

# Factors Affecting The Phenomenon Of Nomophobia In Junior High School Students In Sentani District, Jayapura Regency – Papuan Province Year 2022

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## **Abstract:**

**Background:** *Nomophobia is the fear and anxiety experienced by someone when they are away from smartphone , with symptoms such as discomfort, anxiety, nervousness, sadness or excessive worry.*

**Research Objectives:** *To determine the factors that influence the phenomenon of Nomophobia in junior high school students in Sentani District, Jayapura Regency.*

**Research Method:** *Quantitative with a cross sectional study design with a total sample of 92 students. Data obtained by using a questionnaire and analyzed bivariate using chi-square and multiple linear regression.*

**Research results:** *students with Nomophobia with a percentage of 47.8% less than students with Nomophobia as many as 48 people with a percentage of 52.2%. The results of the chi-square test obtained that the value of social pressure  $p$ -value = 0.000 <0.05 this means that there is an influence between social pressure on students with Nomophobia and the self-confidence value  $p$ -value = 0.011 <0.05, this means that there is an influence between confidence in students with Nomophobia.*

**Conclusion:** *The dominant factors influencing Nomophobia in junior high school students in Sentani District, Jayapura Regency, are social pressure and self-confidence.*

**Keywords:** *Sentani District; Nomophobia; students; Smartphone*

## I. INTRODUCTION

Nomophobia is the fear and anxiety that a person experiences when they are away from their smartphone, with symptoms such as discomfort, restlessness, nervousness, sadness or excessive worry. Nomophobia is considered a

disorder of digital society (modern phobia) introduced into life as a result of the interaction between humans and mobile information and communication technologies, especially smartphones. People who suffer from nomophobia live in worry and are always wary of putting down their smartphone, so they always carry it with them wherever they go. The use of

such a smartphone can cause a change in the function of a smartphone from just an ordinary symbol to a necessity that must be used because of the sophistication of application features and its connection to the internet network (Sofia, 2021). Nomophobia was first investigated in 2008 by the post office in the United Kingdom who investigated anxiety (Nomophobia) in gadget users showed that from 53% from 2008 to 66% this was carried out involving 1000 people as participants. Furthermore, the survey found that the most nomophobia was in the category with an age range of 18-24 years (77%) and followed by respondents aged 25-34 years (68%) (Secure Envoy, 2021). In Indonesia, the prevalence of mental disorders according to the 2018 Basic Health Research (Riskesdas) data at the age of 15 years and over reached 9.8% of the total population. Indonesia is the largest smartphone user country in Southeast Asia, the high number of smartphone users is supported by a population of 255 million. The percentage of school-age children who are addicted to playing online games in Indonesia in 2017 is (10.15%).

According to Study Samuel Peter Arabic et al (2020) the Covid-19 pandemic in Indonesia in particular Papua Province is one of the reason height intensity smartphone use in children and adolescents where is the learning process teach conducted from home. Start from garden children \_\_ until the University is closed. Rule this enforced for limit Covid-19 transmission. However the negative impact is children \_ online school from house with time months month so that children with free could play smartphone every time day from morning until night. For comparison, in Korea there are 2.4% of school-age children, and 10.2% in the age range of 9-39 years, and in China there are 13.7% while in America there are 1.5-8.2% who are addicted to playing online games (APJII 2018). The results of the APJII survey (Association of Indonesian Internet Providers), adolescents aged 15-19 years have the highest penetration in using the internet via smartphones, reaching 91% (Haryanto, 2019).

## II. RESEARCH METHODS

This type of research is quantitative with research design is cross sectional study. Population is Middle School students in District Sentani Jayapura Regency with amount a sample of 92 people. Data obtained with use questionnaire and analyzed chi-square, Odds Ratio (OR) and multiple logistic regression.

## III. RESULTS AND DISCUSSION

### A. THE EFFECT OF STUDENTS AGE ON NOMOPHOBIA

Age is range long life time counted since born and close age (Handayani, 2010). Of the 53 junior high school students aged over 13 years old with Nomophobia heavy as many as 24 people (54.5%) and 29 people (60.4%) with Nomophobia light. Whereas of 39 junior high school students aged under 16 years with Nomophobia heavy as many as 20 people (45.5%) and 19 people (39.6%) with Nomophobia light. The results of the chi square test are obtained score p-value = 0,569 > 0,05

which means no there is influence Among age to Nomophobia in Middle School Students in District Sentani Jayapura Regency. Research results this in line with research conducted \_ Kharisma (2018) at SMP in Kecamatan Setiabudi where is south Jakarta no there is connection among age student with gadget addiction that causes disturbance anxiety and intelligence emotional students.

### B. THE EFFECT OF STUDENTS SEX ON NOMOPHOBIA

Of the 46 students who are sex man as many as 19 people (43.2%) with Nomophobia was severe and 27 people (56.2%) had mild Nomophobia . While 46 students with type sex woman as many as 25 people (56.8%) with Nomophobia weight and 21 people (43.8%) with Nomophobia light. The results of the chi square test are obtained p- value = 0.569 > 0.05. This thing means that no there is meaningful influence \_ Among economic status with Nomophobia. Research results obtained no there is meaningful influence \_ Among type sex to Nomophobia in Middle School Students in the District Sentani Jayapura Regency (p-value = 0.210 > 0.05). This is supported by research conducted by Mawardi, (2018) that there is no significant difference between male and female respondents in nomophobia. Habit child man boy and child woman play smartphone together interesting because available various type downloadable games. \_ \_ \_ This is what forms personality child Elementary School, School Intermediate First, and School Upper Intermediate who became very dependent his life on a smartphone during the COVID-19 pandemic in Papua Province (Irab) et al, 2020)

### C. THE EFFECT OF STUDENTS SOCIAL STATUS ON NOMOPHOBIA

From 53 people (57.6%) students with economic status upper class as many as 24 people (54.5%) with Nomophobia weight and 29 people (60.4%) Nomophobia light. Whereas student with lower class economic status as many as 39 people (42.4%) with Nomophobia weight of 20 people (45.5%) and Nomophobia mild 19 people (39.6%). The results of the chi square test are obtained p- value = 0.569 > 0.05. This thing means that no there is meaningful influence \_ between economic status with Nomophobia.

This thing in line with research conducted by Maulida (2013) about the effect of using gadgets on children, where Gadgets are one of the results of technological developments that are created in the form of small devices whose use is increasing. When viewed from a price point of view, gadgets are not cheap items so they are only used by interested people, but the fact is that children from the age of 3 years and teenagers are already using it. smartphone for just play games, watch until listen music.

### D. EFFECT OF USING SMARTPHONE ALL TIME ON STUDENTS WITH NOMOPHOBIA

Period time use a smartphone more from from 3 years as many as 36 people with percentage 39.1% more a little compared with amount students who use smartphones under 3 years old as many as 56 people with percentage 60.9%. Out of 36 people (39.1%) had period time using a smartphone over 3 years with Nomophobia heavy as many as 22 people (50.0%) and Nomophobia light as many as 14 people (29.2%). Whereas student with period time use a smartphone under 3 years as many as 56 people (60.9%) with Nomophobia weight 22 people (50.0%) and Nomophobia mild 34 people (70.8%). Chi square test results obtained score  $p\text{-value} = 0.041 < 0.05$ . This thing means that there is meaningful influence \_ Among period time using smartphones in junior high school students in the District Sentani Jayapura Regency with Nomophobia. Ratio test results prevalence obtained  $RP > 1$  where  $RP = 1,558$ ;  $CI95\% = (1.029-5.729)$  which is interpreted that student with period time using a smartphone over 3 years 1,588 times more chance tall caught Nomophobia compared with long - term student time use a smartphone under 3 years. This thing means that there is meaningful influence \_ Among period time using smartphones in junior high school students in the District Sentani Jayapura Regency with Nomophobia.

In line with Bivin (2013) found several patterns of smartphone users who have a tendency to nomophobia, one of which is time spent \_ for check more than 35 times a day or high intensity \_ in use smartphones. Agreeing with Bivin's smartphone usage pattern, (Bragazzi, 2014) found several characteristics of nomophobia, one of which is the intensity of looking at the smartphone screen, and being with the smartphone 24 hours a day. Ardianto (in Gifary, 2013) argues that the intensity of smartphone use can be measured by frequency, duration and content.

#### E. THE EFFECT OF STUDENTS SELF-ESTEEM ON NOMOPHOBIA

Respondent with price self negative more tall than students \_ with price self positive, where price self negative as many as 55 people with percentage 59.8% and students with price self positive a total of 37 people with percentage 40.2%. From 55 people (59.8%) students with price self negative as many as 29 people (65.9%) with Nomophobia weight and 26 people (54.2%) Nomophobia light. While 37 people (40.2%) students with price self positive as many as 15 people (34.1%) with Nomophobia weight and 22 people (45.8%) Nomophobia light. Chi square test results obtained score  $p\text{-value} = 0.251 > 0.05$ . This thing means that no there is the influence between price self Middle School students in District Sentani Jayapura Regency with Nomophobia.

Research conducted by Lee, et al. (2016) on 490 adolescents in South Korea showed that self-esteem has a negative relationship with smartphone addiction, which means that the higher the adolescent self-esteem, the lower the adolescent's risk of experiencing addiction. smartphone addiction.

Furthermore, research conducted by Hong, Chiu and Huang (2012) also shows that low self-esteem can lead to smartphone addiction on someone. According to Ehrenberg, Juckes, White and Wals, (2008) self-esteem is one of the

strongest predictors of smartphone addiction. Furthermore, Park and Lee (2014) in their research showed that there was a relationship between self-esteem and smartphone addiction. Adolescents who have low levels of self-esteem will show high levels of smartphone addiction, while adolescents with high levels of self-esteem will show low levels of smartphone addiction.

#### F. THE EFFECT OF STUDENTS PERSONALITY ON NOMOPHOBIA

Personality is something that is very complicated and complex, so it is not easy to define it. Jung distinguished personality into two types, namely introverts and extroverts, to express differences in reactions to social environment and in social behavior (Anggraeni et al., 2014). The two personality types have different ways of accessing the internet as a medium of self-disclosure. Personality Introvert more many with total 51 people with percentage 55.4% compared with student with personality the only extrovert totaling 41 people with percentage 44.6%. that of 51 people (55.4%) students with introvert personality as many as 29 people (65.9%) with Severe nomophobia and 22 people (45.8%) with Nomophobia light. While 41 people (44.6%) students with personality Extrovert as many as 15 people (34.1%) with Nomophobia weight and 26 people (54.2%) with Nomophobia light. Chi-square test results obtained score  $p\text{-value} = 0.053 > 0.05$ . This thing means that no there is influence Among personality Middle School students in District Sentani Jayapura Regency with Nomophobia. Based on research Anggraeni et al. (2014) stated that adolescents with introverted personality types use smartphones to make friends and socialize without face-to-face with their interlocutors so as to reduce awkwardness. Teenagers with this introverted personality type tend to like to sit for hours playing smartphone / gadget instead of adjusting to other people in the real world, besides that they also use games on the internet to immerse themselves in interesting and challenging games to avoid social activities.

Meanwhile, the research of Kraut et al., said on the contrary that internet users with extroverted personalities felt wider social relationships as a result of the internet (ROFID, 2011).

#### G. EFFECT OF PRESSURE SOCIAL STUDENTS ON NOMOPHOBIA

Affected Respondents \_ pressure social as many as 53 people with percentage 57.6% compared with affected students \_ pressure social only totaling 39 people with percentage 42.4%. Social interaction is a communication process that takes place and influences each other in thought and action. Booner also stated that the nature of social interaction is the relationship between two or more individuals that influence each other's behavior (Setiadi and Hakam, 2006).

Desmita (2012), who said that peer support also has a role in the development of adolescent learning, so with whom and where teenagers make friends can affect the interest in learning that teenagers can have. Gathering with peers who have similarities in many ways, can be a way for teenagers to

change their life habits and try new things and support each other. in other words friend same age have great influence \_ in determine development social teenager. of 39 people (42.4%) students were affected pressure social as many as 27 people (61.4%) with Nomophobia weight and 12 people (25.0%) with Nomophobia light. While 53 people (57.6%) students who did not affected social pressure with Nomophobia heavy as many as 17 people (38.6%) and 36 people (75.0%) with Nomophobia light. Chi-square test results obtained score p-value = 0.000 < 0.05. This thing means that there is influence Among pressure social services for junior high school students in the District Sentani Jayapura Regency with Nomophobia. Ratio test results prevalence obtained  $RP > 1$  where  $RP = 2.162$ ;  $CI95\% = (1.953-11.622)$  which is interpreted that affected students \_ pressure social 2,162 times more chance tall caught Nomophobia compared with students who don't affected pressure social.

#### H. THE EFFECT OF STUDENTS SELF CONVIDENT ON NOMOPHOBIA

Respondents who have trust self low or pessimist as many as 50 people with percentage 54.3% more many compared students who have trust self tall or the only optimist amounted to 42 o of 50 people (54.3%) students who have trust self low or pessimistic as many as 30 people (68.2%) with Nomophobia Weight and 20 people (41.7%) with Nomophobia low. While 42 people (45.7%) students with trust self tall or optimistic as many as 14 people (31.8%) with Nomophobia weight and 28 people (58.3%) with Low nomophobia. The results of the chi square test are obtained score p-value = 0.011 < 0.05. This thing means that there is influence Among trust self to middle school students in the District Sentani Jayapura Regency with Nomophobia. Ratio test results prevalence obtained  $RP$  value > 1 where  $RP = 1,923$ ;  $CI95\% = (1,275-7,057)$  which is interpreted that pessimistic student \_ or trust herself low 1,923 times more chance tall caught Nomophobia compared optimistic student \_ or have trust self high. This thing means that there is influence Among trust self to middle school students in the District Sentani Jayapura Regency with Nomophobia. Study conducted by The Business School Salford at the University of Salford, Manchester, found that more than 50% of the 298 respondents who were asked felt that social networking sites had a negative impact on respondents' behavioral patterns (Viva News, 2012). The results of the study were respondents stated that their self-confidence decreased after comparing their achievements with their online friends on social networks, while 60% admitted that social networks had disrupted their sleep patterns. In addition, more than 50% admitted to feeling 'worried or uncomfortable' if they could not access their social network or email account. Based on this research, it can be seen that social media affects the self-confidence of its users.

In adolescence there is a negative period, namely a period where adolescents are anti-life. One of the symptoms that characterize the negative period in adolescents is low self-confidence (lack of confidence). This self-confidence can be caused by various things, one of which is physical changes (Sri Rumini & Siti Sundari, 2004: 60-61).

#### I. THE EFFECT OF STUDENTS SELF CONTROL ON NOMOPHOBIA

Respondents who have control self negative as many as 45 people with percentage 48.9% % more a little compared students who have control self positive as many as 47 people with percentage 51.1%. of 45 people (48.9%) students who have negative reaction to self- control as many as 22 people (50.0%) with Nomophobia weight and 23 people (47.9%) with Low nomophobia. While 47 people (51.1%) students with reaction positive in the control as many as 22 people (50.0%) with Nomophobia weight and 25 people (52.1%) with Nomophobia light. Chi square test results obtained score p-value = 0.842 > 0.05. This thing means that no there is influence Among control self to middle school students in the District Sentani Jayapura Regency with Nomophobia. This thing means that no there is influence Among control self to middle school students in the District Sentani Jayapura Regency with Nomophobia.

In Triwahuni's research (2019), the tendency of Nomophobia can be seen from several characteristics such as carrying a smartphone everywhere, trying to always turn on a smartphone and missing opportunities to interact with other people. One of the causes of the emergence is the negative impact given by the closest people, such as being considered less up-to-date if you don't use a smartphone. This makes teenagers do this on an ongoing basis and is difficult to leave (Triwahuni, 2019).

The results of Anshari, Alas, Hardaker, Jaidin and Smith (2016) research, which aims to explore behavioral patterns and the impact of smartphone use on 589 respondents in Brunei Darussalam reveal that almost two thirds of respondents use smartphones more than six hours per day. Another fact is that more than 46% of respondents claim that they cannot live without a smartphone and feel worried when they are away from their smartphone this show low control self owned \_ respondents. Vice versa, with \_ control good self \_ respondent could control smartphone use with more efficient and orderly so that no cause dependence on smartphones (Anshari, Alas, Hardaker, Jaidin, & Smith, 2016 ).

No	Variable	p-value	RP (95% CI)
1	Age	0.569	0.882 (0.343 – 1.801)
2	Type Sex	0.210	0.760 (0.259 – 1.349)
3	Economic Status	0.569	0.882 (0.343 – 1.801)
4	Term _	0.041	1,558 (1,029 – 5,729)
5	Self -Esteem	0.251	1,301 (0.704 – 3,801)
6	Personality	0.053	1,556 (0.983 – 5.309)
7	Social Pressure	0.000	2,162 (1,953 – 11,622)
8	Trust Self	0.011	1,923 (1,275 – 7,057)
9	Control Self	0.842	1.042 (0.479 – 2,464)

Table 1: Influence Characteristics Respondent to Nomophobia in Students Middle School in District Sentani Jayapura Regency

Table 1 above show variable period time, personality, pressure social and trust self in category p-value < 0.25, so enter to in a multivariate model and tested by together \_ \_ with



regression test logistics multiple with method backward stepwise (likelihood ratio).

#### J. ANALYSIS MULTIVARIATE

Obtained p-value < 0.05 as shown in the table below in step 1, 2 and step 3, pressure social and trust self have p-value < 0.05 which is factor main against Nomophobia in Middle School students in the District Sentani Jayapura Regency

	Variable	B	Sig.	Exp(B)	95% CI for EXP(B)	
Step 1 <sup>a</sup>	JW( 1)	0.683	0.181	1979	0.728	5.380
	KepDir ( 1)	-.334	0.541	0.716	0.246	2,087
	TS( 1)	1,754	0.002	5.779	1,939	17,224
	KepDir ( 1)	1.406	0.006	4.079	1.502	11,081
	Constant	-1,679	0.001	0.187		
Step 2 <sup>a</sup>	JW( 1)	0.621	0.211	1,861	0.702	4,931
	TS( 1)	1,614	0.001	5.024	1,874	13,469
	KepDir ( 1)	1.333	0.007	3,791	1.439	9.986
	Constant	-1.742	0.000	.175		
Step 3 <sup>a</sup>	TS( 1)	1,738	0.000	5.684	2.164	14,926
	KepDir ( 1)	1.322	0.007	3,752	1.436	9,802
	Constant	-1.556	0.001	.211		

Table 2: Analysis Regression Logistics multiple

#### IV. CONCLUSION

Factor influential dominant \_ against Nomophobia in Middle School Students in District Sentani Jayapura Regency is pressure social and trust self.

#### V. SUGGESTION

- ✓ B for the school to pay more attention to the phenomenon of smartphone addiction that occurs among teenagers within the scope of the school. The school can provide a platform for teenagers to use smartphones more wisely, such as making smartphones as a medium for teenagers to channel their hobbies and creativity in a positive way.
- ✓ B for parents are advised to supervise and control the use of smartphones in adolescents when they are at home by finding other activities for adolescents so that they do not spend too much time with smartphones such as involving them in more positive social activities and will help them to practice their social interaction skills to be better
- ✓ For further researchers who are interested in researching smartphone addiction, it is hoped that can look at other variables that may be associated with smartphone addiction and Nomophobia such as stress, anxiety, academic achievement and relationship with parents.

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