

## The Relationship Between Intensity Of Gadget Use And Social Interaction During The Pandemic Period At Sdn Mojorejo 02 Batu City

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### ARTICLE INFORMATION

#### Article history

Received (17 June 2024)

Revised (1 July 2024)

Accepted (20 July 2024)

#### Keywords

COVID-19, oxygen saturation, hypoxemia

### ABSTRACT

**Introduction** : Gadgets are communication tools that have many benefits for humans to carry out all their daily activities. Corona Virus Disease or Covid-19 which has become a pandemic in the world. However, during this pandemic, many children began to act individualistically because children often used their gadgets rather than interacting with their surroundings. This study used a cross-sectional approach with a population of 97 students and a sample of 50 student respondents who fit the inclusion criteria using a stratified random sampling technique. The independent variable is the intensity of using the gadget and the dependent variable is social interaction. The results showed that of the 50 respondents, 31 students (50,0%) often categories. The results of the study showed that 26 students (52,0%) on unless categories. Analysis of the data used, using Spearman rho test, from these results shows that there is a relationship between the intensity of using gadgets and social interaction during the pandemic with a significant value of  $p= 0.005 < 0.001$ .

### INTRODUCTION

Technological developments in this era of globalization are felt by society. Advances in technology and communication have had a major impact on human life because very massive rate of technological development. The increasing use of gadgets or devices that can connect to the internet is one of the impacts of the spread of technology. The internet, which is included in gadgets, is a new invention that can be used by everyone and the existence of the internet will become fast and dynamic (Ananda, 2020).

In a survey conducted by the Central Statistics Agency (BPS) in collaboration with the Association of Indonesian Internet Service Providers (APJII), internet usage penetration in Indonesia increased by around (8%) to 143.26 million people. This is equivalent (54.68%) to a population of 262 million people. Based on data from Indonesia's Central Statistics Agency (BPS) in 2022, around 71.3% of elementary school age children have their own gadgets and have accessed the internet for social media networking. The percentage reached 88.99%, which is the largest compared to other internet access purposes. Apart from social media networks, the percentage of internet use for doing school assignments is 33.04%. The percentage of internet use to access information or news reached 66.13%. The using of gadgets and the internet in 2021 in East Java especially reached 68.71%, an increase of 10% compared



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to the previous year (BPS, 2021). The use of gadgets and the internet in 2021 in Batu City alone reached 25.07% (BPS, 2021). The ideal duration of gadget use for school-aged children is a maximum of 2 hours per day and the time has been agreed upon with the parents (Alodokter, 2022).

When excessive use of gadgets also results in reduced social interaction in elementary school children. This also happens because of the surrounding environment and can be seen in elementary school children when they come home from school and during break time tend to be busy playing with their gadgets. Like social interaction with peers, family is also decreasing. Continuous use of gadgets will have a negative impact on children's attitudes and behavior in carrying out their daily activities. The activities carried out by children in using gadgets continuously will make children become addicted and become routine activities carried out by children in their daily activities. It cannot be denied that many school-aged children now use their gadgets more often than interacting with their peers (Ayuby, 2017).

According to (Ministry of Health, 2021), elementary school age children are children aged 7 to 12 years. In children aged 7 to 12 years there are important changes in biological, psychological, cognitive, social and spiritual development. For a school- aged child, social interaction is one of the things that children need to build their character and social talents in interacting with other people (Hasanah, 2019). Elementary school (SD) children, who are still categorized as children, have specific patterns of growth and development in physical, cognitive, socio-emotional and communication aspects that are appropriate to the age stages they are going through (Dwi, 2018).

In research conducted by Abdul (2018) using 91 respondents among elementary school students aged 10-12 years. The results of the research can be shown that there are 6 people in the social interaction abilities of Ungaran elementary school students in the low category(6.6%). Social interaction skills can be referred to as socially acceptable behavior so that they can help social interactions become positive. (Gresham, 2019). Several researchers can show that the development of social interaction skills tends to be more susceptible to student attitudes at school (Fabes, 2019).

## RESEARCH METHODS

The type of research used in this research is correlational using a cross-sectional approach, because this research is to identify whether there is a relationship between independent and dependent variables by using a questionnaire to collect data which is only carried out once and at the same time. Population in this study there are 97 students in grades 4, 5 and 6 at SDN Mojorejo 02 Batu City. The sample in this study was 50 who met the inclusion and exclusion criteria for inclusion criteria, were 10-12 years old and had gadgets. Meanwhile, the exclusion criteria are students who are not present at the time of distributing with questionnaire. After the sample meets the criteria, then use the stratified random sampling technique and calculate using the Slovin formula. The independent variables of this research are the intensity of gadget use and the dependent variable is social interaction. The location of this research is SDN Mojorejo 02 Batu City.

## RESULTS



This research was carried out for approximately one month, starting with the permitting process and data collection. Data collection in the research was collected directly where respondents were asked to fill out with a questionnaire. The data obtained was then processed using SPSS and presented in the form of frequency tables and tabulations. The results of the research can be described as follows: Respondent Characteristics According to Gender Table 1.1 Frequency Characteristics According to Gender Based on table 1.1 it is known that out of 50 respondents the number of male students at SDN Mojorejo 02 Batu City has 27 more children.with percentage (52%).

**a. The age Characteristics of Students at SDN Mojorejo 02 Batu City**

Age	Frequency (F)	Presentation (%)
10 Years	22	46%
11 Years	15	30%
12 Years Result	13	24%
	50	100%

Based on table 1.2 above can be concluded that of the 50 respondents aged 10 years, the age with the largest number was 22 children with a percentage (46%).

**b. The Level Characteristics according to Student Class at SDN Mojorejo 02 Batu City**

Class	Frequency (F)	Presentati on (%)
4 <sup>th</sup> Grade	16	32%
5 <sup>th</sup> Grade	18	36%
6 <sup>th</sup> Grade	16	32%
Result	50	100%

Based on table 1.3 above, it can be concluded that of the 50 respondents, class 5 is the class with the most children, with 18 children in percentage (36%).

Data analysis was carried out on two variables using Spearman's Rank to test.

The relationship between the intensity of gadget use and social interaction at SDN Mojorejo 02 Batu City. The results of the Spearman Rank correlation test obtained a significant value (Sign.) = 0.05 (p value < 0.005), meaning that H0 was rejected and H1 was accepted, meaning that there was a relationship between the intensity of gadget use and social interaction during the pandemic at SDN Mojorejo 02 Batu City. The results of the Spearman Rank analysis also show a correlation coefficient value of 0.395, which means that the relationship between the intensity of gadget use and social interaction at SDN Mojorejo 02 Batu City is positive but has a fairly strong relationship.

**DISCUSSION**

In theory, Rozalia (2017) states that good use of gadgets for children aged 10-12 years is 2 hours/day because if they use gadgets excessively it can cause children to lose time and enthusiasm for studying or playing with their friends. According to research conducted by (Saputri 2018), which explains that the use of gadgets is generally used by children to watch



animations, play games and then use a little time as a learning medium, furthermore, the use of gadgets varies greatly depending on the control and supervision of parents., which can have a negative impact on children in the form of making it difficult to get along with peers, society, the environment, and causing individualism in children. So the child has an addiction that is difficult to control, it can affect the performance of the child's brain so that the child will have difficulty developing due to playing games for too long.

According to Dewi's (2020) research entitled, it is stated that the impact of the COVID-19 pandemic on online learning in elementary schools can be carried out well. Learning that is usually done at school can now be done at home using several types of applications such as class rooms, zoom meetings, Google forms, or via the Whatsapp application. Distance learning or working from home can reduce the risk of spreading the COVID-19 virus and is in accordance with the regulations issued by the Ministry of Education and Culture for studying online or studying from home.

According to the researchers' assumptions, by carrying out this research, the large number of gadget uses among students at SDN Mojorejo 02 Batu City is frequent and carried out continuously for a relatively long time, around 5-7 hours/day. Normally elementary school children use gadgets no more than 2 hours a day. The use of gadgets itself not only has a positive impact on children but can have a negative impact, but there are negative impacts that can arise from the habits of school-aged children when using gadgets, namely that they can divert children's lives. The impact of playing with gadgets is that it can disrupt fine motor nerves, hinder the development of social interactions in children, cause radiation hazards caused by gadgets, and make it difficult to sleep. In theory, Walgito (2018) states that social interaction is a relationship between one individual and another, one individual can influence another individual or vice versa, so that there is a reciprocal relationship.

This can occur between individuals and individuals, individuals and groups or groups and groups. According to research conducted by Wahyuni (2017), children's social interactions are influenced by parenting patterns by parents at home, relationships with peers, and other factors such as the child's living environment in the form of a house which is related to the parents' choice of parenting style. The school environment and the influence of the culture where the child lives. Meanwhile, according to Puspita (2019), explains that when taking part in learning, children have difficulty interacting with their friends, they don't care about their surroundings and prefer to be alone, and if they interact with their friends it is only limited to the friends next to them, they don't have the confidence to interact. with friends, and tend not to dare to speak in front of the class in front of their friends and teachers.

According to the researchers' assumptions, in this study the results also showed that 70% of children never interacted with family, peers and the surrounding environment, supported by questionnaire data. Social interaction in school-age children is very important for the child's development, social interaction can also improve the relationship between the child and the environment and with peers. When school-aged children enter the world of education, children will begin to interact more with their peers. Where they start working together with friends, are able and can respect friends and family.

The results of the distribution of respondents regarding playing gadgets with the social



interaction of children aged 10-12 years (at SD Mojorejo 02, Batu City) can be seen in the results of statistical tests using the Spearman rho test, which obtained a p value of  $0.004 < 0.05$ , so it can be concluded that there is a relationship between intensity of use. gadgets with social interaction for children aged 10-12 years at SDN Mojorejo 02 Batu City.

According to Fadila (2019), there are several factors that influence elementary school children in using gadgets. These factors include: Advertising that is rampant in the world of television on social media, gadgets displaying attractive features, sophistication of gadgets, the environment, social factors, personal factors. According to Partowisastro (2018) social interaction is a social relationship that functions to establish various types of dynamic relationships, whether the relationship is between individuals, groups and groups, or individuals and groups. Soekanto (2018) stated that social interactions are dynamic social relationships, which include relationships between individuals, between human groups, and between individuals and human groups. According to Sarwono and Meinarno (2018) social interaction is a reciprocal relationship that influences each other between individuals and other individuals, individuals and groups, and groups and other groups.

The frequency of social interactions at SDN Mojorejo 02 for grades 4, 5 and 6 is high and is caused by several factors, namely: Students rarely tell their families (father, mother or older siblings) about their activities while at school. Students about to go to school or play, rarely say goodbye to family members at home. Students rarely greet teachers and friends from different classes at school. Communication between families is also a bit hampered because children do not share stories when they are at school, so parents cannot understand or relate to their children's conditions and situations while they are at school. So parents can also play an active role in asking their children what they are doing while they are at school, or just helping them with their homework. Social interaction is also very important if it is not done, because it can cause excessive worry for parents, and what is feared is if the child says goodbye to school but they are not at school. Rarely greeting or communicating between friends and teachers can also cause the child to become a child who does not understand the surrounding environment or the situation in the school environment.

The relationship between the intensity of gadget use and social interaction during the pandemic at SDN Mojorejo 02 Batu City, students at SDN Mojorejo 02 Batu City are more likely to play with gadgets when at home, communication between families is slightly hampered due to excessive use of gadgets. Children aged 10-12 years (grades 4, 5 and 6), based on preliminary studies that have been conducted in the research environment, the majority of children aged 10-12 years gather and play games without parental supervision, so these children do not interact with the environment. Then, in conditions at home, sometimes children are indifferent and too focused playing with gadgets so that children are less likely to communicate and open up to family members at home.

Based on the calculations above, the results of this research on students in classes 4, 5, 6 at SDN Mojorejo 02 showed that the relationship between the two variables in this research was correlated. So, students at SDN Mojorejo 02 have a high frequency of gadget use in grades 4, 5 and 6 and are caused by several factors, namely: More gadget use.3 hours so it can cause addiction, vision problems, sleep disorders. The use of gadgets cannot be controlled, which



causes children to prefer playing with gadgets and playing online games. Before going to bed, you always use gadgets, which affects your rest pattern which should be used to get enough rest for activities the next day

## CONCLUSION

Based on the results and discussion in this research, it can be concluded that: Most of the respondents' intensity of gadget use was in the frequent category at SDN Mojorejo 02, Batu City. Most of the social interaction respondents were in the poor category at SDN Mojorejo 02 Batu City. The research results show that there is a relationship between the intensity of gadget use and social interaction during the pandemic at SDN Mojorejo 02, Batu City.

## REFERENCES

- Alo Dokter. (2020). Berapa Jam Waktu Ideal Anak Gunakan Gadget Setiap Hari [Serial Online] <https://www.alodokter.com/berapa-jam-waktu-ideal-anak-gunakan-gadget-setiap-hari> (Diakses tanggal 09 September 2022)
- Alo Dokter (2021). Tahap Perkembangan Anak Usia 10-12 Tahun [Serail Online] (<https://www.halodoc.com/artikel/tahap-perkembangan-anak-usia-10-12-tahun>) (Diakses tanggal 09 September 2022). *Verywell Family*. Diakses pada 2021. *10-Year-Old Child Development Milestones*.
- Amri, Muhammad Iqbal Ulil, Reza Syehma Bahtiar, and Desi Eka Pratiwi. "Dampak penggunaan gadget terhadap kemampuan interaksi anak sekolah dasar pada situasi pandemi Covid-19." *Trapsila: Jurnal Pendidikan Dasar* 2.2 (2020): 13-23.
- Feldman, R.S. *Understanding Psychology*. New York: Mc Graw Hill Publishing
- Fitrianis, Elza, and Yaswinda Yaswinda. "Hubungan Durasi Waktu Penggunaan Gadget Terhadap Interaksi Sosial Anak Usia Dini." *Jurnal Pelita PAUD* 4.2 (2020).
- Ningsih, Warti, Muhammad Sowwam, and Dian Retno Pratiwi. "HUBUNGAN PENGGUNAAN GADGET TERHADAP KEMAMPUAN INTERAKSI SOSIAL SISWAKELAS 5 & 6 SDN 1 PELEMGADUNG, KARANG MALANG." *Jurnal Keperawatan CARE* 12.1 (2022) (Sosial et al.,
- Fatimatuzzahro. "Pengaruh penggunaan handphone terhadap interaksi sosial santri putri di pondok pesantren Miftahul Huda IV Mojosari Kabupaten Malang." *Jurnal Pendidikan Edutama* 9.1 (2022): 183-192.
- SAPUTRA, RIZKI, Jaji Jaji, and Eka Yulia Fitri Y. *HUBUNGAN PENGGUNAAN SMARTPHONE TERHADAP INTERAKSI SOSIAL PADA REMAJA*. Diss. Sriwijaya University, 2021.
- Syaiful Bahri Djamarah, *Pola Komunikasi Orang Tua & Anak Dalam Keluarga Jakarta*: Rineka, Cipta, 2004.
- Uswanda, Desi. *Hubungan Antara Intensitas Penggunaan Smartphone Dengan Interaksi Sosial Pada Siswa Kelas 12 SMA Dharma Wanita Surabaya Di Masa Pandemi*. Diss. Universitas 17 Agustus 1945 Surabaya, 2021.
- Wahida, Nur. 2004 *Pola Komunikasi Dalam Keluarga*. Jurnal Musafa, 201.
- Wakhid, Abdul, Nila Sari Andriani, and Mona Saparwati. "Kemampuan Interaksional Siswa Usia 10-12 Tahun Diungaran." *Jurnal*





*Keperawatan Jiwa (JKJ): Persatuan Perawat Nasional Indonesia 5.2* (2019): 87-90.  
Witarsa, R., Hadi, R. S. M., Nurhananik, N., & Haerani, N. R. (2018). Pengaruh penggunaan gadget terhadap kemampuan interaksi sosial siswa sekolah dasar. *Pedagogik*

