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# The Effectiveness of a Systematic Desensitization Strategy on Reduction of Nomophobia

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## ABSTRACT

The purpose of this study is that students can minimize their anxiety when away from smartphones with research subjects, namely five students who have very high nomophobia scores. This type of research is an experiment, with the type of one group pretest-posttest design. While the method of collecting data in this study uses the Nomophobia scale and found 5 research subjects. The results of the analysis using the Paired Samples T-Test Test found the Asymp.Sig (2-tailed) value is 0,000. Then, it can be seen the value of  $0.43 > 0.05$  or 0.43 is greater than 0.05 which means that  $H_0$  is rejected and  $H_a$  is accepted, meaning that the implementation of a systematic desensitization strategy is effective in reducing nomophobia in SMKN 1 Driyorejo.

**Keywords:** *nomophobia, systematic desensitization, smartphone*

## 1. INTRODUCTION

One phenomenon that is often experienced by smartphone users today is nomophobia, namely the way individuals use smartphones excessively, giving rise to compulsivity in their use [1]. Nomophobia can be characterized by feelings of discomfort and even worry when far from the smartphone [2]. Nomophobia is also classified as a situational phobia, a condition where individuals experience fear in certain situations and feel reactions physically and emotionally [3]. Individuals who experience nomophobia will try to eliminate the possibility or cause of them not using a smartphone with excessive measures, for example always carrying a charger, going to a place that has wifi connection, or putting the smartphone on a mattress while sleeping.

Also, excessive use of smartphones can make individuals experience anxiety so that it becomes a problem for most students. This is by research [4] which explains that when an individual fails to limit the time of using a smartphone it will have adverse consequences, including difficulties in social interaction, impact on health, and activities become not productive. Thus, the need for a process of learning from individuals to limit the use of smartphones, thus making individuals trained not to worry when away from the smartphone they have.

The causes of nomophobia are also quite varied, this was revealed by Young, [5] six factors can affect nomophobia in individuals. The six factors are: (a) free and unlimited access, (b) huge unstructured time limits, (c) free from parental supervision (newly experienced freedom from parental control), (d) lack of supervision of what is done or said (no monitoring or censoring of what they say or do), (e) support from teachers (full encouragement from teachers), and (f) social intimidation and social intimidation and alienation). Also, strengthened by research [1] states that there are four dimensions of

nomophobia, namely: (a) losing communication, (b) losing connection, (c) being unable to access information (unable to access information), and (d) loss of comfort (giving up convenience).

Also, factors that influence nomophobia can lead to aspects related to lack of comfort [5]. In this aspect, it is explained that there is an uncomfortable feeling when individuals do not use a smartphone, so individuals choose to utilize the existing facilities on the smartphone they have. So that the perceived comfort makes individuals often carry out activities to ensure that their smartphone battery is always fully charged. Thus, it makes individuals feel anxious and stressed because their batteries have long-term durability.

Meanwhile, research results from Rahayuningrum & Sary [6], show the results that in SMAN Padang more than half of the respondents, ie 60% of adolescents with anxiety levels are experiencing severe nomophobia. Also, Widyastuti & Muyana, [7] showed that the level of nomophobia in adolescents, especially at the vocational level in Yogyakarta, there were 31% of the 540 students at a high level of nomophobia.

The results of the interview on Monday, August 9, 2019 conducted by researchers to one of the BK teachers in SMK 1 Driyorejo, obtained the result that the form of anxiety exhibited by students when away from smartphones is by showing feelings of anxiety and nervousness when the smartphone is not present nearby, it can be seen from some of the habits of students when the subject hours take place they always use a smartphone. Students also often carry cords and chargers at school, so this is in line with expert opinion [8] which states that the characteristics of individuals who experience nomophobia ie often carry chargers wherever they are, This is done by people who have nomophobia to avoid anxiety when they run out of battery.

Based on the explanation above, the problem of nomophobia can be minimized by one of the counseling

techniques that aim to minimize the form of anxiety by using systematic desensitization techniques, so that nomophobia symptoms can be minimized by students of SMK N 1 Driyorejo. This is also supported by the opinions of experts, one of which is [8] which explains that nomophobia can be minimized if someone can divert his anxiety when away from smartphones by using other alternative responses that are opposite from the anxiety he is facing.

Also, systematic desensitization techniques according to other experts namely Erford, [9] said that this strategy is used to assist clients in creating a hierarchy of anxiety and making alternative responses whose contents are opposite of the feelings of anxiety felt, so that after finding both between the anxiety hierarchy and also alternative responses, then the client is assisted to imagine events that arouse anxiety and change them with alternative responses that have been written by the client, this counselor can do it using the help of relaxation techniques to suppress all forms of anxiety felt by the client and change it with new ways of learning namely with alternative responses that have been written down

**2. METHOD**

This study uses an experimental type which according to Sugiyono, [10] explains that this research is used to look for influence on a given strategy. This study also uses a type of One-group Pretest-Posttest Design. The technique in collecting data in this study uses a Likert scale, which can be used in measuring an attitude, opinion, and even a person's perception of certain phenomena [10] In this research, the phenomenon that will be measured is nomophobia in SMK 1 Driyorejo, especially in class X-APL.

The target in the selection of the subjects of this study were students of class X-APL 1, APL 2, and APL 3 of SMK 1 Driyorejo who had very high nomophobia scores. In selecting the selection of research subjects, researchers conducted a scale distribution of nomophobia in class X-APL 1, 2, and 3 at the same time. After that, researchers analyzed the results of working on a nomophobia scale that was filled by 100 students in class X APL, so that the results of the analysis found that the number of subjects in this study was recorded that 5 students had very high nomophobia scores and the need for administration systematic desensitization technique group counseling.

The form of activities in providing treatment in this study is the Systematic Desensitization Group Counseling. While the instrument used to measure the level of nomophobia uses instruments that have been modified from previous researchers namely [1]. Internal instrument testing is conducted using content validity tests that have been identified and revised by three experts in the field of guidance and counseling. After testing the content validity, the researchers tested the validity of the nomophobia instrument amounting to 46 statement items with the help of the SPSS for Windows version 20.0 program, the SPSS results obtained r alpha values greater than r tables at  $N = 100 = 0.195$ . Based on the analysis of the validity test, of the 46 statement items that have been tested using SPSS, it is known that 6 items are declared invalid / invalid and 40 other items are declared valid. In addition to conducting a validity test, the researchers conducted a reliability test, with the result

of a r alpha 0.948 greater than 0.30. Thus it can be said that the nomophobia scale is very reliable.

This study uses data analysis in the form of paired sample t-test with the help of SPSS for Windows version 20.0. This study uses a statistical test to answer the research hypothesis, namely Ho: the implementation of a systematic desensitization strategy is not effective in reducing nomophobia in SMK 1 Driyorejo. Whereas Ha: the implementation of an effective systematic desensitization strategy to reduce nomophobia in SMK 1 Driyorejo.

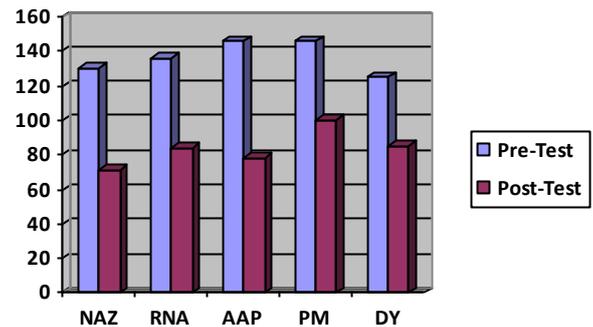
**3. RESULTS AND DISCUSSION**

Below is a comparison of the results of the nomophobia scale that has been filled out by the research subject during pre-test (before treatment is given) and post-test (after treatment) in the form of systematic group desensitization technique counseling. These results can be seen in table 1.1 below:

**Table 1.** Results Nomophobia pre-test and post-test

| No | Counselee | Pre-test | Post-test |
|----|-----------|----------|-----------|
| 1  | NAZ       | 130      | 71        |
| 2  | RNA       | 136      | 84        |
| 3  | AAP       | 146      | 78        |
| 4  | PM        | 146      | 100       |
| 5  | DY        | 125      | 85        |

Based on the results of the comparison of pre-test and post-test from the above table, the results of the comparison can also be seen by using graphs as a comparison between pre-test (before being given treatment) and post-test (after being given treatment) which can be seen in Graph 1.2 the following.



**Figure 1.** Pre-test and post-test Nomophobia results.

Based on the graph and also the table above, it shows that there is a difference in scores between before and after treatment (treatment) in the form of group counseling with a systematic desensitization strategy. This means that after being given group counseling services using a systematic desensitization strategy of students can experience a decrease in nomophobia (anxiety of students when away from smartphones). The results of the pre-test and post-test are then calculated and analyzed using the Paired Sample T-Test with the help of the SPSS Statistics Version 20 for Window program

and the results show that the Sig. (2-tailed) of  $0,000 < 0,05$ , so a decision can be taken that  $H_0$  is rejected and  $H_a$  is accepted. So it can be said that the implementation of a systematic desensitization strategy is effective in reducing nomophobia in SMK 1 Driyorejo.

Changes in the five students who experienced nomophobia with very high categories can be seen from the results of the pre-test and post-test nomophobia scale measurement results, as well as the results of self-monitoring conducted by the five research subjects by applying a systematic desensitization strategy.

The results of this study can add to the latest research related to nomophobia that can be handled with the implementation of a systematic desensitization strategy, because some previous studies have not been carried out treatment of nomophobia that uses a systematic desensitization strategy such as Zuliyana, [11] which shows that nomophobia can be derived by providing self-management, [12] who can design Liva applications to reduce nomophobia, and Prabandari, et al. [13] who provide an Islamic approach to reducing nomophobia among adolescents. In fact, according to Bragazzi & Del Puente, [8] that nomophobia can be minimized if someone is able to divert anxiety when away from smartphones by using alternative responses that are opposite of the anxiety they face. In addition, according to Erford, [9] the client is taught to imagine and arouse his anxiety, after that it will be diverted by providing an alternative response to divert and suppress the anxiety.

One of the factors in the success of this study is the provision of group counseling as an effort in providing new learning experiences to students to help students learn to use their time more directed at things not related to smartphones. This is in line with Corey that group counseling provides an extraordinary contribution to the development of students [14]. Also supported by Winkel that group counseling is used in changing the behavior that is realized and fostered in the form of small groups so as to improve the behavior of nomophobia in a better direction [14].

When giving treatment, the counselor and counselee stage systematic desensitization group counseling in accordance with the stages that have been made previously. The duration of systematic desensitization group counseling is around 40-45 minutes which adjusts to the focus and dynamics within the group.

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Researchers also use some special techniques in this study, this is in accordance with the desensitization procedure according to Cormier in Nursalim [15] [16] where in the conversation of researchers and counsees, researchers focus on situations that make counsees experience anxiety when far from smartphones, besides that the counselee was also asked to arrange the anxiety hierarchy from number 1 which is the least anxiety level and number 3 which is the most anxious level. In

practice, researchers conduct relaxation exercises to teach counsees that anxiety can be minimized by relaxation exercises which will be visualized with the anxiety hierarchy as a generator of anxiety and alternative responses as an anxiety suppressor.

The results in applying group counseling with a systematic desensitization strategy, which was carried out during 6 meetings with five students who experienced nomophobia with a very high category, found that the five students had decreased nomophobia scores from initially categorized as very high to low.

In addition to seeing the results of implementing a systematic desensitization strategy through nomophobia scores, the researcher also looked at the results of post-counseling self-monitoring. Based on the results of self-monitoring researchers get the results of the counselee helped by the application of systematic desensitization group counseling. The counselee feels that there is a decrease in anxiety when away from his smartphone, as well as bad habits that are often done can be minimized by other things based on what is prioritized according to alternative responses that have been made by the counselee.

Although in this study there are obstacles such as lack of space that can make students more concentrated in implementing a systematic desensitization strategy, but researchers can minimize these obstacles by choosing school hours to reduce noise that can interfere with the process of implementing a systematic desensitization strategy. In addition, by providing communication to students that the noisier they hear, the more it makes students become more focused.

#### 4. CONCLUSION

Based on the results of the study by applying a systematic desensitization strategy to the 5 students who have very high nomophobia scores at SMK 1 Driyorejo, it can be seen that the results of the Paired Sample T-Test obtained Sig. (2-tailed) is  $0,000$ , which is greater than  $0,05$ , or  $0,000 < 0,005$ . Then in decision making the research hypothesis was found that  $H_0$  was rejected and  $H_a$  was accepted. So it can be concluded that the implementation of a systematic desensitization strategy is effective in reducing nomophobia in SMK 1 Driyorejo.

#### REFERENCES

- [1] C. Yildirim, "Exploring The Dimensions Of Nomophobia: Developing And Validating A Questionnaire Using Mixed Methods Research". Tesis tidak diterbitkan, Ames, Iowa: Iowa State University. 2014.
- [2] King, S. Anna Lucia, A. M. Valença, A. Silva, T. Baczynski, M. Carvalho, & A. E. Nardi, "Nomophobia: Dependency On Virtual Environments Or Social Phobia?" *Computers In Human Behavior*, Vol 29 (1): hal. 140–144. 2013.
- [3] Y. Choy, A. J. Fyer, & J. D Lipsitz, "Treatment Of Specific Phobia In Adults". *Clinical Psychology Review*, Vol 27 (3): hal. 266–286. 2007.

- [4] A. J. Van Deursen, C. L. Bolle, S. M. Hegner, & P. A. Kommers, "Modeling Habitual And Addictive Smartphone Behavior: The Role Of Smartphone Usage Types, Emotional Intelligence, Social Stress, Self-Regulation, Age, And Gender". *Computers In Human Behavior*, Vol 45 (2): hal. 411–420. 2015.
- [5] K. S. Young, "Internet Addiction: A New Clinical Phenomenon And Its Consequences". *American Behavioral Scientist*, Vol 48(4): hal. 402–415. 2004.
- [6] D. C. Rahayuningrum, & A. N. Sary, "Studi Tingkat Kecemasan Remaja Terhadap No-Mobile Phone (Nomophobia) Di SMA Negeri Kota Padang". *Ensiklopedia Of Journal*, Vol 1 (1): hal. 2. 2019.
- [7] D. A. Widyastuti, & S. Muyana, "Potret Nomophobia (No Mobile Phone Phobia) Di Kalangan Remaja". *Jurnal Fokus Konseling*, Vol 4 (1): hal. 62–71. 2018.
- [8] N. L. Bragazzi, & G. Del Puente, "A Proposal For Including Nomophobia In The New DSM-V". *Psychology Research And Behavior Management*, Vol 7 (14): hal 155-160. 2014.
- [9] B. T. Erford, *40 Teknik Yang Harus Diketahui Setiap Konselor*. Yogyakarta: Pustaka Pelajar. 2017.
- [10] M. P. Sugiyono, *Kualitatif, Dan Kombinasi (Mixed Methods)*. Bandung: Alfabeta. 2013.
- [11] I. Zuliyana, "Pengaruh Konseling Kelompok Dengan Teknik Self-Management Untuk Mengurangi Nomophobia Pada Siswa". Skripsi tidak diterbitkan, Magelang: Universitas Muhammadiyah Magelang. 2017.
- [12] P. W. Pradana, "Perancangan Aplikasi Liva Untuk Mengurangi Nomophobia Dengan Pendekatan Gamifikasi". *Jurnal Teknik ITS*, Vol 5 (1): hal. 38-47 2016.
- [13] R. M. Prabandari, N. A. Muyassaroh, & Mahmudi, "Islamic Counseling Untuk Nomophobia Di Kalangan Remaja". *Prosiding Seminar Nasional Bimbingan Dan Konseling*, Vol 1 (1): hal. 189–194. I. 2017.
- [14] B. D. Wiyono, "Keefektifan Solution-Focused Brief Group Counseling Untuk Meningkatkan Motivasi Berprestasi Siswa Sekolah Menengah Kejuruan". *JKI (Jurnal Konseling Indonesia)*, Vol 1 (1): hal. 29–37. 2015.
- [15] M. Nursalim, *Strategi dan Intervensi Konseling*. Jakarta: Akademia Permata, 2013.
- [16] M. Nursalim, N. Hidayah, A. Atmoko, & C.L. Radjah, "Ego state therapy (EST) and Systemic Desensitization (SD) to Reduce School Refusal among Senior High School Students. *Indian Journal of Public Health Research & Development*, Januari, vol 11, No. 01. 1254-159. 2020.