Relationship of Self Control with Nomophobia in School-Age Children in 1st Nguling Public Elementary School Pasuruan Regency

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ABSTRACT

School-age children with a lack of self-control potentially experience a tendency to become dependent on smartphones, which makes them feel anxious when they are away from their smartphones (Nomophobia). This study aimed to analyze the correlation between self-control and Nomophobia on school-age children at SDN Nguling 1 Pasuruan Regency. Furthermore, this study used a descriptive analytic research design with a cross-sectional approach conducted on seventy-seven samples under the inclusion criteria with a random sampling technique. The questionnaires used in this research were the Self-Control questionnaire and Nomophobia questionnaire. The self-control and Nomophobia correlation analysis used a Chi Square statistic test, with a significance level of 0.05. The result showed that 33.8% (twenty-six respondents) had good self-control and 66.2% (fifty-one respondents) had poor self-control. Fifty-two respondents (67.5%) experienced Nomophobia, while twenty-five respondents (32.5%) did not experience Nomophobia. There was a significant correlation between self-control and Nomophobia (p = 0.023 and OR = 0.319). So, it is necessary to improve the psychological status of school-age children by conducting individual studies. Suggestions from this study are expected, views for parents regarding the supervision of children's smartphone use by being given a time limit of 1 hour per day, so that children can do other activities or play with their peers so as to prevent children from developing nomophobia.

Keywords: Self-control, Nomophobia, School-age Children.

INTRODUCTION

Developments are related to integrated personalities, life span starting from the age of six to twelve years is called school-age. Elementary school-age children are individuals who are in a range of developmental changes, the developmental phase of school-age children is seen from several main aspects of the child’s individual personality (Murni et al., 2020). Children start to explore their capabilities during the school-age, starting from taking care of their responsibility to logical and critical thinking (Santrock, 2011). The children’s memory will expand, children can distinguish between which things are seen with their senses and reality, and which things are temporary, children are no longer egocentric and are starting to be able to see other people’s points of view. Children will develop their skills and learn about their broader environment, not only their family environment but also their surroundings, such as technology and its media (Ramadhan, 2019). Southeast Asia has experienced a rapid increase in smartphone utilization, it was found that at the end of 2012, half of the population of smartphone users was children aged from six to twelve years old (Ramaita et al., 2019).

Most students spend an average of 5-6 hours playing cellphones, from these results it was revealed that there are several factors that can indicate that children are affected by nomophobia (Sunarto, 2018). The ideal screen time for children under the age of two years (>2 yo) is 1 hour/day, and children under the age of 18 months (<18 mo) are suggested not to be exposed to digital media directly. The comfort and convenience that smartphone and digital media offer could be a problem when used excessively, therefore gave some bad impacts on the individual and made them dependent on the use of smartphones or also known as nomophobia which is the feeling of anxiety when they are away from their smartphones (Idayati, 2011). Self-control is one way to get rid of smartphones dependency. Self-control is the ability of each individual to improve their behavior so that their society could accept them. This matter is related to Borba’s research (2008), which said that an individual’s ability to control their feelings, thoughts, and behaviors could...
resist the urges from within and from the outside, and made them able to act properly. Self-control is an internal resource used to regulate individual behavior.

The existing phenomenon revealed that several factors could influence smartphone dependency, one of them being usage rate. Smartphone usage rate on children might take approximately 5-6 hours, and it is also influenced by internal factors regarding individual characters and resulted in low self-control. The researcher interviewed ten school-age teenagers, and the result showed that eight out of ten kids were diagnosed with nomophobia or smartphone dependency. Therefore, the researcher was intrigued to study the relations between self-control and nomophobia on school-age children in 1st Nguling Public Elementary School Pasuruan Regency.

**METHOD**

This research is quantitative research, which means the result obtained in numbers form, with descriptive-analytic research design, and a cross-sectional approach. The researcher used two variables and identified self-control and nomophobia on school-age children in SDN Nguling 1. The population in this study is the active fifth and sixth-grade students in SDN Nguling 1 Pasuruan Regency, as many as 95 people. The research samples are active fifth and sixth-grade students in SDN Nguling 1 Pasuruan Regency that set as many as 77 samples. The sampling technique used in this study is Probability Sampling with a Simple Random Sampling approach which means the sampling is drawn randomly based on certain numbers lottery from the top of the attendance list. The data were collected from February 19th, 2021, to Mach 19th, 2021, in SDN Nguling 1 Pasuruan Regency. Before collecting the data, the researcher applied for a research permit through several stages, intending to obtain a research permit from SDN Nguling 1 Pasuruan Regency. The researcher then conducts a research sample. The instrument used is the self-control and nomophobia questionnaire. In the univariate analysis of this research, the researcher grouped the result into categorical data consisting of gender, class, and age. The bivariate analysis of this research used the statistical Spearman rank test to determine the relations between self-control and nomophobia on school-age children in SDN Nguling 1 Pasuruan Regency. Meanwhile, the chi-square analysis (alpha = 0.05) was conducted to determine the relations between nomophobia and school-age children. The ethical feasibility test was carried out on the Health Research Ethics Committee (HREC) of the Faculty of Nursing, University of Jember, with the number of No. 16/UN25.1.14/KEPK/2021.

**RESULT**

The research result discussed several topics, including the characteristics of the respondents, which are gender, age, and class. The result and discussions were drawn from the univariate and bivariate analysis. The results from the univariate analysis are presented in this paper in percentage and frequency distribution. The results of the bivariate analysis are the relations between self-control and nomophobia on school-age children.

**The Univariate Analysis**

Table 1 The Distribution of Respondents Characteristics in SDN Nguling 1 Pasuruan Regency on February 2021 (n=77)

| Variable | Frequency | Percentage (%) |
|----------|-----------|----------------|
| Gender   |           |                |
| a. Male  | 30        | 39             |
| b. Female| 47        | 61             |
| The Relations Between Gender and Variable Self-control Good | | |
| Male     | 13        | 43.3           |
| Female   | 25        | 53.2           |
| Total of good | 38      | 49.4           |
| Poor     |           |                |
| Male     | 17        | 56.7           |
| Female   | 22        | 46.8           |
| Total of poor | 39   | 50.6           |
| Nomophobia |         |                |
| Male     | 19        | 63.3           |
| Female   | 33        | 70.2           |
| Total of Nomophobia | 52   | 67.5           |
Table 1 shows the distribution of respondents' characteristics of this research. The respondents' gender, which is the majority identified as female as many as 47 female-students (61%), the result of the relations between gender and self-control is 22 female-students (46.8%), and the result of the relations between gender and nomophobia is 33 female-students (70.2%). The respondents' ages range from 10-12 years old, with the majority of 11 years old as many as 37 respondents (48.1%), the result of the relations between age and self-control is 37 respondents (48.1%), and the result of the relations between age and nomophobia is 24 students (64.9%). In fifth-grade, as many as 38 students (49.4%) and 20 students (51.3%) in sixth-grade. The result of the relations between class and self-control in sixth-grade is 20 students (52.3%), and the nomophobia variable showed that the highest nomophobia percentage was found in fifth-grade with 29 students (76.3%).

| Variable                        | Frequency | Percentage (%) |
|---------------------------------|-----------|----------------|
| Not - Nomophobia:               |           |                |
| Male                            | 11        | 36.7           |
| Female                          | 14        | 29.8           |
| Total of Not - Nomophobia       | 25        | 32.5           |
| Age                             |           |                |
| a. 10 years old                 | 10        | 13             |
| b. 11 years old                 | 37        | 48.1           |
| c. 12 years old                 | 30        | 39             |
| The Relations Between Age and Variable |          |                |
| Self-control                    |           |                |
| Good                            |           |                |
| 10 years old                    | 5         | 50             |
| 11 years old                    | 15        | 40.5           |
| 12 years old                    | 18        | 60             |
| Total of good                   | 38        | 49.4           |
| Poor                            |           |                |
| 10 years old                    | 5         | 50             |
| 11 years old                    | 22        | 59.5           |
| 12 years old                    | 12        | 40             |
| Total of poor                   | 39        | 50.6           |
| Nomophobia                      |           |                |
| Nomophobia                      |           |                |
| 10 years old                    | 7         | 70             |
| 11 years old                    | 24        | 64.9           |
| 12 years old                    | 21        | 70             |
| Total of Nomophobia             | 52        | 67.5           |
| Not - Nomophobia                |           |                |
| 10 years old                    | 3         | 30             |
| 11 years old                    | 13        | 35.1           |
| 12 years old                    | 9         | 30             |
| Total of Not - Nomophobia       | 25        | 32.5           |
| Class                           |           |                |
| a. Fifth-grade                  | 38        | 49.4           |
| b. Sixth-grade                  | 39        | 50.6           |
| The Relations Between Class and Variable |      |                |
| Self-control                    |           |                |
| Good                            |           |                |
| Fifth-grade:                    | 19        | 50             |
| Sixth-grade:                    | 19        | 48.7           |
| Total of good                   | 38        | 49.4           |
| Poor                            |           |                |
| Fifth-grade:                    | 19        | 50             |
| Sixth-grade:                    | 20        | 51.3           |
| Total of poor                   | 39        | 50.6           |
| Nomophobia                      |           |                |
| Nomophobia                      |           |                |
| Fifth-grade:                    | 29        | 76.3           |
| Sixth-grade:                    | 23        | 59             |
| Total of Nomophobia             | 52        | 67.5           |
| Not-nomophobia                  |           |                |
| Fifth-grade:                    | 9         | 23.7           |
| Sixth-grade:                    | 16        | 41             |
| Total of Not-nomophobia         | 25        | 32.5           |
Self-Control Characteristics

Table 2 the distribution of self-control variables on school-age children in SDN Nguling 1 Pasuruan Regency on March 2021 (n=77)

| Variable | Category | Frequency | Percentage (%) |
|----------|----------|-----------|----------------|
| Self-control | 1. Good | 26 | 33.8 |
| | 2. Poor | 51 | 66.2 |
| Total | 77 | 100 |

Based on table 2, self-control on school-age children distribution, in fifth and sixth-grade, it was found that 26 (33.8%) respondents have good self-control while 51 (66.2%) respondents have poor self-control.

Nomophobia Characteristics

Table 3 the distribution of nomophobia variables on school-age children in SDN Nguling 1 Pasuruan Regency on March 2021 (n=77)

| Variable | Category | Frequency | Percentage (%) |
|----------|----------|-----------|----------------|
| Nomophobia | 1. Nomophobia | 52 | 67.5 |
| | 2. Not-nomophobia | 25 | 32.5 |
| Total | 77 | 100 |

Based on table 3, the distribution of nomophobia variables on school-age children, in fifth and sixth-grade students, as many as 52 (67.5%) respondents experience nomophobia while 25 (32.5%) respondents do not experience nomophobia.

Bivariate Analysis

Table 4 the relations between self-control and nomophobia on school-age children in SDN Nguling 1 Pasuruan Regency (n=77)

| Self-control | Nomophobia | Total | p value | OR (CI95%) Lower-Upper |
|--------------|------------|-------|---------|-----------------------|
| Good         | Nomophobia | 21    | 17      | 38 | 0.023 | 0.319 | 0.117-0.872 |
|              | Not-Nomophobia | 17   |         |            |
| Poor         | Nomophobia | 31    | 8       | 39 |         | 0.117-0.872 |
|              | Not-Nomophobia | 8    |         |            |
| Total        | Nomophobia | 52    | 25      | 77 |         | |
|              | Not-Nomophobia | 25   |         |            |

Table 4 presents the statistical test result of the relations between self-control and nomophobia on school-age children; p value=0.023 portrays a relation between self-control and nomophobia on school-age children in SDN Nguling 1 Pasuruan Regency. School-age children with low self-control have 0.319 times the chance of probability to experience nomophobia indicated by the value (OR= 0.319; CI 95% 0.117-0.872).

DISCUSSION

The result of this research showed that there is a relation between self-control and nomophobia on school-age children in SDN Nguling 1 Pasuruan Regency with the nomophobia result of 52 respondents and poor self-control of 39 respondents. In line with Muyana’s research (2018) conducted in elementary school that the occurrence of nomophobia on elementary school students jumped as much as 26.6% of students experience high-category nomophobia and Pramana’s research (2018) that showed the highest percentage of poor self-control is 25.8% from the total of 154 respondents.

From the study conducted, the researcher obtained a p-value of 0.023. In rhyme with Asih’s research (2017), the correlation coefficient between self-control and anxiety when away from smartphones (nomophobia) obtained significant results p = 0.030 or p <0.05, indicating that the direction of the relation is linear, while the positive correlation coefficient value indicates that the direction of the relation between the two variables is negative. There are three aspects that influence a person when controlling themselves: breaking their habits related to out-of-the-ordinary behavior and being less able to comply with the surrounding norms, resisting temptation, which is related to how to behave in carrying out their duties, and the last is self-discipline related to the ability to control oneself.
The main point of the self-control concept is the capacity to override or change one’s inner responses and interrupt undesired behavioral tendencies and refrain from acting on them (Tangney, 2004). Research conducted by Rahayunigrum (2017) explained that anxiety caused by being away from a mobile phone or smartphone (nomophobia) is a common occurrence among students nowadays. The result of the interview with the students showed that students could not be separated from mobile phones because nowadays, it is not just a means of communication, but more a crucial tool that cannot be left out on the daily activity. Smartphone users with less self-control found it difficult to control the existing stimuli, so it could trigger anxiety when being away from their smartphones (Choliz, 2012).

**CONCLUSION**

There is a relation between self-control and nomophobia on school-age children in Pasuruan Regency with the result of good relation between self-control and nomophobia of 31 respondents (79.5%) and p-value of 0.023 < α 0.05 with the value OR = 0.319. It is necessary to improve the psychological status of school-age children by conducting individual assessments. It is expected that nurses could work together to be more optimal in increasing self-control in school-age children, and could provide therapeutic training, such as play therapy, to reduce smartphone use to prevent nomophobia in school-age children.

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