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Optimizing Technology in Child Counseling: YouTube Kids as Islamic Education

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Abstract: The rapid development of digital technology has had a significant impact on family life, particularly in the education and upbringing of children. Shifting interaction patterns from physical to virtual requires parents and educators to adopt new, adaptive approaches based on digital literacy. This study aims to disseminate YouTube Kids as an informal educational medium that supports the guidance and development of Islamic character in children. Using a literature review method and a descriptive qualitative approach, this study explains the positive impacts and risks of digital content, particularly Islamic content circulating on the YouTube Kids platform. The study results indicate that although this platform offers significant opportunities for conveying moral and religious values in an engaging and interactive manner, there are serious challenges related to content filtering, the pedagogy used, and the psychological risks resulting from fear-based narratives. Therefore, the active role of parents and educators as wise curators and digital mentors is needed. This study recommends a synergy between curated digital education and positive Islamic pedagogical principles to create a safe, enjoyable learning environment and build children's character holistically.

Keywords: Youtube Kids, Child Counseling, Islamic Education

INTRODUCTION

The rapid development of information technology is now unavoidable. Advances in communications have influenced how people view various aspects of daily life. The presence of technology has made it easier to access information and communicate, making it an inseparable part of modern life. While children used to freely play outside with their friends playing traditional games, many parents now prefer to utilize digital technology as a means of entertainment. In fact, many parents actively provide their children with direct access to digital devices from an early age.

On the one hand, rapid advances in science and technology (IPTEK) have made a significant contribution to the development of human civilization. Jobs that once required significant physical effort can now largely be performed by automated machines. Similarly, innovations in computing capacity have emerged that seem capable of rivaling the function of the human brain in various disciplines and activities. Current technological developments are widely recognized as having brought significant convenience and comfort to human life (Dwiningrum, 2012). However, on the other hand, physical, face-to-face interactions now compete with virtual interactions, requiring adaptation of parenting and guidance strategies to align with students' digital lifestyles (Prihandini, 2024). This changing landscape demands a smarter and more proactive approach from stakeholders

to ensure that technology serves as a tool that empowers, rather than harms, children's holistic development.

Technology provides a variety of learning resources, from online platforms and educational videos to interactive apps, enabling broader access to education. However, physical, face-to-face interactions now compete with virtual ones, requiring adaptations in parenting and guidance strategies to align with students' digital lifestyles. This changing landscape demands a smarter and more proactive approach from stakeholders to ensure that technology serves as a tool that empowers, rather than harms, children's holistic development.

In the field of guidance and counseling services, technology has played a significant role by increasing the accessibility, effectiveness, and quality of services. The use of online platforms allows counselors to provide assistance and advice to students in remote or physically difficult-to-reach locations, bridging geographic and socioeconomic barriers (Soleha, 2023). School guidance and counseling teachers also report that technology facilitates faster and more timely communication, allowing more students to receive counseling assistance. Furthermore, technology offers a comfortable and anonymous space for students who may feel awkward or afraid in face-to-face meetings. Chintyasari (2024) states that by interacting through digital platforms, they can feel more in control of the situation and reduce the stigma that often accompanies the need for psychological assistance. However, it is important to remember that this optimization requires adequate digital readiness and skills training for guidance and counseling staff.

Islamic counseling is a form of counseling service that aims to help individuals develop understanding in facing and resolving problems, and prepare for the future by making the best choices, in order to achieve happiness in this world and the hereafter with the full blessing and love of Allah SWT. Islamic guidance and counseling also serve as a coaching process so that individuals re-realize their identity as creatures of Allah, who should live their lives according to His guidance and decrees, in order to achieve true happiness in this world and the hereafter. This is where integral and functional Islamic religious education plays a crucial role in anticipating moral decadence. Islamic guidance and counseling is a discipline that lies at the intersection of various scientific fields, such as psychology, communication, da'wah, and education. Therefore, an in-depth study is needed to review Islamic counseling in a comprehensive and comprehensive manner (Miharja, 2020).

Religious education, a crucial pillar in character development, has also undergone a significant shift from conventional teaching methods to digital platforms. Platforms like YouTube and specialized educational apps are now the primary sources for children to learn religious teachings. This research will specifically examine the use of YouTube Kids in this context. It will not examine YouTube Kids as a tool for professional counseling, but rather as an informal educational medium that can support the goals of Islamic guidance and character development. This analysis will include an evaluation of the content, safety features, and pedagogy used, with the goal of providing comprehensive recommendations for parents, educators, and content creators.

METHOD

This study uses library research. Library research focuses on the study of reading sources such as books, scientific journals, literature, and other publications that can be used as sources for research. Library research aims to identify similarities and differences, make comparisons, and synthesize various ideas from reading sources, thereby generating new ideas as a result of the study process (Khatibah, 2011). This research is supported by a qualitative approach with a descriptive character and uses an inductive method. The qualitative approach is used to describe research

findings based on analyzed data. The method used is descriptive-analytical, namely by exploring various sources related to the topic being studied.

RESULTS AND DISCUSSION

Information and Communication Technology (ICT) is a term encompassing all technical equipment used to process and convey information. The use of digital technology plays a crucial role in supporting the delivery and dissemination of the latest information, streamlining communication, and supporting the educational process. Both parents and children are users of digital media in various forms, such as mobile phones, computers, and the internet. The increasing use of technology today, particularly in education, presents a significant opportunity to expand access and improve the quality of learning within the family environment.

Digital technology today offers numerous benefits to family life. It facilitates smoother communication within families, even during long-distance relationships. For children's education, digital technology provides broader access. Educational technology, such as online learning platforms and distance learning courses, can provide broader access for family members. This digital technology can increase children's productivity during their learning.

In addition to providing various significant benefits to human life, the development of digital technology today also has negative impacts. One impact that is increasingly being encountered is the emergence of digital addiction, namely the excessive use of digital devices and media beyond reasonable limits. This addiction not only affects individuals but also has a direct impact on family well-being. Communication patterns within the family can be disrupted, interactions between family members are reduced, and even the quality of emotional relationships can decline due to excessive time spent on digital devices. This shows that behind the great benefits of digital technology, there are serious challenges that need to be addressed to maintain family well-being.

Basic Principles of Child Counseling in a Digital Environment

Online counseling is defined as a psychological service that utilizes digital technology for intervention and support (Habibah, 2025). This is an adaptive response to limitations on face-to-face interactions, such as those experienced during COVID-19. These services can be accessed through various media, including video calls, chat, or email. The main benefits are flexibility of time and broader access, especially for individuals who have difficulty accessing conventional services.

However, it is important to note that professional counseling, whether online or offline, is an intervention process conducted by a trained psychologist or counselor (Daulay, 2022). It is a reactive service designed to help individuals address specific behavioral, emotional, or psychological issues. The use of technology in this context requires a platform that guarantees data confidentiality and competent experts in the field.

Technology-Based Counseling Approaches: Benefits and Challenges

Technology offers a number of concrete benefits in guidance and counseling services. In addition to increasing accessibility, technology also makes it easier for counselors to access unlimited information (Triyono, 2018). Specialized applications and platforms have been developed to support various aspects of guidance, from classroom guidance using Google Meet and Google Classroom to individual and group counseling via WhatsApp or Telegram. Some platforms are even designed to address specific issues, such as apps that provide support for victims of bullying. These apps often include interactive features like quizzes (Kahoot!) or relaxation videos that can increase student engagement (Sarasvati, 2024).

Challenges inherent in implementing technology-based counseling remain. One major obstacle is limited internet infrastructure, especially in rural areas, which can disrupt service quality. Furthermore, non-verbal interactions, such as body language, which are crucial in face-to-face counseling, are difficult to observe effectively through digital media. Ursula (2021) explains that data privacy and security issues are also serious concerns, as shared sensitive information is vulnerable to leaks or misuse. Therefore, service providers must ensure strict security protocols.

Putra (2021) in his research explained that there is a difference in understanding between the common narrative of "child counseling" and the actual function of YouTube Kids. Professionally, counseling is a reactive intervention led by experts. YouTube Kids, on the other hand, is an educational and entertainment platform. The role of YouTube Kids is not as a tool for interactive therapy sessions, but rather as a medium that can be used proactively and preventatively. Its function is to build character (moral formation) and provide relevant psychoeducation, which can ultimately reduce the likelihood of behavioral or emotional problems requiring counseling intervention. Thus, technology serves as a powerful supporting tool in the child development ecosystem, but does not replace the role of professional counselors.

Understanding Positive Islamic Educational Pedagogy for Children: Building Morals, Not Fear

Effective and positive Islamic educational pedagogy centers on the principles of compassion, role modeling, and reinforcement of commendable behavior (Saripah, 2019). Islamic education experts, such as Ibn Sina and Al-Ghazali, oppose the use of harsh and harsh punishment. Instead, they advocate an approach that builds children's awareness, motivation, and dignity (Djamal, 2018). This approach aims to instill the values of faith, noble morals, and worship holistically (Daulay, 2015). Education that focuses on compassion will shape individuals who are faithful and pious, not out of fear of punishment, but out of the awareness that Allah is always watching (Djamal, 2018).

This digital content analysis, however, reveals a dichotomy between these pedagogical principles and certain Islamic content trends. A common narrative found on digital platforms is the telling of stories of the Prophets originally intended for adults, often containing elements of punishment or violence. Conveying these stories without proper adaptation can instill unnecessary fear and anxiety in children. For example, stories about God's punishment of disobedient people, or even the story of Abraham's sacrifice, told without considering the child's age, can make them feel insecure and view God as a frightening figure.

Ali Huda explained that exposure to this type of content risks negative psychological impacts. Children who frequently see content with violence or frightening narratives are likely to imitate such behavior or develop excessive fears. Therefore, parents and teachers must be very careful curators. They need to assess content not only from the perspective of its "Islamic" label, but also from the perspective of its pedagogical approach and its impact on children's psychology. Content must be relevant and tailored to the child's cognitive developmental level, promoting good values and noble morals through positive and inspiring narratives.

YouTube Kids as an Islamic Educational Medium

YouTube Kids is designed as a safe and easy-to-use video platform for children. The platform is equipped with various parental control features that can be managed through the YouTube Kids app, the YouTube app, or Google Family Link. These features include content-level settings that categorize videos by age: Preschool (4 years and under), Younger (5-8 years), and Older (9 years and above) (Maharani, 2023). The most restrictive feature is Approved Content

Only, which allows parents to manually select which videos, channels, or collections their children can watch. In this mode, children cannot use the search function.

The YouTube Kids algorithm works based on various factors, including watch history, search history, and channel subscriptions. While this system is designed to filter out inappropriate content, Google acknowledges that it is not perfect. Inappropriate videos can slip through the automatic filters. Therefore, parents can also proactively block videos or channels and report inappropriate content for review by the YouTube team (Cyberlite, 2023). The platform's content policy specifically excludes material more suitable for viewers aged 13 and above or that violates its Community Guidelines, such as sexual content, graphic violence, or excessive promotion.

YouTube Kids is home to many popular Islamic educational channels, such as Muslim Kids, Islamic Kids National, and Kids Free Quran Education. These channels present a variety of themes relevant to children's religious education, such as: Stories of the Prophets and Messengers: For example, the Muslim Kids channel presents the stories of the Prophet Muhammad (peace be upon him), the Prophet Moses (peace be upon him), and the Prophet Joseph (peace be upon him) in animated format. Worship and Basic Teachings: Video tutorials on how to pray, perform ablution, and perform daily prayers (Nurhayati, 2023), as well as an introduction to the Hijaiyah alphabet.

Moral Values and Ethics: Content that teaches honesty, mutual assistance, and the importance of patience. This content generally uses a visually appealing approach with colorful animations, lively characters, and upbeat music. This approach aims to make the learning process fun and engaging, so that children can absorb the information more easily. Research also shows that watching YouTube Kids can positively impact children's cognitive stimulation and language development (Putra, 2021).

Well-designed Islamic educational content, such as that focused on exemplary stories and positive values, has been shown to have a very positive impact on instilling religious values in children. For example, a study showed that through YouTube, children were able to correctly imitate ablution and prayer movements and memorize daily prayers and short surahs from Juz Amma (Asmawati, 2024). This demonstrates the immense potential of digital media in accelerating and facilitating the process of religious learning.

There are also serious risks from poorly filtered content. Exposure to violence, sexual content, or content that instills fear in children can harm their psychological development. Furthermore, as discussed previously, there has been criticism of Islamic educational content that uses narratives based on punishment or violence, which, instead of being constructive, can cause anxiety, fear, and damage children's relationship with the concept of a loving God. It is important to prioritize content that teaches religion through compassion and role models, which is in line with the views of Islamic education experts who oppose harsh punishments (Djamel, 2018).

The Crucial Role of Parents and Educators in the Digital Age

In the digital age, the role of parents and educators as guides and curators is increasingly important. The concept of digital parenting emerged in response to this need, defined as the attitudes and skills of parents in guiding children in cyberspace. 4 In the Islamic context, digital parenting means instilling strong faith from an early age, understanding the digital environment, and teaching children digital ethics. 39 Parents must be proactive in guiding children to use technology wisely, including teaching them to be responsible for their online actions and to be critical of the information they receive (Noviana, 2024). Studies show that parents with good digital literacy tend to be more successful in mentoring their children.

Teachers and parents in the digital age are expected to be technologically literate. Digital literacy skills include the ability to select relevant content, accompany children when interacting with digital media, and foster open conversations afterward (Ahadi, 2024). In the context of YouTube Kids, best practices include using the Approved Content Only feature, creating custom, verified playlists, and monitoring children's viewing history. This active support allows parents to direct children to beneficial content while protecting them from unwanted risks.

Optimizing Technology Utilization: Model and Recommendations

This study presents a conceptual model that wisely integrates the role of technology in child guidance and counseling. In this model, technology, such as YouTube Kids and other educational apps, serves as a supporting tool for preventive and formative education. They are used to instill positive values, build morals, and provide basic psychoeducation on a mass scale, which can be part of a classical guidance program. In this way, technology can help shape children's character from an early age, potentially reducing the need for reactive counseling interventions in the future. Meanwhile, professional counseling is still provided by trained counselors when specific and deep-seated behavioral or psychological issues emerge. This synergy between technology-based preventive education and reactive professional interventions creates a comprehensive and efficient guidance ecosystem.

To optimize the use of technology, parents and educators need to implement several strategies:

1. **Building Digital Literacy:** Increasing personal knowledge and skills regarding technology and digital media, and staying up-to-date on current developments.
2. **Active Parenting Practices:** Implement the "3M" approach when children interact with media:
 - a. Choose appropriate content, prioritizing videos that focus on love and role models, rather than punishment or fear.
 - b. Accompany children while watching, making it a quality time for interaction, rather than simply leaving them in front of a screen.
 - c. Guide by holding open discussions after watching, to strengthen children's understanding of the values presented (Cyberlite, 2023).
3. **Prioritize Positive Pedagogy:** Encourage the selection of content that aligns with Islamic educational principles that center on love, empathy, and positive reinforcement, rather than threats or punishment (Somad, 2021).

In this regard, the following are recommendations for content creators and app developers:

1. **Collaborate with Experts:** Encourage content creators to collaborate with child psychologists, counselors, and Islamic education experts. This approach ensures that the content produced is not only engaging, but also safe, effective, and aligned with children's psychological development.
2. **Focus on Constructive Narratives:** Avoid narratives based on punishment and violence, and prioritize stories that instill values of kindness, empathy, and noble character.
3. **Transparent Safety Features:** Recommend app developers provide robust and transparent parental control features that are easy to use and understand.

CONCLUSION

The role of technology, including YouTube Kids, in child guidance and counseling is transformative yet complex. This analysis demonstrates a fundamental difference between the educational function of digital media and professional counseling. YouTube Kids and similar

platforms are most effective in their capacity as preventative educational media, which play a crucial role in moral and character formation, thereby supporting the overall goals of guidance and counseling. There is a significant dichotomy in the pedagogy of digital Islamic content, where some content still employs punishment-based narratives, contradicting positive Islamic psychological and pedagogical principles. Therefore, the role of parents and educators as content curators and guides in the digital age is crucial. They must possess adequate digital literacy to select, accompany, and guide their children.

The optimal future of digital Islamic education lies in the synergy between wise technology, intelligent content curation, and parenting based on compassionate and constructive Islamic principles. This is the path to ensuring that technology empowers, rather than harms, children's spiritual and psychological development.

AUTHOR CONTRIBUTION

This article is written based on research results by Giri Wahyu (student). Giri Wahyu played a major role in all stages of the research, from conceptualization, methodology development, data collection, data analysis, to writing the initial draft of the manuscript. Meanwhile, the supervisors (Hafidz and Muh. Nur Rochim Maksum) played a crucial role in providing supervision, validation, and academic guidance throughout the research process. Furthermore, the supervisors actively provided input, corrections, and editing to the manuscript, ensuring its successful completion. Therefore, it can be affirmed that Giri Wahyu is responsible for the overall implementation of the research, while the supervisors provided contributions in the form of supervision, methodological guidance, and manuscript review. All authors contributed equally to this article. All authors have read and approved the final manuscript.

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The authors declare that there are no conflicts of interest that could influence the results or interpretation of this research. This research was conducted independently and was not supported by any party with a commercial interest in the topic discussed.

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REFERENCES

Ahadi, A. (2024). Pemanfaatan Media Youtube dalam Pembelajaran Pendidikan Agama Islam. *Rayah Al-Islam*, 8(4), 2628-2643. https://doi.org/10.19109/limas_pgmi.v4i1.14909

Ali Huda. (n.d.). Is YouTube safe for Muslim kids? 7 reasons why it's not. Ali Huda Blog. Retrieved from

<https://blog.alihuda.com/is-youtube-safe-for-muslim-kids-7-reasons-why-its-not/>

Asmawati, L. (2024). Peran orangtua dan penggunaan youtube marbel untuk penanaman nilai-nilai Islam pada anak usia dini. *Jurnal Ilmiah Potensia*, 9(2), 170-179. <https://doi.org/10.33369/jip.9.2.170-179>

Chintyasari, R. (2025). Peran Teknologi Informasi dalam Revolusi Digital Konseling dan Dampaknya terhadap Praktik Bimbingan Konseling. *Jurnal Pembelajaran, Bimbingan, Dan Pengelolaan Pendidikan*, 5(2), 4-4. <https://doi.org/10.17977/um065.v5.i2.2025.4>

Cyberlite. (2023). How the YouTube algorithm works and how to keep kids safe. Cyberlite. Retrieved from

<https://www.cyberlite.org/post/how-the-youtube-algorithm-works-and-how-to-keep-kids-safe>

Cyberlite. (2023). *How the YouTube Algorithm Works and How to Keep Kids Safe*. Cyberlite. Retrieved from <https://www.cyberlite.org/post/how-the-youtube-algorithm-works-and-how-to-keep-kids-safe>

Daulay, N. (2015). Pendidikan karakter pada anak dalam pendekatan Islam dan Psikologi. *Miqot: Jurnal Ilmu-Ilmu Keislaman*, 39(1). <http://dx.doi.org/10.30821/miqot.v39i1.51>

Daulay, N., Harahap, A. C. P., & Sinaga, M. H. P. (2022). Panduan praktis konseling online bagi konselor. umsu press.

Djamal, M. (2018). Metode Hukuman dalam Perspektif Pendidikan Islam. *Al Ghazali*, 1(1), 17-37. Retrieved from

https://ejournal.stainupwr.ac.id/index.php/al_ghzali/article/view/17

Dwiningrum, S. I. A. (2012). Ilmu sosial & budaya dasar. Yogyakarta: UNY Press.

Habibah. (2025). Penggunaan Konseling Online Dalam Menangani Masalah Psikososial Pada Remaja Pasca Pandemi. *Bikoling*. 2 (2). <https://doi.org/10.70134/bikoling.v2i2.657>

Khatibah. (2011). Penelitian Kepustakaan. *Jurnal Iqra'*, Vol. 05 (No. 01), 37. Retrieved from [http://repository.uinsu.ac.id/640/1/\(5\)PENELITIAN%20KEPUSTAKAAN.pdf](http://repository.uinsu.ac.id/640/1/(5)PENELITIAN%20KEPUSTAKAAN.pdf)

Maharani, A. S., & Wardana, M. D. K. (2023). Youtube Kids: Solusi Mengurangi Pengaruh Negatif pada Youtube bagi Anak Sekolah Dasar. *ELSE (Elementary School Education Journal): Jurnal Pendidikan dan Pembelajaran Sekolah Dasar*, 7(1), 88-96. <https://doi.org/10.30651/else.v7i1.13516>

Miharja, S. (2020). Menegaskan Definisi Bimbingan Konseling Islami, Suatu Pandangan Ontologis. *At-Taujih: Bimbingan Dan Konseling Islam*, 3(1), 14. <https://doi.org/10.22373/taujih.v3i1.6956>

Noviana. (2024). Tips mendidik anak dengan nilai Islami di era digital. Daarut Tauhiid. Retrieved from

<https://daaruttauhiid.sch.id/tips-mendidik-anak-dengan-nilai-islami-di-era-digital/>

- Nurhayati, N., Supriyanti, S., Awalunisah, S., & Durrotunnisa, D. (2023). Manfaat media digital youtube terhadap pembelajaran pendidikan agama Islam anak usia dini. *Jurnal Pendidikan Agama Islam Al-Thariqah*, 8(2), 362-379. Retrieved from <https://journal.uir.ac.id/index.php/althariqah/article/view/15190>
- Prihardini, I., Sahrani, R., & Dewi, F. I. R. (2024). Psikoedukasi digital parenting: Pola asuh baru menyiapkan anak untuk era digital. *PUSAKO: Jurnal Pengabdian Psikologi*, 3(2), 17-33.
- Putra, E. P., Christian, L., & Juwitasary, H. (2021). Trend of Youtube Kids as E-learning media for toddlers: systematic literature review. *Rigeo*, 11(6).
<https://doi.org/10.24036/pusako.v3i2.94>
- Sarasvati, H. L. (2024). Peran Teknologi sebagai Media dalam Praktik Layanan Bimbingan Konseling. *Jurnal Ilmiah Bimbingan Konseling Undiksha*, 15(3), 348-361. <https://doi.org/10.23887/jibk.v15i3.87784>
- Saripah. (2019). Pendidikan Agama dan Moral Penting Bagi Anak. Dinas Pendidikan Kabupaten Purwakarta. Diakses dari situs web resmi Dinas Pendidikan Kabupaten Purwakarta. <https://disdik.purwakartakab.go.id/read/pendidikan-agama-dan-moral-penting-bagi-anak>
- Soleha, S. N., Hartini, H., & Rizal, S. (2023). Peran media dan teknologi dalam layanan bimbingan dan konseling di SMA Negeri 1 Rejang Lebong. *At-Taujih: Bimbingan dan Konseling Islam*, 6(2), 17-29. <https://doi.org/10.22373/taujih.v6i2.21687>
- Somad, M. A. (2021). Pentingnya Pendidikan Agama Islam dalam membentuk karakter anak. *QALAMUNA: Jurnal Pendidikan, Sosial, Dan Agama*, 13(2), 171-186.
<https://doi.org/10.37680/qalamuna.v13i2.882>
- Triyono, T., & Febriani, R. D. (2018). Pentingnya pemanfaatan teknologi informasi oleh guru bimbingan dan konseling. *Jurnal Wahana Konseling*, 1(2), 74-83. <https://doi.org/10.31851/juang.v1i2.2092>
- Ursula, P. A. (2021). Mengenal layanan konseling online. *Daiwi Widya*, 8(3), 62-73. <https://doi.org/10.37637/dw.v8i3.824>

