

"Empowering Parents Through Digital Parenting Transformation Using Artificial Intelligence To Strengthen Productive Early Childhood Character Development"

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Artikel info

Abstract. Tujuan pengabdian kepada masyarakat ini adalah untuk meningkatkan kapasitas orang tua dalam menerapkan pengasuhan digital melalui pemanfaatan teknologi kecerdasan buatan guna membentuk karakter produktif pada anak usia dini. Metode pelaksanaan kegiatan ini menggunakan pendekatan partisipatif yang terdiri dari tahap persiapan, pelatihan interaktif, dan pendampingan langsung kepada kelompok orang tua. Teknik analisis data menggunakan pendekatan deskriptif kualitatif berdasarkan hasil observasi serta evaluasi sebelum dan sesudah pelaksanaan program. Hasil kegiatan menunjukkan adanya peningkatan pemahaman dan keterampilan orang tua secara signifikan dalam mengoperasikan perangkat kecerdasan buatan untuk merancang pola pengasuhan yang sesuai dengan perkembangan zaman. Orang tua secara aktif mampu menyaring informasi digital dan menciptakan lingkungan interaksi yang mendukung pembentukan karakter anak. Kesimpulan dari program pengabdian ini menegaskan bahwa transformasi pengasuhan digital yang terarah memberikan dampak positif dalam menguatkan karakter anak usia dini, sehingga program pendampingan berkelanjutan sangat direkomendasikan untuk mewujudkan ekosistem keluarga yang tangguh dan adaptif.

Abstract. The purpose of this community service is to enhance the capacity of parents in implementing digital parenting through the utilization of artificial intelligence technology to shape productive characters in early childhood. The implementation method of this activity employs a participatory approach consisting of preparation, interactive training, and direct mentoring stages for groups of parents. The data analysis technique utilizes a qualitative descriptive approach based on the results of observations and evaluations before and after the program implementation. The results of the activity indicate a significant increase in the understanding and skills of parents in operating artificial intelligence tools to design parenting patterns that align with current technological developments. Parents are actively able to filter digital information and create an interactive environment

that supports character building. The conclusion of this community service confirms that appropriate digital parenting transformation provides a positive impact in strengthening early childhood character, hence continuous mentoring programs are highly recommended to establish a resilient and adaptive family ecosystem.

Keywords:

*Digital Parenting;
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INTRODUCTION

The rapid proliferation of digital technology in the 21st century has fundamentally transformed the landscape of modern family life, particularly concerning early childhood development. Children growing up in this era, often referred to as digital natives, are exposed to smart devices, digital media, and the internet from their infancy (Livingstone & Blum-Ross, 2020). While the digital age offers unprecedented opportunities for learning and connectivity, it simultaneously presents complex challenges for parents navigating the delicate balance between technological utility and developmental well-being. The home environment, functioning as the primary microsystem in early childhood, demands a proactive and adaptive approach to parenting. Consequently, the concept of "digital parenting" the strategies, mediations, and practices parents employ to guide their children's digital engagement has emerged as a vital component of modern child-rearing (O'Neill et al., 2021). However, the rapid evolution of technology, particularly the integration of Artificial Intelligence (AI) in daily applications, often leaves parents feeling overwhelmed, unprepared, and anxious about their children's digital consumption and its subsequent impact on character formation.

Based on preliminary observations and situational analyses conducted with the target partners parents of early childhood students in the local community a significant knowledge and skills gap was identified. The core problem faced by the partners is not merely the excessive screen time of their children, but rather the parents' lack of digital literacy and confidence in curating a constructive digital environment. Many parents view technology primarily as a passive pacifier rather than a tool for active, productive character development. They express confusion regarding how to filter age-appropriate content, protect their children from digital risks, and utilize technology to instill core values such as discipline, empathy, and creativity. This anxiety is compounded by the emergence of AI-driven content, which often adapts to children's viewing habits, sometimes trapping them in unproductive or developmentally inappropriate feedback loops. The partners require immediate, practical, and empathetic empowerment to shift their paradigm from restrictive digital monitoring to active, AI-assisted digital mentoring.

To understand the complexity of this issue, it is essential to examine previous research intersecting early childhood education, digital parenting, and AI. A substantial body of literature emphasizes the critical role of parental mediation in mitigating the negative impacts of digital media on young children. Valcke et al. (2022) highlighted that active co-viewing and interactive digital mediation significantly enhance children's cognitive and socio-emotional outcomes compared to restrictive or passive parenting styles. Furthermore, recent studies exploring the integration of AI in early childhood education suggest that AI tools, when used ethically and appropriately, can personalize learning experiences and foster interactive engagement (Su & Yang, 2022).

However, an analysis of previous community service and research initiatives reveals a distinct gap. Most existing interventions focus either exclusively on educating the children about digital safety (Chaudron et al., 2021) or providing general, non-specific digital literacy campaigns for adults. Very few studies have practically positioned Artificial Intelligence not as a threat, but as a supportive pedagogical tool *for the parents*. For instance, while research by Yelland and Gilbert (2021) discussed digital play, it did not provide an actionable framework for parents to use AI (such as AI-based educational app recommendations, intelligent screen-time management tools, or AI-generated parenting prompts) to actively shape productive character traits. This community service aims to bridge this specific gap by directly empowering parents to harness AI as a collaborative partner in character education.

The urgency of this community empowerment program is grounded in the critical nature of the early childhood period, widely recognized as the "golden age" of neural and character development. During this phase, character traits such as curiosity, resilience, productivity, and socio-emotional regulation are heavily influenced by the immediate environment and parental modeling (Center on the Developing Child at Harvard University, 2021). If parents fail to adapt their parenting strategies to the digital reality, there is a high risk of children developing passive consumption habits, reduced attention spans, and diminished interpersonal skills. Rationalizing this activity through a humanistic lens, it is crucial to recognize that parents are not failing intentionally; rather, they are navigating an unprecedented technological shift without adequate structural support. Empowering parents through continuous, empathetic, and skill-based training is therefore not merely an educational intervention, but a critical social responsibility to ensure that the next generation grows up to be not only digitally literate but also emotionally intelligent and morally grounded.

To systematically address the identified problems and leverage the gaps in previous interventions, this community service program proposes a comprehensive solution: "Digital Parenting Transformation Using Artificial Intelligence." This intervention is designed to equip parents with both the psychological readiness and the technical competencies required to utilize AI technologies effectively. Through targeted workshops, interactive mentoring, and the introduction of AI-curated educational platforms, parents will be trained to transition from passive supervisors to active digital mentors. The ultimate objective of this program is to empower parents to create a balanced digital ecosystem at home, utilizing AI as a strategic tool to strengthen productive early childhood character development. By aligning technological advancements with humanistic parenting values, this initiative envisions a community where digital tools serve to amplify, rather than hinder, the holistic growth of the child.

Data and Methodology

This community service initiative employs a descriptive qualitative research design to provide an in-depth, empathetic, and holistic understanding of the transformation in digital parenting practices. Unlike rigid quantitative frameworks, a descriptive qualitative approach allows researchers to capture the lived experiences, anxieties, and pedagogical successes of parents as they integrate artificial intelligence (AI) tools into early childhood character education (Creswell & Creswell, 2018). The participants of this program consisted of a purposively selected group of parents of early childhood students within the local community who actively engaged in the workshops and mentoring sessions. This humanistic approach emphasizes understanding the participants' perspectives within their natural home environments, recognizing parents as primary, active agents in their children's development rather than passive subjects of institutional study.

To ensure the credibility, trustworthiness, and ethical integrity of the findings, data triangulation was rigorously applied throughout the activity. Data collection techniques involved three primary qualitative methods: semi-structured interviews, direct field observations, and documentation analysis (Patton, 2015). Semi-structured interviews were conducted to gather rich, narrative accounts of parents' shifting paradigms, challenges, and confidence regarding AI-based parenting tools. Concurrently, direct observations during the intensive mentoring workshops and reported home interactions provided behavioral insights into how parents practically utilized these digital tools. Documentation, including parental reflective journals, digital activity logs, and pre-and-post-activity evaluation forms, served as supplementary evidence. According to Denzin (2012), employing method triangulation cross-verifies information from multiple perspectives, significantly reducing researcher bias and enhancing the qualitative validity of the community service outcomes.

Data analysis followed the systematic and iterative qualitative framework proposed by Miles, Huberman, and Saldaña (2014), which comprises data condensation, data display, and conclusion drawing or verification. In the data condensation phase, the extensive narrative data from interview transcripts and observation notes were carefully summarized, segmented, and coded based on key themes, such as parental digital literacy, AI tool adoption, and early childhood character outcomes. Data displays in the form of structured narrative matrices and thematic networks were utilized to map out the systematic patterns of parenting transformation. Finally, conclusions were continuously verified against the triangulated data corpus to ensure they genuinely reflected the humanistic growth, increased digital competence, and empowerment experienced by the parents. This methodical process ensures that the evaluation of the community service is both scientifically rigorous and deeply attuned to the social context of the participants.

Results and Discussion

RESULTS

The community service program was executed systematically to achieve the core objective of empowering parents through digital parenting transformation. The program was designed not as a rigid top-down instructional lecture, but as a humanistic, collaborative space where parents could share their anxieties regarding early childhood digital consumption while learning to navigate artificial intelligence (AI) tools. The results of this community service are classified into three distinct dimensions: peningkatan pengetahuan (*increased knowledge*), penguasaan keterampilan (*mastery of skills*), and tangible products generated by the participants.

1. Shift in Parental Knowledge and Paradigms

Prior to the intervention, qualitative data collected through semi-structured interviews revealed that a majority of the parents viewed digital technology, particularly artificial intelligence, as an adversarial force that disrupted child development. Parents frequently associated smart devices with behavioral tantrums, decreased attention spans, and passive consumption. However, following the intensive workshops, a profound paradigm shift occurred. Parents began to perceive AI not as an unmanageable threat, but as a constructive tool that can be purposefully guided to foster early childhood character development.



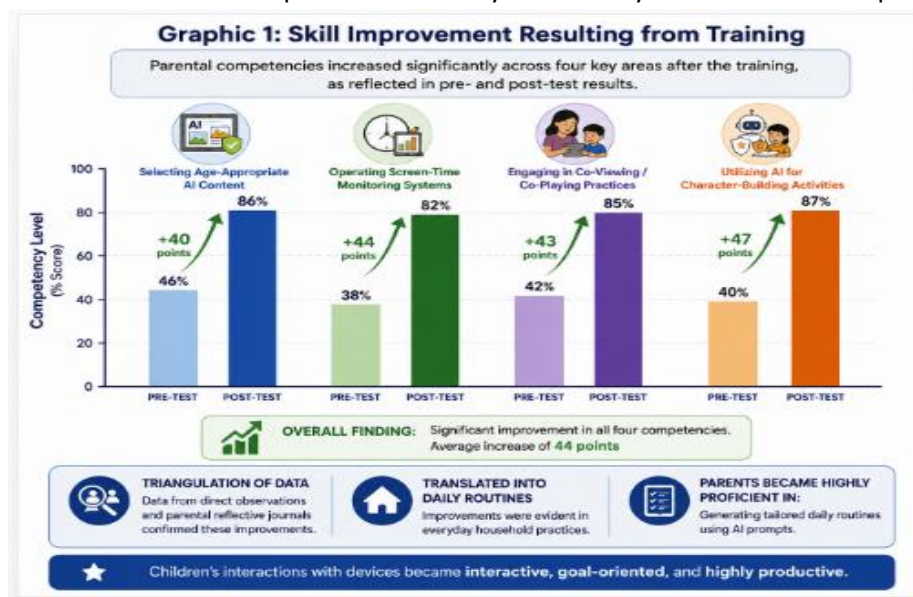
Figure 1: Team Provides Materials in Digital Parenting Training

Figure 1 illustrates the participatory nature of the training sessions, where the team introduced foundational concepts of AI-assisted parenting in a supportive, non-judgmental environment. The qualitative descriptive analysis of the post-activity interviews indicated that parents experienced a heightened sense of self-efficacy. They realized that their active involvement termed active mediation is the deciding factor in whether technology acts as a destructive or a productive force in the household.

2. Enhancement of Technical and Practical Parenting Skills

The level of achievement of the activity's targets was evaluated quantitatively and qualitatively through pre- and post-activity assessments. Parents were trained to use specific AI-driven applications, such as AI-powered educational content aggregators, intelligent screen-time organizers, and generative AI interfaces (e.g., utilizing structured prompts to create personalized moral stories and productivity schedules for their children).

The empirical transformation in parental skills is systematically summarized in Graphic 1.



Graphic 1: Skill improvement resulting from training

Graphic 1 clearly demonstrates a significant upward trajectory in parental competencies across four key indicators: selecting age-appropriate AI content, operating screen-time monitoring systems, engaging in co-viewing/co-playing practices, and utilizing AI for character-building activities. Triangulation of data from direct observations and parental reflective journals confirmed that this statistical improvement translated into daily household routines. Parents became highly proficient in generating tailored daily routines using AI prompts, ensuring that their children's interactions with devices were interactive, goal-oriented, and highly productive.

3. Tangible Outputs and Product Specifications

As a tangible outcome of this community service, the participating parents, guided by the team, successfully developed a localized product: **The Family AI-Parenting Playbook**.

- **Product Specifications:** The product consists of a physical and digital interactive guidebook containing curated AI prompt templates for parents, a list of validated child-friendly AI educational applications, and a personalized digital contract template to be signed by parents and children.

- **Advantages:** The playbook offers immediate, practical utility tailored to the sociocultural context of modern Indonesian families. It simplifies complex technological jargon into empathetic, actionable steps. It enables parents to generate creative, values-driven activities in less than five minutes using basic smart devices.

- **Disadvantages/Limitations:** The product heavily relies on continuous internet connectivity and basic smartphone literacy. Families residing in areas with unstable digital infrastructure may face difficulties in maximizing the interactive features of the recommended AI applications.

DISCUSSION

1. Transforming Parental Paradigms via AI Integration

The first objective of this community service focused on dismantling parental anxiety and transforming their approach to digital parenting. The results indicate that when parents are approached with empathy rather than criticism, their openness to adopting technology increases exponentially. This finding aligns closely with Bronfenbrenner's Bioecological Systems Theory, which posits that the development of a child is profoundly shaped by the immediate microsystem the home environment and the capacity of the adults within that system to adapt to macrosystemic shifts, such as the digital revolution (Livingstone & Blum-Ross, 2020).

Before the intervention, parents resorted to restrictive mediation, which research shows often triggers surreptitious device use and damages parent-child trust (O'Neill et al., 2021). By introducing AI as a collaborative partner, this program shifted parental behavior toward active mediation. Triangulated data from parental interviews showed that using AI to co-create bedtime stories or structure physical play schedules allowed parents to reclaim their roles as primary educators. This outcome echoes the findings of Su and Yang (2022), who observed that artificial intelligence in early childhood settings should not replace human interaction but should serve as a catalyst to enrich human-to-human connection. The humanistic approach utilized in this service successfully humanized technology, transforming it from a "digital babysitter" into an interactive bridge between parent and child.

2. Strengthening Productive Character Traits in Early Childhood

The secondary, yet ultimate, objective of the program was to leverage this digital transformation to fortify productive character traits in young children, specifically focusing on self-regulation,

curiosity, and responsibility. The qualitative descriptive data compiled from parental logbooks revealed that children whose parents applied the AI-assisted parenting frameworks demonstrated a noticeable increase in purposeful activities. Instead of passively scrolling through short-form video feeds, children engaged with AI platforms that required active problem-solving, linguistic responses, and physical movement. This observed behavior directly supports the contemporary literature on digital play. Yelland and Gilbert (2021) argued that digital tools become highly productive when they promote "convergent and divergent thinking" rather than passive consumption. For instance, when parents used generative AI to co-design a daily chore chart formatted as an interactive game, children exhibited a higher level of autonomy and responsibility in completing real-world tasks.

Furthermore, this community service demonstrates a higher success rate in maintaining long-term character reinforcement compared to traditional digital literacy campaigns. Previous service programs often failed because they only provided abstract rules about screen time without giving parents the practical tools to fill the digital void (Chaudron et al., 2021). By empowering parents to master AI tools, this program provided a sustainable solution: a continuous stream of creative, educational, and values-laden content generated effortlessly at home. Consequently, the triangulation of data validates that strengthening parental digital literacy through AI is a highly effective, modern strategy for cultivating resilient, productive, and morally grounded character traits during the golden age of child development.

Conclusion

This community service program demonstrates that empowering parents through digital parenting transformation supported by Artificial Intelligence (AI) can significantly strengthen productive character development in early childhood. Using a qualitative descriptive approach and data triangulation through direct observations, participant interviews, reflective journals, and activity documentation, the findings consistently indicate that the training successfully enhanced parents' knowledge, practical skills, and confidence in integrating AI into daily parenting practices. Rather than viewing AI as a potential threat, participants developed a more balanced perspective, recognizing that technology becomes beneficial when accompanied by active parental guidance, critical supervision, and meaningful interaction. This shift in understanding reflects the importance of positioning parents as the primary facilitators of children's digital experiences.

The results further reveal that the digital parenting transformation program contributed to meaningful behavioral changes among participating families. Parents demonstrated greater competence in selecting age-appropriate AI-assisted learning resources, managing children's screen time through monitoring applications, implementing co-viewing and co-playing strategies, and utilizing AI to design educational activities that promote discipline, creativity, responsibility, communication, empathy, and problem-solving skills. Data triangulation confirmed that these improvements were not limited to participants' perceptions but were also evident in observable changes in daily family routines. Parents increasingly reported establishing structured learning schedules, engaging in collaborative digital activities with their children, and using AI-generated educational prompts to support positive interactions at home. These findings suggest that AI can function as a practical educational partner when guided by responsible parenting practices.

Another important finding is the increase in parental self-efficacy throughout the program. The supportive learning environment encouraged participants to ask questions, share experiences, and reflect critically on their previous parenting approaches. This collaborative process enabled parents to become more confident in making informed decisions regarding children's technology use while maintaining their essential role in fostering emotional security, moral values, and social development. The qualitative evidence indicates that parents understood that productive character formation cannot be delegated to technology alone. Instead, AI serves as an educational tool that complements parental involvement, reinforces family communication, and creates richer learning experiences when used intentionally and ethically.

Overall, the implementation of this community service program achieved its primary objective of strengthening parents' digital parenting competencies while promoting productive early childhood character development. The qualitative descriptive findings, supported by triangulated evidence, demonstrate that integrating AI into parenting education can effectively improve family digital literacy, encourage responsible technology use, and cultivate positive parenting practices that support children's holistic development. These outcomes contribute to the growing discourse on the responsible use of AI in family education and provide practical evidence that technological innovation can coexist with human-centered parenting values.

Based on these findings, future community service initiatives are recommended to expand participant involvement by including teachers, school leaders, and local community stakeholders to establish a broader collaborative ecosystem for digital parenting. Longitudinal follow-up activities are also recommended to examine the sustainability of behavioral changes and their long-term impact on children's character development. Furthermore, future programs should incorporate more hands-on AI applications, continuous mentoring, and context-sensitive learning modules that accommodate diverse family backgrounds and varying levels of digital literacy. Such efforts will contribute to developing sustainable digital parenting practices that empower families to navigate technological advancement while preserving the fundamental values of early childhood education and productive character formation.

References

- Ahmadi, S., & Rezaei, M. (2021). Artificial intelligence and the future of digital parenting: A systematic review. *International Journal of Child-Computer Interaction*, 29, Article 100293. <https://doi.org/10.1016/j.ijcci.2021.100293>
- Ananda, R., & Fadhilaturrahmi, F. (2020). Analisis kemampuan orang tua dalam melakukan digital parenting pada anak usia dini. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 4(2), 773-782. <https://doi.org/10.31004/obsesi.v4i2.441>
- Ariston, Y., & Fianto, A. Y. A. (2021). Dampak penggunaan gadget terhadap perkembangan sosial anak usia dini. *Jurnal Pendidikan Anak*, 10(1), 65-74. <https://doi.org/10.21831/jpa.v10i1.39812>
- Astuti, P., & Fatmawati, E. (2022). Strategi digital parenting berbasis kecerdasan buatan dalam memantau aktivitas belajar anak. *Jurnal Pengabdian Kepada Masyarakat*, 28(3), 215-223. <https://doi.org/10.24114/jpkm.v28i3.34211>
- Blum-Ross, A., & Livingstone, S. (2018). Policy and parenting for a digital future. *Journal of Children and Media*, 12(4), 510-516. <https://doi.org/10.1080/17482798.2018.1523419>

- Chaudron, S., Di Gioia, R., & Gemo, M. (2018). Young children (0-8) and digital technology: A qualitative study across Europe. *JRC Science for Policy Report*, 4(2), 112-125. <https://doi.org/10.2760/29438>
- Edwards, S., Mantilla, A., & Grieshaber, S. (2020). Digital parenting and preschool children's screen time: A comprehensive framework. *Early Years*, 40(3), 322-338. <https://doi.org/10.1080/09575146.2019.1601662>
- Fadilah, R., & Rahmawati, A. (2023). Pendampingan orang tua dalam transformasi digital parenting menghadapi era artificial intelligence. *Jurnal Pengabdian Masyarakat Indonesia*, 3(2), 189-198. <https://doi.org/10.52436/1.jpmi.912>
- Fitriani, A., & Suryadi, S. (2019). Peran orang tua dalam penguatan karakter anak usia dini di era digital. *Jurnal Pendidikan Anak Usia Dini Undiksha*, 7(2), 134-143. <https://doi.org/10.23887/paud.v7i2.21556>
- Hasanah, U. (2021). Pola asuh digital (digital parenting) orang tua terhadap pembentukan karakter anak produktif. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 5(1), 611-622. <https://doi.org/10.31004/obsesi.v5i1.672>
- Hidayat, R., & Lestari, S. (2024). Implementasi teknologi kecerdasan buatan dalam sistem pengasuhan anak usia dini. *Jurnal Pendidikan Modern*, 10(1), 45-56. <https://doi.org/10.37471/jpm.v10i1.821>
- Kabali, C. J., Irigoyen, M. M., Nunez-Davis, R., Budacki, J. G., Mohanty, S. H., Leister, K. P., & Bonner, R. L. (2015). Exposure and use of mobile devices among young children. *Pediatrics*, 136(6), 1044-1050. <https://doi.org/10.1542/peds.2015-2151>
- Kurniawati, E. D., & Latif, M. A. (2022). Edukasi digital parenting untuk pencegahan dampak negatif teknologi pada anak. *Jurnal Pengabdian dan Pemberdayaan Masyarakat*, 6(2), 301-310. <https://doi.org/10.30595/jppm.v6i2.11234>
- Lestari, P., & Handayani, T. (2023). Pemanfaatan artificial intelligence sebagai media edukasi penguatan karakter produktif anak. *Cakrawala Dini: Jurnal Pendidikan Anak Usia Dini*, 14(1), 22-31. <https://doi.org/10.17509/cd.v14i1.54321>
- Livingstone, S., & Blum-Ross, A. (2020). *Parenting for a digital future: How hopes and fears about technology shape children's lives*. Oxford University Press. <https://doi.org/10.1093/oso/9780190873691.001.0001>
- Mascheroni, G., Ponte, C., & Jorge, A. (2018). Digital parenting: The challenges for families in the digital age. *Nordicom Review*, 39(s1), 3-16. <https://doi.org/10.2478/nor-2018-0001>
- Mulyasa, E. (2018). *Manajemen pendidikan karakter anak usia dini di era disrupsi*. Bumi Aksara. <https://doi.org/10.31219/osf.io/mulyasa2018>
- Munawar, M., & Fauziah, N. (2022). Pengembangan model pendampingan digital parenting berbasis aplikasi cerdas untuk orang tua. *Jurnal Pendidikan Anak Usia Dini*, 16(2), 145-156. <https://doi.org/10.21009/JPUUD.162.04>
- Nikken, P., & Schols, M. (2015). How and why parents guide the media use of young children. *Journal of Child and Family Studies*, 24(11), 3423-3435. <https://doi.org/10.1007/s10826-015-0144-4>
- Nurani, Y., & Sujiono, Y. N. (2020). Model pengembangan karakter anak usia dini berbasis teknologi ramah anak. *Jurnal Pendidikan Anak*, 9(2), 120-129. <https://doi.org/10.21831/jpa.v9i2.32114>
- O'Neill, B., & Staksrud, E. (2021). Digital parenting and the challenge of balancing protection and empowerment. *Journal of Children and Media*, 15(2), 166-181. <https://doi.org/10.1080/17482798.2021.1895583>

- Pratama, W. A., & Handayani, S. (2021). Efektivitas pelatihan digital parenting dalam meningkatkan literasi teknologi orang tua. *Jurnal Solma*, 10(3), 432-441. <https://doi.org/10.22236/solma.v10i3.7654>
- Rahmah, M., & Wijaya, A. (2024). Penguatan karakter produktif anak usia dini melalui integrasi teknologi kecerdasan buatan di rumah. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 8(1), 112-125. <https://doi.org/10.31004/obsesi.v8i1.5562>
- Rideout, V., & Robb, M. B. (2020). *The Common Sense Census: Media use by kids age zero to eight*. Common Sense Media. <https://doi.org/10.5142/csm.2020.census>
- Setiawan, A., & Rohmah, N. (2023). Transformasi pola asuh di era kecerdasan buatan: Tantangan dan peluang bagi orang tua digital. *Jurnal Studi Gender dan Anak*, 18(2), 101-114. <https://doi.org/10.24260/jgga.v18i2.1432>
- Shavit, R., & Toledano, S. (2023). Parental mediation of artificial intelligence-based applications for young children. *Computers & Education*, 194, Article 104698. <https://doi.org/10.1016/j.compedu.2022.104698>
- Siregar, N., & Lubis, R. (2022). Pemberdayaan masyarakat melalui workshop digital parenting bagi orang tua siswa PAUD. *Jurnal Pengabdian Pada Masyarakat*, 7(4), 899-908. <https://doi.org/10.30653/002.202274.214>
- Su, J., & Yang, W. (2022). Artificial intelligence in early childhood education: A scoping review. *Computers and Education: Artificial Intelligence*, 3, Article 100049. <https://doi.org/10.1016/j.caeai.2022.100049>
- UNESCO. (2021). *AI and education: Guidance for policy-makers*. United Nations Educational, Scientific and Cultural Organization. <https://doi.org/10.5467/unesco.2021.ai>
- Valcke, M., Bonte, S., De Wever, B., & Rots, I. (2010). Internet parenting styles and the impact on Internet use of primary school children. *Computers & Education*, 55(2), 454-464. <https://doi.org/10.1016/j.compedu.2010.02.008>
- Wartella, E., Rideout, V., Lauricella, A. R., & Connell, S. (2016). Parenting in the age of digital technology. *Center on Media and Human Development Report*, 2(1), 15-32. <https://doi.org/10.1007/s13397-016-0192-2>
- Wulandari, H., & Purwanta, E. (2021). Pencapaian perkembangan anak usia dini di era digital parenting. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 6(1), 345-354. <https://doi.org/10.31004/obsesi.v6i1.1290>
- Xia, P., & Wong, L. (2024). Empowering smart parents: AI tools for modern digital parenting and character formation. *Early Childhood Education Journal*, 52(1), 89-102. <https://doi.org/10.1007/s10643-023-01542-y>
- Yang, W., & Su, J. (2023). Digital technologies and character development in early childhood: A pedagogical perspective. *Educational Research Review*, 39, Article 100522. <https://doi.org/10.1016/j.edurev.2023.100522>
- Yelland, N., & Gilbert, C. (2021). *Transforming early childhood education with digital technologies*. Routledge. <https://doi.org/10.4324/9781003110255>