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The Effects of the Use of Gadgets on Social Life Patterns among Elementary School Students

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Abstract

This study aims to provide empirical evidence of patterns of social disposition among students and the impact of gadget utilization. The research method used is descriptive. This research involved 150 elementary school students from four schools in Indonesia. Data obtained by surveys, observations, questionnaires, and documentation. Data analysis used multiple regression with a 95% T-test. The final result shows that the rapid development of technology can influence and change social disposition patterns. The pattern of social disposition is positively related to one's tendency to frequency the use and utilization of gadgets.

Keywords: *gadgets, social life patterns, social disposition, students, elementary school*

1. Introduction

The development of information and communication technology influences every aspect of human life. As globalization demands the need for rapid information exchange, the role of communication technology has become essential. Gadgets are one of the leading technologies and are essential for people's digital social life. The emotional attachment of the gadget user, as well as the ability of the accompaniment and interference from the gadget to one's close relationship [1]. The use of gadgets affects the emotional attachment of gadget users [2]. Social investment and social practices around the use of gadgets encourage stimulation and produce intensive emotional attachment to someone.

Gadgets are modern communications that have many sophisticated functions [3]. Gadgets and smartphones are the main items and are essential for people's digital social life [1]. The use of gadgets among children is increasing as there is even a tendency for children to adapt more quickly to existing technology. Children often fall asleep with the sophistication of the gadget with the features available in it. Digital disparities tend to occur between generations as a result of development. Gadget usage is increasing day by day, and this leads to technological addiction among children [4]. The impact that gadget technology brings both negative and positive impacts. The gadget makes it easy for students to interact with the crowd through social media, shortening the distance and time [5]. Long-distance relationships are no longer a problem and an obstacle. Besides, gadgets make it easier for students to support learning, such as figuring out assignments that students do not understand through internet facilities in gadgets. Negative behaviour can occur when children open gadgets too early in their lives without parental supervision [6].

The use of gadgets due to the demands of the current trend that requires students to interact and communicate in the world of internet activity or social media. Children who often use gadgets, often forget the surrounding environment. Children prefer playing gadgets rather than being with friends in the neighbourhood. This situation reduces social interaction between children and the community and the environment [7]. There is a significant relationship between the duration and frequency of using gadgets with mental and emotional elementary school students [8]. The gadget can be used by students to listen to music, play games, the internet, photos, watch videos, and others. The presence of

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gadgets makes a change in student behaviour, where when students are clustered or crowding to just talk about a thing, it is not uncommon for them to be more preoccupied with the gadget than with those who are nearby. So, the action reprimanded greeting, joking with friends to be reduced. When, in fact, children's development which is more interactive and communicative, will make them sensitive to the surrounding environment. This socialization process can be well established in the community and will continue into adulthood. According to Sumantri in Harfiyanto et al. (2015), social interaction can be useful for students in developing thinking, relationships, and social skills [5]. Children's habits can change when given a gadget, such as replacing a playmate with a gadget [9]. The positive impact obtained from the use of gadgets is encouraging children in their learning process [10].

An increasing number of gadgets use in facilitating human activities, but on the one hand, the increasing use of technology decreases the intensity of individual social interactions. Social interaction that occurs through the media makes a person's social solidarity bond weakened [11]. Gadgets can always be brought together by users and are relatively proactive in social interactions. Users are actively trying to personalize their gadgets by changing cell phone names, ringtones, lock screens, and wallpapers [1]. Parenting patterns and the use of gadgets together contribute to children's social interactions [12]. Children need gadgets to receive information that parents cannot provide, so communication with parents is reduced [13]. Social disposition implies the mood and attitude that is typical of an individual towards life around a person. This study defines social disposition in three factors, namely chronic loneliness (one's resilience in the social world in general), attachment style (the way a person responds to close relations), and cultural orientation (one's condition culturally in socialization). Chronic loneliness refers to the long-term disjointed feelings that are detached from the surrounding social environment. Chronic lonely people are unlikely to become heavy gadget users and tend not to anthropomorphize smartphones if gadgets are only considered a technological medium [14]. However, if the gadget is considered as a close friend and not just as a media, then it can be suspected that gadget users feel lonely and have a greater tendency to experience anthropomorphism. With the various advantages and disadvantages of gadgets, parents must be careful and prudent in providing tools and facilities that suit their children's needs to support children's development [15].

This study considers attachment style as a disposition factor, which is to reveal how a person is dealing with close relationships with other people today. This research is expected to provide the role of humans as social creatures who should interact and socialize with others. The use of gadgets makes children have limitations with aspects of interacting that can affect patterns of social disposition. This study aims to provide empirical evidence of patterns of social disposition among students and the impact of gadget utilization. Smartphone or gadget as a new communication technology requires a new perspective. The hypothesis related to the empirical investigation proposed about the pattern of social disposition of gadget users in elementary students is the pattern of social disposition is positively related to one's tendency to the frequency and utilization of their gadgets. Students who demonstrate the frequency and use of gadgets have a high tendency on aspects of the social disposition from their gadgets.

2. Methodology

The research method used is descriptive. This study involved 150 elementary school students from four schools in Indonesia. Data obtained by surveys, observations, questionnaires, and documentation. Data analysis used multiple regression with a 95% T-test. This study focuses on social disposition because gadgets are essential for students' digital social lives. Social disposition consists of six aspects. The six aspects are chronic loneliness, cultural orientation, anthropomorphism, attachment style, cultural orientation,

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and anthropomorphism. They are based on these aspects developed into 20 statements to measure the social disposition of elementary school students. The development of the six aspects of research can be seen in Table 1.

Table 1. Aspects of a social disposition

No.	Average	Number of statements
1	Chronic Loneliness	4
2	Cultural Orientation (Independence)	3
3	Anthropomorphism (Direct reflection)	5
4	Attachment Style	2
5	Cultural Orientation (Interdependence),	2
6	Anthropomorphism (Awareness of agency)	4
	Total	20

3. Results and Discussion

3.1. T-Test the Child's Social Tendency Towards Gadgets

The number of respondents involved in the study was 82 students and 68 elementary school students. The percentage of students is 55% male and 45% female.

Table 2. Anova

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1984.099	6	330.683	11.151	0.000[b]
	Residual	4240.734	143	29.655		
	Total	6224.833	149			

a. Dependent Variable: Level of gadget usage
b. Predictors: (Constant) Chronic Loneliness, Cultural Orientation (Independence), Anthropomorphism (Direct reflection), Attachment Style, Cultural Orientation (Interdependence), dan Anthropomorphism (Awareness of agency).

Sum of Squares shows a total result of 6224.833, 4240.734 residuals, and 1984.099 regression. Df (degree of freedom) in this output is 149. The Mean Square column shows the average value of the treated value. An F value of 11.151 is still considered influential. The effect of measuring whether the test value can also be done by comparing it with the table F value. The Sig column or the probability to indicate the level of significance, if the value is below 0.05 (α), it affects if the opposite does not affect.

The level of use of gadgets in elementary school children can be influenced by several characteristics, including characteristics related to individual self (internal) and related to the environment (external). Internal characteristics include gender, family economic status, the intended use of gadgets and activities carried out by children. External characteristics include the influence of peers, the role of parents, school, and the influence of mass media. The level of use of gadgets in children can be seen through the following things: frequency of use, utilization of facilities, level of expenditure, and parties invited to communicate. Furthermore, the use of gadget communication technology has an impact that affects the social disposition of elementary school children.

3.2. Multiple Regression of Children's Social Position on Gadgets

Based on the calculation of multiple regression to see whether the level of gadget usage influences a child's social disposition. The results of multiple regression calculations can be seen in Table 3.

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Table 3. The level of gadget usage influences children's social disposition

Aspect		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.741	6.464		-0.424	0.672
	Chronic Loneliness	0.182	0.100	0.165	1.810	0.072
	Cultural Orientation (Independence)	-0.129	0.086	-0.127	-1.489	0.139
	Anthropomorphism (Direct reflection)	-0.013	0.121	-0.010	-0.106	0.916
	Attachment Style	0.202	0.093	0.154	2.187	0.030
	Cultural Orientation (Interdependence)	0.220	0.091	0.169	2.402	0.018
	Anthropomorphism (Awareness of agency)	0.651	0.093	0.494	7.033	0.000

Based on Table 3, it can be seen that a sig value of less than 0.05, then the hypothesis is accepted, and if above 0.05, then the hypothesis is rejected. The pattern of social disposition shows the factor of chronic loneliness, cultural orientation related to independence and Anthropomorphism (Direct reflection) does not have an impact on the use of gadgets for elementary school students because it has a sig value higher than 0.05. Patterns of social disposition in the aspects of attachment style, cultural orientation, and anthropomorphism have a significant influence on the use of gadgets because they have a sig value of less than 0.05.

Someone who experiences chronic loneliness does not necessarily tend to be a heavy gadget user and prefers to consider gadgets as a technological medium only [14]. Relevance chronic loneliness and attachment style indicates that someone may be motivated to respond to social communication technologies [1]. Social interaction is universal and is present in different cultures. The value of social relations and affiliation is found to be higher in collectivist cultures than individualist cultures [16]. Cultural orientation as a dimension of personal disposition it means how a person is culturally conditioned in his socialization with the surrounding environment. In this case, the child's independence is more influenced by the parents' environment. Parents play an essential role in training children's independence [17]. Anthropomorphism is considered an automatic psychological process [18]. Children have a belief or mental model of themselves as people who can be trusted, attentive, and look at themselves positively and valued. So that self-schema and person-schema will develop positively, one of which is having a mature self-concept [19]. Children interact through the use of gadgets so that they influence each other both in the thoughts, feelings, or behaviour of children. Children's interactions and gadgets experience attachment and attachment styles play an essential role [20]. Self-awareness is the ability to realize the potential that someone has and feel happy (satisfied) with the potential achieved in personal life (actualization).

The use of gadgets in elementary school children as technological assistance skills shows that passive interaction contributes to increasing intimacy and new relationships between users and technology. Hence, as this study suggests, there may be consequences of close relationships in the real world for certain people. The potential of technology in alleviating chronic social awareness and unhealthy emotional dependence on technology can also be examined from the perspective of social disposition. All these changes make social dispositions the basis on which elementary students can adapt and socially respond to new media, and more importantly, not only in understanding anthropomorphism but also in measuring the impact of emerging communication technologies on children's social lives.

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The social disposition, which is part of an aspect of social competence is increasingly recognized as necessary for the success of children, at school and elsewhere, and in later life phases into adulthood [21].

The use of gadgets can help students in learning activities, but on the one hand, it can reduce social interaction with the surrounding community. The findings and limitations are discussed, and recommendations for education policymakers and actors in elementary schools. The role of parents of students should support the teacher in instilling ethics in children in using digital media such as gadgets. With digital media, parents can train and invite children to think critically in responding to information in digital media.

4. Conclusion

The results showed that the use of gadgets had an impact on the patterns of social disposition of elementary students. The pattern of social disposition shows the factors of chronic loneliness, cultural orientation related to independence, and Anthropomorphism (Direct reflection) does not affect the use of gadgets for elementary school students. Whereas three other aspects of social disposition patterns such as attachment style, cultural orientation, and anthropomorphism show significant results on the use of gadgets. Thus, the rapid development of technology can influence and change patterns of social disposition. Patterns of social disposition are positively related to one's tendency to frequency and use of gadgets. The presence and development of gadgets can help students in learning activities, but on the one hand, can reduce real social interaction. Based on the findings obtained, this research is expected to contribute to stakeholders (schools, government) as a reference material providing policies on the use of gadgets in elementary school children.

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