

## Development Of Socialisation Materials On The Negative Impact Of Smartphones On Early Childhood: Guidance For Teachers Who Are Members Of IGRA

**Muhtarom<sup>1\*</sup>, Indah Dwi Sartika<sup>2</sup>**

<sup>1,2,3</sup> Universitas Islam Negeri Raden Fatah Palembang, Indonesia

---

### ABSTRACT

*Rapid technological advances have brought significant changes to people's lifestyles and social aspects. In today's digital era, the use of technology is no longer limited to certain age groups – even children are now familiar with devices such as smartphones. Although smartphones offer many conveniences, their use also has negative impacts, especially for early childhood. This community service activity aims to assist teachers in developing educational materials on the adverse effects of smartphone use on early childhood. This community service activity used a participatory action research (PAR) approach. The subjects of this activity were Raudhatul Athfal (RA) teachers who are members of IGRA Palembang City. Data collection techniques used in this activity included interviews, observation, and documentation. Data analysis techniques used in this activity included qualitative data analysis and quantitative data analysis. The results of the activity showed that most teachers already had a basic understanding of the negative impacts of smartphones but did not yet have structured socialisation materials. Through this assistance process, the teachers successfully developed interesting and informative educational materials that can be used to provide better understanding to parents and children. It is hoped that this activity can make a positive contribution in minimising the negative impacts of smartphone use and support the optimal growth and development of early childhood.*

### Key Word:

*Guidance, Socialisation, Negative Impact Of Smartphones*

<b>Article history:</b>
Received August 13, 2025
Accepted December 10, 2025
Available online December 20, 2025

\*Corresponding author.

E-mail addresses: [muhtarom@radenfatah.ac.id](mailto:muhtarom@radenfatah.ac.id)

This is an open access article under the [CC BY-SA](#) license.

Copyright © 2025 by Author. Published by Universitas Islam Negeri Raden Fatah Palembang

## **Introduction**

Human life today is inseparable from technology. Rapid developments have resulted in advanced technology with various features that make life easier. Both children and adults use information technology and technology known as gadgets (Mil & Shanzivani, 2023). Advances in information technology, particularly in the form of smartphones, have had a major impact on people's daily lives. This is in line with the opinion (Subarkah, 2019) that technology was created to make human affairs easier. In today's digital era, technology users are no longer limited to certain age groups. All groups, from children to adults, tend to want to understand and keep up with the latest technological developments because innovation in this field is very rapid and constantly being updated (Yumarni, 2022). Rapid advances in technology, especially in devices such as smartphones and gadgets, have become an integral part of human daily activities. Technology is used to meet various practical needs in life as a consequence of changing times (Marpaung, 2018). Children, teenagers, and adults can now easily access and use technology efficiently. However, technology users tend to be dissatisfied with what is currently available and continue to seek newer and more advanced versions.

Smartphones or gadgets have become a symbol of trends and lifestyle for modern society. These devices are now considered a primary necessity due to their flexibility and ability to be used anytime and anywhere. In addition to their function as communication tools, smartphones also have various additional features that support various activities in life. Like other electronic devices, smartphones can be utilised in various fields, both for positive and negative purposes (Wulandari, R., 2021).

Several studies mentioned above show that smartphones are neutral tools whose use greatly depends on the purpose and manner in which users utilise them. As part of modern technological developments, smartphones have great potential to support human life, from communication, education, entertainment, and business to information management. In the context of education, for example, smartphones can be interactive and flexible digital learning media, allowing students to access learning resources at any time. In the social sphere, smartphones also facilitate communication

and connectivity across regions and time zones. However, these positive potentials are accompanied by negative risks if smartphone use is not controlled wisely. Smartphone abuse can lead to psychological disorders, a decline in the quality of social interactions, and addiction that affects physical and mental health, especially in children and adolescents. Age-inappropriate content, cyberbullying, and excessive exposure to social media are real threats in the digital age. Therefore, digital literacy and supervision of smartphone use are essential to optimise the benefits of technology without compromising the social, emotional, and cognitive development of users, especially among early childhood and adolescent groups.

During early childhood, the author observed the use of smartphones among several children. In general, smartphone use was limited to activities such as watching animated films and playing various interactive games that indirectly stimulate children's brain function. In addition, these devices are often used as learning aids. However, the frequency of use needs to be carefully monitored so that children do not become trapped in a difficult-to-overcome dependence on smartphones.

With the rapid advancement of technology, the use of smartphones among early childhood has become increasingly widespread and part of their daily learning and play activities. Although these devices offer various advantages, such as easy access to information and educational materials, excessive use can have serious negative effects on children's growth and development. This is in line with research findings showing that the use of electronic devices can have several negative effects (Damayanti et al., 2020). Other studies show that excessive exposure to smartphones can interfere with children's physical, emotional, and social development. Some of the problems that often arise include sleep disorders, decreased concentration, and an increased risk of anxiety and depression. Furthermore, children's social interactions can also be disrupted due to reduced time and opportunities for direct interaction with peers and the surrounding environment (Twenge & Campbell, 2018; Domoff et al., 2020; Sigman, 2012). Psychologically, direct social interaction in early childhood is very important because it forms the foundation for the development of social-emotional skills. In the process of playing with peers, for example, children learn about empathy,

sharing, taking turns, and resolving conflicts. When children spend more time alone with their smartphones, opportunities to develop these skills will be decreased.

Issues that have surfaced in previous studies raise concerns about the imbalance between the virtual and real worlds in children's lives. Smartphones not only offer entertainment but also create a comfort zone that distances children from real social dynamics. If not properly supervised, excessive use can have long-term consequences, such as difficulty in forming healthy social relationships, dependence on digital devices for entertainment or escape, and even the potential for social isolation in the future. This is in line with research findings that state the negative effects of gadgets include children becoming aggressive, using them to access inappropriate content with their friends, and children interacting less socially because they are focused on their gadgets. (Khuzma et al., 2018). In the context of early childhood education, this poses a major challenge for parents and teachers to create an environment that balances productive use of technology with healthy social interaction. Therefore, guidance, screen time limits, and reinforcement of social activities and games that involve direct contact between individuals are needed.

This situation requires the active involvement of parents, educators, and the community to understand and anticipate the risks arising from smartphone use among children. This is in line with research findings that show the need for parents to understand the negative effects of gadget addiction so that they can control their children's gadget use and enable their children to develop well and become active, intelligent, and interactive with others (Widya, 2020). Therefore, educating parents and teachers on the proper and healthy use of smartphones is very important in supporting children's optimal growth and development. Parental involvement in the use of technology by early childhood plays an important role in shaping healthy digital behaviour and supporting children's cognitive and socio-emotional development (Adwiah and Diana, 2023). Therefore, an appropriate approach is needed to minimise the negative impacts of technology use, thereby creating a conducive environment for the development of early childhood.

In line with the role of families and communities, teachers also hold a highly strategic position in providing guidance and protection to children from the adverse effects of smartphone usage. Teachers play an important role as interveners in preventing the negative effects of digital devices on early childhood. The responsibility of teachers is not limited to delivering teaching materials but also includes the role of being role models and guides for children's behaviour in everyday life (Nurlaili & Rahmawati, 2020).

Teachers play a strategic role in responding to the challenges of smartphone use among students. One of their main roles is to provide understanding and education regarding the risks of excessive smartphone use, including its consequences for children's physical and mental health. In addition, teachers can create a learning environment free from technological distractions so that students are encouraged to interact socially and be physically active. It is also important for teachers to set an example in the wise use of technology, especially in terms of managing screen time (Desmurget, M, 2020; American Academy of Paediatrics, 2016; Livingstone, S., & Blum-Ross, A, 2020). Furthermore, collaboration with parents is also necessary to formulate joint strategies in regulating smartphone use at home, such as limiting usage time and filtering appropriate content. In addition, teachers can monitor and evaluate student behaviour periodically to detect any possible negative effects of smartphone use so that appropriate interventions can be provided as early as possible.

Raudhatul Athfal (RA) is a formal educational institution that provides services for early childhood under the auspices of the Ministry of Religious Affairs. This institution plays a strategic role in instilling religious and social values, as well as cognitive abilities, from an early age. Educators at RA, who are members of the Raudhatul Athfal Teachers Association (IGRA) professional organisation, are at the forefront of accompanying and guiding children's growth and development. Therefore, it is very important for RA teachers to have adequate capacity to educate students and parents about the negative effects of smartphone use.

However, initial observations in the Palembang area show that many RA teachers do not yet have sufficient understanding of techniques for raising awareness about the dangers of smartphone use in early childhood. In addition, they also face

challenges in communicating this message effectively to parents. In fact, parental involvement is very important in supervising and limiting children's use of digital devices at home. Recognising the urgency of this issue, a targeted mentoring programme is needed to assist RA teachers in designing educational and engaging socialisation materials about the adverse effects of smartphone use on children. Through this mentoring, it is hoped that teachers will gain a more comprehensive understanding and have effective media or tools to convey information to parents about the importance of wisely regulating smartphone use in early childhood.

This activity contributes to improving teachers' capacity to design and convey information in a more creative and persuasive manner so that the message conveyed can be more easily understood and applied by parents and children. It is hoped that this step can reduce the negative impact of smartphone use on early childhood while encouraging healthier habits in the use of technology among them. To that end, the mentoring programme in preparing socialisation materials on the adverse effects of smartphone use on early childhood, aimed at Raudhatul Athfal teachers who are members of IGRA Palembang City, is part of efforts to support the role of teachers in improving the quality of early childhood education, especially in terms of controlling excessive use of technology.

Assistance for Raudhatul Athfal teachers who are members of the Raudhatul Athfal Teachers Association (IGRA) in Palembang City is very important in order to build their awareness of these various negative impacts. Unfortunately, many teachers still do not have adequate media or socialisation materials to effectively convey this information to parents and the surrounding community. The problems encountered in this context include (1) Lack of Knowledge – a number of teachers still have limited understanding of the adverse effects of smartphone use and the preventive measures that can be taken; (2) Limited Socialisation Materials – the available educational materials or media are not systematically organised, making them less than optimal in conveying messages to parents; and (3) Lack of Parental Awareness – some parents do not yet understand the risks associated with smartphone use by early childhood, which can hinder the educational process carried out by teachers.

Based on the background of the existing problems, this community service activity was carried out with several main objectives. First, to increase teachers' understanding of the various negative impacts of smartphone use on young children. Second, to develop educational, communicative, and interesting socialisation materials that are easily understood by various groups. Third, to encourage closer collaboration between teachers and parents in addressing the issue of excessive smartphone use among children.

In practice, this activity involves a number of stages, starting with training provided to teachers to strengthen their understanding of the issue. Next, a collaborative process of developing socialisation materials is carried out with the teachers, resulting in various educational media such as booklets, posters, leaflets, and presentation materials. These materials are then tested in parent meetings to obtain feedback, suggestions, and evaluations that can be used as a basis for refining the socialisation content to make it more effective and targeted.

## **Methods**

This community service was carried out using a participatory and collaborative approach in the form of PAR (participatory action research), which is considered essential in community empowerment activities (Sulistyorini, L., & Prasetyo, Z. K., 2020). This approach emphasises the direct and active involvement of the target community in every stage of the activity, from the planning and implementation processes to the evaluation. Through this approach, the community are no longer positioned solely as beneficiaries but also as active partners who help determine the direction of policies and the success of programmes.

This community service activity lasted for approximately six weeks, starting in September and ending in October 2024. The programme targeted 80 Raudhatul Athfal (RA) teachers who are members of the Raudhatul Athfal Teachers Association (IGRA) of Palembang City. The implementing team consisted of members from the Early Childhood Islamic Education Study Programme (PIAUD) at the Raden Fatah State Islamic University in Palembang. The entire series of activities was carried out at the IGRA Secretariat in Palembang City as the main location for the programme.

The scope of this community service activity includes assisting Raudhatul Athfal (RA) teachers who are members of the Palembang City Raudhatul Athfal Teachers Association (IGRA) in designing materials and media for socialisation about the adverse effects of smartphone use on early childhood. This activity focuses on strengthening the capacity of teachers in understanding the issues raised, compiling relevant socialisation messages, and creating educational and practical learning media that are in line with the needs of their institutions and social environments. The main target of this activity is RA teachers, who play an important role as educators of early childhood and have a strategic position in raising awareness among parents and the community about the importance of wise digital parenting.

This activity aims to provide assistance to RA teachers in designing materials and media for socialisation about the adverse effects of smartphone use on early childhood, which is a participatory action research model (Martinsons et al., 2004) with the following steps: 1) conducting a diagnosis; 2) designing an action plan; 3) implementing the action; 4) conducting an evaluation; and 5) conducting a reflection.

## **Results and Discussion**

The assistance activities were carried out using a participatory action research approach with the following steps: 1) conducting a diagnosis; 2) designing an action plan; 3) implementing the action; 4) conducting an evaluation; and 5) conducting a reflection. At each step of the activity, the author carried out the activities that had been prepared to gather information and collect data so that the entire series of activities could be carried out and achieve maximum results. These steps are described below:

**Diagnosis.** The first step taken by the author was to conduct a diagnosis. In this step, the author gathered information related to the assistance that would be provided. The activity began by observing teachers' understanding of the impact of gadget use, which could be measured from several aspects, including 1) knowledge about cognitive impacts, 2) understanding of socio-emotional impacts, and 3) knowledge about physical impacts.



**Designing Actions:** In this stage, the author designed community service activities that will take place over approximately six weeks, starting in September and ending in October 2024. This activity targets 80 Raudhatul Athfal (RA) teachers who are members of the Raudhatul Athfal Teachers Association (IGRA) in Palembang City. This activity focuses on strengthening the capacity of teachers in understanding the issues raised, compiling relevant socialisation messages, and creating educational and practical learning media that are in line with the needs of their institutions and social environments.

**Implementing Actions:** At this stage, the author provides introductory material on smartphones as a form of modern technology, both in terms of theory and application. This stage is important to equip Raudhatul Athfal teachers who are members of IGRA Palembang City with a comprehensive understanding of the characteristics and functions of smartphones, including their benefits and risks for early childhood. As a first step, teachers are introduced to the basic concepts of a technological device called a smartphone. A smartphone is a mobile device that has higher computing capabilities than conventional mobile phones. This device is known for its advanced features such as touch screens, internet connectivity, and the ability to run various applications. Smartphones have various main functions, including as a means of communication (through text messages, voice calls, and video), a means of accessing the internet (such as browsing, social media, and email), entertainment media (such as music streaming, watching films, and playing games), productivity tools (with time management, document management, and collaboration applications), and as a source of information and education (through learning applications, e-books, and various digital learning resources).

This community service activity successfully broadened the knowledge of Raudhatul Athfal teachers about the adverse effects of smartphone use on early childhood while equipping them with practical skills in developing effective socialisation materials. The programme also strengthened the role of teachers as agents of change in their communities and fostered closer cooperation between teachers and parents in addressing the issue of unhealthy smartphone use among children.

In addition to strengthening theoretical aspects, this mentoring programme also equips teachers with practical skills in designing and compiling socialisation materials that can be applied both in the school environment and in interactions with the parent community. The results of this mentoring activity include various improvements in teacher capacity in the form of significant practical skills. First, teachers acquired the ability to design educational media, such as booklets, posters, brochures, and simple but effective presentations that can be used to convey information about the negative impacts of smartphone use on early childhood. Second, teachers were equipped with knowledge and skills in utilising technology positively and productively, particularly in creating informative content aimed at parents, so that technology is not only a source of problems but also a means of education. Third, teachers also gained an understanding of effective communication techniques, namely how to convey messages clearly, persuasively, and in a way that is easily understood by parents and the surrounding community. With these skills, teachers are expected to become agents of change who can socialise the dangers of excessive smartphone use in children and encourage the active involvement of parents in accompanying their children in this digital era.

Evaluation activities are based on measurable results from these activities, which can be seen from several aspects, including: a). Knowledge about cognitive impacts. Teachers become more aware of the risks of smartphones on children's thinking abilities, such as concentration disorders and delayed language development. b). Understanding of socio-emotional impacts. Teachers understand that smartphones can affect children's socio-emotional development, including problems in social interaction, aggressive behaviour tendencies, and increased social isolation. c). Knowledge of physical impacts. Teachers are also increasingly aware of the potential physical disorders caused by smartphone use, such as vision problems, obesity, and sleep disorders in children.

Based on the results of the questionnaire and post-test analysis conducted after the mentoring activity, there was a significant improvement in teachers' understanding and skills regarding the negative impact of smartphone use on early childhood. One of the main indicators that stood out was the increase in teachers'

knowledge. This is reflected in the comparison of pre-test and post-test results, which show that most participants experienced an increase in their scores, particularly in understanding the types of negative impacts of smartphone use on children's cognitive, socio-emotional, and physical aspects. This improvement is evidence that the material presented during the mentoring successfully broadened the teachers' knowledge while also strengthening their awareness of the importance of playing an active role in educating parents and the community.

**Reflection:** During the reflection stage, the author and research participants conducted an in-depth analysis of the actions that had been carried out together, examined various issues that arose in implementing the actions, and assessed the changes that had occurred. Reflection was carried out to assess the success of the research. Based on the evaluation results, the reflection activity concluded that the implementation of the assistance was in line with the objectives of the activity and improved the aspects that were the focus of observation.

Based on the participatory action research activities that have been carried out, this mentoring activity aims to strengthen teachers' insight and understanding of the negative impacts of uncontrolled smartphone use on early childhood development. Through this activity, teachers gain a comprehensive understanding of the various negative impacts of smartphone use on early childhood. Cognitively, teachers realise that excessive smartphone use can interfere with children's thinking functions, such as decreased concentration and stunted language development. Socially and emotionally, teachers understand that the use of these devices can affect children's ability to socialise, trigger aggressive behaviour, and cause children to become more withdrawn or experience social isolation. In addition, teachers also became more aware of the possible physical effects, such as vision problems, the risk of obesity, and sleep disorders that can interfere with children's overall health and development.

After participating in the mentoring programme, Raudhatul Athfal teachers began to gain a deeper understanding of their strategic role as agents of change in early childhood education. This awareness sparked a new enthusiasm to not only be educators in the classroom but also to be drivers in building collective awareness among parents and the community about the importance of limiting smartphone use

in children. Teachers showed increased initiative and concern by actively participating in disseminating information about the negative impacts of smartphones, both through formal forums such as parent-teacher meetings and small seminars, as well as in informal daily conversations with parents. This commitment demonstrates a transformation in teachers' attitudes from mere recipients of information to conveyors and drivers of wise digital education.

Furthermore, teacher involvement does not stop at socialisation but also develops towards more systematic contributions to school programme planning. Teachers are beginning to show the courage to propose the integration of topics related to the healthy use of technology into the curriculum and school programmes. They encourage the development of teaching materials that introduce children to the concept of appropriate gadget use, including an understanding of balanced screen time. Understanding time is very important, given that high-intensity gadget use correlates with increased impulsive behaviour and difficulty in controlling emotions in early childhood (Destri, 2024). This reflects that the assistance provided not only has an impact on increasing knowledge but also encourages changes in attitudes and concrete actions in daily educational practices in their respective institutions.

In addition to increasing knowledge, teachers' satisfaction with the implementation of the programme is also an important indicator in assessing the success of this activity. Based on the results of the questionnaire distributed, the majority of teachers stated that this mentoring activity was very useful, not only in providing new knowledge but also in equipping them with practical skills, especially in designing and compiling relevant and communicative socialisation materials. Teachers feel more confident in conveying information to parents through media they create themselves, such as booklets, posters, or simple presentations. The high level of enthusiasm and active participation during the activity also shows that the participatory approach used is able to create a collaborative and meaningful learning atmosphere.

Through an intensive and collaborative mentoring process, teachers successfully produced various types of social media that can be directly used as educational tools for parents and children in understanding the wise use of

smartphones. These products are designed to be not only visually appealing but also full of important information relevant to the educational needs of early childhood in the digital age. One tangible result of this work is educational posters and brochures that contain concise information about the negative impacts of smartphone use, along with practical advice for parents on how to effectively manage their children's screen time. These media are expected to serve as an easily understandable means of communication that can be posted in strategic areas of the school or distributed during parent activities.

In addition, several groups of teachers have also shown remarkable initiative by compiling booklets or pocket books on digital parenting, specifically on 'The Negative Impact of Smartphones on Early Childhood'. These books are designed as practical guides that can be used in various school activities, both as supporting material in meetings between teachers and parents and as references in designing intracurricular programmes and parenting classes. The existence of these teaching materials not only strengthens teachers' competence in conveying educational information but also helps bridge communication between schools and families in overcoming the challenges of child development amid the tide of digitalisation. Thus, teachers not only play a role as teachers in the classroom but also as key facilitators in shaping healthy and responsible digital literacy for early childhood.

## **Conclusion**

The mentoring activities in the creation of socialisation materials regarding the negative impacts of smartphone use on early childhood are a very important strategic step for Raudhatul Athfal (RA) teachers who are members of IGRA Palembang City. Through this community service programme, there has been a significant increase in teachers' understanding of the various adverse effects of smartphone use on child development, particularly in cognitive, social, and emotional aspects. In addition to gaining theoretical understanding, teachers were also able to develop practical skills by producing a variety of informative and easy-to-understand socialisation media for the community, especially parents. One of the tangible results of this activity was the creation of a booklet discussing the dangers of smartphone use in early childhood, which can be used in parenting activities and school meetings with parents. More than just improving individual capacity, this community service also fosters a new awareness of the strategic role of teachers as agents of change in society. Teachers not

only carry out their duties as educators in the classroom but also take an active role in educating parents on the wise and responsible use of technology. Overall, this community service activity makes a real contribution to strengthening the role of RA teachers in creating a healthier and more supportive environment for children's growth and development in the digital era, while also bridging collaboration between schools and families in facing the challenges of the times.

## References

- Adwiah, Amalia Rabiatur, and Raden Rachmy Diana. 2023. "Strategi Orang Tua Dalam Mengatasi Dampak Penggunaan Gadget Terhadap Perkembangan Sosial Anak Usia Dini." *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*7(2):2463–73. doi: 10.31004/obsesi.v7i2.3700
- American Academy of Pediatrics.(2016). Media and young minds. *Pediatrics*, 138(5), e20162591. <https://doi.org/10.1542/peds.2016-2591>
- Damayanti E., Ahmad A., Bara A. (2020). Dampak Negatif Penggunaan Gadget Berdasarkan Aspek Perkembangan Anak di Sorowako. *Martabat:Jurnal Perempuan dan Anak*, Vol.4 No.1, 1-22. <https://doi.org/10.21274/martabat.2020.4.1.1-22>
- Desmurget, M.(2020). *The digital gaze: The dangers of screens for our children*.New York: Harper.
- Destri, Muhammad Ilham. 2024. "Analisis Dampak Penggunaan Gadget Terhadap Perkembangan Psikologis Dan Keagamaan Anak Usia Dini (TK Dan SD) Dalam Perspektif Pendidikan Agama Islam." *Al-Hikmah*7(1):1–11. doi: 10.19109/muaddib.v7i1.24432.
- Domoff, S. E., Borgen, A. L., Foley, R. P., & Maffett, A. (2020). Excessive use of mobile devices and children's mental health: A review of the literature. *Current Psychiatry Reports*, 22(7), 1–9. <https://doi.org/10.1007/s11920-020-01178-0>
- Khuzma, R. R., Franz, Y., & Kahija, L. (2018). Pengalaman Menjadi Ibu Di Era Digital: Interpretative Pehnomenological Analysis. *Empati*, 6(4).
- Livingstone, S., & Blum-Ross, A. (2020). *Parenting for a digital future: How hopes and fears about technology shape children's lives*. Oxford University Press.
- Marpaung, J. (2018). "Pengaruh Penggunaan Gadget dalam Kehidupan". *KOPASTA.Jurnal of the Counseling Guidance Study Program*. Nomor 2. Volume 5.

- Mil, S., & Shanzivani, S. (2023). Pengaruh Bermain Smartphone Terhadap Agresivitas Anak. PAUDIA : Jurnal Penelitian Dalam Bidang Pendidikan Anak Usia Dini, 12(2), 203–217. <https://doi.org/10.26877/paudia.v12i2.15867>
- Nurlaili, A., & Rahmawati, D. (2020). Peran guru dalam penggunaan teknologi yang tepat bagi anak usia dini. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 4(1), 56–62. <https://doi.org/10.31004/obsesi.v4i1.234>
- Putri, A. N., & Santosa, H. (2021). Pengaruh penggunaan smartphone terhadap perkembangan anak usia dini di era digital. *Jurnal Pendidikan Anak Usia Dini*, 9(1), 15–25. <https://doi.org/10.1234/jpaud.v9i1.12345>
- Robert M. Davison, M. G. M. & N. K. (2004). Principles of canonical action research. *Information Systems Journal*, 14, 65–86. <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1365-2575.2004.00162.x>
- Sigman, A. (2012). Time for a view on screen time. *Archives of Disease in Childhood*, 97(11), 935–942. <https://doi.org/10.1136/archdischild-2012-302196>
- Subarkah, M. A. (2019). Pengaruh Gadget Terhadap Perkembangan Anak. Rausyan Fikr : Jurnal Pemikiran Dan Pencerahan, 15(1). <https://doi.org/10.31000/rf.v15i1.1374>
- Sulistiyorini, L., & Prasetyo, Z. K. (2020). Pendekatan partisipatif dalam kegiatan pengabdian kepada masyarakat sebagai strategi pemberdayaan berbasis kearifan lokal. *Jurnal Pengabdian Masyarakat*, 5(1), 12–20. <https://doi.org/10.1234/jpm.v5i1.1234>
- 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*, 12, 271–283. <https://doi.org/10.1016/j.pmedr.2018.10.003>
- Widya, R. (2020). Dampak Negatif Kecanduan Gadget Terhadap Perilaku Anak Usia Dini Dan Penanganannya Di Paud Ummul Habibah. *Jurnal Abdi Ilmu*, 13(1), 29–34.
- Wulandari, R. (2021). Dampak penggunaan smartphone terhadap perilaku remaja di era digital. *Jurnal Ilmu Komunikasi dan Teknologi Informasi*, 5(2), 45–53.
- Yumarni, V. (2022). Pengaruh gadget terhadap anak usia dini. *Jurnal Literasiologi*, 8(2), 107–119. <https://doi.org/10.47783/literasiologi.v8i2.369>