



Gadgets addiction behavior towards social development in adolescents

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Abstract

Social development in adolescence is one of the most challenging for adolescents because, in this phase, adolescents must be able to make social adjustments. This study aimed to determine the relationship of smartphone addiction with the social development of adolescents. This study used a quantitative design with a cross-sectional approach. The population of this study was 160 students using quota sampling. The independent variable was smartphone addiction, and the dependent variable was social development. Data collection was done by distributing questionnaires directly to respondents, then analyzed by the Spearman Rank Correlation test. The result of this research showed there was a correlation between smartphone addiction with social development ($p = 0.000$), the direction of the correlation (-0.333). This meant that the higher the value of smartphone addiction, the lower social development. Teens who use gadgets in excess will aggravate the development of social. Subsequent research is to pay attention to other factors that affect social development.

Keywords: smartphone addiction, social development

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INTRODUCTION

Adolescents come from the Latin 'adolescere' which means maturity, while in English, it is called 'adolescence,' which means mental, emotional, social, and physical maturity (Hurlock, 2011; Istiqomah, Erawati, & Suyanta, 2019). Adolescence is a transition from childhood to adulthood that is marked by physical, emotional, and psychological changes. The success of the adolescent phase changes will have an influence on adolescents in fulfilling developmental tasks in the next phase (Dalviyani, Thaha, & Palutturi, 2019; Retnowati, 2013). However, not all teenagers can fulfill the tasks in this development well. One of the stages of development that adolescents go through is social development. Social development during adolescence is one of the most challenging events for adolescents because, in this phase, adolescents must be able to make social adjustments, adjusting themselves to the opposite sex, and change to adults both in the family and school environment. Social development is the achievement of maturity in social relations and as a learning process for adolescents to adjust to group norms, morals, and traditions, so that they must be able to learn to adapt to others. This is because, at this stage, it is considered as a transitional stage that makes adolescents need to adapt from being a child to being an adult where parents are involved mainly in shaping their personalities (Elizabeth, 2016).

The number of events in Indonesia regarding developmental delays has not been established with specific data. According to data from the Indonesian Pediatric Association (IDAI), approximately 5% to 10% of children experience developmental delays (ADAI, 2013). Based on research by Novitasari & Khotimah in 2016, the use of gadgets has an impact on children's social interactions (Novitasari & Khotimah, 2016). Children also find it difficult to work together in groups with friends to work together. Based on preliminary data surveys conducted in junior high school, of the ten people interviewed from 10 children, five children experienced gadget addiction. Whereas in terms of social development, five children tend to experience less social development.

Adolescence is a period in which changes occur, including physical and psychological changes, the search for self-identity, and forming new relationships (Sari, Ilyas, & Ildil, 2018; Yuliatin, Triawanti, Arifin, Panghiyangani, & Indriasari, 2018). The progress of science and technology is also a factor that supports how development in adolescents (Ameliola & Nugraha, 2013). The use of gadgets is one of the developments in science and technology in the field of information and communication. The use of gadgets has both positive

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and negative effects (Fauzi, Yusuf, & Mundakir, 2019). One of the negative effects of using a gadget is an addiction (Arthy et al., 2019; Winoto, 2013). Compared to adults, adolescents are more prone to gadget addiction because teenagers are easy to concentrate when using gadgets (Kim, 2013). The high duration of gadget usage can cause several negative impacts, including changes in behavior patterns and adolescent activities. Generally, this addictive behavior is influenced by factors from within individuals who have not been able to control or control the limits in the use of smartphones to make the teen experience addiction (Ningtyas, 2013). Addiction to this gadget will bring negative impacts on social and emotional development in children, including the child being a closed, private person, sleep disorders, like to be alone, violent behavior, loss of creativity, and the threat of cyberbullying (Iswidharmanjaya & Agency, 2014; Wahyuni, Siahaan, Arfa, Alona, & Nerdy, 2019). Based on the results of research conducted by Anggrahini in 2013, since children use gadgets when they are at home, the child becomes difficult to be invited to communicate, do not care, and respond less when parents ask to talk (Anggrahini, 2013). The use of gadgets in pre-school children will affect the child's social and emotional development. Based on the above phenomenon, this study aimed to determine the relationship of gadget addiction to adolescent social development. It needs to be done using the theoretical approach of the Imogene M. King Human Interaction Model.

MATERIALS AND METHODS

The design in this study was quantitative by using a cross-sectional design. The population in this study was adolescents in grades VII and VIII of junior high school in Surabaya. Respondents in the research who met the inclusion criteria were students in grades VII and VIII (ages 13-14 years), male and female, and students who used gadgets. The exclusion criteria, namely students who were sick or not present when the research was conducted. The independent variable in this study was gadget addiction. The dependent variable in this study was social development. Instrument addicted to using gadgets *Smartphone Addiction Scale* (SAS) (Meirianto, 2018) and instruments of social development (W. Z. Nasution, 2017). Analysis of the data used in this study used descriptive analysis and inferential analysis. The test used in this study is the Spearman Rank Correlation test. This research has ethical clearance from the Health Research Ethics Committee (KEPK) Faculty of Nursing, Universitas Airlangga with the certificate number 1437-KEPK.

Table 1. Distribution of respondents' demographic characteristics

Characteristics	n	%
Gender		
Male	69	43.1
Female	91	56.9
Age		
13 years old	93	58.1
14 years old	67	41.9
Grade		
Seventh	80	50.0
Eight	80	50.0
Father's last education		
High school	22	13.8
Bachelor degree	113	70.6
Master degree	25	15.6
Mother's last education		
High school	26	16.2
Bachelor degree	122	76.2
Master degree	12	7.5
Addicted to gadgets		
Low addiction	45	28.1
Moderate addiction	63	39.4
Severe addiction	52	32.5
Social development		
Bad social	59	36.9
Social enough	61	38.1
Good social	40	25.0
Total	160	100

RESULTS

Based on **Table 1**, most respondents were female, which was 56.9% (91 respondents). Most respondents were 13 years old, which was 58.1% (93 respondents). The respondents in grades seventh and eighth have the same amount, namely 50% (80 respondents). The most recent education of respondents' fathers was S1 (Bachelor), with a percentage of 70.6% (113 respondents). Likewise, with the last education of the respondent's mother, the most are bachelor degrees, with a percentage of 76.2% (122 respondents). The most common type of addiction experienced by respondents is moderate addiction as much as 39.4% (63 respondents). In comparison, the type of social development most experienced by respondents is enough social development as much as 38.1% (61 respondents).

Based on **Table 2**, the highest mean and SD values found in gadget addiction are positive anticipation indicators, respectively 22.96 and 9.07. On social development variables, the highest mean and SD are found in the new value indicators in social acceptance, respectively 13.68 and 3.908.

Based on **Table 3**, the results of data analysis of the relationship between gadget addiction and social development using the Spearman Rank Correlation test obtained significant results $p = 0.000$ with a degree of significance $\alpha = 0.05$. Therefore, it can be concluded that there is a significant relationship between gadget addiction and social development in adolescents. The result of the correlation coefficient is -0.333, which shows the direction of the negative correlation, meaning that the higher the level of gadget addiction, the lower

Table 2. Distribution respondents based on indicators of gadget addiction and social development

Indicator	The mean	Elementary school
Added to gadgets		
Daily life disturbance	5.88	2.33
Positive anticipation	22.96	9.07
Withdrawal	14.79	5.65
Cyberspace-oriented relationship	17.63	7.32
Overuse	10,38	3.65
Tolerance	6.52	2.80
Social development		
A strong influence of peer groups	9.95	3.124
Influence in social behavior	13.08	3.845
New social grouping	9.95	3.427
New value in choosing friends	7.57	2.859
New value in social acceptance	13.68	3.908
New value in choosing leaders	11.19	3.499

Table 3. Cross distribution of gadget addiction relationships with social development

Addicted to Gadgets	Social Development						Total	
	Bad Social		Social Enough		Social Good		n	%
	n	%	n	%	n	%		
Low addiction	6	3.8	23	14.4	17	10.6	46	28.8
Moderate addiction	21	13.1	28	17.5	14	8.8	63	39.4
Severe addiction	32	20.0	10	6.2	9	5.6	51	31.9
Total	59	36.9	61	38.1	40	25.0	160	100

Spearman Rank Correlation Test $p = 0.000$ $r = -0.333$

the social development. Individuals who experience high levels of gadget addiction will adversely affect their social development.

DISCUSSION

Based on the Spearman test results obtained that there is a significant relationship between gadget addiction with social development. That is, gadget addiction affects social development. These results are consistent with previous research conducted by Imron in 2017, which states that there is a relationship between the use of gadgets and preschoolers' social and emotional development (Imron, 2018). The use of gadgets is one of the developments in science and technology in information and communication. The use of gadgets has both positive and negative effects. According to Winoto, in 2013, one of the adverse effects of using gadgets is an addiction (Winoto, 2013). Factors that lead to gadget addiction include low self-control, high sensation seeking, low self-esteem, individual psychological, high media exposure, and social interaction of students (Agusta, 2016).

Teenagers use gadgets almost every day at home. Mostly for playing social media and playing games (F. A. Nasution, Effendy, & Amin, 2019). The types of social media that teenagers use are Facebook, Twitter, Path, and Instagram. Teens' time spent to use gadgets every day is 2.5 hours to browse the internet and play online games. Meanwhile, the time spent by teenagers to play social media like Instagram, Twitter, and Facebook is 1.5-3 hours (Zimic, 2011).

Children who are addicted to gadgets will usually have friendships that are more familiar with social media networks than friends in real life (Kwon, Kim, Cho, & Yang, 2013). This causes the ability of socialization with

the surrounding environment is low. The cause of smartphone addiction from this factor is because smartphones as a means of interacting and maintaining contact with others. In this case, individuals always use cellphones to interact and tend to be lazy to communicate directly with other individuals (Agusta, 2016). This is consistent with research conducted by Moslehpour & Batjargal in 2013, which states that adolescents who experience internet addiction will reduce their social interactions in the real world and are more comfortable with their friends in cyberspace (Moslehpour & Batjargal, 2013).

The results showed that the majority of respondents experienced moderate addiction with considerable social development. The results also showed that respondents who experienced addiction to gadgets felt the most positive anticipation from the results of questionnaire scores from all respondents. Positive anticipation is a feeling of enthusiasm from users to use gadgets and make gadgets as stress relievers. For some gadget users, the function of the gadget is not only as a communication tool, playing games, but the gadget is also a device that can be a friend, provide a fun, reduce fatigue, reduce anxiety and give a sense of security (Kwon et al., 2013). Teenagers who use smartphones become busy with their world and ignore the surrounding environment. The existence of a smartphone makes teenagers rarely socialize and makes it look anti-social in real life. For example, a group of teenagers who are gathering with their friends in a place will use their smartphones more often than talking to their friends. Researchers argue that adolescents who are addicted to gadgets will try to overcome their anxiety by surfing into cyberspace. This will cause social relations in the real world to become rigid and reduce

their interest in social relationships, making it difficult to socialize.

CONCLUSION

There is a relationship between smartphone addiction and social development. Teenagers who use gadgets excessively to eliminate anxiety will have a negative impact on social development.

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