experienced social alienation so that early prevention efforts are needed. This effort can make with community-based social learning.

Keywords: Community-based social learning, Nomophobia, Social alienation, Students.

1. INTRODUCTION

One common symptom that is increasingly prominent today is the increasing dependence of students on using smartphones. The development of smartphone technology that is so fast by offering various attractive features and ease of communication has resulted in students not being able to escape from dependence on smartphones. The pattern of smartphone use among students has shown a worrying indication [1]. Students have experienced addiction to smartphones, and this condition has affected the student's academic achievement. Smartphones have started to become a new norm in society which as a reference in behaviour [2]. Smartphones have changed the culture, social life, and technological landscape of modern society. Nomophobia is considered as a disorder of the modern world [3-5].

This high level of dependence on smartphones has led to the emergence of symptoms of nomophobia, which is a symptom that shows the type of phobia marked by excessive fear when unable to use a smartphone [6], [7].

The study show that nomophobia is increasing in such a way that it cannot be ignored, especially among young people [8], [9]. As well as previous studies, the find relationship between levels of nomophobia prevalence and internet addiction among high school students [10]. The nomophobia levels of high school students found to be slightly above average. About gender differences, female students have a higher tendency to exhibit nomophobia behaviors compared to male students. The results of research on Muhammadiyah University of Surakarta students reinforce that there is a very significant positive correlation between smartphone use and nomophobia. Students find it challenging to break away from a smartphone. Smartphones have become an integral part of students at any time and opportunity. This phenomenon of nomophobia is very worrying because it occurs among students [11].

In fact, offered this nomophobia prevention model through their study of the Liva application model as an effort to prevent nomophobia [12]. Likewise, the results of the study which offer treatment of nomophobia through psychological treatment for 7 x 24 hours, which focuses on changes in human behaviour and thinking about dependence on SP [13]. However, the model from Pradana et al. 1 is a computer-based application model, while Prasyatiani, Hijriarahmah, and Solamat are more concerned with handling nomophobia through psychological approaches. In contrast, the problem of nomophobia is a problem of social behaviour that arises as a result of the development of information technology, so it cannot be seen from one point of view.
This symptom of nomophobia can lead to social alienation. The social alienation is a process that shows that people with high alienation tend to behave in ways that conflict with general social norms [14]. There is a relationship between the level of cell phone dependence and social alienation among users and most young adolescents [15].

Sociologist states that the symptoms of social alienation associated with five aspects, namely first, powerlessness; that is, the individual feels alienated socially, and this situation is out of his control, so he feels powerless to shape his way of life. Second, meaninglessness, namely individuals who think his life is not meaningful. Third, social normlessness, namely the condition of individuals who lose their ideals, goals, and norms in their lives [16].

The shared values that motivate and direct their actions are no longer influential. Fourth, isolation, i.e., individuals feel not connected through shared values, beliefs, and practices, and do not have meaningful social relationships with others. Fifth, self-estrangement, i.e., individuals experience social alienation and tend to avoid meeting the demands of others and social norms. The students can experience some or all of the five things.

In situations such as those stated by Seeman, people feel alienated or experience loneliness in their environment. Research by another researcher seen similar symptoms conducted on students. The results show that BlackBerry usage has caused alienated students. They feel uncomfortable if they cannot use BlackBerry as best they can. The students did not realize this process of alienation because they considered this situation beneficial in their lives [17].

Alienation studies do the fascinating reading because they deal with such crucial issues. And in the reading, one comes away with an almost overwhelming wealth of insights and new perspectives on the inter dynamics of socio-historical change and individual life and experience [18].

The problem of social alienation is a social phenomenon that occurs everywhere and has resulted in someone living with his world. This tendency is students seen in Palembang. The students can easily see using smartphones at every opportunity, even in lecture halls. The students using smartphones when the learning process takes place. Students tend to have no longer been controlled by the power of information technology to become dependent and weak [19].

Based on this fact, this paper will analyze the influence of nomophobia on social alienation, both simultaneously and partially in students Junior High School (JHS), Senior High School (SHS), and College of Palembang. Partly, the effects of nomophobia on powerlessness, meaninglessness, normlessness, social isolation, and self-estrangement will be analyzed.

2. METHODS

The method used is a survey with a cross-sectional study approach. The sample of this study were students in Palembang City aged 12-21 years, divided into three groups, junior high school, senior high school, and college. The sampling technique used is random sampling. First, it is done in a cluster sampling to determine the school/college area. Second, random sampling conducted to determine the sample of students from the school/college area. The number of selected samples is 241 students. Data collected came from students according to the research target populations. The analysis carried out by Manova test.

3. RESULT AND DISCUSSION

The description of the results of research on nomophobia and social alienation in students of Palembang divided into two parts, namely (1) adolescent demographic profile and (2) the influence of nomophobia on social alienation, both simultaneously and partially. Partially, the effect of nomophobia on powerlessness, meaninglessness, normlessness, social isolation, and self-estrangement, which are variables of social alienation.

3.1 Students Demography Profile

The students of Palembang who became the sample of this study consisted of 138 (57.3%) boy and 103 (42.7%) girl. The students divided into three level group school, that is students of junior high school, senior high school, and college. The college group had the largest percentage, which was 38.2%, while the lowest rate was junior high school at 27.4%. There are two students groups that have the most considerable portion, namely the college group of girl 19.5% and the senior high school group of 21.6%, as shown in Table 1.

The students have an average of 1-2 smartphones with an average age of having a smartphone with 11.73 years, meaning that the average students already have a smartphone while still in elementary school. The intensity of use is relatively high; the average students checking smartphones can be 20-40 times a day with an average duration of use of 6.41 hours a day. Data shows that the higher the level of adolescent education, the higher the duration of use smartphone. Students use smartphones for various purposes, ranging from checking notifications, chatting, posting on social media, selfie, to playing online games.

The average late adolescent becomes a member of more than eight groups from various social media, such as WA, Line, IG, path, Twitter or Fb. These groups can
be identified based on similarities in hobbies, from school, majors/study programs, or specific activities. The students of junior and senior high school are more likely to be members of social media groups based on similarities in class, school, close friends, or extracurricular activities at school. Membership in social media groups in early and middle students averages 2-10 groups from various social media; there are even groups specifically for gamers, described in Table 1.

**Table 1. Education *age *gender crosstabulation**

|        | Age |        |        |        |
|--------|-----|--------|--------|--------|
|        | 12 - 15 | 15 - 18 | 18 - 21 | Total  |
| **Boy** |        |        |        |        |
| Junior High School | 33 | 0 | 0 | 33 |
| Senior High School | 8 | 50 | 1 | 59 |
| College | 0 | 2 | 44 | 46 |
| **Total** | 41 | 52 | 45 | 138 |
| **Girl** |        |        |        |        |
| Junior High School | 19 | 0 | 0 | 19 |
| Senior High School | 6 | 26 | 0 | 32 |
| College | 0 | 5 | 47 | 52 |
| **Total** | 25 | 31 | 47 | 103 |
| **Total** | 66 | 83 | 92 | 241 |

The students of the college group are more active in using social media than other groups. The final activity of students is inseparable from their freedom to use smartphones compared to another student. The use of smartphones in the junior and senior high school is often still limited by parents or schools, so that both groups can only use the smartphone at certain times, such as Sundays or other holidays, or also on regular days but with limited duration of use.

The students use smartphones by utilizing the internet network, both through its Wi-Fi network and internet data package, but on average, 89.7% of students use Wi-Fi networks that are available in various places. Places that are usually visited to be able to access the Wi-Fi network include schools/campuses, malls, cafes, or during lectures. If he is in a place that does not have a Wi-Fi network, then he will use the internet data package that he has. On average, in a month they can spend Rp 65,000 - Rp 130,000 to buy internet data packages. They buy the data package with the money they have. In general, the cash obtained from daily/monthly payment from his parents.

### 3.2 The Influence of Nomophobia on Social Alienation

This section examines the influence of the level of nomophobia on powerlessness, meaninglessness, normlessness, social isolation, and self-estrangement. Furthermore, it is also analyzed the influence of the difference in nomophobia level on the four dependent variables simultaneously. Overall the four dependent variables are characteristics of social alienation, while nomophobia consists of nomophobia groups mild, moderate, and severe. Based on the number of dependent variables >1, which were analyzed together and different tests were carried out. The tests analysis would use the Manova test.

Before this Manova test, Levene's Test of Equality of Error Variances conducted first. This test was doing to see whether or not the variance between data groups was the same. The criteria used are if the significance is <0.05, then the intergroup data variants are different; on the contrary, if the significance is >0.05, then the intergroup data variants are the same. Levene's Test of Equality of Error Variances output table shows that the significance of powerlessness is 0.712, meaninglessness is 0.794, social isolation is 0.537, and self-estrangement is 0.318. The four variables have significance >0.05. The normlessness variable is 0.038, or its significance is <0.05, so the intergroup variants are different, but if using the significance limit is 0.1, then it becomes >0. The results of this test generally indicate that the data variant is the same or homogeneous.

After the homogeneity test carried out, then Box's Test of Equality of Covariance Matrices was conducted, which aimed to test the homogeneity of the covariance matrix. The results of Box's Test of Equality of Covariance Matrices show that the Box's M value is 58,969 with a significance of 0.06. The significance level of this study is 0.05, so the significance is >0.05. Thus, the variance/covariance matrix of the four dependent variables tested is the same so that the test can continue with the Manova test. The results of the
MANOVA test conducted using the results of P values from Pillai Traice, Wilk Lambda, Hotelling’s Trace, and Roy's Largest Root. The results are as follows in Table 2.

The results of the multivariate tests in Table 3 show that the price of F class for Pillai Traice, Wilk Lambda, and Hotelling’s Trace, has a significance value of 0.001, while Roy’s Largest Root is 0.000. The four showed a value of <0.05, which means that everything was significant. In conclusion, simultaneously the influence of nomophobia on social alienation is very significant.

This social alienation is equated with anomic. According to Durkheim, anomy refers to social conditions that exist outside the individual who occupies a role in the social system and is postulated as a result of instinctive human aspirations without effective social control described in Table 3 [20].

Table 2. Levene's test of equality of error variances

|                  | F    | df1 | df2 | Sig  |
|------------------|------|-----|-----|------|
| Powerlessness    | .341 | 2   | 238 | .712 |
| Meaninglessness  | .231 | 2   | 238 | .794 |
| Normlessness     | 3.317| 2   | 238 | .038 |
| Social Isolation | .624 | 2   | 238 | .537 |
| Self Estrangement| 1.153| 2   | 238 | .318 |

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

Table 3. Multivariate tests

| Effect          | Value       | F         | Hypothesis df | Error df | Sig  |
|-----------------|-------------|-----------|---------------|----------|------|
| Intercept       | Pillai's Trace | .958      | 1073.620^b    | 5.000    | 234.000 | .000 |
|                 | Wilks’ Lambda | .042      | 1073.620^b    | 5.000    | 234.000 | .000 |
|                 | Hotelling’s Trace | 22.941 | 1073.620^b    | 5.000    | 234.000 | .000 |
|                 | Roy's Largest Root | 22.941 | 1073.620^b    | 5.000    | 234.000 | .000 |
| Nomophobia      | Pillai's Trace | .122      | 3.053         | 10.000   | 470.000 | .001 |
|                 | Wilks’ Lambda  | .880      | 3.093^c       | 10.000   | 468.000 | .001 |
|                 | Hotelling’s Trace | .134 | 3.133         | 10.000   | 466.000 | .001 |
|                 | Roy’s Largest Root | .117 | 5.484^c       | 5.000    | 235.000 | .000 |
3.3. The Difference between the Social Alienation Sub-variables and Level of Nomophobia

The results of the Levenes Tests of Equality of Error Variances show sig >0.05. This value affects the choice of the Post Hoc test used. If sig >0.05, the Post Hoc test uses the Benferroni Test, whereas if sig <0.05 then the Post Hoc test uses the Games-Howell Test. The Levene test results show that four of the five dependent variables have the same intergroup variant because they have sig> 0.05 so the Post Hoc test used later is Benferroni. The four sub-variables are powerlessness, meaninglessness, social isolation, and self-estrangement. The normlessness variable has a different variant because sig <0.05 so the Post Hoc test used is Games-Howell. Based on the Multiple Comparisons Table, the various test results obtained as follows.

The difference in powerlessness based on the nomophobia level, between mild and moderate was significant. Likewise, there is a difference between moderate and mild. The significant value is the same, which is 0.006 or sig. <0.05. There is a significant difference in powerlessness based on the level of nomophobia, between mild and severe. Likewise, vice versa, between severe and mild. The significant value is the same, which is 0.001 or sig. <0.05.

There is a significant difference in meaninglessness based on the nomophobia level, between mild and severe. Likewise, vice versa, there is a difference between moderate and mild. The significant value is the same, which is 0.031 or <0.05.

There are significant self-estrangement differences based on nomophobia level, between mild and moderate. Likewise, there is a difference between moderate and mild. The significant value is the same, which is 0.015 or <0.05.

However, the tendency is that students have experienced social alienation so that early prevention efforts are needed. This effort can be made with community-based social learning leads to activities that have strong cohesion ties in real social spaces, so that students' dependence on smartphone use reduced.

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