

LAMPIRAN

Lampiran 1 Surat Keterangan Pembimbing



UNIVERSITAS GALUH
FAKULTAS ILMU KESEHATAN
S1 KEPERAWATAN – S1 KEBIDANAN – PROFESI NERS – PROFESI BIDAN
Kampus : Jalan. R.E. Martadinata No. 150 Ciamis 46274 Nomor Kontak: 0821-1790-9060
website: fikes.unigal.ac.id / e-mail: fikes@unigal.ac.id

SURAT KEPUTUSAN
DEKAN FAKULTAS ILMU KESEHATAN UNIVERSITAS GALUH
NOMOR : 66 /401/SK/AK/D/XI/2025
TENTANG
PENGANGKATAN PEMBIMBING KARYA ILMIAH AKHIR NERS (KIAN)
PROGRAM STUDI PENDIDIKAN PROFESI NERS TAHUN AKADEMIK 2025/2026
FAKULTAS ILMU KESEHATAN UNIVERSITAS GALUH

DEKAN FAKULTAS ILMU KESEHATAN UNIVERSITAS GALUH

- MENIMBANG** : 1. Bahwa untuk kelancaran kegiatan Bimbingan Karya Ilmiah Akhir Ners (KIAN) perlu diangkat pembimbing Karya Ilmiah Akhir Ners (KIAN),
2. Bahwa untuk legalitas pembimbing dalam melakukan kegiatan bimbingan Karya Ilmiah Akhir Ners perlu di terbitkan Surat Keputusan Dekan.
- MENGINGAT** : 1. Undang-undang Nomor 12 Tahun 2012 tentang Pendidikan Tinggi;
1. Peraturan Pemerintah Nomor 4 Tahun 2014 tentang Penyelenggaraan Pendidikan Tinggi dan Pengelolaan Pendidikan Tinggi;
2. Permendikbud nomor 3 Tahun 2020 tentang Standar Nasional Perguruan Tinggi;
3. Keputusan Menteri Pendidikan Nasional Nomor 184/U/2001 tentang Pedoman Pengawasan, Pengendalian dan Pembinaan Program Diploma, Sarjana dan Pascasarjana di Perguruan Tinggi;
4. Surat Keputusan Yayasan Pendidikan Galuh Ciamis Nomor 1 Tahun 2025 tentang Statuta Universitas Galuh;
5. Peraturan Rektor Universitas Galuh Nomor 1 Tahun 2025 tentang Pedoman Akademik Universitas Galuh Tahun 2025;
6. Surat Keputusan Rektor Universitas Galuh Nomor : 262/4123/SK/G/VIII/2023 Tanggal 26 Agustus 2023 tentang Pemberhentian dan Pengangkatan Dekan Fakultas Ilmu Kesehatan Universitas Galuh Masa Jabatan 2023-2027;
- MEMPERHATIKAN** : Surat Ajuan dari Ketua Program Studi Ilmu Keperawatan Fakultas Ilmu Kesehatan Universitas Galuh Nomor 86/1490/SP/AK/Ka.Prodi_Kep/XI/2025 perihal Permohonan SK Pembimbing KIAN.
- MEMUTUSKAN**
- MENETAPKAN** :
PERTAMA : Nama : **NUR WIFA SAPIRA**
Nomor Pokok : **1490125054**
Program Studi : Pendidikan Profesi Ners
- KEDUA** : Mengangkat Pembimbing KIAN mahasiswa seperti yang tertulis pada diktum pertama sebagai berikut:
Pembimbing I : **Reni Hertini, S.Kep., Ners., M.Kep.**
Pembimbing II : **Ade Sity Riyantina, S.Kep., Ners., M.Kep.**
- KETIGA** : Tugas dan wewenang pembimbing KIAN:
a. Pembimbing KIAN ditugaskan untuk membimbing dan mengarahkan, dan memberikan masukan kepada mahasiswa dalam proses penulisan KIAN hingga selesai.
b. Dosen Pembimbing wajib memastikan bahwa KIAN yang disusun sesuai dengan standar akademik yang berlaku di Program Studi Profesi Ners Fakultas Ilmu Kesehatan Universitas Galuh
c. Pembimbingan KIAN dilaksanakan secara berkala sesuai dengan ketentuan yang berlaku.
- KEEMPAT** : Surat Keputusan ini berlaku sejak tanggal ditetapkan hingga mahasiswa menyelesaikan KIAN dan dinyatakan lulus sidang KIAN, dan apabila di kemudian hari ternyata terdapat kekeliruan dalam Surat Keputusan ini, akan dilakukan perbaikan sebagaimana mestinya.

Ditetapkan : Ciamis
Pada Tanggal : 6 November 2025
Dekan



Dr. Triandono, S.Kep., Ners., MM., M.Kep.
SK. 11.3112770275

Lampiran 2

JBI Critical Appraisal

JBI Critical Appraisal untuk Cross Sectional

Reviwer : Nur Wifa Sapira Tanggal : 05/06/2026

Author : Huang, P., et al. Tahun publikasi : 2024

Judul : Screen time, brain network development and socio-emotional competence in childhood: moderation of associations by parent–child reading.

No	Pertanyaan	Jawaban (Ya/Tidak/Tidak Jelas)		
		Ya	Tidak	Tidak Jelas
1.	Apakah kriteria inklusi dalam sampel dijelaskan dengan jelas?	✓		
2.	Apakah subjek dan setting penelitian dijelaskan secara rinci?	✓		
3.	Apakah paparan diukur dengan cara yang valid dan reliabel?	✓		
4.	Apakah kriteria standar yang objektif digunakan untuk mengukur kondisi?	✓		
5.	Apakah faktor perancu diidentifikasi?	✓		
6.	Apakah strategi untuk mengatasi faktor perancu dinyatakan?	✓		
7.	Apakah hasil diukur dengan cara yang valid dan reliabel?	✓		
8.	Apakah analisis statistik yang digunakan sesuai?	✓		
	<i>Overall Appraisal</i>	8		
	Presentase	100%		

JBI Critical Appraisal untuk Cross Sectional

Reviwer : Nur Wifa Sapira Tanggal : 05/06/2026

Author : Nurhidayah, I., et al. Tahun publikasi : 2026

Judul : *Screen Time Matters: The Impact of Screen Time on the Risk of Personal–Social Development Outcomes Among Preschool Children in Indonesia: A Cross-Sectional Study*

No	Pertanyaan	Jawaban (Ya/Tidak/Tidak Jelas)		
		Ya	Tidak	Tidak Jelas
1.	Apakah kriteria inklusi dalam sampel dijelaskan dengan jelas?	✓		
2.	Apakah subjek dan setting penelitian dijelaskan secara rinci?	✓		
3.	Apakah paparan diukur dengan cara yang valid dan reliabel?	✓		
4.	Apakah kriteria standar yang objektif digunakan untuk mengukur kondisi?	✓		
5.	Apakah faktor perancu diidentifikasi?	✓		
6.	Apakah strategi untuk mengatasi faktor perancu dinyatakan?	✓		
7.	Apakah hasil diukur dengan cara yang valid dan reliabel?	✓		
8.	Apakah analisis statistik yang digunakan sesuai?		✓	
	Overall Appraisal	7		
	Presentase	88%		

JBI Critical Appraisal untuk Cross Sectional

Reviwer : Nur Wifa Sapira Tanggal : 05/06/2026

Author : Wahyuni, A. S., et al. Tahun publikasi : 2019

Judul : *The Relationship between the Duration of Playing Gadget and Mental Emotional State of Elementary School Students.*

No	Pertanyaan	Jawaban (Ya/Tidak/Tidak Jelas)		
		Ya	Tidak	Tidak Jelas
1.	Apakah kriteria inklusi dalam sampel dijelaskan dengan jelas?	✓		
2.	Apakah subjek dan setting penelitian dijelaskan secara rinci?	✓		
3.	Apakah paparan diukur dengan cara yang valid dan reliabel?	✓		
4.	Apakah kriteria standar yang objektif digunakan untuk mengukur kondisi?	✓		
5.	Apakah faktor perancu diidentifikasi?	✓		
6.	Apakah strategi untuk mengatasi faktor perancu dinyatakan?	✓		
7.	Apakah hasil diukur dengan cara yang valid dan reliabel?	✓		
8.	Apakah analisis statistik yang digunakan sesuai?	✓		
	<i>Overall Appraisal</i>	8		
	Presentase	100%		

JBI Critical Appraisal untuk Cross Sectional

Reviwer : Nur Wifa Sapira Tanggal : 05/06/2026

Author : Twenge, J. M., et al. Tahun publikasi : 2018

Judul : *Associations between screen time and lower psychological well-being among children and adolescents: Evidence from a population-based study*

No	Pertanyaan	Jawaban (Ya/Tidak/Tidak Jelas)		
		Ya	Tidak	Tidak Jelas
1.	Apakah kriteria inklusi dalam sampel dijelaskan dengan jelas?	✓		
2.	Apakah subjek dan setting penelitian dijelaskan secara rinci?	✓		
3.	Apakah paparan diukur dengan cara yang valid dan reliabel?	✓		
4.	Apakah kriteria standar yang objektif digunakan untuk mengukur kondisi?	✓		
5.	Apakah faktor perancu diidentifikasi?	✓		
6.	Apakah strategi untuk mengatasi faktor perancu dinyatakan?	✓		
7.	Apakah hasil diukur dengan cara yang valid dan reliabel?	✓		
8.	Apakah analisis statistik yang digunakan sesuai?	✓		
	<i>Overall Appraisal</i>	8		
	Presentase	100%		

JBI Critical Appraisal untuk Cross Sectional

Reviwer : Nur Wifa Sapira Tanggal : 05/06/2026

Author : Mannikkö, N., et al. Tahun publikasi : 2026

Judul : *Device-specific and Contextual Patterns of Screen Use: Links to Emotional and Behavioral Outcomes in Early Childhood*

No	Pertanyaan	Jawaban (Ya/Tidak/Tidak Jelas)		
		Ya	Tidak	Tidak Jelas
1.	Apakah kriteria inklusi dalam sampel dijelaskan dengan jelas?	✓		
2.	Apakah subjek dan setting penelitian dijelaskan secara rinci?	✓		
3.	Apakah paparan diukur dengan cara yang valid dan reliabel?	✓		
4.	Apakah kriteria standar yang objektif digunakan untuk mengukur kondisi?	✓		
5.	Apakah faktor perancu diidentifikasi?	✓		
6.	Apakah strategi untuk mengatasi faktor perancu dinyatakan?	✓		
7.	Apakah hasil diukur dengan cara yang valid dan reliabel?	✓		
8.	Apakah analisis statistik yang digunakan sesuai?		✓	
	<i>Overall Appraisal</i>	7		
	Presentase	88%		

JBI Critical Appraisal untuk Cross Sectional

Reviwer : Nur Wifa Sapira Tanggal : 05/06/2026

Author : Choi, Y., et al. Tahun publikasi : 2021

Judul : *Association Between Screen Overuse and Behavioral and Emotional Problems in Elementary School Children*

No	Pertanyaan	Jawaban (Ya/Tidak/Tidak Jelas)		
		Ya	Tidak	Tidak Jelas
1.	Apakah kriteria inklusi dalam sampel dijelaskan dengan jelas?	✓		
2.	Apakah subjek dan setting penelitian dijelaskan secara rinci?	✓		
3.	Apakah paparan diukur dengan cara yang valid dan reliabel?	✓		
4.	Apakah kriteria standar yang objektif digunakan untuk mengukur kondisi?	✓		
5.	Apakah faktor perancu diidentifikasi?	✓		
6.	Apakah strategi untuk mengatasi faktor perancu dinyatakan?	✓		
7.	Apakah hasil diukur dengan cara yang valid dan reliabel?	✓		
8.	Apakah analisis statistik yang digunakan sesuai?	✓		
	<i>Overall Appraisal</i>	8		
	Presentase	100%		

JBI Critical Appraisal untuk Cross Sectional

Reviwer : Nur Wifa Sapira Tanggal : 05/06/2026

Author : Hosokawa, R., et al. Tahun publikasi : 2018

Judul : *Association between mobile technology use and child adjustment in early elementary school age*

No	Pertanyaan	Jawaban (Ya/Tidak/Tidak Jelas)		
		Ya	Tidak	Tidak Jelas
1.	Apakah kriteria inklusi dalam sampel dijelaskan dengan jelas?	✓		
2.	Apakah subjek dan setting penelitian dijelaskan secara rinci?	✓		
3.	Apakah paparan diukur dengan cara yang valid dan reliabel?	✓		
4.	Apakah kriteria standar yang objektif digunakan untuk mengukur kondisi?	✓		
5.	Apakah faktor perancu diidentifikasi?	✓		
6.	Apakah strategi untuk mengatasi faktor perancu dinyatakan?	✓		
7.	Apakah hasil diukur dengan cara yang valid dan reliabel?	✓		
8.	Apakah analisis statistik yang digunakan sesuai?		✓	
	<i>Overall Appraisal</i>	7		
	Presentase	88%		

JBI Critical Appraisal untuk Cross Sectional

Reviwer : Nur Wifa Sapira Tanggal : 05/06/2026

Author : Kurnia, S. D. Tahun publikasi : 2025

Judul : Pengaruh Penggunaan *Gadget* terhadap Perkembangan Sosial Emosional Anak SD

No	Pertanyaan	Jawaban (Ya/Tidak/Tidak Jelas)		
		Ya	Tidak	Tidak Jelas
1.	Apakah kriteria inklusi dalam sampel dijelaskan dengan jelas?	✓		
2.	Apakah subjek dan setting penelitian dijelaskan secara rinci?	✓		
3.	Apakah paparan diukur dengan cara yang valid dan reliabel?	✓		
4.	Apakah kriteria standar yang objektif digunakan untuk mengukur kondisi?	✓		
5.	Apakah faktor perancu diidentifikasi?		✓	
6.	Apakah strategi untuk mengatasi faktor perancu dinyatakan?		✓	
7.	Apakah hasil diukur dengan cara yang valid dan reliabel?	✓		
8.	Apakah analisis statistik yang digunakan sesuai?	✓		
	<i>Overall Appraisal</i>	6		
	Presentase	75%		

JBI Critical Appraisal untuk Cross Sectional

Reviwer : Nur Wifa Sapira Tanggal : 05/06/2026

Author : Azriasih, P., et al. Tahun publikasi : 2024

Judul : Pengaruh Penggunaan *Gadget* Terhadap Perkembangan Sosial Anak Usia 5-6 Tahun

No	Pertanyaan	Jawaban (Ya/Tidak/Tidak Jelas)		
		Ya	Tidak	Tidak Jelas
1.	Apakah kriteria inklusi dalam sampel dijelaskan dengan jelas?	✓		
2.	Apakah subjek dan setting penelitian dijelaskan secara rinci?	✓		
3.	Apakah paparan diukur dengan cara yang valid dan reliabel?	✓		
4.	Apakah kriteria standar yang objektif digunakan untuk mengukur kondisi?	✓		
5.	Apakah faktor perancu diidentifikasi?		✓	
6.	Apakah strategi untuk mengatasi faktor perancu dinyatakan?		✓	
7.	Apakah hasil diukur dengan cara yang valid dan reliabel?	✓		
8.	Apakah analisis statistik yang digunakan sesuai?	✓		
	<i>Overall Appraisal</i>	6		
	Presentase	75%		

JBI Critical Appraisal untuk Cross Sectional

Reviwer : Nur Wifa Sapira Tanggal : 05/06/2026

Author : Anggraini, T. P., et al. Tahun publikasi : 2024

Judul : Hubungan Penggunaan *Gadget* dengan Perkembangan Emosional pada Anak Usia Sekolah di SDN 01 Sambiroto Kota Semarang

No	Pertanyaan	Jawaban (Ya/Tidak/Tidak Jelas)		
		Ya	Tidak	Tidak Jelas
1.	Apakah kriteria inklusi dalam sampel dijelaskan dengan jelas?	✓		
2.	Apakah subjek dan setting penelitian dijelaskan secara rinci?	✓		
3.	Apakah paparan diukur dengan cara yang valid dan reliabel?	✓		
4.	Apakah kriteria standar yang objektif digunakan untuk mengukur kondisi?	✓		
5.	Apakah faktor perancu diidentifikasi?	✓		
6.	Apakah strategi untuk mengatasi faktor perancu dinyatakan?	✓		
7.	Apakah hasil diukur dengan cara yang valid dan reliabel?	✓		
8.	Apakah analisis statistik yang digunakan sesuai?	✓		
	<i>Overall Appraisal</i>	8		
	Presentase	100%		

Original Article

Cite this article: Huang P et al (2024). Screen time, brain network development and socio-emotional competence in childhood: moderation of associations by parent-child reading. *Psychological Medicine* 54, 1992–2003. <https://doi.org/10.1017/S0033291724000084>

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Corresponding author:

Ai Peng Tan; Email: ai_peng_tan@nuhs.edu.sg

Screen time, brain network development and socio-emotional competence in childhood: moderation of associations by parent-child reading

Pei Huang¹, Shi Yu Chan¹, Zhen Ming Ngho¹, Zi Yan Ong¹,
Xi Zhen Low², Evelyn C. Law^{1,3}, Peter D. Gluckman^{1,4}, Michelle Z.L. Kee¹,
Marielle V. Fortier⁵, Yap Seng Chong^{1,6,7}, Juan H. Zhou^{7,8,9},
Michael J. Meaney^{1,7,10,11} and Ai Peng Tan^{1,2,7,11}

¹Singapore Institute for Clinical Sciences, A*STAR Research Entities, Singapore; ²Department of Diagnostic Imaging, National University Health System, Singapore; ³Department of Pediatrics, Khoo Teck Puat-National University Children's Medical Institute, National University Health System, Singapore; ⁴Liggins Institute, University of Auckland, Auckland, New Zealand; ⁵Department of Diagnostic & Interventional Imaging, KK Women's and Children's Hospital, Singapore; ⁶Department of Obstetrics & Gynecology, National University Health System, Singapore; ⁷Yong Loo Lin School of Medicine, National University of Singapore, Singapore; ⁸Department of Electrical and Computer Engineering, National University of Singapore, Singapore; ⁹Integrative Sciences and Engineering Programme (ISEP), National University of Singapore, Singapore; ¹⁰Department of Psychiatry, Faculty of Medicine, Douglas Mental Health University Institute, McGill University, Montreal, Canada and ¹¹Brain – Body Initiative, Agency for Science and Technology (A*STAR), Singapore

Abstract

Background. Screen time in infancy is linked to changes in social-emotional development but the pathway underlying this association remains unknown. We aim to provide mechanistic insights into this association using brain network topology and to examine the potential role of parent-child reading in mitigating the effects of screen time.

Methods. We examined the association of screen time on brain network topology using linear regression analysis and tested if the network topology mediated the association between screen time and later socio-emotional competence. Lastly, we tested if parent-child reading time was a moderator of the link between screen time and brain network topology.

Results. Infant screen time was significantly associated with the emotion processing-cognitive control network integration ($p = 0.005$). This network integration also significantly mediated the association between screen time and both measures of socio-emotional competence (BRIEF-2 Emotion Regulation Index, $p = 0.04$; SEARS total score, $p = 0.04$). Parent-child reading time significantly moderated the association between screen time and emotion processing-cognitive control network integration ($\beta = -0.640$, $p = 0.005$).

Conclusion. Our study identified emotion processing-cognitive control network integration as a plausible biological pathway linking screen time in infancy and later socio-emotional competence. We also provided novel evidence for the role of parent-child reading in moderating the association between screen time and topological brain restructuring in early childhood.

Introduction

The substantial increase in screen time exposure among young children is a growing concern in the electronic media age. Screen-based media has exploded over the past 20 years, fundamentally altering the way humans interact with one another and transforming the way a child learns and explores the environment, exacerbated by the recent COVID-19 pandemic lockdowns. An estimated 90% of children under the age of two are regularly exposed to electronic media (Brown, 2011). Infants are on average exposed to 2 to 3 h of screen time per day (Chen & Adler, 2019), far exceeding the existing recommendation by the World Health Organization (WHO).

Excessive screen time during childhood has been associated with behavioral and cognitive outcomes (Christakis, Ramirez, Ferguson, Ravinder, & Ramirez, 2018; Kirkorian, Pempek, Murphy, Schmidt, & Anderson, 2009; Zimmerman, Christakis, & Meltzoff, 2007), including the socio-emotional competence (Kerali, Almas, Guhn, Forer, & Oberle, 2022). Previous research has demonstrated a negative link between screen time and the social-emotional function of preschoolers (del Pozo-Cruz et al., 2019). However, most studies on screen time have been focused on children at preschool or school-going ages. Notably, existing findings might

Screen Time Matters: The Impact of Screen Time on the Risk of Personal–Social Development Outcomes Among Preschool Children in Indonesia: A Cross-Sectional Study

Ikeu Nurhidayah¹, Thalia Salsabilla², Emma Aprilia Hastuti²

¹Pediatric Nursing Department, Faculty of Nursing, Universitas Padjadjaran, Sumedang, Indonesia; ²Mental Health and Psychiatric Nursing, Dharma Husada Institute of Health, Bandung, Indonesia

Correspondence: Ikeu Nurhidayah, Pediatric Nursing Department, Faculty of Nursing, Universitas Padjadjaran, Sumedang, 45363, Indonesia. Fax +62 22 7795596, Email ikeu.nurhidayah@unpad.ac.id

Background: The rapid increase in screen time among preschool children has become a growing public health concern, as digital gadgets are increasingly integrated into children's daily lives. Excessive screen exposure may reduce opportunities for direct social interaction and experiential learning, thereby increasing the risk of adverse personal–social development outcomes. Personal–social development is a critical component of early childhood growth, enabling children to interact effectively with peers and their environment. This study aimed to examine the association between the duration and intensity of screen time and the risk of suboptimal personal–social development among preschool-aged children.

Methods: A quantitative cross-sectional study was conducted involving 98 parents of preschool children recruited from a single preschool setting in Bandung, Indonesia. Data were collected using structured, parent-reported questionnaires assessing screen time duration and frequency, and the risk of suboptimal personal–social development, based on a previously applied personal–social development instrument in the Indonesian context. Personal–social development scores were categorized into optimal (lower risk) and suboptimal (higher risk) based on an established cut-off. Screen time variables were classified according to risk-based thresholds. Descriptive statistics, chi-square tests, and multivariable analyses were performed to examine associations while adjusting for child age and parental education.

Results: The findings showed a statistically significant association between screen time duration and the risk of suboptimal personal–social development ($p < 0.001$), as well as between the intensity of gadget use and the risk of suboptimal personal–social development ($p < 0.001$). Children with prolonged daily screen time (≥ 120 minutes) had a higher risk of suboptimal personal–social development (53.1%) compared with those with limited screen exposure. Similarly, children who used gadgets frequently (> 3 times per day) were at greater risk of suboptimal personal–social development than those with moderate or minimal use.

Conclusion: Prolonged duration and high intensity of screen time are significantly associated with an increased risk of suboptimal personal–social development among preschool children. These findings highlight the importance of parental monitoring and the establishment of appropriate limits on screen use during early childhood. Health professionals, educators, and policymakers should work collaboratively to promote balanced digital habits and screen time awareness as part of early childhood development strategies in the digital era. This study contributes to achieving SDG 3 (Good Health and Well-being) and SDG 4 (Quality Education), particularly Target 4.2 on early childhood development.

Plain Language Summary:

- Provides new empirical evidence from Indonesia, a developing country context with rapidly increasing digital exposure among children.
- Longer screen time and more frequent gadget use were associated with a higher risk of suboptimal personal–social development among preschool children.

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The Relationship between the Duration of Playing Gadget and Mental Emotional State of Elementary School Students

Arlinda Sari Wahyuni¹, Ferdinan Benito Siahaan¹, Mudia Arfa¹, Ivana Alona¹, Nerdy Nerdy^{2,3*}

¹Department of Public Health and Community Medicine, Faculty of Medicine, Universitas Sumatera Utara, Padang Bulan, Medan Baru, Medan, Sumatera Utara 20155, Indonesia; ²Department of Pharmaceutical Chemistry, Faculty of Pharmacy, Universitas Sumatera Utara, Padang Bulan, Medan Baru, Medan, Sumatera Utara 20155, Indonesia; ³Department of Pharmacy, Academy of Pharmacy Yayasan Tenaga Pembangunan Arjuna, Pintubosi, Laguboti, Toba Samosir, Sumatera Utara 22381, Indonesia

Abstract

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Keywords: Mental, Emotional, Strength and Difficulties Questionnaire (SDQ), Gadgets, Elementary School

*Correspondence: Nerdy Nerdy, Department of Pharmaceutical Chemistry, Faculty of Pharmacy, Universitas Sumatera Utara, Padang Bulan, Medan Baru, Medan, Sumatera Utara, 20155, Indonesia. Department of Pharmacy, Academy of Pharmacy Yayasan Tenaga Pembangunan Arjuna, Pintubosi, Laguboti, Toba Samosir, Sumatera Utara, 22381, Indonesia. E-mail: nerdy1905@gmail.com

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Competing Interests: The authors have declared that no competing interests exist

BACKGROUND: Technology has provided a type of facility in the world that currently makes the world like a virtual globe. One of the technologies currently used by humans is gadgets. Generally, children and adolescents nowadays often use gadget excessively. They use it excessively which may affect their social and emotional functions.

AIM: This study aims to determine the relationship between the duration of playing gadget and mental-emotional state of elementary school students.

METHODS: This study uses Strength and Difficulties Questionnaire (SDQ) which contains 25 questions that can be used for children aged 8 to 16 years. This research was conducted in August 2018 with fourth-grade students of Public Elementary School and Private Elementary School Medan as respondents. This study uses a cross-sectional study method with the chi-square test as a statistical hypothesis test. The number of respondents in this study was 103 students consist of 73 students of Public Elementary School and 30 students of Private Elementary School Medan.

RESULTS: The results of this study found a relationship between the duration of playing gadgets on mental-emotional at elementary school students with a probability value of 0.0001 ($p < 0.05$) and the relationship between the frequency of using gadgets and mental-emotional with a probability value of 0.001 ($p < 0.05$).

CONCLUSIONS: There is a significant relationship between mental emotional and the duration of playing gadgets and the frequency of using gadgets elementary school students.

Introduction

Information and communication technology systems have provided a kind of facility in the world that currently makes the world like a small globe globally [1]. One of the current technologies used by humans is gadgets. A gadget is an object or item created specifically in this advanced era with the aim of helping everything become easier and more practical compared to previous technologies [2]. Generally, children and adolescents nowadays often use intense gadgets. They use it excessively which can affect their social and emotional function. The majority of children and adolescents have smartphones, laptops, game consoles, tablets, iPod

[3]. The use of electronic gadgets has greatly increased in the contemporary world, particularly among children, as a result of addiction [4].

Very early recognition gadget for children can have positive and negative impacts. These are influenced by several factors such as the frequency, duration, and supervision of parents. Using gadgets as a basic material for learning in children will have positive impacts such as increasing children's creativity and thinking. It can appear with parents and children, as well firm in providing time limits for children in playing gadget. Likewise the opposite, if the supervision of parents is lacking and there is no firm effort in providing time limits of playing gadget in children, can cause negative effects. The children



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Associations between screen time and lower psychological well-being among children and adolescents: Evidence from a population-based study

Jean M. Twenge^{a,*}, W. Keith Campbell^b^a San Diego State University, United States of America^b University of Georgia, United States of America

ABSTRACT

Previous research on associations between screen time and psychological well-being among children and adolescents has been conflicting, leading some researchers to question the limits on screen time suggested by physician organizations. We examined a large ($n = 40,337$) national random sample of 2- to 17-year-old children and adolescents in the U.S. in 2016 that included comprehensive measures of screen time (including cell phones, computers, electronic devices, electronic games, and TV) and an array of psychological well-being measures. After 1 h/day of use, more hours of daily screen time were associated with lower psychological well-being, including less curiosity, lower self-control, more distractibility, more difficulty making friends, less emotional stability, being more difficult to care for, and inability to finish tasks. Among 14- to 17-year-olds, high users of screens (7+ h/day vs. low users of 1 h/day) were more than twice as likely to ever have been diagnosed with depression (RR 2.39, 95% CI 1.54, 3.70), ever diagnosed with anxiety (RR 2.26, CI 1.59, 3.22), treated by a mental health professional (RR 2.22, CI 1.62, 3.03) or have taken medication for a psychological or behavioral issue (RR 2.99, CI 1.94, 4.62) in the last 12 months. Moderate use of screens (4 h/day) was also associated with lower psychological well-being. Non-users and low users of screens generally did not differ in well-being. Associations between screen time and lower psychological well-being were larger among adolescents than younger children.

1. Introduction

A growing proportion of children and adolescents' leisure time is spent with screens including smartphones, tablets, gaming consoles, and televisions (Common Sense Media, 2015; Twenge et al., 2019), raising concerns about the effect of screen time on well-being among parents, health professionals, and educators (e.g., Kardaras, 2017). These concerns have prompted physician organizations such as the American Academy of Pediatrics (AAP) to recommend that parents limit children's daily screen time, with specific time limits for preschool children and a general suggestion of limiting time on screens for older children and adolescents (Radesky and Christakis, 2016). In addition, the World Health Organization recently decided to include gaming disorder in the 11th revision of the International Classification of Diseases (WHO, 2018).

Associations between screen time and poor health outcomes such as obesity and lack of exercise have been well-documented (e.g., Chiasson et al., 2016; de Jong et al., 2013; Dumuid et al., 2017; Poitras et al., 2017). However, research exploring associations be-

tween screen time and more psychological aspects of well-being among children and adolescents has been inconsistent. Some studies find significant associations between screen time and low well-being (Babic et al., 2017; Page et al., 2010; Romer et al., 2013; Rosen et al., 2014; Twenge et al., 2018a,b; Yang et al., 2013), while others find null effects or even benefits with greater screen time (Granic et al., 2014; Odgers, 2018; Przybylski and Weinstein, 2018; Valkenburg and Peter, 2009). Thus, some have suggested that more research is needed before concluding that screen time limits are justified, arguing that valuable physician appointment time should not be devoted to discussing screen time without sufficient evidence for significant associations with well-being (Przybylski and Weinstein, 2017, 2018). Some researchers have made similar statements about the WHO characterizing gaming disorder as a mental health issue, maintaining that associations between gaming and psychological well-being are not substantial or consistent enough to justify such a classification (Davis, 2018; van Rooij et al., 2018).

Theories and research on psychological well-being support the notion of a broad concept including emotional stability, positive in-

* Corresponding author at: Department of Psychology, San Diego State University, 5500 Campanile Drive, San Diego, CA 92182-4611, United States of America. E-mail address: jtwenge@mail.sdsu.edu (J.M. Twenge).

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Device-specific and contextual patterns of screen use: links to emotional and behavioral outcomes in early childhood

Niko Männikkö^a, Aristides M. Machado-Rodrigues^{b,c,d}, Cristina Padez^c, Clara Barata^e, Daniela Rodrigues^{c,*}

^a Centre for Research and Innovation, Oulu University of Applied Sciences, 90570 Oulu, Finland

^b University of Coimbra, Centre for the Study of Human Performance (CIPER), Faculty of Sport Sciences and Physical Education, 3040-248 Coimbra, Portugal

^c University of Coimbra, Research Centre for Anthropology and Health (CIAS), Department of Life Sciences, 3000-456 Coimbra, Portugal

^d University of Coimbra, Faculty of Sport Sciences and Physical Education, 3040-256 Coimbra, Portugal

^e University of Coimbra, Centre for Interdisciplinary Studies (CEIS20), Faculty of Psychology and Education Sciences, 3000-115 Coimbra, Portugal

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Keywords:

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Preschool children
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Mental health

ABSTRACT

While most research emphasizes the negative impact of screen time duration on child outcomes, fewer studies examine how content, context, and device-specific patterns influence mental health in early childhood. This study explored how characteristics of household screen media use, including dominant content type, device, co-viewing frequency, and age at first exposure, relate to socio-emotional outcomes in children aged 2–6 years.

Cross-sectional baseline data were analyzed from 940 children (mean age = 4.67 years) participating in the ScreenHealth longitudinal project in Portugal. Parents reported screen use across five devices (television, computer, video games, tablet, and smartphone), content categories (educational, entertainment, communication), co-viewing practices, mealtime and bedtime use, and age at first exposure. Socio-emotional outcomes were assessed using the Strengths and Difficulties Questionnaire (SDQ), and associations were analyzed using multinomial logistic regression, adjusting for child and parental characteristics.

Entertainment content was the most frequent type of use (58.5%). Higher television viewing time was associated with conduct problems and abnormal total difficulties (both $OR = 1.01$, $ps < 0.01$). Similarly, daily smartphone use was linked to elevated conduct problems and abnormal total difficulties (both $OR = 1.01$, $ps < 0.01$). Smartphone use during meals was significantly related to abnormal conduct problems ($OR = 2.66$, $p < 0.001$). Early smartphone exposure (≤ 2 years) was connected to borderline conduct problems ($OR = 1.66$, $p < 0.01$) and abnormal total difficulties ($OR = 2.10$, $p < 0.01$).

These findings indicate that, beyond total screen time duration, the specific device-use patterns, early exposure to screens, and certain contexts may play distinct roles in early socio-emotional development. Interventions may benefit from incorporating these multidimensional factors to better support healthy developmental outcomes.

1. Introduction

The modern world is increasingly digitized, and the prevalence of screen-based activities among children has risen significantly, driven by the proliferation of digital devices such as smartphones and tablets (Madigan, Racine, & Tough, 2020; OECD, 2023). Despite some reported benefits of moderate screen media use in facilitating children's outcomes, such as learning, school readiness, and social interactions (AAP Council on Communications and Media, 2016), excessive or poorly regulated exposure has been consistently associated with a broad range

of developmental risks. For instance, greater screen engagement has been linked to adverse physical health indicators, including adiposity and cardiorespiratory fitness (Saunders & Vallance, 2017). Evidence also shows that screen use relates to adverse psychological and educational outcomes, such as higher levels of depression and anxiety, poorer socio-emotional development, and lower cognitive abilities and academic performance (Muppala et al., 2023).

The World Health Organization (WHO) and the American Academy of Pediatrics (AAP) provide recommendations for screen exposure. Children under 5 should not spend more than one hour per day on

* Corresponding author at: University of Coimbra, Research Centre for Anthropology and Health (CIAS), Department of Life Sciences, 3000-456 Coimbra, Portugal.
E-mail address: drdc@uc.pt (D. Rodrigues).

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Association Between Screen Overuse and Behavioral and Emotional Problems in Elementary School Children

Yeonkyu Choi¹, Dong Yun Lee², Sangha Lee¹, Eun-Jin Park³, Hee Jeong Yoo⁴, and Yunmi Shin¹

¹Department of Psychiatry, Ajou University School of Medicine, Suwon, Korea

²Department of Biomedical Informatics, Ajou University School of Medicine, Suwon, Korea

³Department of Psychiatry, Inje University Ilsan Paik Hospital, Goyang, Korea

⁴Department of Psychiatry, Seoul National University Bundang Hospital, Seoul National University College of Medicine, Seongnam, Korea

Objectives: This study identified the association between excessive exposure to screen media and behavioral and emotional problems in elementary school students.

Methods: A total of 331 parents of children aged 7–10 years were recruited from “The Kids Cohort for Understanding of Internet Addiction Risk Factors in Early Childhood (K-CURE)” study. Children’s demographics, household media ownership, screen time, and behavioral/emotional problems were assessed using a parental questionnaire. Children’s behavior/emotional problems were measured using the Korean version of the Child Behavior Checklist (K-CBCL) score.

Results: The total K-CBCL score in the screen overuse group was 51.18 ± 9.55 , significantly higher than 47.28 ± 10.09 in the control group ($t=2.14$, $p=0.05$). For each subscale, the externalization score (51.65 ± 10.14 , 48.33 ± 8.97 , respectively; $t=2.02$, $p<0.05$), social problem score (55.41 ± 6.11 , 53.24 ± 5.19 , respectively; $t=2.27$, $p<0.05$), and rule breaking behavior score (55.71 ± 6.11 , 53.24 ± 5.19 , respectively; $t=2.27$, $p<0.05$) were significantly higher in the screen overuse group than in the control group. In addition, the screen overuse group also had a significantly higher usage rate than the control group, even if limited to smartphones, not only on weekdays (3.56 ± 2.08 , 1.87 ± 2.02 , respectively; $t=-4.597$, $p<0.001$) but also weekends (1.62 ± 0.74 , 1.19 ± 0.83 , respectively; $t=-3.14$, $p=0.003$).

Conclusion: The study suggested that screen media overuse patterns in children in Korea are particularly relevant to the excessive use of smartphones and are related to higher risks of emotional and behavioral problems.

Keywords: Screen time; Smartphone; Child; Behavioral and emotional problems.

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Address for correspondence: Yunmi Shin, Department of Psychiatry, Ajou University School of Medicine, 164 World cup-ro, Yeongtong-gu, Suwon 16499, Korea

Tel: +82-31-219-5180, Fax: +82-31-219-5179, E-mail: ymshin@ajou.ac.kr

INTRODUCTION

Screen media devices are indispensable in our lives. Thanks to the spread of these devices, the “digital native” generation is quite familiar with media culture [1]. The prevalence of smart devices has enabled access to media anytime; use is not limited to a particular location or device, such as a television or computer. According to data released by the Organization for Economic Cooperation and Development (OECD), 95% of children in OECD countries had Internet access in their homes in 2015, an increase of more than 20% from a decade ago [2].

With this trend, children have gradually begun to spend more time in front of screens. According to a study, students spent twice as much time online in 2016 as they did 10 years

before. In 2008, only half of the students visited social media sites daily, whereas this percentage had grown to 82% in 2016 [3].

Concerns have continuously been raised that exposure to screen media devices at a young age has a negative impact on children. In particular, it has been suggested that screen time causes not only physical problems (e.g., interference with children’s sleep and eating habits, as well as obesity), but also in a wide range of areas, including behavior, hyperactivity, emotions, and relationships with peers [4–9]. As these negative results are announced one after another, guidelines for the use of smart devices by children are being established in various countries. Since 1999, the American Academy of Pediatrics has consistently generated guidelines for children’s media use, and the World Health Organization (WHO) released a revised guideline on the same topic in 2019 [10,11]. However, although most guidelines strictly regulate very young children’s exposure to screen media, they remain rel-

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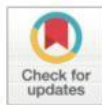
RESEARCH ARTICLE

Association between mobile technology use and child adjustment in early elementary school age

Rikuya Hosokawa^{1,2*}, Toshiki Katsura²

1 School of Nursing, Nagoya City University, Nagoya, Japan, **2** Graduate School of Medicine, Kyoto University, Kyoto, Japan

* rikuya@med.nagoya-cu.ac.jp



Abstract

The time that children spend using digital devices is increasing rapidly with the development of new portable and instantly accessible technology, such as smartphones and digital tablets. Although prior studies have examined the effects of traditional media on children's development, there is limited evidence on the impact of mobile device use. The current study aimed to clarify the link between mobile device use and child adjustment. The sample included 1,642 children aged 6 in first grade at elementary schools in Japan. Parents completed a self-report questionnaire regarding their children's use of mobile devices and emotional/behavioral adjustment. We performed inverse probability of treatment weighted (IPTW) logistic regression to compute odds ratios (OR) for emotional/behavioral problems according to mobile device use. The values for IPTW analysis were computed based on variables assessing sociodemographics and child characteristics. Among the participants, 230 (14.0%) were regular users (60 minutes or more on a typical day) and 1,412 (86.0%) non-regular users (under 60 minutes on a typical day). Relative to non-regular use, regular use of mobile devices was significantly linked to conduct problems (IPTW-OR: 1.77, 95% CI: [1.03–3.04], $p < .05$) and hyperactivity/inattention (IPTW-OR: 1.82, 95% CI: [1.15–2.87], $p < .01$). Based on these results, routine and frequent use of mobile devices appear to be associated with behavioral problems in childhood.

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Introduction

The time that children spend using digital devices is increasing rapidly with the development of new portable and instantly accessible technology, such as smartphones and digital tablets. Furthermore, with the dramatically rapid development of media games, learning packages, and educational applications for young children, opportunities for using mobile devices have been growing, children's usage time has become increasingly longer, and child target users of mobile devices are becoming younger [1,2,3,4]. In Japan, the amount of time that children spend using mobile devices has also increased dramatically. A recent survey found that, according to the Japan Ministry of Education, the proportion of children using mobile devices



Pengaruh Penggunaan Gadget terhadap Perkembangan Sosial Emosional Anak SD

Syahrani Dwi Kurnia¹

¹ Poltekkes Semarang

¹syahraniidwikurnia12@gmail.com

Abstract

Children's social-emotional development is a crucial aspect of their overall growth, and the use of gadgets has emerged as a significant factor influencing it. This study aims to examine the impact of gadget usage on the social-emotional development of elementary school students. A quantitative survey method was employed, collecting data through questionnaires and observations involving students from several elementary school classes. The findings indicate that excessive gadget use can negatively affect children's social interaction skills, emotional regulation, and ability to build interpersonal relationships. However, controlled use of gadgets for educational purposes can support the development of social-emotional skills. These results highlight the importance of parental and teacher supervision to ensure gadget use contributes positively to children's growth.

Keywords: Gadget, Social-Emotional Development, Elementary School Children, Social Interaction, Education

Abstrak

Perkembangan sosial emosional anak merupakan aspek penting dalam tumbuh kembang mereka, dan penggunaan gadget menjadi salah satu faktor yang memengaruhi aspek tersebut. Penelitian ini bertujuan untuk menganalisis pengaruh penggunaan gadget terhadap perkembangan sosial emosional siswa sekolah dasar. Metode yang digunakan adalah survei kuantitatif dengan pengumpulan data melalui kuesioner dan observasi, melibatkan siswa dari beberapa kelas SD sebagai responden. Hasil penelitian menunjukkan bahwa penggunaan gadget secara berlebihan dapat berdampak negatif pada kemampuan anak dalam berinteraksi sosial, mengelola emosi, dan membentuk hubungan interpersonal. Namun, penggunaan gadget secara terkontrol dan diarahkan untuk kegiatan edukatif dapat mendukung perkembangan sosial emosional anak. Temuan ini menekankan pentingnya pengawasan orang tua dan guru dalam memanfaatkan gadget untuk mendukung tumbuh kembang anak secara optimal.

Kata Kunci: Gadget, Perkembangan Sosial Emosional, Anak SD, Interaksi Sosial, Edukasi

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PENDAHULUAN

Perkembangan sosial emosional anak adalah fondasi penting dalam membentuk karakter, keterampilan interpersonal, dan kemampuan mengelola emosi sejak usia dini. Anak yang memiliki keterampilan sosial emosional yang baik cenderung mampu berinteraksi lebih efektif dengan teman sebaya, guru, dan anggota keluarga. Mereka juga lebih mampu mengendalikan emosi, menghadapi tantangan, dan beradaptasi dengan perubahan lingkungan. Oleh karena itu, pengembangan aspek ini menjadi fokus utama dalam pendidikan anak usia sekolah dasar (SD).

Di era digital saat ini, penggunaan gadget menjadi fenomena yang tidak terhindarkan di kalangan anak-anak. Gadget, termasuk smartphone, tablet, dan perangkat elektronik lainnya, telah menjadi sarana hiburan, komunikasi, dan belajar. Meskipun gadget menawarkan berbagai keuntungan edukatif, penggunaannya yang berlebihan dapat berdampak negatif terhadap perkembangan sosial emosional anak. Anak-anak yang terlalu sering menggunakan gadget dapat mengalami penurunan kemampuan berinteraksi secara langsung, mengurangi empati, serta kesulitan dalam mengelola emosi. Selain itu, kecanduan gadget dapat menurunkan waktu anak untuk bermain kreatif dan berinteraksi dengan teman sebaya, yang merupakan aspek penting dalam pembelajaran sosial.

Penggunaan gadget pada anak usia SD memiliki karakteristik yang berbeda dibandingkan dengan remaja atau orang dewasa. Anak-anak pada tahap ini masih dalam proses pembentukan norma sosial, pengembangan empati, dan pengenalan regulasi diri. Aktivitas yang mereka lakukan melalui gadget, baik menonton video, bermain game, atau berkomunikasi melalui media sosial, dapat memengaruhi cara mereka memahami hubungan sosial dan merespons situasi emosional. Oleh karena itu, sangat penting untuk meneliti secara sistematis dampak penggunaan gadget terhadap perkembangan sosial emosional anak, agar orang tua dan guru dapat mengambil langkah yang tepat dalam mengelola penggunaannya.



Pengaruh Penggunaan Gadget Terhadap Perkembangan Sosial Anak Usia 5-6 Tahun

Azriasih Putri^{1*}, Khadijah²

Pendidikan Islam Anak Usia Dini, Universitas Islam Negeri Sumatera Utara Medan, Indonesia^(1,2)

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✉ Corresponding author:

[azriasih0308202032@uinsu.ac.id]

Article Info

Abstrak

Kata kunci:

*Penggunaan Gadget;
Perkembangan Sosial;
Anak Usia 5-6 tahun*

Penelitian ini berfokus untuk mengetahui ada atau tidaknya pengaruh penggunaan gadget terhadap perkembangan sosial anak, dikarenakan anak mengalami kesulitan dalam perkembangan sosialnya yang dilatarbelakangi oleh anak menggantikan teman bermainnya dengan gadget serta dapat membantu orangtua dan pendidik membuat keputusan yang baik mengenai batasan penggunaan gadget untuk mendukung perkembangan sosial anak. Penelitian ini memiliki tujuan untuk mengetahui pengaruh penggunaan gadget terhadap perkembangan sosial anak usia 5-6 tahun. Metode penelitian yang digunakan ialah pendekatan kuantitatif korelasional. Peneliti menggunakan data skunder pada sumber data penelitian ini, dikarenakan guru dan orang tua sebagai sumber data nya. Sampel pada penelitian ini sebanyak 20 siswa. Instrumen pengumpulan data yang digunakan ialah observasi, dokumentasi dan angket. Adapun analisis data dalam penelitian ini menggunakan uji normalitas data, uji homogenitas data, uji hipotesis data. Hasil penelitian ini adalah terdapat pengaruh penggunaan gadget terhadap perkembangan sosial anak usia 5-6 tahun.

Keywords:

*Use of Gadgets;
Social Development;
Children aged 5-6 years*

Abstract

This research focuses on finding out whether or not the use of gadgets influences children's social development because children experience difficulties in their social development, which is motivated by children replacing their playmates with gadgets and can help parents and educators make sound decisions regarding limits on the use of gadgets to support social development. This research aimed to determine the effect of gadget use on the social development of children aged 5-6 years. The research method used was a correlational quantitative approach. Researchers used secondary data as the data source for this research because teachers and parents were the data sources. The sample in this research was 20 students. The data collection instruments used were observation, documentation and questionnaires. The data analysis in this research uses the data normality test, data homogeneity test, and data hypothesis test. The results of this research show that there is an influence of gadget use on the social development of children aged 5-6 years.

HUBUNGAN PENGGUNAAN GADGET DENGAN PERKEMBANGAN EMOSIONAL PADA ANAK USIA SEKOLAH DI SDN 01 SAMBIROTO KOTA SEMARANG

Tarisma Putri Anggraini^{1*}, Agus Saptanto², Hema Dewi Anggraheny³

¹Program Studi S1 Kedokteran, Universitas Muhammadiyah Semarang

^{2,3}Fakultas Kedokteran, Universitas Muhammadiyah Semarang

^{*}Email korespondensi: anggraini6@gmail.com

Abstract: The Relationship between Gadget Use and Emotional Development in School-Age Children at SDN 01 Sambiroto, Semarang City. Technology is advancing quickly, and one area of this growth is in the gadget industry. The use of gadgets brings many changes in life patterns, especially for children, and without realizing it, children can become dependent or addicted to gadgets. When they don't play with gadgets, emotions will appear such as feelings of restlessness, sadness, disappointment, anger and anxiety. The purpose of this study is to ascertain how school-age children in SDN 01 Sambiroto, Semarang City, utilize gadgets and how this affects their emotional development. This study uses a cross-sectional approach and is quantitative in nature. Children in grades 4-6 at SDN 01 Sambiroto in Semarang City served as the research participants. Purposive sampling was used to choose 74 respondents. A questionnaire is used to collect data. The questionnaires used were the gadget use questionnaire and the Strength and Difficulties Questionnaire (SDQ). Relationship analysis uses the Spearman rank test. The majority of the frequency of using gadgets was bad as many as 56 respondents (75.7%) and the majority had abnormal levels of strength and difficulty as many as 72 respondents (97.3%). Device usage and emotional development are related, according to the Spearman rank test analysis ($p=0.000$ and $r=0.747$). A correlation value of 0.000 indicates the association between children's skills and challenges and their usage of gadgets. This suggests that these two factors have a significant and positive association.

Keywords: Emotional Development of Children, Gadget Use, School-Aged Children

Abstrak: Hubungan Penggunaan Gadget dengan Perkembangan Emosional Pada Anak Usia Sekolah di SDN 01 Sambiroto Kota Semarang. Kemajuan ilmu pengetahuan dan teknologi di zaman modern berkembang dengan pesat, dan industri gadget adalah salah satu contohnya. Banyak kebiasaan gaya hidup yang berubah akibat penggunaan gadget, terutama pada anak muda, yang mungkin mengembangkan kecanduan atau ketergantungan pada gadget tanpa menyadarinya. Emosi seperti gelisah, tidak bahagia, kecewa, marah, dan cemas akan muncul saat mereka tidak menggunakan gawai mereka. Penelitian ini bertujuan untuk memastikan bagaimana siswa usia sekolah di SDN 01 Sambiroto, Kota Semarang, mengaitkan penggunaan gadget dengan perkembangan emosi mereka. Penelitian ini menggunakan pendekatan *cross-sectional* dan bersifat kuantitatif. Anak-anak kelas 4-6 di SDN 01 Sambiroto, Kota Semarang menjadi partisipan penelitian, dan *purposive sampling* digunakan untuk memilih 74 responden. Kuesioner digunakan untuk mengumpulkan data. Kuesioner yang digunakan yakni Kuesioner penggunaan gadget dan Kuesioner *Strength and Difficulties Questionnaire* (SDQ). Analisis hubungan menggunakan uji *rank spearman*. Mayoritas frekuensi penggunaan gadget yang buruk sejumlah 56 responden (75,7%) dan mayoritas memiliki tingkat kekuatan dan kesulitan abnormal sejumlah 72 responden (97,3%). Pada analisis uji *rank spearman* menunjukkan terdapat hubungan penggunaan gadget dengan perkembangan emosional ($p=0,000$) dan ($r=0,747$). Menunjukkan Hubungan penggunaan gadget dengan kekuatan dan kesulitan anak memperlihatkan koefisien

Lampiran 4

RIWAYAT HIDUP



Nama : Nur Wifa Sapira

Tempat/Tanggal Lahir : Tasikmalaya, 25 April 2003

Email/HP : nurwifa92@gmail.com / 081991250983

Alamat : Kp.Jeungkil tengah Rt 03/Rw 07 Desa Sukamenak
Kecamatan Sukarame Kabupaten Tasikmalaya

Pendidikan

TK Nurul Ikhwan	: 2007-2009
SDN 2 Sukamenak	: 2009-2015
MTS KHZ Muttaqin	: 2015-2018
SMK As-shofa	: 2018-2021
S1 Keperawatan Fikes Universitas Galuh	: 2021-2025
Profesi Ners Fikes Universitas Galuh	: 2025-sekarang