

Quality of Parent-child Communication, Self-esteem, and Smartphone Addiction on Generation Z Adolescent

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Abstract: Teenagers today often own and use smartphones, but uncontrolled excessive use can put a risk of smartphone addiction. This study aimed to determine the correlation between the quality of parent-child communication and Self-esteem with the smartphone addiction on Z-generation teenagers in high school (High School) groups. This research uses a quantitative approach. The sampling technic of this research is purposive sampling. Subjects in this research are 100 high school students aged 15-18 years. Data collection is done by survey method using a questionnaire. Measuring instruments used in this study include: SAS-SV (Short Version of Smartphone Addiction Scale) to measure smartphone addiction, communication quality scale of parent and children developed by researchers based on communication quality theory from De Vito, and SLSC-R (Self-Liking and Self-Competance Scale Revised) to measure Self-esteem. Data analysis using correlation test with SPSS 22.0 for Windows. The results showed that there was no significant correlation between the quality of parent-child communication with smartphone addiction and Self-esteem with smartphone addiction.

1 INTRODUCTION

Adolescence is a period of human development which includes biological, psychological, and social maturity as a transition from childhood to adulthood. Today's teenagers generally belong to generation Z, which was born since 1998 (Tapscott, 2008). In the process, adolescents are often overwhelmed by great curiosity so that adolescents explore their world and it is a form of searching for identity.

In the era of generation Z teenagers, the use of smartphones or smart cellular phones facilitated by various applications and the internet, has grown with the influence of globalization, including in Indonesia. Smartphones provide several conveniences for teenagers, such as fast access to information and can make people able to have communication with peers, family, and the wider community, even in a long distance. With the internet in it, people can access several social media platforms such as Facebook, WhatsApp, Line, Instagram, and others.

The Association of Indonesian Internet Service

Providers (APJII), stated that internet users in 2017 reached 143.26 million people (Setiawan, 2018). This shows that more than half of Indonesia's population has used the internet, including teenagers. Data from the Nielsen survey institute (2014) shows that the average smartphone use in Indonesia is 189 minutes per day or about three hours.

Common Sense Media (a non-profit organization focused on helping children, parents, teachers and policy makers with media and technology in America), which conducted research in 2016 in San Francisco, California, found that 50% of teens admit to gadget addiction. The study involved 1.240 parent- children, ages 12 to 18 years. The result is that 66% of parents feel their teens spend too much time on gadgets, and 52% of these teens agree with this.

Firmana (2016) in a study on the use and utilization of smartphones among high school students, stated that the level of smartphone ownership among students can be categorized as very high. In addition, teens especially the high school students also use several social media

applications to exchange information such as sharing subject matter, asking for schedules, and related to school activities through various application features. However, the use of smartphones does not mean that it always has a positive impact on students in their adolescence.

Research conducted by Muflih, Hamzah, & Puniawan (2017) shows that there is a significant correlation between smartphone use and smartphone addiction. Hovart (Riani, 2016) states that dependence or what is termed addiction is an activity or substance that is carried out repeatedly and can have a negative impact which is characterized by high intensity on smartphone use, unable to control smartphone use, feelings of anxiety and restlessness appear when not using smartphones, as well as social relationships with the environment and those closest to them have problems.

The existence of smartphone addiction can have an impact on psychological problems. A news report from Liputan 6 on January 2018 informed that smartphone addiction caused two students who were still in junior high and high school to enter a mental hospital in Bondowoso, East Java. The two students were taken for treatment to the Mental Polyclinic of RSUD Koesnadi Bondowoso by their parents because they experienced drastic personality changes, such as not wanting to go to school for several months, and hurting themselves when asked to take off their gadgets.

Agusta (2016) in his research on the risk factors for smartphone addiction in adolescents found that there are four factors that influence smartphone addiction, such as external factors, situational factors, social factors, and internal factors. Some of these factors, namely external factors that explain the influence of media on exposure to smartphones and the various facilities provided, situational factors that explain where a person feels comfortable when using smartphones both in their own and in groups, as well as social and internal factors which will be explained in more detail below.

Social factors have aspects of individual needs in social interaction. Although it creates its own fun, the presence of smartphones makes teenagers often focus more on smartphones than communicating with those around them. Effendy (2003) states that essentially interpersonal communication is communication between communicators (the person who delivers the information) and communicants (the person who receives the information), where this type of communication is considered the most effective in an effort to change a person's attitude, opinion or behavior. With the dialogical nature of

communication in the form of conversation, the communicator can know the quality of the communication, that is, if the communication is positive or negative.

In the dynamics of communication, adolescents according to research from Bukowski, Motzoi, & Meyer, 2009; Laursen & Pursell, 2009 (Santrock 2012), are more dependent on their peers than their parents. One of the characteristics of adolescence is wanting freedom from adults. However, adolescents are not directly independent without parents, but it is the attachment of parents that can increase the possibility of adolescents having good social skills (Santrock, 2012).

Based on Cho & Lee (2017), the role of parents, such as self-reflection from parents, is needed to counteract the negative effects of smartphone use on children. According to Kwak, Kim, and Yoon (2018), parental neglect is significantly associated with dependence or excessive use of smartphones among adolescents. Misaghi, et al (2018) in their research on family functioning accompanied by a generation gap also showed a significant negative correlation with smartphone addiction. Another study by Chasanah and Kilis (2018) on the effect of gadget addiction on family functioning shows that gadget addiction also affects family functioning, but its effect on communication aspects is smaller than other aspects.

Internal factors describe individual characteristics and are the factors that most influence smartphone addiction. Internal factors have three aspects, namely weak self-control, high sensation-seeking nature, and low self-esteem.

As smartphones generally contain social media that can expand friendships or kinship with other people in cyberspace, teenagers become interested in using smartphones. This is done in order to get an increase in Self-esteem and existence in the community because many of today's generation Z teenagers also have smartphones. According to a teenager digital observer, Peg Streep (in Felita et al., 2016) suggests that the basic reason why teenagers become social media maniacs is because they want to seek attention, ask for opinions, grow their image, and moreover they are already addicted or become dependent on smartphone use. From the results of a survey conducted by Felita et al (2016) who tried to examine adolescent self-concept and use of social media, most teenagers want to look good and display an image of their ideal self-concept (ideal-self) on their social media profiles, even though it is not in accordance with their real self-concept (real-self) they have.

The incompatibility of adolescent self- concept with their ideal self will cause low self- esteem. According to Tafarodi and Swann (1995), there are two dimensions of Self-esteem, such as self-liking and self-competence. Self- liking is an evaluation of one's own experience in social interactions, which can be good or bad, while self-competence is also an evaluation about self-experience regarding the results of the efforts or practices someone made (Harre, in Tafarodi and Swann, 1995). A teenager with low Self-esteem tries to improve his self-image, one of which is by using a smartphone to access social media as it has been mentioned that teenagers actually need support from others to feel more valued (Kurburun in Mulyana and Arifani, 2017). According to the research conducted by Ehrenberg et al (2008), people with low Self-esteem will more often use social media to write messages. Research by Kim (2016) and Mulyana and Arifani (2017) also proves that there is a negative correlation between Self-esteem and smartphone addiction, in which the lower the Self-esteem of a teenager, the higher the tendency for smartphone addiction.

From other studies, such as that conducted by Pugh (2017), it was found that Self-esteem did not have a significant correlation with smartphone addiction. Shaw and Gant (in Pugh, 2017) through their research in 2002 also found contradictory research results, that internet addiction was actually positively related to Self-esteem and this was explained to be related to a person's reduced sense of loneliness.

Smartphone addiction in this study is explained as a condition in which a person cannot be separated from his/her smartphone. Smartphone addiction can occur because of using them too often, which begins with the stage of habituation to create a dependence.

Kwon et al (Mulyana & Afriani, 2017) developed smartphone addiction or dependence on smartphones measured in five aspects, namely daily-life disturbance (interruption of daily activities), withdrawal (not being able to stay away from smartphones because of anxiety, including feeling uncomfortable when disturbed). while playing smartphones), cyberspace-oriented relationship (socializing more with smartphones), overuse (excessive and uncontrolled use), and tolerance (failure to control smartphone use).

The quality of communication in this study focuses on the quality of interpersonal communication (parent-child), namely the process of delivering messages through conversations that occur between parents and children. Parents need to

make sure the communication takes place in a positive way which is related to interpersonal communication. De Vito (Marthiani, 2015) states that interpersonal communication is the process of sending and receiving messages between two people or a small group of people with various impacts and opportunities to provide immediate feedback. Effendy (2003) states that essentially interpersonal communication is a communication between communicators and communicants, where this type of communication is considered the most effective in an effort to change one's attitudes, opinions or behavior, because it has a dialogical nature in the form of conversation. When communicating, the communicator knows for sure whether the communication is positive or negative, and successful or not. This happens when the communicator gives the communicant the opportunity to ask as widely as possible. De Vito (1997) states that communication quality has five dimensions, namely openness, empathy, supportiveness, positiveness, and equality. Openness indicates that someone has a willingness to open his/her self so that he/she can receive suggestions or information from others. Empathy can be seen from the activeness in accompanying, being concentrated, and giving physical contact with the person. Supportiveness indicates the attitude in interpersonal relationship that can motivate someone when it needed. Positiveness is a person's tendency to be able to act based on good judgment between communicators and communicants. Meanwhile, equality indicates that both communicators and communicants have awareness that they are equally valuable and need each other.

Baron, Byrne, & Branscombe (Sarwono & Meinarno, 2011) state that self- esteem shows the overall attitude that a person has, both positive and negative. Lerner and Spanier (Ghufron & Risnawita, 2011) argue that Self-esteem is the level of assessment given by individuals to themselves, both in positive and negative assessments which are then associated with the individual's self-concept.

This research needs to be done to determine the correlation between the quality of parent-child communication as a factor of interpersonal interaction in the family and self- esteem as a personal factor in answering the phenomenon of smartphone addiction among generation Z teenagers, especially high school students. Here is a theoretical concept to explain this study.

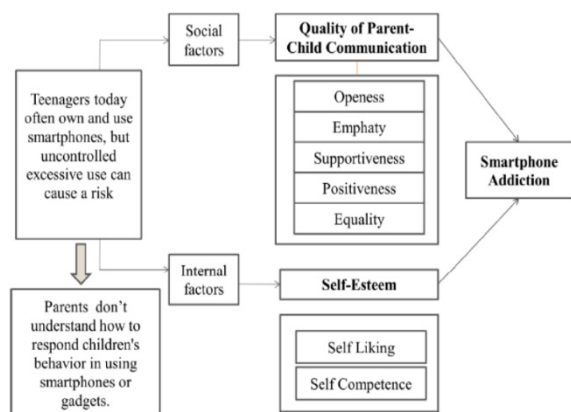


Figure 1: Theoretical Concept.

Hypothesis

- H_0 : there is no correlation between the quality of parent-child communication and Self-esteem with smartphone addiction on adolescents of generation Z
- H_a : there is a correlation the quality of parent-child communication and self-esteem with smartphone addiction on adolescents of generation Z

2 METHOD

This study uses a quantitative approach, in which researchers conduct a survey to get the data. The sampling technique used was purposive sampling.

Researchers used a questionnaire to measure each variable. The questionnaire consisted of open and closed nature, which can be done directly by the research subject. The questionnaire was also accompanied by a consent form at the beginning. In an open questionnaire, research subjects were asked to fill in their personal data and answer essay questions according to their circumstances. While in a closed questionnaire (scale), the research subject will be asked to choose one of the alternative answers that have been provided in the form of numbers to represent the situation that suits him/her.

The subjects in this study were 100 teenagers (aged 15-18 years) who were students of class X, XI, and XII SMA Trimurti Surabaya. At Trimurti High School there are 24 classes, namely 8 classes for class X, 4 classes for class XI IPA, 4 classes for class XI IPS, 5 classes for class XII IPA, and 3 classes for class XII IPS with an average number of students reaching 40 in every class. Of the 24 classes, 6 classes will be taken, namely 2 classes in class X, 2

classes in class XI (IPA/IPS), and 2 classes in class XII (IPA/IPS). For class X, 37 subjects were obtained, class XI was 33 people, and class XII was 30 people. Of the 100 students, there were 52 boys and 48 girls.

The quality of parent-child communication is measured by a multidimensional scale based on the operational definition of interpersonal communication quality according to De Vito which has five dimensions, such as openness, empathy, supportiveness, positiveness, and equality. Researchers created a new scale with a total of 42 items, which included the five aspects of communication quality according to De Vito in the context of parent-child. The reliability of the test results of the questionnaire with 38 respondents showed the Cronbach's Alpha value of 0.915. The assessment is based on 4 answer choices (STS = strongly disagree, TS = not suitable, S = suitable, SS = very suitable). The higher the total score, the higher the quality of communication between parents and children, and vice versa.

The scale used to measure Self-esteem is the Revised Self Liking and Self Competence Scale (SLSC-R) developed by Tafarodi and Swann (1995). Based on Tafarodi & Swann (1995), Self-esteem in this study is measured in 2 dimensions, namely self-liking (our affective assessment of ourselves, approval or disapproval of ourselves) and self-competence (assessment of each individual self experience as a result of the exercises that have been done). SLSC-R contains 16 favorable and unfavorable items with two dimensions, namely self-liking and self-competence, and there are five answer choices (1 = very unsuitable, up to 5 = very suitable). The value of Cronbach's Alpha SLSC-R reached 0.90 and after the research process in the field, the reliability of the SLSC-R showed Cronbach's Alpha value of 0.734 by removing eight unfavorable items. Self-esteem scores based on measurements with the SLSC-R through the total score. The higher the total score, the higher the Self-esteem, and vice versa. The smartphone addiction scale was measured using the Smartphone Addiction Scale Short Version (SAS-SV) developed by Kwon et al (2013). SAS-SV is a unidimensional scale and has 10 favorable items. The value of Cronbach's Alpha SAS-SV is 0.911 and after the research process in the field, the reliability of the SAS-SV shows the value of Cronbach's Alpha 0.758. The assessment is based on 5 answer choices (1 = strongly disagree, up to 5 = strongly agree). Smartphone addiction score based on measurement with SAS-SV through total score.

The higher the total score, the higher the subject's dependence on smartphones, and vice versa.

3 RESULT

3.1 Level of Smartphone Addiction

From the results of descriptive statistics, it was found that the average smartphone addiction of Z generation teenagers in SMA Trimurti Surabaya was 28.19 with a standard deviation (SD) of 6.8. The average quality of parent-child communication is 127.65 with a standard deviation of 17.22. The average Self-esteem is 29.37 with a standard deviation of 4.67.

Table 1: Smartphone Addiction Category.

Norm	Category	N	Percent
$x > 35.00$	High	16	16%
$21.38 \leq x \leq 35.00$	Moderate	70	70%
$x < 21.38$	Low	14	14%

Based on the description table for the smartphone addiction category above, it can be seen that out of 100 research subjects, there are 16 students (16%) who have high smartphone addiction, 70 students (70%) have moderate smartphone addiction, and 14 students (14%) have low smartphone addiction.

3.2 Level of Quality of Parent-child Communication

Table 2: Quality of Parent-Child Communication Category.

Norm	Category	N	Percent
$x > 144.87$	High	16	16%
$110.43 \leq x \leq 144.87$	Moderate	67	67%
$x < 110.43$	Low	17	17%

Based on the description table for the category of parent-child communication quality above, it can be seen that out of 100 research subjects, there were 16 students (16%) with good parent-child communication quality, 67 students (67%) with adequate parent-child communication quality, and 17 students (17%) with low quality of parent-child communication.

3.3 Level of Self-esteem

Table 3: Self-esteem Category.

Norm	Category	N	Percent
$x > 34.04$	High	14	14%
$24.70 \leq x \leq 34.04$	Moderate	72	72%
$x < 24.7$	Low	14	14%

Based on the Self-esteem category description table above, it can be seen that out of 100 research subjects, there are similarities in the percentage between students with high and low Self-esteem, as many as 14 students (14%) have high and low Self-esteem, and 72 other students (72%) have moderate Self-esteem.

3.4 Correlation of Quality of Parent-child Communication and Self-esteem with Smartphone Addiction

Based on the results of the normality assumption test through Kolmogorov Smirnov where the significance value is said to meet the normal data requirements if (sig) > 0.05, the data distribution from the smartphone addiction measurement is not normal (sig 0.047 < 0.05), the data distribution from the parent-child communication quality measurement is normal (sig 0.095 > 0.05), and the distribution of data from Self-esteem measurements was not normal (sig 0.027 < 0.05). Therefore, the researcher used non-parametric statistical analysis.

Table 4: Correlation Analysis.

Variable	Sig.	r (Spearman)	Status
$X_1 - Y$	0.703	-0.039	Not significant correlate
$X_2 - Y$	0.603	0.053	Not significant correlate
Muliple correlation: $X_1, X_2 - Y$		R = 0.051	No multiple correlation

Based on the table of non-parametric correlation test results, the correlation between X_1 (the quality of parent-child communication) and Y (smartphone addiction) shows that the correlation between X_1 and Y is -0.039 with a significance level of 0.703 (p

> 0.05), which indicates that there is no correlation. There is a significant correlation between the quality of parent-child communication with smartphone addiction. The negative sign indicates that the correlation between the quality of parent-child communication is negative, that is, if the quality of parent-child communication is high, the level of smartphone addiction in children is low, and vice versa.

The correlation between X2 and Y is 0.053 with a significance level of 0.603 ($p > 0.05$) which means that H_0 is accepted and H_a is rejected, so it can be said that there is no significant correlation between Self-esteem and smartphone addiction. With multiple correlation analysis, an R value of 0.051 was also obtained, which means that there is no correlation between the quality of parent-child communication and Self-esteem with smartphone addiction on Generation Z teenagers of high school students.

4 DISCUSSION

A non-significant correlation between the quality of parent-child communication with smartphone addiction, indicating other different findings. This study reveals that social factors, such as interactions in the family that involve the quality of parent-child communication, are not always associated with smartphone addiction.

Research on family functioning belonging to Habibi, Danesh, and Mazandarani (2015) explains that although family functioning is related to internet addiction, which if family functioning is poor then the level of internet addiction is high, but the correlation coefficient of communication aspects in family functioning is very small and not significant. As discussed in the introduction section, Chasanah and Kilis (2018) research which states the weak influence seen from the relative contribution (R^2) of the communication aspect in the functioning of families with gadget or smartphone addiction, shows that other factors such as affective responses, roles, and control behavior related to various situations in the family also contributed more to the decrease in smartphone addiction. This allows parental supervision in the use of smartphones in children can be quite related and have influence. On the other hand, the non-significant correlation between Self-esteem and smartphone addiction on Generation Z high school students indicates that this study supports the previous findings stated by

Pugh (2017). According to Pugh, low Self-esteem is not always associated with high levels of smartphone addiction. Through a review of the previous literature, Pugh revealed the results of research by Shaw and Gunt (2002) which explained that high Self-esteem is actually associated with a high level of smartphone addiction. This is due to the loneliness factor, which when someone experiences loneliness, there is a tendency for low Self-esteem. With the use of smartphones to access social media intensely, a person feels they receive social support (perceived social support), and according to research results, the tendency of loneliness is reduced so that Self-esteem increases along with the intensity of smartphone use.

5 CONCLUSION

Based on the results of data analysis, it can be concluded that there is no significant correlation between the quality of parent-child communication and Self-esteem with smartphone addiction on high school students who are the adolescents of generation Z. There are other factors which can be stronger predictors for smartphone addiction on adolescents, as mentioned that smartphone addiction can be caused by four main factors, such as external factors, situational factors, social factors, and internal factors, while the quality of parent-child communication is a part of social factors, and Self-esteem is a part of internal factors.

For further researchers, through this research, it is hoped that other attributes will be considered for research with similar themes, for adolescents who have a tendency to be dependent on smartphones so that they can control the intensity of smartphone use and sort out more positive activities in using smartphones, then for parents to pay attention and improve the quality of their communication positively with children so that parents can play a more role in directing the use of smartphones wisely in children.

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