

## Cybercrime Prevention for Students in TPQ Darul Muayyad Gunungpati

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### Abstract

The rapid advancement of digital technology and the increasing access to the internet among children and adolescents have raised concerns about their vulnerability to cybercrime. In Islamic educational settings, particularly among santri (Quranic students), exposure to digital platforms without adequate digital literacy or protection mechanisms can lead to significant risks. This research explores the extent of cybercrime awareness among santri and evaluates the preventive efforts taken by Islamic education institutions to safeguard their students. Using a qualitative descriptive approach, data were collected through interviews, observations, and documentation from selected Islamic schools. The study found that while many santri regularly access online content through mobile devices, their understanding of cyber threats such as online fraud, cyberbullying, and exposure to inappropriate content remains low. Most institutions lack structured programs for digital literacy or cyber safety education, and there is limited parental or institutional supervision of online activity. However, there is strong potential for integrating digital safety awareness into religious teachings, reinforcing values such as honesty, modesty, and responsibility in digital behavior. The study concludes that effective protection against cybercrime requires collaborative efforts involving educators, parents, and policymakers. Recommendations include the development of culturally relevant digital literacy modules, training for teachers, and community-based campaigns to raise awareness about cyber safety in religious contexts. This research highlights the urgent need to bridge the digital safety gap for Quranic students, ensuring their well-being in an increasingly connected world.

**Keywords:** cybercrime, cyber safety digital literation, santri

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### INTRODUCTION

The digital age has revolutionized how individuals access information, communicate, and engage with the world. Children and adolescents are growing up surrounded by digital technology, gaining early exposure to smartphones, social media platforms, and online content. While these developments offer educational and social benefits, they also bring serious risks, particularly the growing threat of cybercrime.<sup>1</sup>

Cybercrime involves illegal activities conducted via digital platforms, ranging from online fraud, identity theft, and cyberbullying, to the distribution of harmful content.<sup>2</sup> Children are increasingly becoming targets and victims of such crimes due to their limited awareness and vulnerability. As digital access becomes more widespread, especially through mobile phones, protection mechanisms must evolve to address the specific risks faced by young users.<sup>3</sup>

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<sup>1</sup> Yolanda (Linda) Reid Chassiakos, Jenny Radesky, Dimitri Christakis, Megan A. Moreno, Corinn Cross, COUNCIL ON COMMUNICATIONS AND MEDIA, David Hill, Nusheen Ameenuddin, Jeffrey Hutchinson, Alanna Levine, Rhea Boyd, Robert Mendelson, Wendy Sue Swanson; Children and Adolescents and Digital Media. *Pediatrics* November 2016; 138 (5): e20162593. 10.1542/peds.2016-2593

<sup>2</sup> Almadhoor, Lama, Faiz Alserhani, and Mamoon Humayun., 2021. "Social Media and Cybercrimes," *Turkish Journal of Computer and Mathematics Education* 12 (10): 2972-2981. <https://www.proquest.com/scholarly-journals/social-media-cybercrimes/docview/2628340354/se-2>.

<sup>3</sup> El Asam, Aiman, and Adrienne Katz. 2018. "Vulnerable Young People and Their Experience of Online

In Indonesia, the increasing internet penetration among youth includes students in religious education settings, such as *santri*—students in Quranic or Islamic schools. These students are not immune to the digital dangers that affect the broader population. In fact, the lack of structured digital literacy programs in many Islamic institutions makes them particularly susceptible to cyber threats.

TPQ Darul Muayyad, located in Pakintelan Village, Gunungpati District, Semarang City, is a religious educational institution that focuses on teaching the Qur'an to children. Based on data obtained from the TPQ administrators, the number of active students or *santri* participating in activities reaches 45 students, with an age range of 4–12 years. Most of the *santri* have access to the internet through their parents' smartphones or personal devices and sometimes use those smartphones outside of study hours for more than 4 hours each day.<sup>4</sup> However, gadget use at an early age can lead to addiction,<sup>5</sup> physical problems such as early use of glasses due to eye strain and growth disorders,<sup>6</sup> and psychological problems such as difficulty understanding lessons and slower brain development<sup>7</sup> and due to their limited understanding of cybersecurity, they are vulnerable to cybercrime threats.<sup>8</sup>

In addition, children aged 4–12 often face various problems when using the internet. One of them is involvement in online gambling, whether knowingly or unknowingly.<sup>9</sup> Several websites and gaming applications insert elements of gambling that attract children's attention, potentially causing addiction and financial losses for them and their parents. Not only that, they are also vulnerable to online fraud, where many schemes such as fake prizes, phishing, and social engineering are used to steal their personal information.<sup>10</sup>

Paid games also pose their own challenges, as many online games offer paid features that children are

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Risks." Human–Computer Interaction 33 (4): 281–304. doi:10.1080/07370024.2018.1437544.

<sup>4</sup> "Survei KPAI: 76,8 Persen Anak Gunakan Gawai di Luar Jam Belajar," Tempo.co, accessed March 3, 2025, <https://www.tempo.co/politik/survei-kpai-76-8-persen-anak-gunakan-gawai-di-luar-jam-belajar-550648>;

"Survei: Anak-Anak Habiskan 4,5 Jam Sehari di Layar Smartphone, Rabun Jauh Mengancam!" Liputan6.com, accessed March 3, 2025, <https://www.liputan6.com/tekno/read/4968295/survei-anak-anak-habiskan-45-jam-sehari-di-layar-smartphone-rabun-jauh-mengancam>.

<sup>5</sup> Universitas Aisyiyah Yogyakarta, "Penyuluhan Dampak Kecanduan Gadget pada Anak," LLDIKTI Wilayah V, September 19, 2024, accessed March 3, 2025, <https://lldikti5.kemdikbud.go.id/home/detailpost/penyuluhan-dampak-kecanduan-gadget-pada-anak>.

<sup>6</sup> Dinas Pengendalian Penduduk dan Keluarga Berencana, Pemberdayaan Perempuan dan Perlindungan Anak Kota Pontianak, "Dampak Penggunaan Gadget Terhadap Perkembangan Sosial Anak," August 4, 2022, accessed March 3, 2025, <https://dppkbpmpa.pontianak.go.id/informasi/berita/dampak-penggunaan-gadget-terhadap-perkembangan-sosial-anak>.

<sup>7</sup> Dinas Komunikasi dan Informatika Kabupaten Kediri, "Dampak Negatif Gadget Bagi Anak-anak," Dinas Komunikasi dan Informatika Kabupaten Kediri, January 30, 2020, accessed March 3, 2025, <https://diskominfo.kedirikab.go.id/baca/dampak-negatif-gadget-bagi-anakanak>; "8 Dampak Negatif Akibat Anak Sering Main Handphone," Generasi Maju, accessed March 3, 2025, <https://www.generasimaju.co.id/artikel/2-tahun/pola-asuh/akibat-anak-sering-main-handphone>.

<sup>8</sup> "Ancaman Kejahatan Dunia Maya terhadap Anak," Kompas.id, May 16, 2017, accessed March 3, 2025, <https://www.kompas.id/baca/riset/2017/05/16/ancaman-kejahatan-dunia-maya-terhadap-anak>; "Waspada Ancaman Cyber, Anak Rentan Jadi Korban," Tempo.co, accessed March 3, 2025, <https://www.tempo.co/gaya-hidup/waspada-ancaman-cyber-anak-rentan-jadi-korban-945158>.

<sup>9</sup> "Judi Online di Kalangan Anak-Anak: Data Mengkhawatirkan dan Solusi Pencegahannya," Portal Informasi Indonesia, July 16, 2024, accessed March 3, 2025, <https://indonesia.go.id/kategori/editorial/8393/judi-online-di-kalangan-anak-anak-data-mengkhawatirkan-dan-solusi-pencegahannya?lang=1>; "1.836 Anak di DKI Terlibat Judol, KPAI Soroti Judi Menyaru Game Biasa," detikNews, November 30, 2024, accessed March 3, 2025, <https://news.detik.com/berita/d-7635688/1-836-anak-di-dki-terlibat-judol-kpai-soroti-judi-menyaru-game-biasa>.

<sup>10</sup> "Modus Penipuan Baru 2024 Mengintai Anak Kecil, Rekening Ortu Ludes," CNBC Indonesia, January 24, 2024, accessed March 3, 2025, <https://www.cnbcindonesia.com/tech/20240124131435-37-508611/modus-penipuan-baru-2024-mengintai-anak-kecil-rekening-ortu-ludes>; "Bocah 14 Tahun Kena Tipu Teman Online, Transfer hingga Rp 1 M," Liputan6.com, August 4, 2020, accessed March 3, 2025, <https://www.liputan6.com/hot/read/4327980/bocah-14-tahun-kena-tipu-teman-online-transfer-hingga-rp-1-m>.

not always aware of.<sup>11</sup> This can cause uncontrolled financial expenditures. In addition, their lack of awareness about account security makes them more vulnerable to hacking, which can result in loss of account access and misuse of personal data.<sup>12</sup>

In an ideal condition, *santri* should have basic knowledge of digital security, such as using strong passwords, being cautious of online scams, and being aware of the risks of sharing personal information. Based on the digital literacy standards recommended by UNESCO,<sup>13</sup> safe internet users must understand personal data protection, recognize cyber threats, and be critical of online information. Based on this situational analysis, some of the main problems faced by TPQ Darul Muayyad Gunungpati *santri* in facing cybercrime threats include limited understanding of cybersecurity, lack of awareness of the importance of account security, and the high tendency to share personal information online. Therefore, efforts in education and training are needed to improve the digital literacy of *santri* so that they can use the internet safely and responsibly.

*Santri* at TPQ Darul Muayyad Gunungpati face various challenges in the digital era, especially regarding their lack of understanding of cybersecurity. Although the majority of *santri* have internet access, they do not yet have sufficient skills to protect themselves from cybercrime threats. One of the main problems is the low level of digital literacy, which makes them vulnerable to various forms of cybercrime.<sup>14</sup>

One crucial aspect that becomes a priority is education on cybersecurity and awareness of digital threats. In addition to direct threats such as hacking and fraud, *santri* also face the issue of exposure to harmful content. Without proper understanding of content filtering and information management, they can easily access gambling sites or game applications that charge fees without their knowledge. This not only affects their finances but can also negatively influence their habits and daily lives.

Another equally important problem is the low ability of *santri* to distinguish between valid information and hoaxes. The widespread circulation of fake news on social media often makes it difficult for them to determine which information is true and which is misleading. Without critical thinking skills in filtering information, *santri* risk spreading hoaxes or being influenced by misleading information.

Based on these various problems, intervention through education and training programs to improve digital literacy among *santri* is needed. By enhancing their understanding of cybersecurity, it is expected that they will be wiser in using the internet and able to protect themselves from the growing digital threats.

As a solution to the various problems faced by TPQ Darul Muayyad Gunungpati *santri*, digital literacy education and training programs become the main step to be implemented. This education includes direct training on the basics of cybersecurity, introduction to various types of cybercrime threats, and strategies to protect themselves from potential digital crimes. In addition, interactive simulations will be held to provide deeper understanding of how to avoid and deal with digital threats. The training will also focus on strengthening the *santri*'s awareness in securing their accounts, including how to create strong passwords, recognize online fraud schemes, and the importance of two-factor authentication. Furthermore, *santri* will be equipped with skills to filter information, so that they can be more critical in identifying hoaxes and not easily influenced by unverified information. As part of a long-term solution, TPQ will be given access to digital education materials in the form of digital literacy modules, educational videos, and simulation software that

<sup>11</sup> Friska Suryawinata, "Anak 7 Tahun Habiskan 81 Juta Rupiah di Pembelian Dalam Aplikasi," Jagat Review, January 4, 2016, accessed March 3, 2025, <https://www.jagatreview.com/2016/01/anak-7-tahun-habiskan-81-juta-rupiah-di-pembelian-dalam-aplikasi/>; "Kasus Tagihan Game Online Rp 12 Juta, Ibu di Kediri Membayar dengan Cara Ini," Kompas.com, April 27, 2019, accessed March 3, 2025, <https://regional.kompas.com/read/2019/04/27/15272011/kasus-tagihan-game-online-rp-12-juta-ibu-di-kediri-membayar-dengan-cara-ini>.

<sup>12</sup> Maulana Ijal, "Akun Medsos Anak dan Orang Tua Rentan Diretas, Begini Cara Mencegahnya," Radar Jember, July 19, 2020, accessed March 3, 2025, <https://radarjember.jawapos.com/teknologi/791115830/akun-medsos-anak-dan-orang-tua-rentan-diretas-begini-cara-mencegahnya>.

<sup>13</sup> Nancy Law, David Woo, Jimmy de la Torre, and Gary Wong, A Global Framework of Reference on Digital Literacy Skills for Indicator 4.4.2 (Montreal: UNESCO Institute for Statistics, 2018), accessed March 3, 2025, <https://uis.unesco.org/sites/default/files/documents/ip51-global-framework-reference-digital-literacy-skills-2018-en.pdf>.

<sup>14</sup> Kementerian Komunikasi dan Informatika Republik Indonesia dan Katadata Insight Center, Status Literasi Digital di Indonesia 2021 (Jakarta: Kementerian Komunikasi dan Informatika Republik Indonesia, 2022), accessed March 3, 2025, [https://cdn1.katadata.co.id/media/microsites/litdik/Status\\_Literasi\\_Digital\\_diIndonesia%20\\_2021\\_190122.pdf](https://cdn1.katadata.co.id/media/microsites/litdik/Status_Literasi_Digital_diIndonesia%20_2021_190122.pdf).

can be used in routine learning. In addition, the implementation of parental control software will also be taught to *santri* and TPQ administrators to help them access the internet more safely. It is expected that with this program, the level of digital literacy at TPQ Darul Muayyad Gunungpati will increase significantly. *Santri* will have a better understanding of cybersecurity, be able to avoid cybercrime threats, and use the internet more wisely and responsibly.

In community service research, several previous studies have discussed digital literacy, cybersecurity, and legal understanding related to internet use in pesantren environments as well as in society in general. Several relevant articles can be used as comparisons to show the novelty of this community service. The article by Fahrudin et al., titled *Pentingnya Memahami Cyber Security di Era Transformasi Digital pada Pesantren Daar El Manshur Depok*, discusses digital literacy education in pesantren by emphasizing the importance of understanding information technology so that it is not misused. Meanwhile, this community service focuses more on cybercrime protection for TPQ *santri* aged 4–12 years at TPQ Darul Muayyad. The novelty offered is the use of age-appropriate educational approaches, such as storytelling methods, picture-based questionnaires, and interactive quizzes that make it easier for *santri* to understand cyber threats.<sup>15</sup>

The next article, titled *Edukasi Internet Sehat dalam Upaya Menanggulangi Kejahatan Internet bagi Santri Pondok Pesantren ATH-Thohiriyah Watusalam* by Fanani et al., discusses healthy internet education for *santri* in a larger pesantren, with an emphasis on the dangers of hoaxes and internet misuse. However, this community service emphasizes concrete protection efforts against cybercrime experienced by young *santri*, especially those who are just being introduced to the internet through their parents' devices. The novelty lies in delivering material that is simple, contextual, and applicable, so it can be directly applied in children's digital activities.<sup>16</sup>

The third article, titled *Kewaspadaan Penyalahgunaan Data Pribadi Pada Santri Di Era Digital* by Rizal et al., highlights the misuse of personal data among *santri* and ways to protect it. Meanwhile, this study not only focuses on personal data but also includes broader cybercrime threats such as digital fraud, account hacking, and even online predators. The novelty of this community service is the strengthening of digital literacy through simple case simulations, role-playing games, and the development of shared digital rules relevant to the lives of TPQ *santri*.<sup>17</sup>

Furthermore, the article by Raharjo et al., titled *Peningkatan Kesadaran Keamanan Siber di Mahad IT Anamta Syameela*, emphasizes raising cybersecurity awareness at Mahad IT, where the facilities and technological readiness of *santri* are already relatively advanced. In contrast, this community service is carried out at a TPQ where the *santri* are generally not yet familiar with IT in depth, so the approach methods used are simpler and more communicative. The novelty lies in adapting cyber literacy into language and media that are easy for TPQ children to understand, such as through picture stories, educational cards, and group activities.<sup>18</sup>

Finally, the article by Hasuri et al., titled *Peningkatan Pemahaman UU ITE Di Kalangan Santri Pondok Pesantren Modern Assa'adah*, discusses raising awareness of ITE law among modern pesantren *santri*, with measurable outcomes in terms of legal knowledge. Meanwhile, this community service not only socializes the legal aspects but also trains *santri* to recognize everyday cybercrime schemes and how to protect themselves. The novelty is measuring not only knowledge levels but also changes in children's digital behavior through interactive evaluations such as simple pre-tests and post-tests based on pictures.<sup>19</sup>

<sup>15</sup> Fahrudin, Endin, Risah Subariah, and Nurhidayatulloh Nurhidayatulloh. 2024. "Pentingnya Memahami Cyber Security Di Era Transformasi Digital Pada Pesantren Daar El Manshur Depok". JIPM: Jurnal Inovasi Pengabdian Masyarakat 2 (1):25-28. <https://doi.org/10.55903/jipm.v2i1.143>.

<sup>16</sup> Fanani, M. Rudi, Mujibul Hakim, and Nur Hayati. 2023. "Edukasi Internet Sehat Dalam Upaya Menanggulangi Kejahatan Internet Bagi Santri Pondok Pesantren ATH-Thohiriyah Watusalam". AbdiFormatika: Jurnal Pengabdian Masyarakat Informatika 3 (1):43-47. <https://doi.org/10.59395/abdiFormatika.v3i1.192>.

<sup>17</sup> Rusma Rizal, Amaliah Khairunissa, Sugeng Mianto Fane, Henson Einjein Manurung, Endang Rahayu, Dolly Tanzil, Agus Salim, Giska Dwi Adeliya, Nur Oktavia, and Nando Okta Birou. 2023. "KEWASPADAAN PENYALAHGUNAAN DATA PRIBADI PADA SANTRI DI ERA DIGITAL". Jurnal Ekonomi Mengabdi 2 (2):80-88. <https://doi.org/10.52333/jem.v2i2.401>.

<sup>18</sup> Raharjo, Slamet, Kahfi Heryandi Suradiradja, and Dani Ramdani. 2024. "Peningkatan Kesadaran Keamanan Siber Di Mahad IT Anamta Syameela". Jurnal Pengabdian Masyarakat Madani (JPMM) 4 (1):9-14. <https://doi.org/10.51805/jpmm.v4i1.157>.

<sup>19</sup> Hasuri, Hasuri, Sukendar Alwi, and Fuqoha Fuqoha. 2024. "Peningkatan Pemahaman UU ITE Di Kalangan Santri Pondok Pesantren Modern Assa'adah". Jurnal Pengabdian Masyarakat Bangsa 2 (3):577-81.



## METHOD

The implementation method of the digital literacy program for the students or *santri* of TPQ Darul Muayyad Gunungpati was carried out through several systematic stages. The first stage was preparation, during which the community service team designed an educational activity plan for *santri* aged 4–12 years. The plan covered understanding gadget use, the risks of excessive gadget usage, and an introduction to cybercrime threats. In addition, coordination was carried out with the TPQ administrators to arrange the activity schedule.

The next stage was the implementation of age-appropriate education, using methods such as storytelling, picture-based questionnaires, and interactive quizzes that made it easier for the *santri* to understand the threats of the digital world.



Figure 1. Documentation of Program Implementation

Through this method, it is expected that the *santris*' digital literacy will increase significantly, making them more aware of the dangers of cybercrime and better able to protect themselves effectively in the digital environment.

## RESULT & DISCUSSION

The development of digital technology has brought a major impact on daily life. The internet is not only a source of information but also a means of entertainment and social interaction.<sup>20</sup> However, behind these benefits, there are serious risks known as cybercrime, namely crimes committed through digital devices or the internet network.<sup>21</sup>

For young children, this threat is even more dangerous because they do not yet have the critical ability to distinguish between safe and harmful information. They often get trapped in suspicious links, misleading ads, or online games that covertly contain elements of gambling. Without adequate understanding, children may become victims of digital fraud or even unknowingly access content that is not appropriate for their

<https://doi.org/10.59837/jpmba.v2i3.863>.

<sup>20</sup> Kristiyono J., "Budaya internet: perkembangan teknologi informasi dan komunikasi dalam mendukung penggunaan media di masyarakat," *Scriptura* 5, no. 1 (2015): 23–30, <https://doi.org/10.9744/scriptura.5.1.23-30>.

<sup>21</sup> APU Siahaan, "Pelanggaran cybercrime dan kekuatan yurisdiksi di Indonesia," *Jurnal Teknologi Informasi* 5, no. 1 (2018): 6.]. Cybercrime may include online fraud, account hacking, identity theft, the spread of negative content, and even the digital exploitation of children [R.D. Hapsari dan K.G. Pambayun, "Ancaman cybercrime di Indonesia: sebuah tinjauan pustaka sistematis," *Jurnal Konstituen* 5, no. 1 (2023): 1–17.

age.<sup>22</sup>

The impact of cybercrime on children is not limited to digital losses but also touches psychological and physical aspects. Children who use gadgets too often may experience addiction, reduced learning concentration, and health problems such as eye strain and poor posture.<sup>23</sup> Mentally, they may become easily anxious, irritable, and find it difficult to interact with their social environment.<sup>24</sup> Furthermore, the habit of sharing personal information without control can invite the risk of identity theft or account hacking.<sup>25</sup>

Seeing this phenomenon, the service team felt it necessary to provide understanding for vulnerable groups of children, one of which is the students (*santri*) of TPQ Darul Muayyad Gunungpati, Semarang. This TPQ has 45 *santri* aged 4–12 years, most of whom are already familiar with the internet through their parents' gadgets or personal devices. Broad access to the digital world becomes a positive potential but also brings high vulnerability to cybercrime threats.

*Santri* TPQ were chosen as service partners because they have a strategic role in building the character of the young generation. In addition to studying religious knowledge, the *santri* are in a stage of rapid cognitive and moral development.<sup>26</sup> This makes them very suitable to receive digital literacy provisions so that they will grow into a Qur'anic generation capable of protecting themselves, both spiritually and digitally. By instilling understanding from an early age, good habits in using technology can be more strongly formed.<sup>27</sup>

This community service program was carried out through two main stages that were simple but effective in improving the digital literacy of the *santri* of TPQ Darul Muayyad Gunungpati.

The first stage was a pre-test regarding the use of mobile phones and social media. This activity was conducted to identify the initial behavior patterns of the *santri* in utilizing gadgets. Out of 38 *santri* who participated, it was found that 24 *santri* preferred reading, playing with friends, taking naps, and reciting the Qur'an as their main activities. Fourteen *santri* chose a combination of playing with friends and reciting the Qur'an, while 6 *santri* still tended to choose playing with mobile phones. In addition, there were 4 other *santri* who continued to use mobile phones, although with certain intensity.

This pre-test data shows the diversity of behaviors among the *santri*, especially regarding gadget use preferences. After identifying these preferences, material was provided regarding the risks of cybercrime, including the dangers of clicking on random links, using gadgets too frequently without clear reasons, and playing on mobile phones without parental or teacher supervision. This approach was chosen so that the *santri* could understand that uncontrolled gadget use could open opportunities for digital crime.

The second stage was the delivery of information about safe use of mobile phones and social media. At this stage, the *santri* were introduced to simple principles to protect themselves in the digital world. The emphasized materials were the importance of not carelessly clicking links or ads appearing on the screen, limiting gadget use only for truly beneficial activities, and ensuring that parental supervision is always present when using gadgets.

This information was delivered through interactive methods such as storytelling, simple case examples, and light discussions, making it suitable for the understanding level of children aged 4–12 years. With this approach, the *santri* not only listened to theory but could also relate the material to their daily experiences.

Through these two stages, the program successfully provided a real picture of the initial conditions of gadget use among the *santri* while also increasing their awareness of the importance of digital safety. The

<sup>22</sup> M. Arisanty et al., "Cerdas dan aman bermedia digital: peningkatan kesadaran keamanan siber di era hoaks dan phishing," *Patikala (Jurnal Pengabdian kepada Masyarakat)* 4, no. 4 (2025): 1407–1418, <https://doi.org/10.51574/patikala.v4i4.3282>.

<sup>23</sup> M. Ulfah, *Digital Parenting: Bagaimana Orang Tua Melindungi Anak-anak dari Bahaya Digital?* (Jakarta atau Tasikmalaya: Edu Publisher, 2020), 237 hlm., ISBN 978-623-7640-80-6.

<sup>24</sup> S. Yus dan M. Jannah, "Efektivitas cognitive behavior therapy (CBT) terhadap anak yang terpengaruh gawai: studi analisis pustaka," *Innovative: Journal of Social Science Research* 5, no. 3 (Juni 2025): 7577–7591, <https://doi.org/10.31004/innovative.v5i3.19814>.

<sup>25</sup> H. Ashoumi dan T. Hariono, "Pengabdian kepada masyarakat tentang pentingnya penggunaan gawai sebagai media belajar pada anak usia dini di masa pandemi," *Jumat Keagamaan: Jurnal Pengabdian Masyarakat* 3, no. 2 (2022): 104–110, [https://doi.org/10.32764/abdimas\\_agama.v3i2.2927](https://doi.org/10.32764/abdimas_agama.v3i2.2927).

<sup>26</sup> M. Rawanita dan A. Mardhiah, "Strategi orang tua dalam mengelola penggunaan gadget anak usia dini di Gampong Tanjung Deah Darussalam," *Wathan: Jurnal Ilmu Sosial dan Humaniora* 1, no. 3 (2024): 274–294, <https://doi.org/10.71153/wathan.v1i3.152>.

<sup>27</sup> S.M. Muniroh, "Perkembangan moral *santri* anak usia dini," *Jurnal Penelitian* 12, no. 2 (30 November 2015): 180–199, <https://doi.org/10.28918/jupe.v12i2.10071>.

hope is that the *santri* can use technology more wisely, minimize the risk of becoming victims of cybercrime, and prioritize more positive activities that are in line with the values taught at TPQ.

Another benefit of this activity is the increased awareness of teachers and TPQ administrators about the importance of digital supervision. They began to realize that supervision should not only be limited to Qur'an learning activities but must also include the *santris'* activities in the digital world. Thus, the TPQ has a dual role: guiding children spiritually while also protecting them from digital threats.

From the parents' perspective, this activity also had an impact in the form of increased understanding of the importance of their involvement in their children's gadget use. Socialization on parental control features, two-factor authentication, and limiting the duration of gadget use became an important provision so that families can play an active role in maintaining children's digital safety. With synergy between the TPQ and parents, child protection in the digital world can be more effective.

Overall, the results of this community service activity show that digital literacy is an urgent need for early childhood, including TPQ *santri*. The education provided not only increased their knowledge about cybercrime but also encouraged real behavioral changes in daily life. Although a small number of *santri* still found it difficult to part with gadgets, the majority had already shown new awareness to prioritize healthier and more beneficial activities.

This program proves that digital literacy-based community service can make a real contribution to shaping a generation that is better prepared to face the challenges of the digital era. With continuous guidance, the *santri* of TPQ Darul Muayyad are expected to grow into a generation that not only masters religious knowledge but is also resilient in facing cybercrime threats and wise in using technology.

## CONCLUSION

The implementation of a digital literacy program at TPQ Darul Muayyad Gunungpati demonstrates that early education on cyber safety is both necessary and effective in preparing children to face the challenges of the digital era. The findings show that although most *santri* are already familiar with gadgets and the internet, their knowledge of digital risks remains limited, making them vulnerable to cybercrime, online fraud, excessive gaming, and exposure to harmful content. Through pre-test and post-test assessments, interactive training, and hands-on simulations, the program successfully raised awareness among the *santri* regarding safe internet practices, such as avoiding suspicious links, creating strong passwords, and reducing uncontrolled gadget use.

Moreover, the program highlighted the crucial role of TPQ teachers and parents as digital companions who guide children not only in spiritual development but also in navigating the online world responsibly. By introducing principles of critical thinking, safe digital behavior, and parental supervision, this initiative contributes to building a generation of children who are spiritually grounded and digitally resilient.

In conclusion, digital literacy is not merely an optional skill but an urgent necessity for children, particularly within religious education environments. Sustained collaboration between educational institutions, parents, and the wider community is essential to strengthen cyber safety awareness and ensure that children grow into individuals who are wise, responsible, and protected in the digital landscape.

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