

The Use of Artificial Intelligence in Counseling: Improving Client Support and Mental Health Services

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Abstract. This study examines the integration of artificial intelligence (AI) in virtual counseling services, exploring the benefits and challenges that come with it. Based on a comprehensive literature review of 25 studies published on Google Scholar between 2020 and 2025, the study uses a library review methodology to analyze key themes. The results show that AI has great potential to improve the accessibility and effectiveness of counseling services, especially in areas with professional limitations. However, the study also found significant challenges related to ethics and data privacy. Issues such as user trust, the need for ethical oversight, and the importance of inclusive and transparent policies are major obstacles. While technologies such as secure computing and federated learning offer solutions to protect privacy, interdisciplinary collaboration between technology developers, mental health practitioners, and policymakers is indispensable. The study concludes that to maximize the benefits of AI, a balance between technological advances and the protection of user rights must be achieved through a strong ethical framework and sustainable policies.

Keywords: counseling, artificial intelligence; virtual; ethics; policy.



INTRODUCTION

Counseling services play an important role in supporting individuals facing psychological and emotional challenges. However, significant challenges remain, resulting in difficulties in accessing these services, especially in rural areas or among individuals who experience stigma related to mental health. This limited access is often caused by high service costs, a shortage of trained professionals, and the absence of adequate resources. In this context, the use of artificial intelligence (AI) is beginning to be considered as an alternative that can improve the accessibility and efficiency of counseling services through various advanced technology applications such as chatbots and virtual counseling (Wilson & Mărășoiu, 2022).

Artificial intelligence has shown significant potential in the development phase of tackling mental health issues. For example, chatbots designed specifically for mental health such as Woebot and Wysa can provide the emotional support individuals need in a more affordable and convenient way (Wah, 2025; Almalki & Azeez, 2020; Roy et al., 2023). Research shows that this technology can help individuals manage anxiety and depression, where AI can serve as a mental support tool for those who feel reluctant to seek help in person (Gamble, 2020; Abd-Alrazaq et al., 2019). Initial interactions with these chatbots often show positive outcomes, stemming from the evidence-based approach and ease of access offered by the technology (Casu et al., 2024).

Nonetheless, the adoption of AI in counseling is not without its challenges, especially related to ethical considerations and data privacy. Users often feel concerned about the security of their personal information, especially when dealing with sensitive data related to mental states (Chen et al., 2025; Wairimu & Iwaya, 2025). Research shows that transparency in data management and further regulatory provisions are needed to build user trust in chatbots and AI-based mental health apps (Amiri & Karahanna, 2022; Wu et al., 2024; Abd-Alrazaq et al., 2019). With growing concerns over the potential misuse of data and biased algorithms, it is important to ensure that the development of these technologies is balanced with policies that protect users and pay attention to inclusivity (Bendig et al., 2019; Hisan & Amri, 2022).

A comprehensive ethical framework for the integration of artificial intelligence in counseling services will be indispensable to address these challenges. This includes the development of guidelines governing the use of AI in counselling with special attention to fairness and privacy, as well as the development of policies that can ensure equitable access to mental health services (Gavarkovs, 2019; Safi et al., 2020). With this approach, AI will be able to make a more significant contribution in expanding the reach of counseling services, while still maintaining high ethical standards and public trust in technology (Bendig et al., 2019; Abd-Alrazaq et al., 2019; Potts et al., 2023).

Overall, while AI offers promising solutions to improve counseling services, challenges related to ethics, privacy, and inclusivity must be carefully managed to maximize their benefits.

Research in this area is expected to provide policy guidance that supports the safe and effective integration of AI in mental health services going forward

METHODOLOGY

This study adopts a library review methodology to explore key themes related to the application of artificial intelligence (AI) in virtual counseling (Braun & Clarke, 2006). With a focus on literature published between 2020 and 2025, the article search was conducted through the Google Scholar database with relevant keywords to identify high-quality literature and topics specific to AI in virtual counseling, as well as important issues related to data privacy, user data security, and policies that align with transparency and inclusivity.

It has found 25 articles that have keywords related to AI, counseling, and privacy data compiled through scispace's AI platform. The data obtained from related studies are then categorized into key classifications, namely the application of AI in counseling, ethical dilemmas related to data privacy, AI policies in mental health, and inclusivity considerations in access to services. This methodological approach facilitates the identification of prominent themes prevalent in the literature and provides a comprehensive overview of the issues that arise related to the integration of AI in counseling practice. Thematic analysis was conducted to explain and categorize the key themes identified in the relevant study, such as data privacy, user trust, ethical policy frameworks, and challenges related to implementation. Furthermore, an extensive comparative analysis was conducted to evaluate the benefits and harms of existing policies and to provide insights into the ethical integration of AI in the realm of virtual counseling

RESULTS AND DISCUSSION

Based on a thematic analysis of 25 AI-related studies in virtual counseling, several key themes were found that affect the implementation and sustainability of AI in mental health services, namely (1) ethical frameworks, (2) user trust, (3) policy recommendations, (4) inclusion and equity, and (5) implementation challenges. The summary is presented in table 1. Thematic summary below.

Table 1. Thematic Summary

Yes	Theme	Articles
1	Ethical framework	There are 7 studies with a main focus on data privacy, information security and ethical gaps (AlMakinah et al. 2024; Gawankar et al., 2024; Saeidnia et al., 2024; Majeed & Qadir, 2024; Grabb et al., 2024; Prathomwong & Singsuriya, 2022; Peters et al., 2020)
2	User trust	The findings of 6 studies show that trust is often associated with the transparency, data security, and reliability of AI tools (Pazer, 2024; Ryan et al; 2024; Moreno, 2024; Yadav, 2023; Omarov et al., 2023; Cecula et al., 2021)

3	Policy recommendations	There are 6 studies that describe diverse policy proposals, ranging from specific technical guidelines such as Federated Learning and blockchain, to broad regulatory frameworks that emphasize privacy, fairness, and accountability (AlMakinah et al., 2024; Shaw et al., 2024; Gawankar et al., 2024; Ding & Barbic, 2024; Sonig et al., 2024; Doraiswamy et al., 2020)
4	Inclusion and equality	Findings of 5 studies with a focus on equitable access and mitigation in the application of AI in mental health counseling as well as user (inclusion) gaps (AlMakinah et al., 2024; Moreno, 2024; Alnaher, 2023; Sharma et al., 2022; Fosso Wamba, S., & Queiroz, M. M., 2021)
5	Implementation challenges	There are 6 studies that contain the most frequently identified challenges, namely inadequate Privacy Preservation, lack of transparency, and gaps in regulatory oversight and learning sustainability (AlMakinah et al., 2024; AI. Surani et al., 2023; Tian et al., 2022; Zhou, S., Zhao, J., & Zhang, L., 2022; Haque et al., 2021).

Most of the studies analyzed focused on the application of ethical frameworks in the use of AI for mental health, especially related to data privacy and information security. Research by Almakinah et al. (2024), Gawankar et al. (2024), and Saeidnia et al. (2024) suggests the use of Federated Learning as a solution to maintain user privacy. This technology allows AI to learn from distributed data without the need to send personal data to a central server, thereby improving the protection of user privacy. This is an important step in addressing challenges related to the protection of sensitive data in the context of mental health (Majeed & Qadir, 2024; Prathomwong & Singsuriya, 2022).

However, research by Peters et al. (2020) and Grabb et al. (2024) reveals gaps in the application of ethical principles in the field. While an understanding of the importance of transparency, accountability, and data protection is already in place, its implementation is still often inconsistent. Federated Learning provides a solution to privacy concerns, but a greater challenge arises in implementing a comprehensive ethical framework in AI platforms. Therefore, there is a need for an anticipatory ethical design to ensure that AI operates safely and in accordance with established ethical standards.

User trust in AI in virtual counseling is influenced by factors such as transparency, data security, and the reliability of AI tools. Research by Pazer (2024) and Ryan et al. (2024) shows that users who are earlier in adopting the technology tend to have more trust in AI systems, while those who are more skeptical often feel concerned about privacy and AI's ability to mimic human empathy. Moreno (2024) and Yadav (2023) note that trust is declining due to unclear explanations of data use and fear of data misuse, especially among more vulnerable populations, such as patients with severe mental health problems.

These findings corroborate previous research that emphasizes the importance of transparency in the use and storage of personal data to build trust. The main challenge lies in crafting an

explanation that can be understood by all users, including those with technological limitations or who have an over-reliance on AI (Omarov et al., 2023). In addition, the social stigma associated with the use of AI for counseling (Cecula et al., 2021) also affects user trust. While AI has great potential, privacy concerns and AI's inability to provide empathy underscore that AI cannot completely replace the role of human therapists in providing emotional and therapeutic support.

Various policy recommendations related to the application of AI in virtual counseling include technical guidelines and regulatory frameworks to ensure that its use complies with principles of ethics, privacy, and fairness. Almakinah et al. (2024) and Gawankar et al. (2024) emphasize the need for multi-tier governance, involving a wide range of stakeholders, such as technology developers, medical practitioners, psychologists, counselors, and policymakers, to ensure that the use of AI is done in an ethical manner and in accordance with professional standards. Meanwhile, Ding & Barbic (2024) and Sonig et al. (2024) emphasized the importance of user-based collaborative design and ongoing policy change so that AI capabilities can evolve in accordance with social and ethical needs.

Although some studies have proposed policies that support a more inclusive regulatory framework, there are still significant differences in the practical implementation of such policies. Comprehensive and flexible policy formulation will be more effective when it involves stakeholders who have a direct influence on the user experience. Therefore, the main challenge in policy implementation is to ensure that the policy not only benefits developers and policymakers, but also truly focuses on the well-being of users in the implementation of AI-based counseling.

The fourth theme relates to inclusion and equity, with a primary focus on equitable access and mitigation of bias in the application of AI in mental health counseling. Research by Almakinah et al. (2024) and Fiske et al. (2019) shows that without the right policies, AI can exacerbate health inequalities, especially among marginalized groups. Yadav (2023) adds that AI has the potential to widen the access gap if it is not designed to meet the needs of different demographics. In contrast, research by Fosso Wamba & Queiroz (2021) and Sharma et al. (2022) highlights the importance of further research to ensure AI is accessible to all walks of life, given the existence of gaps in research on inclusion.

These findings are consistent with previous research that emphasizes the importance of fairness and accessibility in the application of AI in the mental health sector. AI must not only accelerate and reduce service costs, but it must also ensure equal access for individuals from different social and economic backgrounds. For this reason, policies that pay attention to equal access are very important so that AI can truly benefit all people without exacerbating existing gaps.

The fifth theme addresses the diverse challenges faced in the application of artificial intelligence, particularly in relation to privacy, transparency, and regulatory oversight. Investigations conducted by Surani et al. (2023) have shown that while certain AI platforms have

complied with established privacy and ethical standards, significant deficiencies in oversight remain, thus hindering optimal implementation. Inadequate oversight often raises the risk of ethical policies being violated or not being adequately executed. Nonetheless, research by Almakinah et al. (2024) and Tian et al. (2022) illustrates that mechanisms such as secret computing and Federation Learning can serve as viable solutions to protect data privacy while facilitating the ongoing machine learning process.

These findings highlight the need for increased monitoring and continuous assessment of the implementation of AI technology to ensure compliance with ethical standards (Zhou, S., Zhao, J., & Zhang, L., 2022), particularly for children (Haque et al., 2021). In the absence of adequate oversight, AI systems can deviate from established ethical principles, potentially eroding users' trust and jeopardizing the confidentiality of their data.

Given the five key themes discussed above, the integration of AI in the virtual counseling domain is emerging as a complex endeavor characterized by a rapidly evolving landscape of development. While AI has the potential to improve the accessibility and customization of mental health services, it cannot fully replicate the emotional depth and adaptive capabilities inherent in human therapists. As a result, these findings provide support for a theoretical framework that places AI as an adjunct tool rather than a substitute for human doctors or therapists (Almakinah et al., 2024; Fiske et al., 2019). The deployment of AI in this field should be based on a strong ethical framework that prioritizes user security, privacy, and trust, while also addressing the challenges associated with its implementation. In this context, anticipatory ethical design methodologies are essential to reduce ethical dilemmas that have the potential to arise in the future (Peters et al., 2020).

Furthermore, the operational methodology of machine learning systems, particularly Federation Learning as a Privacy Preservation technique, supports the theoretical discourse around the application of decentralized AI, emphasizing increased user control over data and privacy considerations (Gawankar et al., 2024; Tian et al., 2022). This paradigm is in line with theoretical propositions that advocate data minimization and user autonomy in AI systems. As a result, the insights gained from these themes strengthen the argument advocating for further integration of Privacy Preservation technologies to increase user trust in AI-driven mental health services.

CONCLUSION

Overall, the integration of artificial intelligence in virtual counseling not only provides many benefits regarding the accessibility and customization of services but also introduces significant challenges that must be addressed, especially regarding ethical considerations related to data privacy, user trust, and the formulation of policy recommendations aimed at improving sustainability and ethical practices in the application of AI in mental health services. According to

findings obtained from a literature review, artificial intelligence shows great potential in improving the accessibility and efficacy of counseling services, especially in areas with a deficit of mental health practitioners. Nevertheless, issues regarding data privacy, user trust, and fair access remain as obstacles that need to be resolved. The results further show that while AI technology can provide emotional support, the involvement of medical professionals, including doctors and psychiatrists, is still indispensable to address more complex medical conditions.

The consequences of this study underscore the need for stronger policies on data privacy and transparency, along with the need for inclusive policies to ensure equitable access for all groups of people, especially those marginalized. Further, the study explains that while artificial intelligence can serve as a highly effective auxiliary mechanism, there is an urgent need for policies that emphasize ethical oversight and the safeguarding of personal data to maintain user confidence in these technological advancements.

Given these findings, recommendations that can be offered include, first, the formulation of a more comprehensive policy that includes data privacy regulation, transparency in data management, and equality in service access as top priorities. Second, interdisciplinary collaboration between technology developers, mental health practitioners, and policymakers should be enhanced to foster ethical and responsible frameworks in the use of AI in the context of counseling. Third, it is important to implement ongoing assessments of existing policies and AI applications to ensure that these technologies not only effectively provide emotional support but also are safe and trustworthy for all users.

Artificial intelligence has the capacity to revolutionize mental health services in a more efficient and economically viable way, it is essential to strike a balance between technological advances and the protection of users' rights, ensuring that their implementation is carried out in an ethical, equitable and inclusive manner.

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