

The Effect of Gadget on Mental Health Status and Social Interactions in Students at Public Junior High School 3 Pekuncen, Pekuncen Sub-District, Banyumas Regency

Panca Wahyu Safitri¹, Devita Elsanti²

^{1,2}Faculty of Health Sciences, Universitas Muhammadiyah Purwokerto, Indonesia

ARTICLE INFO

Article history:

DOI:

[10.30595/pshms.v3i.621](https://doi.org/10.30595/pshms.v3i.621)

Submitted:

Sept 28, 2022

Accepted:

Nov 27, 2022

Published:

Dec 28, 2022

Keywords:

Effect of gadgets, Social Interaction, Mental Healty, Adolescents

ABSTRACT

Background: Technology is growing rapidly in accordance with the times, especially gadgets that are designed to be complete and easy to carry, the type of gadget that is commonly used is usually a mobile phone. However, there are many negative impacts that arise in the use of gadgets for adolescents that can interfere with adolescent mental health and social interaction in adolescents. Social interaction is a relationship between individuals and groups that occurs because of social contact and communication. Objective: To analyze the effect of gadgets on mental health status and social interaction among students at public junior high school 3 Pekuncen. Methods: the research sample was 82 respondents who were taken using proportional random sampling technique. In study, three different types of questionnaires were used which were measured using an ordinal scale. Data processing in this study used the Chi-Square test. Results: Based on the results of the study, the p-values were 0,003 and 0,007. From these results it can be seen that the p-value is less than 0.05, which means that there is an effect of the gadget on mental healty status and the influence of the gadget on social interaction in students at public junior high school 3 Pekuncen. Conclusion: There is an effect of gadgets on mental health status and social interaction in students at public junior high school 3 Pekuncen.

This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).



Corresponding Author:

Devita Elsanti

Faculty of Health Sciences, Universitas Muhammadiyah Purwokerto,

Soepardjo Rustam Street KM. 7, Banyumas, Indonesia

Email: elsanti.devita@gmail.com

1. INTRODUCTION

Mental health according to World Health Organization (WHO) is a state of well-being in which an individual, as well as coping with adverse situations in life, is able to work and is able to contribute to society. Instilling about children's mental health is very important to do from an early age. Because at the adult level, the child's way of thinking is more likely to be influenced by the mentality that the child at that time had (Desi et al., 2020). Stuart (2016) says adolescence is a typical developmental process, significant changes that occur during adolescence occur in physical, cognitive, and emotional states that can cause stress conditions and lead to unique behaviors (Stuart, 2016). The development of technology now makes children's mental health very disturbed. According to researchers (Hasanah (2017) Ratih et al., 2020) the influence of gadgets on children's mental status, among others, children avoid socializing with the environment, tend to choose poor relationships

with parents, get bored easily, and cannot concentrate on activities. Nowadays, the use of gadgets does not only come from the workers. But almost all people, including children and toddlers, have used gadgets in their daily activities. The negative impact of the habit of using gadgets is that it makes children reduce their concentration in learning, decreases in social skills, causes health problems, hampers children's cognitive development, impacts on children's behavior (Marapung, 2018). Childhood is a period of rapid development and also a period where changes occur in various aspects, ranging from psychological, physical, academic, and social aspects (Ratih et al., 2020). The phenomenon that is happening right now, in the midst of a pandemic season like now, children spend a lot of time playing gadgets, starting from online learning, playing games, and even interacting with other people and peers using gadgets more often than meeting and playing directly. Children with gadget addiction often have irregular eating patterns, get emotional easily, find it difficult to concentrate, decline academic grades, find it difficult to fall asleep, and like to talk or laugh alone (Royke et al., 2021). Data from WHO shows that 450 million people worldwide experience mental disorders, 20% of which prevalence occurs in children (O'Reilly et al. (2015). Based on Basic Health Research (2018) in 2018 shows that the percentage of emotional mental disorders in Indonesians aged over 15 years has increased from 2013. In 2013 the prevalence of emotional mental disorders in 2013 in Indonesia was 6% while in 2018 it was 9.8%. at risk for emotional and behavioral problems.

The purpose of this study was to analyzing the influence of gadgets on mental health status, and social interaction among students at public junior high school 3 pekuncen.

2. RESEARCH METHOD

This research is quantitative research that is correlational (tests the relationship/influence) between causal factors and effect factors with the number of research respondents as many as 82 students of public junior high school 3 Pekuncen takes using the Proportional Random Sampling formula. In this study, 3 different types of questionnaires were used, namely questionnaires on the use of mobile media, social interactions and mental health which were measured using an ordinal scale. Data processing in this study used the Chi-Square test

3. RESULT AND DISCUSSIONS

3.1 Univariat

Table 1. Characteristics of Respondents (n=82)

| Characteristics of respondents | n | % |
|--------------------------------|----|------|
| Gender | | |
| Female | 38 | 46,3 |
| Male | 44 | 53,7 |
| Age (Years) | | |
| 12 | 31 | 37 |
| 13 | 12 | 14,6 |
| 14 | 13 | 15,9 |
| 15 | 20 | 24,4 |
| 16 | 6 | 7,3 |
| Class | | |
| Class 7 | 30 | 36,6 |
| Class 8 | 25 | 30,5 |
| Class 9 | 27 | 32,9 |
| Effect device | | |
| Low | 32 | 39,0 |
| High | 50 | 61,0 |
| Mental health status | | |
| Low | 40 | 48 |
| High | 42 | 51,2 |
| Social interaction | | |
| Low | 29 | 35,4 |
| High | 53 | 64,6 |

The results of the univariate analysis obtained result, it shows that the sample based on female gender is 38 students and male is 44 students,, then the sample based on the age of 12 years is 31 students. 13 years old are 12 students, 14 years old are 13 students, 15 years old are 20 students, 16 years old are 6 students. Based on the table above, it shows that the educated sample or grade 7 is 30 students, grade 8 is 25 students, and grade 9 is 27 students. From the table above, it mostly shows that the level of use of gadgets in students at *public junior high school 3 Pekuncen* is high at 50 students, and low is 32 students, then the level of high mental

health status is 42 students, and low are 40 students. From the table above shows that students in *public junior high school 3 Pekuncen* high by 53 students and low as many as 29 students.

3.2. Bivariat

Table 2. The Effect of Devices on Mental Health Status and Social Interactions

| Mental health status | Effect device | | | | | | OR | P value |
|----------------------|---------------|------|------|------|-------|-----|------------------------|---------|
| | Low | | High | | Total | | | |
| | N | % | N | % | N | % | | |
| Low | 9 | 28,1 | 31 | 62,0 | 40 | 100 | 0.240 (0.092-0.626) | 0.003 |
| High | 23 | 71,9 | 19 | 38,0 | 42 | 100 | | |
| Social interaction | N | % | N | % | N | % | OR | P value |
| Low | 11 | 34,4 | 33 | 66,0 | 44 | 100 | 0.270 (0,106-0.687) | 0.007 |
| High | 21 | 65,6 | 17 | 34,0 | 38 | 100 | | |

3.3 The Effect of Devices on Mental Health Status

Based on the results of the study using the chi-square test with a p-value of 0.003 from these results, it can be seen that the p-value <0.05, which means that there is an. Teenagers are currently faced with technological advances that continue to innovate. Either directly or indirectly, technological advances can affect the development of behavior and personality and adolescents are very vulnerable to the risks posed.

If they don't get the right understanding, then they will take advantage of technological advances in unnatural behavior. The rapid development of technology and its exposure to adolescents is a video game that can affect the mental and emotional development of adolescents. Action video games such as fighting/warfare, reflex speed, so that there will be an increase in emotions resulting in more aggressive behavior. Based on research conducted by Shalan et.al (2021) in the title "An educational study on gadget addiction and mental health among gen z" influence of gadgets on mental health status in students at *public junior high school 3 Pekuncen*. According to research conducted by Lintang et.al (2020) the highest level of emotional development of respondents is in the interpretation of abnormal values as much as 64,8% shows that p = 0.000 and contributes to an increase in mental health disorders by 10.2%, which means that when the level of anxiety increased by one unit, the gadget trend rate also increased by 0.295 units.

3.4 The Effect of Devices on Social Interaction

Social interaction for a teenager is very important, considering that at the age of teenagers they are still in the stage of adjusting to the environment in order to become a healthy person. Considering in the period of adolescent development, at this age adolescents are faced with the environment, with free association for it is important for a teenager to choose the right association.

Teenagers can be said to be a difficult time to start interacting with new people, but teenagers can also immediately have close relationships if there is an intense relationship. This research has been conducted chi-square test to determine the effect of the device on social interaction, based on the results of the sci-square test obtained a value of 0.007 which means that there is an effect of the device on social interaction in students at *public junior high school 3 Pekuncen*. This study is in line with research conducted by Dindin (2019) entitled "The influence of gadgets on students' social interaction and communication patterns" that students' laziness in social activities is 81.81%. So that researchers can conclude that the need to interact in adolescents is very important to build self-concept for survival, self-actualization, to obtain happiness, avoid pressure through entertaining communication and can foster relationships with others. The desires that arise make teenagers have to interact with various people, by interacting it will make it easy for teenagers to socialize, make new friends, attract the attention of the opposite sex, and it is not uncommon for teenagers to be willing to join a community to become popular. According to Harrocks and Benimoff (in Hurlock 2011) peer groups provide a world where young people can socialize in an atmosphere where the prevailing values are not the values set by adults but by their peers. This research is strengthened by research by Annisa et.al (2020) which says that there is an influence between the intensity of playing games on social interaction is 0.256, with a p value = 0.000

The limitations of this research are in the way of determining the age of the respondents and the data collection process because they are related to educational institutions.

4. CONCLUSION

The results of this study were dominated by male as many as 44 students (53.7%), most of the 12 year old students were 31 students (37.8%), the highest level of education was in grade 7 as many as 30 students (36.6%). The effect of gadgets on mental health status showed that the use of gadgets had an effect on student mental health status of (71,9%). From the results of the analysis of the effect of gadgets on social interaction, the result is (66%) which means that there is an influence between the use of gadgets and social interaction.

REFERENCES

- Desi, D. D., Jacob, M. Y., & Pilakoannu, R. T. (2020). Status Kesehatan Mental Dan Program Kesehatan Mental Anak Sekolah Dasar Di Halmahera Utara. *Jurnal Keperawatan Muhammadiyah*, 5(1), 1–7.
- Dini, U. (2017). *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini Analisis Penggunaan Gadget terhadap Kemampuan Interaksi Sosial*. 1(1), 1–11.
- Effendi Ahmad junaidi budi prihanto. (2014). *Pengaruh Penggunaan Teknologi Informasi Terhadap Aktivitas Fisik Siswa (Studi pada SMK Negeri 8 Surabaya Kelas X)*. 2, 605–608.
- Hardani, H., Ustiawaty, J., Utami, E. F., Istiqomah, R. R., Fardani, R. A., Sukmana, D. J., & Auliya, N. H. (2020). Metode penelitian kualitatif & kuantitatif. Yogyakarta: Pustaka Ilmu.
- Hidayat, A. (2014). Metode penelitian kebidanan dan teknik analisis data.
- Hidayat, F., Hernisawati, H., & Maba, A. P. (2021). Dampak penggunaan gadget terhadap kepribadian anak sekolah dasar: studi kasus pada siswa 'X.' *Jurnal Humaniora Dan Ilmu Pendidikan*, 1(1), 1–13.
- Indra, I. (2013). Pengertian umur dan kategori menurut depkes. *Scribd, April*, 1.
- Irawan, E. P. (2013). Sosialisasi Pendamping Penggunaan Smartphone Terhadap Anak.
- Irawan, E. P. (2021). *Sosialisasi pendamping penggunaan*. 4(2), 123–131.
- Ivie, E. J., Pettitt, A., Moses, L. J., & Allen, N. B. (2020). A meta-analysis of the association between adolescent social media use and depressive symptoms. *Journal of Affective Disorders*, 275, 165–174.
- Judhita, C. (2011). Hubungan Penggunaan Situs Jejaring Sosial Facebook Terhadap Perilaku Remaja di Kota Makassar. *Jurnal Penelitian IPTEK-KOM*, 13(1), 1-23.
- Kwon, M., Kim, D., Cho, H., & Yang, S. (2013). *The Smartphone Addiction Scale: Development and Validation of a Short Version for Adolescents*. 8(12), 1–7.
- Lahiwu, R. J. C., Maramis, F. R. R., Kolibu, F. K., Kesehatan, F., Universitas, M., & Ratulangi, S. (2021). Hubungan Kebiasaan Penggunaan Gadget Dengan Status Mental Kecerdasan Emosional Pada Anak Sekolah di SD NEGERI 1 TAHUNA KABUPATEN SANGIHE. *Kesmas*, 10(2), 133–140.
- Marpaung, J. (2018). Pengaruh penggunaan gadget dalam kehidupan. *KOPASTA: Journal of the Counseling Guidance Study Program*, 5(2).
- Miraningsih, W., Sugiharto, D. Y. P., & Nusantoro, E. (2013). Hubungan Interaksi Sosial dan Konsep Diri dengan Perilaku Reproduksi Sehat Siswa. *Indonesian Journal of Guidance and Counseling: Theory and Application*, 2(2).
- Ninah. (2017). Informed Consent Penelitian. *Informed Consent*, 4(1), 1–16. https://id.scribd.com/embeds/359310937/content?start_page=1&view_mode=scroll&access_key=key-fFexxf7r1bzEfWu3HKwf
- Nursalam, S. P., & Sri, U. (2011). Konsep dan penerapan metodologi penelitian ilmu keperawatan: pedoman skripsi (Doctoral dissertation, Doctoral dissertation, Tesis, dan Instrumen Penelitian Keperawatan. Jakarta: Penerbit Salemba Medika).
- Notoatmodjo, S. (2012). Metodologi penelitian kesehatan.
- Novitasari, W., & Khotimah, N. (2016). Dampak penggunaan gadget terhadap interaksi sosial anak usia 5-6 tahun. *Jurnal PAUD Teratai*, 5(3), 182-186.
- Rajab, A. M., Zaghoul, M. S., Enabi, S., Rajab, T. M., Al-Khani, A. M., Basalah, A., Alchalati, S. W., Enabi, J., Aljundi, S., Billah, S. M. B., Saquib, J., AlMazrou, A. R., & Saquib, N. (2020). Gaming addiction and perceived stress among Saudi adolescents. *Addictive Behaviors Reports*, 11(January).
- Pebriana, P. H. (2017). Analisis penggunaan gadget terhadap kemampuan interaksi sosial pada anak usia dini. *Proceedings homepage*: <https://conferenceproceedings.ump.ac.id/index.php/pshms/issue/view/18>

- Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini, 1(1), 1-11.
- Ratih, D., Ragil, A., Sokaraja, N. P., & Sokaraja, N. P. (2020). *Jurnal Keperawatan Muhammadiyah Hubungan Peran Pengawasan Orang Tua Dan Kecanduan Gadget Dengan Kemampuan Interaksi Sosial Pada Anak Usia Sekolah di SD Negeri 1 Pamijen Sokaraja*. September.
- Royke, A., Langingi, C., Mongkau, F. M., Tumiwa, F., Akbar, H., & Barat, M. (2021). *Penggunaan Gadget Pada Kesehatan Mental Relationships The Role Of Family In Avoiding The Negative Impact Of Gadget Using On Mental Health School Age Children In Dulangon Village , Kecamatan Lolak*. 4(1), 11–19.
- Saryono, A. (2010). *Metodologi penelitian kualitatif dalam bidang kesehatan*. Yogyakarta: Nuha Medika, 98-99.
- Sari, I., & Susanti, A. Y. (n.d.). *Hubungan paparan gadget dengan perkembangan emosional pada anak usia remaja kelas VII dan VIII SMP Negeri 04 Pontianak Timur*. 30–40.
- Sugiyono. (2020). *Metode Penelitian Kualitatif*. *Jurnal Penelitian Humaniora*, 18(1), 9.
- Sugiyono, M. (2012). *Metode Penelitian Kuantitatif, Kualitatif, dan Kombinasi*. Bandung: Alfabeta.
- Sugiyono, D. (2013). *Metode penelitian pendidikan pendekatan kuantitatif, kualitatif dan R&D*.
- S., Govindaraj, Y. D., Ramli, S., & Yusop, Y. M. (2021). *An Educational Study on Gadget Addiction and Mental Health among Gen Z*. *Creative Education*, 12(07), 1469–1484.
- Tatminingsih, S. (n.d.). *The Impact Of Ict Use On Early-Age Children Behavior : A Case Study Of 4-7 Years Old Dampak Penggunaan TIK Terhadap Perilaku Anak Usia Dini : Studi Kasus Pada Anak Usia 4-7 Tahun*.
- Wahyuni, A. S., Siahaan, F. B., Arfa, M., Alona, I., & Nerdy, N. (2019). *The relationship between the duration of playing gadget and mental emotional state of elementary school students*. *Open Access Macedonian Journal of Medical Sciences*, 7(1), 148–151.