

Digital Parenting Education for Strengthening Parental Roles in the Digital Era

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Submission: 2026-07-22		Received: 2026-09-25	Published: 2026-09-30
Keywords:	Digital Parenting; Digital Technology; Parent Education; Community Service.	Abstract. The development of digital technology has increased people's access to the internet while also creating challenges for parents in managing children's use of digital devices and addressing various risks in the digital environment. The need to strengthen digital parenting has become increasingly important as internet penetration continues to grow in Indonesia. According to the 2026 Internet Profile Survey conducted by the Asosiasi Penyelenggara Jasa Internet Indonesia (APJII), national internet penetration reached 81.72%, with young people, including children, representing a significant proportion of internet users. These conditions indicate that younger generations are increasingly exposed to the digital environment, highlighting the need for adequate parental guidance and supervision. Therefore, this community service activity aimed to strengthen parents' digital parenting skills through educational activities as a preventive measure against the negative effects of technology use. The activity employed a Community-Based Participatory Approach (CBPA) and was conducted in three stages: preparation, implementation, and evaluation. The preparation stage involved coordination and discussions with Kelompok Kerja (Pokja) II of the Tim Penggerak Pemberdayaan dan Kesejahteraan Keluarga (TP PKK) of Surabaya City. The implementation stage consisted of educational sessions, discussions, and question-and-answer activities involving 10 participants. The evaluation was conducted using direct pre-tests and post-tests, as well as questionnaires. The results showed a 20-percentage-point increase in participants' cognitive outcomes, while the overall community service activity received positive evaluations. These findings provide an initial indication of increased parental knowledge regarding digital parenting. However, continuous support is still needed to encourage parents to apply this knowledge in their daily parenting practices.	
Katakunci:	Digital Parenting; Edukasi Orang Tua; Pengabdian kepada	Abstrak. Perkembangan teknologi digital telah meningkatkan akses masyarakat terhadap internet, sekaligus menghadirkan tantangan bagi orang tua dalam mengelola penggunaan perangkat digital oleh anak serta menghadapi berbagai risiko di lingkungan digital. Penguatan pola asuh digital (digital parenting) menjadi semakin	

Masyarakat; Teknologi Digital.

penting seiring dengan meningkatnya penetrasi internet di Indonesia. Berdasarkan Survei Profil Internet Indonesia 2026 yang dilakukan oleh Asosiasi Penyelenggara Jasa Internet Indonesia (APJII), tingkat penetrasi internet nasional mencapai 81,72%, dengan kelompok usia muda, termasuk anak-anak, menjadi bagian yang signifikan dari pengguna internet. Kondisi tersebut menunjukkan bahwa generasi muda semakin intensif berinteraksi dengan lingkungan digital, sehingga diperlukan pendampingan dan pengawasan orang tua yang memadai. Oleh karena itu, kegiatan pengabdian kepada masyarakat ini bertujuan untuk memperkuat keterampilan orang tua dalam menerapkan pola asuh digital melalui edukasi sebagai upaya preventif terhadap dampak negatif penggunaan teknologi.

Kegiatan ini menggunakan pendekatan Community-Based Participatory Approach (CBPA) dan dilaksanakan melalui tiga tahap, yaitu persiapan, pelaksanaan, dan evaluasi. Tahap persiapan meliputi koordinasi dan diskusi dengan Kelompok Kerja (Pokja) II Tim Penggerak Pemberdayaan dan Kesejahteraan Keluarga (TP PKK) Kota Surabaya. Tahap pelaksanaan terdiri atas kegiatan edukasi, diskusi, dan tanya jawab yang melibatkan 10 peserta. Evaluasi dilakukan melalui pre-test dan post-test secara langsung serta penyebaran kuesioner. Hasil evaluasi menunjukkan adanya peningkatan capaian kognitif peserta sebesar 20 poin persentase, sementara kegiatan pengabdian secara keseluruhan memperoleh penilaian positif dari peserta. Temuan ini memberikan indikasi awal adanya peningkatan pengetahuan orang tua mengenai pola asuh digital. Namun, pendampingan secara berkelanjutan tetap diperlukan untuk mendorong penerapan pengetahuan tersebut dalam praktik pengasuhan sehari-hari.

1 Introduction

Digital technology has transformed various aspects of family life, including the ways children learn, receive information, seek entertainment, and communicate (Timotheou et al., 2023). A 2026 survey by *Asosiasi Penyelenggara Jasa Internet Indonesia (APJII)* reported that Indonesia's internet penetration rate reached 81.72%; equivalent to 235.2 million users out of a total population of 287.8 million (APJII, 2026). The figure indicates that the internet has become a fundamental necessity for society. Such a condition is reflected in the wide-spread use of smartphones, online video platforms, digital games, social media, and various artificial intelligence-based applications that are increasingly integrated into the daily activities of children and families (Zou et al., 2025). These changes have yielded positive impacts on child

development, particularly in supporting access to learning resources, enhancing creativity, and creating more interactive learning experiences (Haleem et al., 2022). However, these benefits are not automatically realized when technology use occurs without parental guidance.

Early exposure to technology among children has expanded the parental role beyond physical caregiving to encompass the ability to accompany, guide, and protect children within the digital environment. Knowledge and skills in implementing digital parenting have therefore become essential. These include selecting age-appropriate content, regulating device usage time, maintaining open communication regarding online risks, utilizing security features and parental controls, and modeling healthy digital behavior. Studies on digital parenting demonstrate that digital caregiving practices encompass parental mediation, technology use, and role modeling. These three aspects are influenced by the attitudes of both parents and children toward technology and its accessibility. Equally important are the digital skills of parents themselves (Tan et al., 2024). Referring to these studies, parental competence in technology use constitutes a critical element in creating a safe digital environment that supports child development. Digital parenting education is vital because knowledge and skills in safeguarding children's digital activities can drive attitudinal change through the implementation of technology-mediated guidance strategies (Zgambo et al., 2025). Digital parenting training programs have the potential to assist parents in developing the capacity to regulate digital device use and reduce problematic behaviors associated with technology use (Mameli et al., 2025). Accordingly, digital parenting education is needed not only to improve parents' digital literacy but also to equip them practical strategies for guiding their children's technology use in safe, productive, and developmentally appropriate manner.

In addressing these needs, the role of academics is essential to bridge the gap between children's technology use and parents' capacity for digital guidance. One such initiative is a community engagement program conducted in collaboration with *Kelompok Kerja (Pokja) II, Tim Penggerak Pemberdayaan dan Kesejahteraan Keluarga (TP PKK)* of Surabaya City, which focuses on education and family welfare. This

activity also aligns with parental capacity-strengthening programs such as the *Sekolah Orang Tua Hebat (SOTH)* and the *Kemangi* program (Pemerintah Kota Surabaya, 2024; Sekolah Orang Tua Hebat, 2023). The collaborative role of academics and government provides solutions to the community of Surabaya, particularly in Kedung Baruk Village, Rungkut District. This location was selected as the site for the community engagement program due to its proximity to University of Hayam Wuruk Perbanas, in alignment with the institutional vision of creating impact beginning from its immediate surroundings. A second rationale is based on preliminary interviews and discussions with community partners, which revealed challenges related to parents' ability to guide children's use of technological devices. The need is consistent with the responsibilities and needs of the partner organization.

Accordingly, the objective of this community engagement program is to strengthen digital parenting among parents in Kedung Baruk Village through education aimed at protecting children from the adverse influences of digital media. The outcomes of this educational intervention are expected to enhance parents' awareness, knowledge, and skills in creating a safe digital environment for their children.

2 Method

The community engagement program was implemented using a Community Based Participatory Approach (CBPA). This method relies on capacity building, community involvement, and collaborative decision-making (Heyrani et al., 2024; Ismail & Rahangiar, 2026). Active parental participation in a series of activities served as the primary focus of the program to ensure a direct impact on parenting practices (Rochmawan et al., 2024). A summary of the three stages of the community engagement program's implementation is presented in Figure 1.



Figure 1. The Community Engagement Program's Stages

The digital parenting education session was conducted on Monday, June 8, 2026 at *SOTH Lestari*, located at Jalan Raya Kedung Asem 98-A, Kedung Baruk Village, Rungkut District, Surabaya. The program ran from 08.00-10.00 am. The speakers for the session comprised a team of faculty members of the Faculty of Economics and Business and the Faculty of Engineering and Design. The community engagement activity was carried out through three main stages: preparation, implementation, and evaluation. The preparation stage involved interviews and discussions with the *Pokja II* to identify the problems faced by the community partner. The outcome of these interviews and discussions served as the basis for formulating the partners' problems and determining appropriate solutions. The community engagement team proposed a solution in the form of education on the parental role in communicating and controlling children's use of technological media.

The second stage was the implementation of the education session, which lasted approximately two hours. The participants were primarily parents residing in Kedung Baruk Village, totaling 10 housewives. Prior to delivery of the educational material, participants were administered a pre-test consisting of open-ended questions. The education session, titled "Protecting Children from the Influence of Technological Media," aimed to enhance parents' understanding of the importance of guiding and monitoring their children's use of digital media in a wise, responsible manner that is appropriate for their developmental stage (Ismail & Rahangiar, 2026; Mayadiana & Jenuri, 2024). The educational activity was specifically directed toward strengthening the parenting capacity of mothers, enabling them to establish effective communication and control over their children's technology use.

The community engagement team emphasized the active role of parents in accompanying their children during digital interactions. Simple communication patterns can be applied by explaining information and content that is inappropriate for a child's developmental stage. An open communication model is essential to ensure that children feel comfortable expressing their opinions, experiences, and the challenges they encounter (Turhan et al., 2026; Young & Tully, 2022). The material

delivery was supplemented with straightforward examples relevant to daily activities. Participants were also invited to engage in group discussions to map the positive and negative impacts of technological media. Four groups were formed: two groups consisting of three participants each, and the remaining two groups comprising two participants each. This division was implemented to ensure that group discussion could be conducted intensively. Participants were subsequently asked to articulate their communication and guidance models as part of their parenting approach to technology media use.

The third stage involved conducting an evaluation, which was divided into two parts: an assessment of parents' understanding of digital parenting through a pre-test and a post-test. Both tests were administered via direct oral questioning. The objective was to determine the level of parental comprehension regarding the child-rearing material concerning the use of technological media (Dzulfadhilah et al., 2023). The second evaluation pertained to measuring the overall effectiveness of the community engagement program (Rochmawan et al., 2024). This measurement was conducted using an online questionnaire administered at the conclusion of the educational session. The evaluation was carried out using a census sampling method.

3 Results

The pre-test administered at the beginning of the activity showed that only four out of ten housewives (40%) were able to answer the questions correctly. However, the post-test results indicated that six housewives provided correct answers (60%). This 20% improvement is considered moderate and suggests that the educational intervention enhanced participants' cognitive capacity regarding childrearing practices related to technology use, although the improvement remains suboptimal. Nevertheless, direct observation revealed that the housewives were highly enthusiastic throughout the activity. This was evidenced not only by their accurate responses but also by their ability to provide real-life illustrations from their daily routines, such as regulating device usage duration, selecting age-appropriate content, and

implementing open communication when children face challenges in digital media.

At the conclusion of the community engagement program, participants were asked to complete an overall evaluation of the activity. The assessment covered the educational program, facilities and refreshments, and the speakers' ability to deliver the material. The evaluation utilized a *Likert scale* ranging from one to five, where one indicated very poor, and five indicated excellent (Budiana et al., 2023). The detailed evaluation results are presented in Table 1.

Table 1. Results of the Community Engagement Evaluation

Evaluation Dimension	Minimum	Maximum	Mean	Standard Deviation
Educational program	4.67	5.00	4.90	0.16
Facilities & consumptions	3.75	5.00	4.35	0.46
Speakers	4.00	5.00	4.60	0.44

Source: Processed data (2026)

Based on Table 1, the assessment of all three aspects yielded mean scores above 4.00 on a five-point scale, indicating that the overall implementation of the community engagement program was well received by the participants. These average scores also reflect the enthusiasm of the participants who attended the educational session. Participants' impressions were also captured through the questionnaire, with the majority indicating that they acquired knowledge and skills applicable to their daily lives to support their children's development. Participant responses are presented in Figure 2.



Figure 2. Participants in the Digital Parenting Education Program

The assessment of the educational activity received the highest mean score of 4.90 with a minimum value of 4.67. A maximum value of 5.00 and a standard deviation of 0.16. These figures reflect that all participants provided high ratings for the measurement indicators of the educational method. These indicators included the educational method, activity coordination, and the collaboration between the community engagement team and the participants.

Participants also provided favorable evaluations of the speakers, with a mean score of 4.60 and a standard deviation of 0.44. Participants assessed the speakers as capable of delivering the material clearly, communicatively, and in accordance with the participants' needs. The competence of the speakers constituted a critical factor in the success of the education, linking theoretical concepts to the real-world challenges faced by parents. The lowest assessment was obtained for the facilities and refreshments aspect, with a mean score of 4.35 and a relatively high standard deviation of 0.46. However, this mean score still falls within the good category as it exceeds 4.00. Based on the standard deviation value, the variation in responses was considerably wide, indicating that supporting aspects of the activity require improvement, particularly concerning room comfort and refreshments.

4 Discussion

Community engagement activities conducted through digital parenting education represent an approach to improving parents' knowledge and awareness of the importance of providing guidance to children in their use of digital technology and media (Kristina et al., 2026; Wulandari & Dewi, 2024). Conceptually, digital parenting involves not only regulating children's use of technological devices but also serving as a positive role model through appropriate digital behavior (Tan et al., 2024). Parents who initially had limited understanding of how to implement appropriate parenting practices regarding children's use of digital media subsequently gained knowledge about suitable parenting strategies. This knowledge was acquired not only through the delivery of theoretical concepts but also by relating these concepts to parenting experiences encountered in their daily lives. This approach is supported by previous studies indicating that integrating information with practical exercises and discussions can enhance parents' awareness and readiness to perform their role as mediators of children's technology use (Cavallini et al., 2023). Another study also demonstrated that parents who adopt parenting practices based on communication and discussion with their children tend to be more capable of performing the role of digital mediators (Shin & Lwin, 2022). Consistent with these findings, the educational activities in this program were designed not merely to introduce theoretical concepts but also to facilitate their application in everyday parenting practices. Participants were given opportunities to engage in small-group discussions, which facilitated the exchange of experiences and perspectives among parents.

The educational activities involved not only the delivery of concepts and discussions but also an evaluation process. The pre-test results indicated that participants initially had limited understanding of parenting strategies related to children's use of digital media. This finding indicates a gap between children's exposure to digital technology in family life and parents' readiness to provide appropriate guidance. This condition is consistent with previous study showing that the rapid development of digital technology has created new challenges for parents, as increased exposure to technology among children has not always been accompanied by adequate parental guidance or effective

management of children's digital behavior (Mayadiana & Jenuri, 2024). Therefore, educational interventions are needed to strengthen the role of parents in guiding children's use of digital technology. Participants subsequently completed a post-test, which showed a moderate improvement of 20%. Although the increase was moderate, participants demonstrated active engagement throughout the learning process, as reflected in the quality of their responses. Several participants were able to provide relevant examples by connecting the concepts presented during the educational sessions with real-life parenting situations, such as selecting age-appropriate digital content and implementing open communication with their children. In this context, as children's use of digital technology continues to increase, strengthening parental competencies through digital parenting education is necessary to enable parents to guide children toward healthy and appropriate use of digital devices (Mameli et al., 2025)

Based on the evaluation results, the digital parenting education activities provided tangible benefits to the participants overall. Participants not only gained insights into the risks and opportunities associated with digital technology use, but also acquired practical strategies that can be implemented in family life. These findings are supported by previous study demonstrating that digital parenting programs incorporating participatory approaches, training, and evaluation can improve parents' digital literacy as well as their ability to establish and implement rules governing children's uses of digital technology (Ismail & Rahangiar, 2026). Furthermore, digital parenting education represents a strategic approach that extends beyond monitoring children's technology use to encompass digital literacy education, responsible and ethical technology use, and collaboration between families and educational environments (Rahman et al., 2025). Therefore, educational activities play an important role in strengthening family capacity to respond effectively to changes in the family environment resulting from the increasing integration of digital technology into everyday life.

5 Conclusion

Overall, digital parenting education had a positive impact on parents' understanding and readiness to implement parenting practices involving the use of digital technology and media. The participants not only gained practical knowledge regarding the opportunities and risks associated with digital technology but also developed practical skills that can be applied to their everyday parenting practices. However, the limited number of participants and the short-term evaluation indicate the need for continued support in implementing appropriate parenting practices related to children's technology use. Such ongoing assistance is necessary to assess the longer-term impact of digital parenting education more comprehensively.

6 Acknowledgment

The community service team would like to express its sincere gratitude to the Surabaya City Government, particularly Pokja II TP PKK Surabaya, for its valuable support as the facilitator of the SOTH program. Appreciation is also extended to the Center for Research and Community Service of University of Hayam Wuruk Perbanas for providing the opportunity and institutional support for faculty members from the Faculty of Economics and Business and the Faculty of Engineering and Design to conduct this community service initiative.

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