



# IS SMARTPHONE ADDICTION RELATED TO LONELINESS?

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**Abstract:** This research is aimed to observe the relation of loneliness with Smartphone addiction. This research used survey methodology with quantitative approaches. The population of this research are smart phone users with sample those users in Jakarta amount of 100 respondents with age range from 16 to over 30 years old. The instrument used to measure the loneliness in this research is Russel instrument and the instrument used to measure Smartphone addiction is the instrument that modified from Zahrani's instrument which refers to Griffiths Theory. The sample collected with accidental sampling. The result of this research shows that there is no significant relation between loneliness with Smartphone addiction, with  $r$  value about 0,175 and  $P > 0,05$ .  
**Key words:** Loneliness, Smartphone Addiction

## PREFACE

The expansion of information and communication technologies has influenced the use of public spaces; the enhanced use of wireless communication technology in public has omitted the barrier among public and private spaces (Halim & Rachmatika 2008). Internet is one of limitless wireless communication technology that able to reach the distance in second. Internet indirectly has important influences to the advancement of information and communication technologies, business and economy, sciences and many others.

Nowadays internet has been the main requirement for majority of people. The existence of internet facilitate people to easier their tasks such as to look for information, on-line shopping, internet banking and any communication activities used internet. The speedy growth of internet and the high demand of internet access at anytime and anywhere make the headway of technology. Recently the technology is able to combine two sophisticated technologies between handphone and internet which is known as Smartphone. One of the functions of Smartphone is to easier people to communicate. Through communication people able to deliver message and information to others; therefore they are able to interacting each other's.

According to Backer (2010), Smartphone is a telephone which has sophisticated capabilities that may use as computer with features such as personal digital assistant (PDA), internet access, email, and global positioning system (GPS). Smartphone also have other functions such as camera, video, games, social media and MP3 media player. Due to Technopedia (Technopedia.com), Smartphone is a phone with very sophisticated features. Special characteristics of Smartphone are the high resolution touch-screen, WiFi connectivity, web browsing, and the ability to be installed with application. The majority of this software runs with one of these popular system operations: mobile Android, Symbian, iOS, Blackberry OS and Windows Mobile.

Park & Chen (2007)) stated that Smartphone is an information technology used as tools for mobile internet that able to access internet with broadband velocity starting from 144 kbps 2MBps or more. In general,

the definition of Smartphone is communication technology that run open system operation and connected to internet with special characteristics such as touch-screen, applications (bbm, line, whatsapp), social media (path, facebook, twitter, instagram and so on), mp3, games, camera, video and other features.

Due to the data from Internet World Stats on June 2014, there were 71 million internet users in Indonesia from 253 million total estimated population. In 2010 there were only 30 million internet users among 243 million total estimated populations. The speedy growth of internet and the high demand of internet access at anytime and anywhere make the headway of technology. Recently the technology is able to combine two sophisticated technologies between handphone and internet which is known as Smartphone.

According to Roy Morgan research institute (Saputri & Pranata, 2014) in the period of March 2012-2013, the user of Smartphone in Indonesia raised twice, from 12% to 24% of Indonesian population. Means, there were 60 million of Indonesian owned Smartphone. The high numbers of Smartphone usage could be shown at the annual increasing of internet access in Indonesia.

In the survey of Flurry (Khalaf, 2014), the Smartphone addiction is someone whose used application on Smartphone for more than 60 times a day. From 1,4 billion internet users as object of the research 176 of them are Smartphone addicted. Those number raised to 123% compare to the result in 2013 where only 79 million people addicted to Smartphone with the range of age : 13-17 years old (teenager) about 25%, 18-24 years old (university students) about 49%, 25-43 years old (adult) less than 42%, and 35-54 years old (middle aged) about 40%. This is supported by the result of the research that most of Smartphone users are those at university level with percentage 66.9% and 33.1% are users from practitioner level (Jung & Yim, 2014).

Those who addicted to Smartphone are those with lack of self confidence, difficult to entwining social relation with others and consider they have to continuously contact with others (Singh, Chopra, & Kaur, 2014). Smartphone addiction considered as serious problem recently (park, dkk., 2014). Addicted is an uncontrolled and unhealthy habit (Kowalski, 2014). Griffiths (Terry, dkk. 2004) emphasized that addiction is a behaviour that consider as habit or a force to always carrying on even the behaviour direct to negative event and bring several consequences, such as loss control to the action. There are numbers of students whose decrease their performances because of engaged with Smartphone longer than to finish their school tasks.

According to Brown (Terry, Szabo and Griffiths, 2004), the aspects caused addiction are: Salience, happen when the specific activities become more important to someone life and dominate their mind. Mood modification, refers to someone subjective experiences as consequence engaged to certain activities. Tolerance, the presence of increased activity to reach particular effects. Withdrawal symptom, the unease feeling or physical effect when an activity have to be stopped. Conflict, refers to the conflict between the addicted person with people around them. Relapse, the repeated inclination similar with previous pattern.

Yuwanto (2010) in his research on mobile phone addict stated several factors caused mobile phone addiction, to be mentioned: Internal Factors, consist of factors that describe the characteristic of an individual. The high sensation seeking, low self-esteem, high extraversion personality, low self-control, high habit of mobile phone usage, high expectancy effect, and high personal pleasure may predicted as the susceptibility of individual who experienced mobile phone addiction.

Situational factor, refer to the use of mobile phone as a tool which make an individual feel comfortable psychologically when facing uncomfortable situation. High level of stress, sorrow, lonely, anxiety, studying boredom, and leisure boredom might caused mobile phone addiction. Social factor, consist of mandatory behaviour and high connected presence. Mandatory behaviour refers to a must behaviour to act to satisfy the requirement of interaction which stimulated or supported by others. Connected presence emphasized to an interaction which based on internal of an individual.

External factor comes from out of individual, this factor related to the high explanation of media about mobile phone and its facilities. Universally, human has a needed to intimate relation with others and when the

needed is unfulfilled she/he will feel lonely. The lonely feeling may only be a temporary condition caused by the changing of individual life. Majority of people have experienced loneliness at several temporary conditions; one of them caused by the changing of life such as moving to a new place or just started a new job.

According to Russel (1996), loneliness based on three aspects, to be mentioned: Personality is a dynamic organization in an individual from psycho-physical systems that determine behaviour characteristics and thinking. Social desirability is and social life expected by an individual at their environment. Depression is one of feeling disorder marked by sad feeling, melancholy, less enthusiasm, unworthy feeling, focus to failure.

Loneliness has been found as one of the most powerful predictor from game addiction among online gamers (Parsons, Seay & Kraut dalam Lemmens, Valkenburg, & Peter, 2009). The research conducted by Andini (2009) found the significance relation between social loneliness with the intensity used of internet to university students. Other research on loneliness and Smartphone addiction also stated that there were significant influence of self-esteem, loneliness and demography with the tendency to Smartphone addiction (Zahrani, 2014).

Smartphone addiction is a theory generated from Internet Addiction by Young. Internet addiction is an holistic five characteristics related to internet matters: cyber sexual addiction, virtual relationship addiction, the force to use internet, excessive information, and online-game addiction (Young et al, 1999). The symptoms of internet addiction included social isolation, family distraction, divorce, academic failure, loss of job and having load of debt (Young et al, 1999).

The fast growing of technology and the high numbers of excessive Smartphone users including the rising phenomenon of smartphone addiction and loneliness constituted the interest of researchers to establish more knowledge to the relation of loneliness with Smartphone addiction.

Due to above explanation the problem in this research may be formulated as is there any relation of loneliness with Smartphone addiction?. The aim of this research is to analyze whether or not the relation of loneliness with Smartphone addiction.

## **RESEARCH METHODOLOGY**

This research used quantitative approach, as explained by Arikunto (2010), quantitative research is the detailed examination mostly used numbers, starting from data collection, interpretation of the data and the application of the research. The methodology used in this research is correlation research to acknowledge the probability relation of independent variable loneliness with dependent variable Smartphone addiction.

Population in this research is Smartphone users. This research is willing to acknowledge the relation of loneliness with Smartphone addiction. Therefore the sample of this research are those used Smartphone. Sample was collected in Jakarta with sampling method particularly purposive sampling by distributing questionnaires with accidental sampling.

The prominent benefit of this method is the effectiveness in time and cost. The subject characteristics in this research are: 1. Smartphone users in Jakarta, 2. Smartphone Addiction based on addiction characteristics questionnaires (Young, 1966) with minimum five "yes" answer from eight questions. The instrument used in this research is the direct questionnaires to the subjects by using link of google forms. The questionnaires consist of two instruments: UCLA Loneliness Scale (version 3) with score alpha cronbach 0,884 to measure the level of loneliness and Smartphone Addiction with score alpha cronbach 0,880 which had been modified by Zahrani (2014) to measure the level of Smartphone addiction.

## **RESULT**

The testing approach to normal distribution used Kolmogorov-Sminov methodology with significance level 0.05. Based on normality test with the assistance of SPSS version 22 was found the score of Asymp.sig Loneliness around  $0,000 < 0,05$  and the score of Asymp.sig Smartphone addiction about  $0,000 < 0,05$ . General description of the subjects refer to sex are 39 (39%) men and 61 (61%) women. Due to the age range there are 14 respondents around 16-20 years old, 80 respondent around 21-25 years old, 3 respondents around 25-30 years old and 3 respondents older than 30 years old. From the collected data, this research was dominated with women respondents around 21-25 years old.

The general description of the subject in regard to their occupation are 2 students, 68 university students, 25 workers, 2 unemployment, and 3 others. Due to above table, it could be concluded that the majority of the respondents are university students. The subject description based on the most used application are : 65 respondents mostly used chatting application, 29 respondents mostly used social media, 2 respondents mostly used browsing application, and 4 respondents mostly used games application. From those data, it could be concluded that the most application used is chatting with percentage 65%.

The description of the time used to run Smartphone in a day to the subjects are: no respondents used Smartphone 1 hour a day, 17 respondents used Smartphone around 1-6 hours a day, 35 respondents used Smartphone 7-12 hours a day and 48 respondents used Smartphone more than 12 hours a day. Thus, as the summary, there used time of Smartphone is more than 12 hours a day to run several available applications in the Smartphones.

The description of subjects based the brand of the Smartphone are: 30 respondents used Apple smartphoe, 26 respondents used Samsung Smartphone, 17 respondents used ASUS Smartphone, 6 respondents used Sony Smartphone. 6 respondents used Lenovo Smartphone, and 15 respondents used other brand of Smartphones. Therefore, most of subject in this research used Apple Smartphone wit percentage 30%.

According to the scoring shown that loneliness had minimum score 18, maximum score 56, range 38, mean 30,46 and deviation standard 9,271. In regard to Smartphone addiction the result from descriptive test are : minimum score 45, maximum score 83, range 38, mean 59,59 and deviation standard 8,203. Some of subjects been at loneliness level at low categorization with frequent 72 respondents (7%), subject at medium categorization about 23 respondents (23%) and at high categorization about 5 respondents (5%).

The majority of subject been at high categorization of Smartphone addiction with frequent 94 respondents (94%), subject at medium categorization about 6 respondents (6%) and none of respondents been at low categorization. Based on correlation test with Spearman the correction score for loneliness toward Smartphone addiction about 0,082. Thus, it could be concluded that there is no significant relation between loneliness with Smartphone addiction. The significant relation should be at score  $< 0,05$ . Due to both variables were not significant than  $H_0$  was accepted, therefore the conclusion is there is no significant relation between loneliness with Smartphone addiction.

## CONCLUSION AND DISCUSSION

Based on the result and data analysed, the conclusion is there is no relation between loneliness with Smartphone addiction. There is no significant relation among loneliness and Smartphone addiction. Therefore, in the statistical scoring with SPSS 22 For Windows, the result shown  $H_a$  was rejected and  $H_0$  was accepted.

In relation with that, this research do not proper with the research on the correlation of loneliness with the used of internet to university students (Andini, 2009), where that research found significant relation between social loneliness with the intensity of using internet for university students. This research is also improper with other researches which related to loneliness and Smartphone addiction that stated there is significant influences between self-esteem, loneliness and demography factor toward the tendency to Smartphone addiction (Zahrani, 2014).

The different of the result might caused by several factors, some of them are: population, sample, number of subjects, age and background. This research did not focus to the expansion of age such as early adult or late teenager, but receive the unlimited range of age. This research analysed Smartphone addiction in general and holistic, probably when the research conducted with specific theme (social media, facebook, chat, and others) will launched different result. In such way, those specific themes will influence the result of the research that different from previous research.

The result of this research about the using of high intensity of Smartphone, is not because of loneliness, means there is other variable caused the high intensity used of Smartphone in Jakarta, or Smartphone addiction could be the result of life style of society. In this regard, the research by including others variable and focusing to specific theme is needed.

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