

The Impact of Gadget Use on Early Childhood in Suci Village, Manyar Sub-district

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ABSTRACT

The rapid development of gadgets has a significant impact on young children, which can lead to delays in their developmental stages. This research aims to understand the effects of gadget usage on young children. The research was conducted using a qualitative method, with the subjects being young children in the Suci, Manyar District, Gresik village. Data for the research was gathered through observation, interviews, and documentation. The research results revealed that the impact of gadget usage on young children in the village of Suci has both positive and negative effects. The positive effects include facilitating communication, increasing knowledge, enhancing creativity, and aiding in children's creativity and intelligence development. On the other hand, the negative effects include the risk of radiation from gadgets, a decline in psychomotor skills, difficulties in adapting to learning materials, and a lack of self-control due to reduced social interactions.

Keywords: Gadget, Early Childhood, Young Children

INTRODUCTION

Early childhood education is a level of education preceding primary education, aimed at nurturing children from birth to six years of age (Susanto, 2017). Early childhood is a phase of life where each child is distinct, unique, and possesses characteristics that correspond to their age stage (Mulyasa, 2014). In daily life, the term technology is undoubtedly familiar. The advancement of technology and information has progressed rapidly, marked by advancements in the field of information and technology (Ismanto, 2015). Early childhood is no exception; for them, it represents a new aspect that they may not have encountered before. One such technology is gadgets, which are now closely linked with early childhood and have become engaging toys for them. Within these gadgets, there are numerous video games, such as Playstations, online games, and open-platform games, which have captivated and captured the hearts of children. Children who become too engrossed in



the games may neglect their surroundings. And, of course, these games can have an impact on a child's development.

وَلْيَخْشَ الَّذِينَ لَوْ تَرَكُوا مِنْ خَلْفِهِمْ ذُرِّيَّةً ضِعَافًا خَافُوا عَلَيْهِمْ فَلْيَتَقُوا اللَّهَ وَلْيَقُولُوا قُوْلًا سَدِيدًا (٩)

And let those who, if they were to leave behind weak offspring, be mindful of Allah SWT and fear for their welfare. Therefore, they should have taqwa (God-consciousness) of Allah SWT and speak truthful words.

Children who frequently use gadgets often forget their surroundings and prefer to play using gadgets rather than playing with friends in their environment. The impact can be both positive and negative depending on how parents or adults introduce and limit the use of gadgets.

For children under 5 years old, it's okay to give them gadgets, but the duration of usage should be observed. For example, they can play only for half an hour and only during leisure time. Introduce gadgets once a week, for instance, on Saturdays or Sundays. Beyond that, they should continue to interact with others. Because if gadget usage exceeds 2 hours per day, it will affect a child's psychological well-being (Feliana, 2016).

Initially, gadgets were mainly focused on being communication tools. However, with technological advancements, these devices have become sophisticated with various features inside, allowing them to be used for various activities. They can be used for making calls, sending messages, emails, taking selfies or photos of objects, telling time, and much more. According to Garini as cited in Rohman (2017: 27), a gadget is a small electronic device that has many functions.

Gadgets (Smartphones) have numerous functions for users, making them more convenient. Gadgets (Smartphones), or simply mobile phones that now have various features and functions that are increasingly complex to facilitate their use, are a new breakthrough from previous mobile phones. According to Derry (2013), gadgets are electronic devices or instruments that have practical purposes and functions to assist human tasks. Meanwhile, according to Fajrin (2015), gadgets provide a means for individuals to engage in social interactions, particularly for social contacts and communication. It is easy to interact with others using gadgets; one can easily communicate. Anyone can use gadgets for any purpose depending on the owner's needs. Gadgets are used by many individuals, from young children to adults. Adults commonly use gadgets for communication, information search or browsing, YouTube, gaming, and more. On the other hand, the use of gadgets by young children is typically limited to learning, playing games, and watching animations. The usage patterns can vary in terms of duration and intensity between adults and children.

METHOD

The method used is qualitative research. The study was conducted in Suci Village, Manyar Subdistrict, Gresik Regency, targeting early childhood. The reason for using qualitative research is to understand phenomena based on participants' opinions or internal perspectives, rather than the researcher's own opinions or external perspectives (Perspective etic) (Sugiono, 2017). Data collection techniques include interviews, participant observation, and documentation. The collected data consists of interview notes with parents or families, observation notes, and documentation results.

The collected data was analyzed using the Miles and Huberman data analysis model. The researcher analyzed the data during the data collection process and continued collecting data after completion. During interviews with participants, the researcher analyzed the participants' responses. Data analysis was conducted interactively and continuously until saturation point was reached, meaning no new information was obtained.

The steps used to analyze the data included gathering data using a combination of observation, interviews, and documentation regarding the impact on early childhood due to gadget use. The data was summarized, essential and important information was extracted, and then presented in narrative form for better understanding. Finally, the researcher drew conclusions and verified them (Sugiono, 2019).

RESULT AND DISCUSSION

Gadgets are practical communication tools, both among children and adults. The use of gadgets among young children impacts their users, whether positive or negative. Therefore, the use of gadgets by young children should be limited to a specific timeframe and closely supervised by parents. The role of parents is crucial as figures to accompany, monitor, and guide gadget usage to ensure it benefits early childhood development.

It is often seen that parents buy sophisticated gadgets with models that match their children's preferences. Working parents use gadgets to monitor activities and communicate with their children at home, while stay-at-home



mothers buy gadgets to divert their children's attention and not disrupt their household chores. Initially, their intentions succeed for communication and distraction purposes. However, over time, children will become bored and more active in exploring other features and more appealing applications. From this point, children will become more focused on their gadgets and gradually withdraw from their play activities. They become more individualistic and less sensitive to their surroundings.

Excessive gadget use will have negative consequences for children. Children who spend too much time with gadgets may become more emotional and rebellious, feeling disturbed when playing games. They may need to be more active in performing daily routines, and even need to be fed while using their gadgets. More concerning is when they no longer pay attention to their surroundings, avoid interacting with older people, and disregard others around them.

Based on the research findings on the impact of gadget use among young children through interviews, observations, and documentation, the following points are highlighted:

Positive Impact of Gadget Usage

Being introduced to gadgets at an early age, we as parents are also participating in introducing the advancing technology. With the development of science and technology, it greatly influences a child's lifestyle, both in terms of critical thinking patterns and behavior. Moreover, gadgets have many educational applications available for children, which can train brain development and assist in the learning process for young children.

"...with the gadget, my child can easily learn English and Arabic songs along with their gestures..." (quote from HA's interview)

"...smartphones help me teach letters and numbers through playful guessing games..." (quote from MS's interview)

1. Stimulating the Child's Creative Thinking Stimulating a child's creativity can be a positive impact of gadgets, especially when balanced with producing some form of creative work. As technology advances, several applications can train the balance between a child's left and right brain hemispheres, further enhancing their creative abilities.

"...my child plays puzzle games and other activities with the phone, making it easy and no need to buy toys..." (quote from BS's interview)

2. Assisting in Developing Motor Skills One of the positive impacts of gadget usage is that it can enhance a child's motor development. The majority of activities tend to focus on fine motor development. This is evident as the

dominant movements involve the use of finger muscles and eyes, such as sliding objects, reading, scribbling, or writing on the screen. The child's focus and concentration are directed solely toward the screen.

3. As a Communication Medium With the existence of gadgets, it widens the circle of friendships for young children, as it is important to introduce them to communication from an early age. According to Nurrachmawati (2014), young children should also be encouraged to communicate, and it is not unlikely that if something important arises, a child can contact their parents or anyone else through gadgets.

"...I can contact my child when they are with their caregiver while I am at work; sometimes my child even calls me first. So, for me, gadgets are very important for children..." (quote from FA's interview)

From the positive impacts of gadget usage identified by the researchers, it aligns with what Education experts suggest (in Maulida, Hidayahti: 2013), "It is recommended to introduce a child to the functions and use of gadgets at the age of six. At that age, a child's brain development increases by 95% compared to that of an adult's brain. This is because, if gadgets are introduced before age six, children tend to play more due to their attraction to various visuals (images) and sounds found in gadgets."

In addition to the positive impacts of gadgets on children, there are negative effects that parents or adults must also consider regarding gadget usage.

Negative Impacts of Gadget Usage

1) Health Impacts

Gadgets have various negative health impacts on young children, including damaging eyesight, altering posture, causing facial skin sagging, disrupting hearing, and affecting sleep patterns.

"...my child doesn't pay attention to time while playing on the phone; when I take the phone away, they cry, and they don't respond when called..." (quote from interview with RA)

2) Lack of Socialization

Children often prefer playing with their gadgets over interacting with peers. It is not uncommon to witness children struggling with concentration due to their minds being preoccupied with the virtual world. (Ameliola & Nugraha, 2013)

"...mostly looking at gadgets, playing games inside it, so when I ask them to play with their friends, they refuse and choose to use their phones..." (quote from interview with DF)





3) Violent Behavior

Children are natural imitators, and what they see is likely to be imitated, whether good or bad. Similarly, gadget use can lead to violent behavior due to exposure to aggressive content.

"...they often play war games and hit their siblings, saying they're imitating superheroes from the game..." (quote from interview with RA)

4) Disrupting Brain Development

In early childhood, a child's brain grows rapidly. Brain development continues until around the age of 21 and is influenced by environmental stimulation. Excessive gadget use in children can lead to negative impacts such as cognitive delays, tantrums, and a decline in their ability to become independent.

5) Dependency on Gadgets

Another negative impact of gadgets on children is the emergence of dependency. Excessive gadget use can lead to a strong reliance on them, adversely affecting physical and motor development.

Based on interviews, observations, and documentation, it is evident that gadget usage significantly impacts children's development and activities, both positive and negative. In this context, the role of parents or adults is crucial, as they are the first educators during a child's formative years. Monitoring and limiting gadget use are essential to prevent children from misusing them for inappropriate content. Parents must provide guidance and explain the consequences of gadget usage, as the negative impacts can outweigh the positive ones if misused.

CONCLUSION

Parents' perception of the impact of gadget usage is generally positive. They know that providing gadgets to children from an early age significantly influences their future development. Parents understand the importance of setting limits on gadget usage but also recognize the value of allowing children to learn and interact through gadget use. Parents need to choose age-appropriate and suitable applications for their children, manage the duration of gadget usage, and set a good example in its use.

REFERENCE

Angtoni, M., & Adjie, E. K. K. (2022). Hubungan Durasi Screen Time dengan Gangguan Tidur Anak Usia 6-12 Tahun di SDK Mater DEI Selama Pandemi Covid-19. Jurnal Pendidikan Dan Konseling (JPDK), 4(4), 4439–4443. Beauty Manumpil Yudi Ismanto Franly Onibala. (n.d.). Hubungan Penggunaan Gadget Dengan Tingkat Prestasi Siswa Di SMA Negeri Manado. Ejoural Keperawatan (e-Kep), 3, 6.

Blum-Ross, A., & Livingstone, S. (2018). The trouble with "screen time" rules.

- CHUSNA OKTIA ROHMAH. (2017). Pengaruh Penggunaan Gadget Dan Lingkungan Belajar Terhadap Minat Belajar Siswa Kelas Xi Kompetensi Keahlian Administrasi Perkantoran Smk Muhammadiyah 2 Yogyakarta. Skripsi, Fakultas Ekonomi, Universitas Negeri Yogyakarta.
- Derry, I. (2013). Bila Si Kecil Bermain Gadget: Panduan Bagi Orang Tua Untuk Memahami Faktor-Faktor Penyebab Anak Kecanduan Gadget. Bisakimia.
- Domingues-Montanari, S. (2017). Clinical and psychological effects of excessive screen time on children. Journal of Paediatrics and Child Health, 53(4), 333–338.
- Ferliana, J. M. (2016). Anak dan Gadget Yang Penting Aturan Main. Nakita.Grid.Id. http://nakita.grid.id/balita/anak-dangadgetyangpenting-aturan-main?page=2.%0A%0A
- Hale, L., & Guan, S. (2015). Screen time and sleep among school-aged children and adolescents: a systematic literature review. Sleep Medicine Reviews, 21, 50–58.
- Hinkley, T., Brown, H., Carson, V., & Teychenne, M. (2018). Cross sectional associations of screen time and outdoor play with social skills in preschool children. PloS One, 13(4), e0193700.
- Houghton, S., Hunter, S. C., Rosenberg, M., Wood, L., Zadow, C., Martin, K., & Shilton, T. (2015). Virtually impossible: Limiting Australian children and adolescents daily screen based media use. BMC Public Health. https://doi.org/10.1186/1471-2458-15-5
- Indrayani, T., & Choirunnisa, R. (2021). Penyuluhan dan Pelatihan tentang Bahaya Pornografi serta Intervensi Penerapan Aplikasi Parental Control Screen Time di Majelis Taklim Kecamatan Cengkareng Jakarta Barat. Journal of Community Engagement in Health.
- Istiqomah, S. N. (2019). Dampak Eksposur Screen Time terhadap Perkembangan Psikososial pada Anak-anak Prasekolah The Effect of Screen Time Exposure in Sleep Disorder and Obesity Level on Children. Journal Of Applied Health Research And Development.
- K. Kaye, L., Orben, A., A. Ellis, D., C. Hunter, S., & Houghton, S. (2020). The conceptual and methodological mayhem of "screen time." International Journal of Environmental Research and Public Health, 17(10), 3661.
- Kadita, F., & Wijayanti, H. S. (2017). Hubungan konsumsi kopi dan screentime dengan lama tidur dan status gizi pada dewasa. Journal of Nutrition College, 6(4), 301–306.
- Kemp, N., & Grieve, R. (2014). Face-to-face or face-to-screen? Undergraduates' opinions and test performance in classroom vs. online learning. Frontiers in Psychology, 5, 1278. https://doi.org/10.3389/fpsyg.2014.01278



- Kerai, S., Almas, A., Guhn, M., Forer, B., & Oberle, E. (2022). Screen time and developmental health: results from an early childhood study in Canada.
 BMC Public Health. https://doi.org/10.1186/s12889-022-12701-3
- Kesuma, Y. (2020). Effect of screentime during school from home. Conferences of Medical Sciences Dies Natalis Faculty of Medicine Universitas Sriwijaya, 2(1), 101–106.
- Konca, A. S. (2022). Digital Technology Usage of Young Children: Screen Time and Families. Early Childhood Education Journal. https://doi.org/10.1007/s10643-021-01245-7
- Kurniasanti, K., Firdaus, K., Christian, H., Wiguna, T., Wiwie, M., & Ismail, R. (2019). Internet screen time and related factors: Threat to adolescents in Indonesia. Makara Human Behavior Studies in Asia, 23(2), 152.
- Madinah, R. S., Laeto, A. Bin, & Putri, S. S. F. (2020). Hubungan Aktivitas Fisik dan Screen-time Smartphone dengan Kualitas Tidur Mahasiswa PSPD Fakultas Kedokteran Universitas Sriwijaya di Era Pandemi Covid-19. Sriwijaya University.
- Marchamah, D. N. S., Sudrajat, A., & Rahmatika, D. N. (2022). Use of Gadgets with Screen Time on Emotional Intelligence in The Digital Era in Middle Adolescence (15-18 Years). J-Kesmas: Jurnal Fakultas Kesehatan Masyarakat (The Indonesian Journal of Public Health), 9(2), 56–62.
- McCarthy, C. (2021, February). Need to revisit screen time? https://www.health.harvard.edu/blog/need-to-revisit-screen-time-2021020921912
- Mireku, M. O., Barker, M. M., Mutz, J., Dumontheil, I., Thomas, M. S. C., Röösli, M., Elliott, P., & Toledano, M. B. (2019). Night-time screen-based media device use and adolescents' sleep and health-related quality of life. Environment https://doi.org/10.1016/j.envint.2018.11.069
- Nurhanisah, Y. (2023). Orang Indonesia Betah Screen Time. https://indonesiabaik.id/infografis/orang-indonesia-betah-screentime
- Oflu, A., Tezol, Ö., Yalçın, S., Yıldız, D., Çaylan, N., Foto Özdemir, D., Çiçek, Ş., & Erat Nergiz, M. (2021). Excessive screen time is associated with emotional lability in preschool children.
- Oflu, A., Tezol, O., Yalcin, S., Yildiz, D., Caylan, N., Ozdemir, D. F., Cicek, S., & Nergiz, M. E. (2021). Excessive screen time is associated with emotional lability in preschool children. Archivos Argentinos de Pediatria. https://doi.org/10.5546/AAP.2021.106
- OKKY RACHMA, F. (2015). Hubungan Tingkat Penggunaan Teknologi Mobile Gadget Dan Eksistensi Permainan Tradisional Pada Anak Sekolah Dasar. Jurnal Idea Societa, 2(6), 1–33.
- Ozturk Eyimaya, A., & Yalçin Irmak, A. (2021). Relationship between parenting practices and children's screen time during the COVID-19 Pandemic in Turkey. Journal of Pediatric Nursing. https://doi.org/10.1016/j.pedn.2020.10.002

Putri, M.A., A. K., Supriyadi, S., Wijaya, M., & Pujihartati, S. H. (2021). SOCIAL CAPITAL TO CONTROL GENERATION Z'S SCREEN TIME BEHAVIOR. Jurnal Analisa Sosiologi. https://doi.org/10.20961/jas.v10i0.50485

Quispe, J. (2023). No Titleการบริหารจัดการการบริการที่มีคุณภาพใน โรงพยาบาลสังกัดกระทรวงสาธารณสุข. วารสารวิชาการมหาวิทยาลัยอีสเทิร์นเอเชีย, 4(1), 88–100.

- Radesky, J. S., & Christakis, D. A. (2016). Increased screen time: implications for early childhood development and behavior. Pediatric Clinics, 63(5), 827–839.
- Ramirez, E. R., Norman, G. J., Rosenberg, D. E., Kerr, J., Saelens, B. E., Durant, N., & Sallis, J. F. (2011). Adolescent screen time and rules to limit screen time in the home. Journal of Adolescent Health, 48(4), 379–385.
- Resly, I. V. (2019). Hubungan Screen Time Dengan Perkembangan Sosial Anak Usia Sekolah Di SD Negeri Wonosari Baru Gunungkidul. Universitas' Aisyiyah Yogyakarta.
- Roswita, R., Mulyono, S., & Sukihananto, S. (2023). Hubungan Pembatasan Screen Time Dengan Sedentary Behavior Pada Anak Usia Sekolah. JURNAL KEPERAWATAN RAFLESIA, 5(1), 1–8.
- Sanchez, M. A. (2020). College Students' Relationship Between Entitlement, Screentime, Smartphone Addiction and Academic Success. Texas A&M University-Central Texas.
- Sigman, A. (2012). Time for a view on screen time. Archives of Disease in Childhood, 97(11), 935–942.
- Simanjuntak, S. (2023). LITERATUR REVIEW: PENGARUH SCREEN TIME TERHADAP MASALAH PERILAKU ANAK. JURNAL KEPERAWATAN, 11(1), 64–80.
- Skalická, V., Wold Hygen, B., Stenseng, F., Kårstad, S. B., & Wichstrøm, L. (2019). Screen time and the development of emotion understanding from age 4 to age 8: A community study. British Journal of Developmental Psychology, 37(3), 427–443.
- Stiglic, N., & Viner, R. M. (2019). Effects of screentime on the health and wellbeing of children and adolescents: a systematic review of reviews. BMJ Open, 9(1), e023191.
- Susilowati, I. H., Nugraha, S., Alimoeso, S., & Hasiholan, B. P. (2021). Screen Time for Preschool Children: Learning from Home during the COVID-19 Pandemic. Global Pediatric Health. https://doi.org/10.1177/2333794X211017836
- Tamana, S. K., Ezeugwu, V., Chikuma, J., Lefebvre, D. L., Azad, M. B., Moraes, T. J., Subbarao, P., Becker, A. B., Turvey, S. E., & Sears, M. R. (2019). Screen-time is associated with inattention problems in preschoolers: Results from the CHILD birth cohort study. PloS One, 14(4), e0213995.
- Tang, S., Werner-Seidler, A., Torok, M., Mackinnon, A. J., & Christensen, H. (2021). The relationship between screen time and mental health in young people: A systematic review of longitudinal studies. In Clinical Psychology Review. https://doi.org/10.1016/j.cpr.2021.102021
- Twenge, J. M., & Campbell, W. K. (2018). Associations between screen time and lower psychological well-being among children and adolescents:



Evidence from a population-based study. Preventive Medicine Reports. https://doi.org/10.1016/j.pmedr.2018.10.003

- Utami, N. P., Purba, M. B., & Huriyati, E. (2018). Paparan screen time hubungannya dengan obesitas pada remaja SMP di Kota Yogyakarta. Jurnal Dunia Gizi, 1(2), 71–78.
- Veraksa, N., Veraksa, A., Gavrilova, M., Bukhalenkova, D., Oshchepkova, E., & Chursina, A. (2021). Short-and long-term effects of passive and active screen time on young children's phonological memory. Frontiers in Education, 6, 600687.
- Wong, C. W., Tsai, A., Jonas, J. B., Ohno-Matsui, K., Chen, J., Ang, M., & Ting, D. S. W. (2021). Digital screen time during the COVID-19 pandemic: risk for a further myopia boom? American Journal of Ophthalmology, 223, 333–337.