



## Digital Transformation in Counseling Services: Ethical, Relational, and Sociocultural Perspectives on Technology-Based Counseling

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ARTICLE INFO	ABSTRACT
<p><b>Keywords:</b></p> <p><i>Counseling Ethics;</i> <i>Digital Counseling;</i> <i>Technology-Based Counseling;</i> <i>Therapeutic Relationship;</i> <i>Sociotechnical Transformation.</i></p> <hr/> <p><b>Article History</b></p> <p>Received: May 08, 2026 Revised : May 20, 2026 Accepted : May 26, 2026</p>	<p>This study examines the transformation of counseling services in the digital era by exploring the ethical, relational, professional, and sociocultural dimensions of technology-based counseling. Using an integrative literature review approach, the study critically analyzes contemporary literature related to digital counseling, online therapy, telecounseling, and technology-mediated psychological support services. The analysis employs thematic content analysis to identify major conceptual patterns concerning therapeutic relationships, ethical adaptation, counselor competencies, accessibility, and sociocultural challenges within digitally mediated counseling environments. The findings indicate that digital counseling should not be understood merely as the transfer of conventional counseling into virtual platforms, but as a multidimensional sociotechnical transformation that reconstructs counseling practice within contemporary digital society. Technology-based counseling expands accessibility, flexibility, and inclusivity of psychological services while simultaneously generating ethical challenges related to cybersecurity, privacy protection, professional boundaries, and digital inequality. The study further reveals that therapeutic effectiveness in online counseling depends significantly on counselors' ability to establish psychological presence, emotional responsiveness, and relational authenticity despite technological limitations. In addition, the implementation of digital counseling in developing countries such as Indonesia remains strongly influenced by sociocultural context, institutional readiness, and unequal digital infrastructure. This study proposes the concept of digital counseling as a humanistic sociotechnical ecosystem integrating technological innovation, ethical responsibility, relational engagement, and cultural sensitivity within contemporary counseling practice.</p> <p style="text-align: right;"><i>This is an open access article under the <a href="https://creativecommons.org/licenses/by-sa/4.0/">CC BY-SA</a> license</i></p> <div style="text-align: right;"></div>
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### INTRODUCTION

The rapid expansion of digital technology has fundamentally transformed the structure and delivery of counseling services across educational and mental health settings. Counseling, which was traditionally conducted through direct face-to-face interaction, is increasingly mediated through digital platforms such as Zoom, Google Meet, and other online communication technologies (Ulum et al., 2023; Faqih Isro'i et al., 2022; Haryati, 2020) . This transformation accelerated substantially during the COVID-19 pandemic, which compelled educational institutions and counseling services to rapidly adopt remote and technology-mediated approaches in order to maintain the continuity of psychological and educational support services (Caraka Putra Bhakti et al., 2023; Situmorang, 2020; Tuna & Avci, 2023). However, the integration of technology into counseling services should not be understood merely as a technical transition from offline to online interaction. Rather, digital

counseling represents a broader sociotechnical transformation that reshapes therapeutic communication, professional ethics, counseling accessibility, and the relational dynamics between counselors and clients. In countries with advanced digital infrastructure, technology-based counseling has rapidly developed as an alternative and complementary form of mental health support. Conversely, developing countries such as Indonesia continue to face significant challenges related to technological inequality, digital literacy, infrastructure limitations, and regulatory readiness (Utami et al., 2023; Anggara & Suherman, 2024). These conditions indicate that technology-based counseling is a multidimensional phenomenon influenced not only by technological innovation, but also by social, cultural, institutional, and ethical contexts.

Academically, technology-based counseling is increasingly understood not simply as the transfer of traditional counseling practices into virtual environments, but as the reconstruction of therapeutic processes within technologically mediated settings. Richards, D., & Viganò, (2020) and Shchedrinskaya & Bebchuk, (2020) emphasized that digital counseling requires substantial adaptation of counseling paradigms, communication patterns, and professional ethics in order to maintain therapeutic effectiveness in online environments. One of the most significant ethical concerns involves digital informed consent, which now extends beyond procedural agreement to include transparency regarding cybersecurity risks, network instability, technological limitations, and personal data protection. Recent studies by Goldschmitt et al., (2025); Cilar Budler & Stiglic, (2025) demonstrated that the digitization of informed consent procedures may improve client understanding and administrative efficiency, while simultaneously raising important concerns regarding privacy, transparency, and data security. In addition to ethical adaptation, digital counseling also transforms the nature of therapeutic relationships. Conventional counseling interactions rely heavily on nonverbal communication cues such as facial expressions, body language, eye contact, and emotional atmosphere within counseling settings. However, many of these relational dimensions become altered or limited in virtual interactions, particularly in text-based communication. Nevertheless, several studies suggest that counselors may adapt to these limitations through explicit empathetic communication, digitally responsive interaction strategies, and flexible communication patterns. Stoll et al., (2020) argued that online psychotherapy may enhance clients' sense of anonymity and privacy, which can reduce inhibition and encourage greater openness in discussing emotional concerns within digitally mediated therapeutic environments. These findings demonstrate that digital counseling simultaneously creates opportunities for accessibility while challenging conventional understandings of therapeutic presence, relational authenticity, and professional ethics.

Technology-based counseling also contributes to the expansion of more inclusive and accessible counseling services. Individuals living in geographically remote areas, individuals with limited mobility, and clients experiencing social anxiety may benefit significantly from the flexibility and accessibility offered by digitally mediated counseling environments (Himmatun 'Aliah et al., 2024; Bee et al., 2008; Weightman, 2020). Consequently, digital counseling should not be viewed solely as technological modernization, but also as a mechanism for democratizing access to psychological support and professional counseling services for previously underserved populations. Within the Indonesian context, the discourse surrounding digital counseling continues to develop alongside the increasing integration of digital technology into educational settings. Farsiah et al., (2025) and Boniel-Nissim, (2026) argued that the increasing implementation of technology-based counseling services in schools is driven by their efficiency, accessibility, and compatibility with students' digital communication preferences and contemporary learning environments. This transformation became increasingly significant following the COVID-19 pandemic, which accelerated the adoption of online communication systems in educational institutions (Caraka Putra Bhakti et al., 2023; Prawitasari, 2020; Dwi Rohmadi et al., 2021). Several studies highlighted that technology-based counseling offers important opportunities to improve service flexibility, counseling accessibility, and communication effectiveness (Malelak et al., 2024; Renaningtias et al., 2023; Richards D., & Viganò, 2020; Harris & Birnbaum, 2015). However, the implementation of digital

counseling in Indonesia continues to face substantial structural barriers, including unequal technological infrastructure, disparities in institutional readiness, limited counselor digital competence, and low digital literacy among service users (Anggara & Suherman, 2024; Utami et al., 2023). These challenges indicate that the successful implementation of technology-based counseling in Indonesia depends not only on technological availability, but also on ethical adaptation, institutional support, sociocultural contextualization, and professional competency development.

Although previous studies have extensively discussed technological accessibility, ethical adaptation, online communication, and the effectiveness of digital counseling services, existing literature tends to examine these issues from fragmented perspectives. Most studies focus primarily on technological implementation, ethical concerns, or practical effectiveness in isolation, resulting in limited conceptual integration regarding how technology reshapes therapeutic relationships, counselor competence, professional identity, and counseling practices within digitally mediated environments. Furthermore, limited attention has been given to the interconnected relationship between ethical adaptation, therapeutic relationality, sociocultural contextualization, and digital professional competence within developing countries such as Indonesia. As a result, digital counseling is often understood primarily as a technological innovation rather than as a multidimensional sociotechnical transformation that reconstructs counseling practice in the digital era. This conceptual limitation is important because the effectiveness of technology-based counseling cannot be understood solely through technological efficiency, but must also be examined through the interaction between humanistic counseling values, ethical responsibility, digital competence, and local cultural realities.

Based on these considerations, this study aims to critically examine the transformation of counseling services in the digital era by exploring the ethical, relational, professional, and sociocultural dimensions of technology-based counseling. Through an integrative literature-based analysis, this study seeks to develop a conceptual understanding of digital counseling as a sociotechnical transformation that reconstructs therapeutic interaction, professional ethics, counseling accessibility, and counselor competence within contemporary digital environments. This study contributes to the growing discourse on digital counseling by emphasizing that the effectiveness of technology-based counseling depends not only on technological innovation, but also on the integration of ethical responsibility, relational authenticity, sociocultural adaptation, and humanistic counseling values.

## METHOD

This study employed an integrative literature review approach to critically examine the ethical, relational, and sociocultural transformation of technology-based counseling in the digital era. An integrative literature review was considered appropriate because this study aimed not only to summarize previous findings, but also to develop a conceptual understanding of how digital technology reconstructs counseling practices, therapeutic relationships, professional ethics, and counseling accessibility within digitally mediated environments. This approach allows the integration of theoretical discussions, empirical findings, and conceptual perspectives from diverse academic sources in order to generate a comprehensive interpretation of contemporary digital counseling practices.

This study adopted a qualitative interpretive approach using thematic content analysis as the primary analytical framework. The analysis focused on identifying recurring concepts, emerging themes, conceptual patterns, and theoretical relationships related to the transformation of counseling services in digital contexts. Thematic content analysis was selected because it enables systematic interpretation of complex and multidimensional issues across various forms of literature while supporting conceptual synthesis and interpretive analysis. The literature search process was conducted systematically using several academic databases, including Scopus, Google Scholar, DOAJ, ProQuest, and ScienceDirect. The search focused on publications discussing technology-based

counseling, digital counseling, e-counseling, online counseling, teletherapy, and digital mental health. To ensure relevance and academic quality, the literature selection process applied several inclusion criteria, including: (1) peer-reviewed journal articles and academic publications; (2) studies discussing the implementation, ethics, relational dynamics, accessibility, or professional dimensions of digital counseling; (3) publications written in English or Indonesian; and (4) literature published within the context of contemporary digital counseling development. Meanwhile, opinion-based articles, non-scientific publications, duplicated sources, and literature unrelated to counseling services were excluded from the analysis. The literature selection process involved screening and evaluating academic publications based on thematic relevance, conceptual contribution, methodological credibility, and alignment with the objectives of the study. The selected literature consisted of peer-reviewed journal articles, theoretical studies, and empirical research discussing ethical, relational, technological, and sociocultural dimensions of digital counseling practices.

Following the literature selection process, data extraction was conducted by identifying and recording essential information from each selected source, including research objectives, theoretical frameworks, methodological approaches, principal findings, and implications for counseling practice. The collected literature was subsequently analyzed through thematic categorization. Several major themes emerged from the analysis, including: (1) the transformation of counseling service models in digital environments; (2) counselor competence and professional adaptation in the digital era; (3) ethical challenges, privacy, and cybersecurity in technology-based counseling; (4) therapeutic relationships and digital relationality; and (5) sociocultural challenges and accessibility in developing countries, particularly Indonesia. The final stage involved interpretive synthesis, in which findings from diverse sources were critically integrated to construct a conceptual understanding of technology-based counseling as a multidimensional sociotechnical transformation. To enhance analytical rigor and conceptual consistency, findings from diverse academic sources were critically compared and synthesized across different theoretical and empirical perspectives. In addition, all sources included in this study were transparently documented in the reference list to ensure academic accountability and methodological transparency. The thematic synthesis generated several interconnected conceptual categories that form the basis of the findings and discussion presented in this study.

## FINDINGS

### 1. Digital Counseling as a Sociotechnical Transformation

The literature indicates that the emergence of technology-based counseling represents not merely a technical transition from face-to-face interaction to virtual communication, but a broader sociotechnical transformation that reconstructs the structure, delivery, and accessibility of counseling services. The rapid development of digital communication technologies has enabled counseling services to be conducted through various synchronous and asynchronous platforms, including video conferencing, email, chat-based systems, mobile applications, and artificial intelligence-assisted platforms (Anthony, K., & Nagel, 2019; Richards, D., & Viganò, 2020). This transformation accelerated substantially during and after the COVID-19 pandemic, when educational institutions and mental health services were required to rapidly adopt digitally mediated counseling systems in order to maintain psychological support services under social restrictions (Situmorang, 2020; Tuna & Avci, 2023).

Reviewed literature demonstrates that digital counseling has expanded the operational boundaries of conventional counseling practice by enabling more flexible, adaptive, and accessible service delivery models. Unlike traditional counseling, which is generally limited by geographical proximity, institutional schedules, and physical interaction, digital counseling facilitates remote therapeutic communication across different regions and time settings (Bee et al., 2008; Weightman, 2020). Furthermore, the integration of asynchronous communication models allows clients to express emotional concerns more flexibly without requiring immediate real-time interaction, thereby

increasing accessibility for individuals with time limitations, social anxiety, or mobility restrictions (Anthony, K., & Nagel, 2019). Consequently, digital technology functions not solely as an administrative tool within counseling services, but as an active medium that reshapes therapeutic communication and psychological support systems within contemporary society.

The findings also suggest that technology-based counseling is increasingly supported by interdisciplinary theoretical perspectives that integrate psychological, communicational, sociological, and technological frameworks. Humanistic perspectives continue to emphasize empathy, authenticity, and therapeutic presence as central components of counseling relationships, even within digitally mediated environments (Rogers, 1961; Stoll et al., 2020). Simultaneously, cognitive-behavioral approaches have demonstrated strong adaptability to digital platforms due to their structured and measurable intervention models, particularly in internet-based cognitive behavioral therapy (iCBT) for anxiety, depression, and stress management (Andersson et al., 2019). In addition, systems theory and ecological perspectives highlight that digital counseling interactions are influenced not only by counselor-client relationships, but also by broader sociocultural, institutional, and technological environments that shape communication practices and counseling accessibility (Bronfenbrenner, 1979; Hoch, 2023). These findings indicate that digital counseling should be understood as an interdisciplinary and multidimensional phenomenon situated within broader technological and sociocultural transformations.

## **2. Reconstruction of Therapeutic Relationships in Virtual Environments**

A major theme emerging from the literature concerns the transformation of therapeutic relationships within digitally mediated counseling environments. Traditional counseling interactions rely heavily on physical co-presence, nonverbal communication, emotional atmosphere, and direct interpersonal engagement. However, digital counseling alters many of these relational dimensions by transferring therapeutic interaction into technologically mediated communication systems (Richards, D., & Viganò, 2020). As a result, counselors are required to reconstruct relational strategies in order to maintain empathy, trust, emotional responsiveness, and therapeutic alliance within virtual environments.

Several studies indicate that limitations in nonverbal communication constitute one of the primary challenges in online counseling practices. In text-based communication, counselors are unable to directly observe facial expressions, gestures, eye contact, or emotional atmosphere, thereby increasing the possibility of misunderstanding emotional cues and client responses (Stoll et al., 2020). Even within video-based counseling, unstable internet connections, technological interruptions, and limited camera perspectives may reduce communication quality and emotional immediacy (Moudatsou et al., 2024). Consequently, counselors must develop alternative forms of relational sensitivity through explicit empathetic language, verbal affirmation, digitally responsive interaction patterns, and greater attentiveness to subtle digital communication indicators such as pauses in messaging, response patterns, or written emotional expressions. Despite these limitations, the literature also demonstrates that digital counseling may create new forms of therapeutic openness and psychological comfort. Stoll et al., (2020) argued that online counseling environments may increase clients' sense of anonymity and privacy, thereby reducing feelings of intimidation commonly associated with direct face-to-face interaction. Several clients reportedly experience greater comfort in discussing emotionally sensitive issues within digitally mediated environments because virtual interaction creates a form of psychological distance that reduces social pressure and emotional vulnerability. These findings suggest that therapeutic effectiveness in digital counseling is not determined solely by physical proximity, but by the counselor's capacity to establish psychological presence, emotional validation, and relational authenticity within virtual communication environments.

The findings further indicate that relational adaptation in digital counseling requires the development of specific communication competencies. Counselors must demonstrate the ability to

maintain professional warmth, clarity of communication, and emotional responsiveness despite technological limitations. The reviewed studies consistently emphasize that digital therapeutic relationships depend significantly on the counselor's ability to integrate humanistic counseling values into technologically mediated interactions (Richards, D., & Viganò, 2020; Stoll et al., 2020). Thus, digital counseling reconstructs conventional understandings of therapeutic presence by shifting emphasis from physical co-presence toward psychological and relational engagement within virtual settings.

### 3. Ethical Transformation in Technology-Based Counseling

The literature consistently identifies ethical adaptation as one of the most critical dimensions of technology-based counseling transformation. While the fundamental ethical principles of counseling—including confidentiality, beneficence, client autonomy, and professional responsibility—remain central within digital environments, technological mediation introduces new ethical complexities related to cybersecurity, privacy protection, informed consent, and professional boundaries (Moudatsou et al., 2024; McInnis, K., Johnson, R., & Harper, 2024). One of the most frequently discussed ethical concerns involves digital informed consent. Unlike conventional counseling settings, informed consent within online counseling environments must explicitly address technological risks, including internet instability, digital communication limitations, cybersecurity vulnerabilities, electronic data storage, and the possibility of unauthorized data access (Goldschmitt et al., 2025; Cilar Budler & Stiglic, 2025). Recent studies suggest that digital informed consent procedures may improve administrative efficiency and client understanding through interactive digital systems, while simultaneously increasing concerns regarding transparency and personal data protection. Consequently, ethical counseling practice in digital environments requires greater technological transparency and clearer communication regarding the limitations and risks associated with online therapeutic interaction.

The findings also demonstrate that confidentiality and cybersecurity represent major ethical challenges within technology-based counseling. In conventional face-to-face counseling, confidentiality is primarily maintained through controlled physical settings and institutional privacy procedures. However, in digital counseling environments, confidentiality depends significantly on technological infrastructure, encryption systems, secure communication platforms, and counselor digital competence (Stoll et al., 2020). Several studies highlight that inadequate digital security practices may expose clients to risks such as data leakage, privacy violations, identity exposure, and unauthorized information sharing (Hazel Wendy et al., 2024). Therefore, counselors are increasingly expected to possess not only clinical competence, but also basic cybersecurity literacy and technological risk management capabilities.

Another significant ethical issue concerns the maintenance of professional boundaries within digitally connected environments. The literature indicates that digital communication technologies may blur temporal, interpersonal, and professional boundaries between counselors and clients, particularly through social media interactions, messaging applications, and continuous online accessibility (McInnis, K., Johnson, R., & Harper, 2024). Clients may attempt to contact counselors beyond formal counseling schedules or through informal digital platforms, thereby increasing the risk of boundary violations and professional ambiguity. As a result, professional ethical standards increasingly emphasize the importance of establishing explicit communication policies, digital response boundaries, and separate professional communication channels in order to maintain professional integrity within online counseling relationships.

Furthermore, the reviewed literature suggests that ethical challenges become increasingly complex within cross-cultural and cross-jurisdictional counseling interactions. Digital counseling frequently transcends geographical boundaries, thereby exposing counselors to differences in legal systems, cultural norms, ethical regulations, and professional standards across regions and countries (Gross., 2017). Consequently, multicultural competence and contextual ethical sensitivity become

essential competencies within contemporary digital counseling practices. These findings collectively demonstrate that the ethical transformation of counseling in the digital era involves not only the adaptation of existing ethical principles, but also the reconstruction of professional responsibility within increasingly complex sociotechnical environments.

#### **4. Counselor Competencies and Professional Adaptation in the Digital Era**

The reviewed literature demonstrates that the digital transformation of counseling services requires significant changes in counselor competencies and professional roles. Technology-based counseling demands competencies that extend beyond conventional therapeutic skills, including digital literacy, technological adaptability, online communication management, cybersecurity awareness, and virtual relational competence (Himmatun 'Aliah et al., 2024; Anggara & Suherman, 2024). Consequently, the role of counselors in the digital era increasingly involves the integration of psychological expertise with technological proficiency. Several studies indicate that digital literacy constitutes a foundational competency within contemporary counseling practice. Counselors are expected to understand the operational characteristics of digital platforms, online communication systems, virtual documentation procedures, and digital security mechanisms in order to ensure effective and ethical service delivery (Belshaw, 2014). In addition, counselors must demonstrate the ability to select communication platforms that correspond to client needs, accessibility conditions, and therapeutic objectives. These competencies are particularly important within educational counseling contexts, where students' communication patterns and psychological engagement are increasingly shaped by digital technologies and online social interaction (Farsiah et al., 2025).

The findings also reveal that counselors must adapt conventional counseling techniques to digitally mediated environments. Several therapeutic approaches, including cognitive behavioral therapy, solution-focused counseling, and mindfulness-based interventions, have demonstrated substantial adaptability to online platforms when supported by appropriate technological integration and communication strategies (Carlbring et al., 2018). Digital counseling environments also facilitate the emergence of innovative intervention strategies, including mood-tracking applications, online reflective journals, digital psychoeducation, virtual visual boards, and AI-assisted therapeutic support systems (Fulmer, R., Joerin, A., Gentile, B., Lakerink, L., & Rauws, 2021; Miyazaki, T., Hirano, M., & Yoshino, 2022). These developments suggest that technological innovation increasingly influences the design, implementation, and monitoring of counseling interventions.

Nevertheless, the literature consistently highlights substantial disparities in counselor readiness and institutional capacity regarding digital counseling implementation. In developing countries such as Indonesia, unequal technological infrastructure, limited digital training opportunities, and varying levels of institutional readiness continue to constrain the effectiveness of technology-based counseling services (Utami et al., 2023; Anggara & Suherman, 2024). Several studies further indicate that many counselors continue to experience difficulties in managing digital communication boundaries, maintaining cybersecurity standards, and adapting therapeutic methods to online interaction environments. Therefore, the professional transformation of counseling in the digital era requires systematic institutional support through digital competency training, ethical supervision, technological infrastructure development, and the integration of digital counseling competencies into counselor education curricula.

#### **5. Opportunities and Structural Challenges of Digital Counseling**

The literature demonstrates that technology-based counseling provides substantial opportunities for expanding counseling accessibility, service flexibility, and psychological support inclusivity. Digital counseling enables mental health services to reach individuals who previously experienced barriers to conventional face-to-face counseling, including individuals living in geographically remote areas, persons with physical disabilities, individuals experiencing social anxiety, and populations with limited mobility (Bee et al., 2008; Weightman, 2020). Consequently,

digital counseling contributes to the democratization of psychological support services by reducing geographical and institutional barriers to mental health access.

Several studies also indicate that online counseling environments may increase service flexibility and communication effectiveness. The integration of synchronous and asynchronous communication systems allows counseling services to become more adaptable to client schedules, communication preferences, and emotional readiness (Richards, D., & Viganò, 2020). Furthermore, digital counseling platforms facilitate continuous communication, automated documentation, and easier monitoring of therapeutic progress through digitally stored interaction records and assessment systems. These technological capabilities potentially improve counseling efficiency, continuity of care, and accessibility within educational and mental health institutions. However, despite these opportunities, the findings consistently identify significant structural and sociocultural challenges associated with digital counseling implementation. One of the most prominent challenges involves the digital divide, particularly within developing countries where technological infrastructure and internet accessibility remain unevenly distributed (Utami et al., 2023). Limited internet connectivity, inadequate technological facilities, and disparities in digital literacy may restrict equitable access to counseling services and reduce the effectiveness of online therapeutic communication. Consequently, technological accessibility does not automatically guarantee equal counseling quality across different social and geographical contexts.

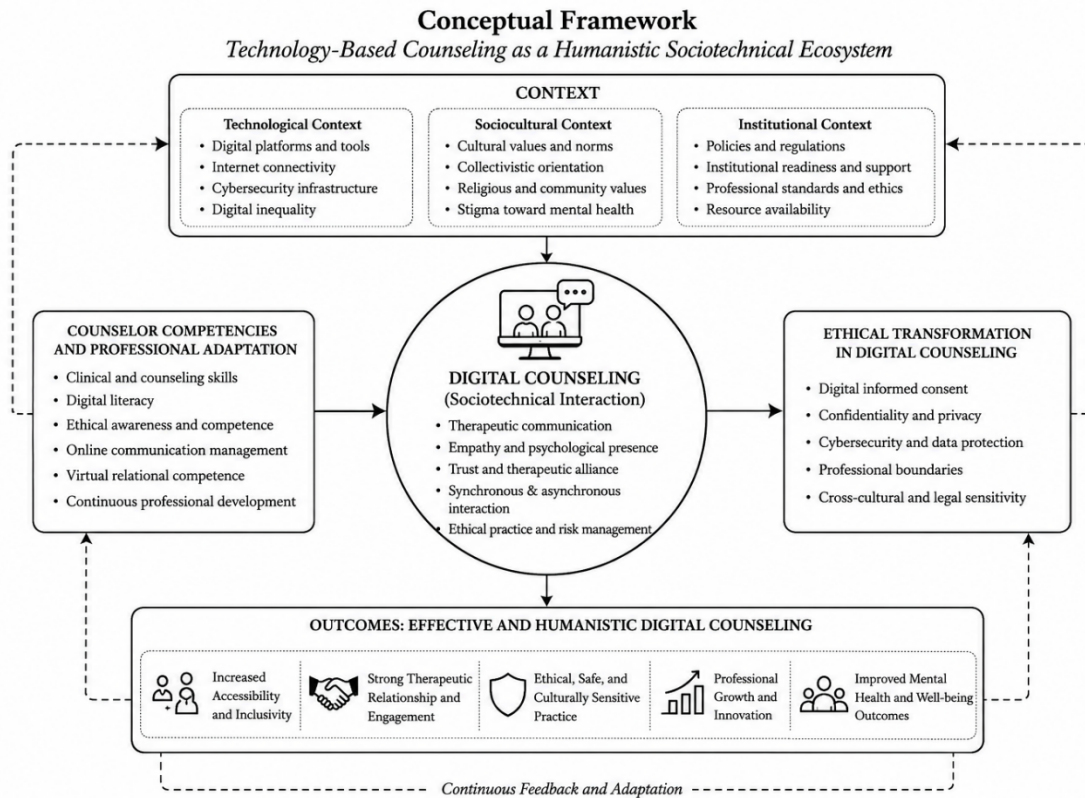
Within the Indonesian context, the literature further indicates that digital counseling implementation continues to face challenges related to institutional readiness, regulatory limitations, and sociocultural adaptation. The absence of comprehensive national standards regarding telecounseling practices, digital data protection, and cross-platform counseling services may increase ethical inconsistency and professional vulnerability among counselors (Anggara & Suherman, 2024). In addition, several studies emphasize that counseling practices in Indonesia must remain sensitive to local cultural values, collective social structures, religious perspectives, and community-based communication patterns that influence clients' perceptions of psychological support services. These findings suggest that the successful implementation of digital counseling depends not only on technological innovation, but also on ethical adaptation, institutional support, sociocultural contextualization, and equitable technological development.

### CONCEPTUAL SYNTHESIS

The synthesis of the reviewed literature indicates that technology-based counseling should not be understood merely as the digitization of conventional counseling practices, but rather as a multidimensional sociotechnical transformation that reconstructs therapeutic interaction, professional ethics, counselor competencies, and counseling accessibility within digitally mediated environments. Across the reviewed studies, digital technology consistently functions not only as a communication medium, but also as an active structural component that reshapes how counseling relationships are established, maintained, and experienced within contemporary society. Consequently, the effectiveness of digital counseling depends not solely on technological efficiency, but on the dynamic integration of humanistic values, ethical adaptability, digital competence, and sociocultural sensitivity.

The findings further demonstrate that the transformation of counseling services in digital environments is characterized by several interconnected tensions. First, while digital counseling significantly expands accessibility and inclusivity, it simultaneously increases ethical vulnerabilities related to privacy protection, cybersecurity, and digital confidentiality. The increased flexibility of online counseling also creates challenges regarding professional boundaries, response expectations, and counselor availability within continuously connected communication environments. Second, although technology-based counseling enables broader therapeutic access and communication flexibility, it may also reduce elements of physical co-presence and nonverbal interaction traditionally considered central to therapeutic relationships. This condition requires counselors to reconstruct

therapeutic presence through psychological engagement, explicit empathy, and digitally responsive communication strategies. Third, the growing integration of technology into counseling practices enhances service efficiency and innovation, while simultaneously creating risks of excessive technological dependence that may weaken the humanistic foundations of counseling if not balanced with ethical and relational awareness.



**Figure 1.** Conceptual Framework of Technology-Based Counseling as a Humanistic Sociotechnical Ecosystem

Within this framework, digital counseling can be conceptualized as a humanistic sociotechnical ecosystem in which technological systems, ethical principles, therapeutic relationality, counselor competencies, and sociocultural contexts interact dynamically to shape counseling effectiveness. Technological infrastructure alone is insufficient to ensure successful counseling outcomes. Instead, the quality of digitally mediated counseling depends largely on the counselor’s ability to integrate professional ethics, emotional responsiveness, cultural sensitivity, and technological competence within virtual therapeutic interactions. Therefore, digital counseling transformation should be viewed not as a replacement for conventional counseling, but as the reconstruction of counseling practice through the integration of technological innovation and humanistic therapeutic values. The reviewed literature also highlights that sociocultural context plays a crucial role in shaping the implementation and acceptance of technology-based counseling, particularly within developing countries such as Indonesia. Unequal digital infrastructure, disparities in digital literacy, institutional limitations, and culturally specific perceptions regarding mental health significantly influence the effectiveness of online counseling practices. In collectivistic societies, counseling interactions are often shaped by communal values, religious perspectives, and family-oriented communication patterns that may differ from dominant individualistic assumptions within many digital counseling models developed in Western contexts. Consequently, the implementation of digital counseling in

Indonesia requires context-sensitive adaptation that integrates technological advancement with local sociocultural realities, ethical standards, and institutional readiness.

Overall, the findings suggest that the future development of digital counseling depends on the profession's ability to maintain humanistic counseling values within increasingly complex technological environments. The transformation of counseling services in the digital era therefore requires interdisciplinary collaboration among counseling professionals, educational institutions, policymakers, and technology developers in order to construct ethical, inclusive, culturally responsive, and psychologically meaningful digital counseling ecosystems. Based on the thematic synthesis and interpretive integration of the reviewed literature, this study proposes a conceptual framework that conceptualizes technology-based counseling as a humanistic sociotechnical ecosystem. The framework illustrates the dynamic interaction among technological context, counselor competencies, ethical adaptation, therapeutic relationality, and sociocultural factors in shaping effective digital counseling practices.

## RESULTS AND DISCUSSION

The identified themes and conceptual synthesis collectively demonstrate that the transformation of counseling in the digital era extends beyond technological implementation and involves broader ethical, relational, professional, and sociocultural reconstruction processes. The findings of this study demonstrate that the digital transformation of counseling services represents a profound restructuring of counseling practice rather than merely a technological modification of service delivery. The reviewed literature consistently indicates that technology-based counseling has altered not only the medium of therapeutic interaction, but also the ethical foundations, relational dynamics, professional competencies, and sociocultural dimensions of counseling practice. In this sense, digital counseling should be understood as a sociotechnical reconstruction of counseling in which technological systems and humanistic therapeutic values interact simultaneously within contemporary digital environments. This perspective challenges reductionist assumptions that conceptualize digital counseling primarily as a technical innovation focused on efficiency and accessibility. Instead, the findings suggest that counseling transformation in the digital era involves the redefinition of therapeutic presence, professional identity, and relational authenticity within technologically mediated interactions.

One of the most significant theoretical implications emerging from this study concerns the reconstruction of therapeutic relationality in virtual environments. Traditional counseling theories have historically emphasized physical co-presence, nonverbal communication, and emotional immediacy as essential elements of effective therapeutic relationships. However, the findings indicate that relational effectiveness within digital counseling depends less on physical proximity and more on the counselor's ability to establish psychological presence, emotional responsiveness, and digitally mediated empathy. This finding supports the argument proposed by Stoll et al. (2020) that therapeutic alliance in online environments may still be developed effectively when counselors adapt communication strategies to virtual interaction contexts. Consequently, digital counseling does not eliminate therapeutic relationships, but rather transforms the mechanisms through which therapeutic connection is constructed and experienced. This transformation reflects a broader shift from physically bounded counseling relationships toward psychologically mediated relational engagement.

The findings also highlight that ethical transformation constitutes a central component of digital counseling development. While core counseling principles such as confidentiality, beneficence, autonomy, and professional responsibility remain fundamental, digital environments generate new ethical vulnerabilities that cannot be adequately addressed through conventional ethical frameworks alone. Issues related to cybersecurity, electronic data protection, cross-platform communication, digital informed consent, and professional boundary management increasingly shape the ethical landscape of contemporary counseling practice. Therefore, ethical competence in the digital era

extends beyond moral reasoning and interpersonal responsibility to include technological literacy and digital risk awareness. This suggests that counseling ethics must evolve from primarily interpersonal ethical regulation toward sociotechnical ethical governance capable of addressing the complexities of digitally mediated therapeutic interaction.

From a professional perspective, the findings demonstrate that the transformation of counseling services requires substantial changes in counselor competencies and professional training systems. Counselors are no longer expected to possess only therapeutic communication skills and psychological expertise, but also digital literacy, online communication management, cybersecurity awareness, and technological adaptability. This finding has important implications for counselor education programs, particularly within developing countries where institutional readiness and technological infrastructure remain uneven. The integration of digital counseling competencies into counselor education curricula therefore becomes increasingly necessary in order to ensure that future counselors are capable of practicing ethically and effectively within digital environments. Without systematic professional adaptation, technological innovation may widen competency disparities and reduce counseling effectiveness rather than improve service quality.

Another important contribution of this study lies in its emphasis on the sociocultural dimensions of digital counseling transformation. Much of the existing literature on online counseling originates from technologically advanced and predominantly individualistic social contexts, whereas the findings of this study demonstrate that the implementation of digital counseling in developing countries such as Indonesia is strongly influenced by local cultural values, collective social structures, religious perspectives, and unequal technological accessibility. This finding suggests that digital counseling models cannot be universally implemented without contextual adaptation. Counseling practices that are effective within highly individualistic societies may require substantial modification when applied within collectivistic cultural environments where interpersonal relationships, communal values, and family involvement play central roles in psychological support systems. Consequently, the effectiveness of digital counseling depends not only on technological sophistication, but also on the ability to integrate local sociocultural realities into counseling design and implementation.

The study further reveals an important paradox within the development of technology-based counseling. On one hand, digital counseling significantly expands accessibility, inclusivity, and service flexibility by reducing geographical and institutional barriers to psychological support. On the other hand, the increasing reliance on technological systems may simultaneously create risks of depersonalization, ethical vulnerability, digital exclusion, and weakened relational depth if technological efficiency becomes prioritized over humanistic engagement. This paradox illustrates that technology functions as both an opportunity and a potential source of professional disruption within counseling practice. Therefore, the future development of digital counseling should not be oriented solely toward technological advancement, but toward maintaining balance between innovation and humanistic therapeutic values.

The findings of this study also contribute conceptually by proposing that digital counseling should be understood as a humanistic sociotechnical ecosystem. Within this framework, counseling effectiveness emerges through the dynamic interaction between technological infrastructure, ethical adaptation, therapeutic relationality, professional competence, institutional support, and sociocultural context. This conceptualization moves beyond technologically deterministic perspectives by emphasizing that technology alone cannot guarantee meaningful therapeutic outcomes. Instead, successful digital counseling depends on the counselor's ability to integrate empathy, ethical awareness, cultural sensitivity, and technological competence within digitally mediated environments. This conceptual perspective offers a more holistic understanding of counseling transformation in the digital era and may serve as a foundation for future theoretical and empirical development within digital counseling research. Despite these contributions, this study has several limitations that should be acknowledged. As an integrative literature review, the study relies

primarily on secondary academic sources and conceptual interpretation rather than direct empirical investigation. Consequently, the findings reflect synthesized theoretical and empirical perspectives from existing literature rather than real-time observational data from counseling practice. Furthermore, although this study emphasizes the Indonesian context, much of the global literature on digital counseling remains dominated by Western perspectives, potentially limiting the representation of culturally diverse counseling experiences. Future studies may therefore benefit from empirical investigation involving counselors, clients, educational institutions, and mental health organizations in order to examine how ethical adaptation, therapeutic relationality, and sociocultural contextualization are negotiated within actual digital counseling practice.

Overall, this study confirms that the transformation of counseling services in the digital era should not be understood merely as the digitization of conventional counseling techniques. Rather, it represents a multidimensional sociotechnical transformation that reconstructs therapeutic relationships, ethical responsibility, professional competence, and counseling accessibility within contemporary digital society. The sustainability and effectiveness of technology-based counseling therefore depend on the counseling profession's ability to preserve humanistic therapeutic values while simultaneously adapting to increasingly complex technological environments. Interdisciplinary collaboration among counseling professionals, educational institutions, policymakers, and technology developers consequently becomes essential for developing digital counseling ecosystems that are ethical, inclusive, culturally responsive, and psychologically meaningful.

## CONCLUSION

This study demonstrates that technology-based counseling represents a multidimensional sociotechnical transformation rather than merely the digitization of conventional counseling practices. The integration of digital technology into counseling services has fundamentally reconstructed therapeutic interaction, professional ethics, counselor competencies, and counseling accessibility within contemporary digital environments. The findings indicate that digital counseling simultaneously creates significant opportunities and complex challenges. On one hand, technology-based counseling expands service accessibility, flexibility, and inclusivity by reducing geographical and institutional barriers to psychological support. On the other hand, digitally mediated counseling environments introduce new ethical vulnerabilities related to privacy protection, cybersecurity, professional boundaries, and technological inequality.

The study further reveals that therapeutic effectiveness in digital counseling is no longer dependent solely on physical co-presence, but increasingly on the counselor's ability to establish psychological presence, emotional responsiveness, and relational authenticity within virtual communication environments. Consequently, counselors are required to integrate humanistic counseling values with digital literacy, technological adaptability, and ethical awareness in order to maintain meaningful therapeutic relationships in online settings. In addition, the findings highlight that sociocultural context plays a crucial role in shaping the implementation and effectiveness of digital counseling, particularly in developing countries such as Indonesia where unequal technological infrastructure, institutional limitations, and local cultural values significantly influence counseling practices.

Conceptually, this study proposes that digital counseling should be understood as a humanistic sociotechnical ecosystem in which technological systems, ethical principles, therapeutic relationality, counselor competencies, and sociocultural contexts interact dynamically to shape counseling outcomes. Therefore, the future development of digital counseling should not focus exclusively on technological innovation, but also on maintaining ethical responsibility, cultural sensitivity, relational depth, and humanistic therapeutic values. The study also emphasizes the importance of interdisciplinary collaboration among counseling professionals, educational institutions, policymakers, and technology developers in constructing ethical, inclusive, culturally responsive, and sustainable digital counseling ecosystems.

## REFERENCES

- Andersson, G. et al. (2019). Internet-delivered psychological treatments: from innovation to implementation. *World Psychiatry*, 18(1), 20–28. <https://doi.org/10.1002/wps.20610>
- Anggara, N., & Suherman, U. (2024). Optimalisasi Sarana dan Prasarana Melalui Kreativitas Guru Bimbingan dan Konseling (Guru BK) dalam Melaksanakan Layanan Bimbingan dan Konseling (BK). *G-Couns: Jurnal Bimbingan Dan Konseling*, 9(1), 116–130. <https://doi.org/10.31316/gcouns.v9i1.6245>
- Anthony, K., & Nagel, D. M. (2019). *Online Counseling: A Handbook for Mental Health Professionals (2nd ed.)*. Routledge. <https://doi.org/https://doi.org/10.4324/9781315623259>
- Bee, P. E. et al. (2008). Psychotherapy mediated by remote communication technologies: a meta-analytic review. *BMC Psychiatry*, 8(1), 60. <https://doi.org/10.1186/1471-244X-8-60>
- Belshaw, D. A. J. (2014). *The Essential Elements of Digital Literacies*. Independently published. <https://doubelshaw.com/blog/digilit/>
- Boniell-Nissim, M. (2026). Integrating Online and Face-to-Face Counselling in Schools: Benefits, Challenges, and Strategies. *Journal of Psychologists and Counsellors in Schools*. <https://doi.org/10.1177/20556365261428304>
- Bronfenbrenner, U. (1979). *The Ecology of Human Development: Experiments by Nature and Design*. Harvard University Press.
- Caraka Putra Bhakti et al. (2023). Implementasi Layanan Bimbingan Dan Konseling Dalam Jaringan (Daring). *G-Couns: Jurnal Bimbingan Dan Konseling*, 7(03), 365–373. <https://doi.org/10.31316/gcouns.v7i03.4576>
- Carlbring, P. et al. (2018). Internet-based vs. face-to-face cognitive behavior therapy for psychiatric and somatic disorders: an updated systematic review and meta-analysis. *Cognitive Behaviour Therapy*, 47(1), 1–18. <https://doi.org/10.1080/16506073.2017.1401115>
- Cilar Budler, L., & Stiglic, G. (2025). Ethical approval and informed consent in mental health research: a scoping review. *AI and Society*, 0123456789. <https://doi.org/10.1007/s00146-025-02364-0>
- Dwi Rohmadi et al. (2021). The Guidance And Counseling On The Covid-19 Pandemic Period. *Perspektif Pendidikan Dan Keguruan*, 12(1), 74–83. [https://doi.org/10.25299/perspektif.2021.vol12\(1\).6579](https://doi.org/10.25299/perspektif.2021.vol12(1).6579)
- Faqih Isro'i, N. et al. (2022). Optimalisasi Penggunaan Media dan Teknologi dalam Layanan Bimbingan dan Konseling Online. *IjoCE : Indonesian Journal of Counseling and Education*, 3(1), 11–17. <https://doi.org/10.32923/ijocce.v3i1.2572>
- Farsiah, L. S. R. et al. (2025). Transformasi Layanan Konseling di Era Digital : Studi Kualitatif tentang Penggunaan AI oleh Siswa SMA. *Jurnal Psikologi Konseling*, 18(1), 126–133.
- Fulmer, R., Joerin, A., Gentile, B., Lakerink, L., & Rauws, M. (2021). Using psychological artificial intelligence (Tess) to relieve symptoms of depression and anxiety: Randomized controlled trial. *JMIR Mental Health*, 5(4), 64. <https://doi.org/https://doi.org/10.2196/64>
- Goldschmitt, M. et al. (2025). Digitalizing informed consent in healthcare: a scoping review. *BMC Health Services Research*, 25(1). <https://doi.org/10.1186/s12913-025-12964-7>
- Gross, D. C. and D. (2017). *Introduction to the Counseling Profession (7th Edition)*. Cognella.
- Harris, B., & Birnbaum, R. (2015). Ethical and Legal Implications on the Use of Technology in Counselling. *Clinical Social Work Journal*, 43(2), 133–141. <https://doi.org/10.1007/s10615-014-0515-0>
- Haryati, A. (2020). Online Counseling Sebagai Alternatif Strategi Konselor dalam Melaksanakan Pelayanan E-Counseling di Era Industri 4.0. *Bulletin of Counseling and Psychotherapy*, 2(2), 27–38. <https://doi.org/10.51214/bocp.v2i2.33>
- Hazel Wendy et al. (2024). Ethical issues raised in using online tele-mental health (OTH): a review of studies. *Diversitas Journal*, 9(1\_Special), 121–140. <https://doi.org/10.48017/dj.v9ispecial1.2875>

- Himmatun 'Aliah, V. et al. (2024). Masalah Etika Privasi Digital: Kebocoran Informasi Konseli Dalam Setting Konseling Komunitas. *Jurnal Bimbingan Konseling Dan Psikologi*, 4(1), 39–47. <https://doi.org/10.56185/jubikops.v4i1.581>
- Hoch, J. E. (2023). Virtual leadership and cross-cultural dynamics: Lessons from global counseling practice. *Journal of Counseling & Development*, 101(1), 55–67. <https://doi.org/https://doi.org/10.1002/jcad.12478>
- Malelak, E. O. et al. (2024). Penggunaan Teknologi Digital pada Generasi Z dan Alpha serta Implikasinya dalam Layanan Bimbingan dan Konseling. *JAMBURA Guidance and Counseling Journal*, 5(2), 93–106. <https://doi.org/10.37411/jgci.v5i2.3293>
- McInnis, K., Johnson, R., & Harper, S. (2024). Considerations for the design of informed consent in digital health research. *Journal of Empirical Research on Human Research Ethics*, 19(3), 495. <https://doi.org/https://pubmed.ncbi.nlm.nih.gov/39397541/>
- Miyazaki, T., Hirano, M., & Yoshino, A. (2022). Enhancing counseling engagement through digital media: A mixed-method study on visual and audio interventions. *Frontiers in Psychology*. <https://doi.org/https://doi.org/10.3389/fpsyg.2022.954362>
- Moudatsou, M. et al. (2024). Evaluation of Online Counseling through the Working Experiences of Mental Health Therapists Amidst the COVID-19 Pandemic. *Healthcare (Switzerland)*, 12(4). <https://doi.org/10.3390/healthcare12040495>
- Prawitasari, I. (2020). Implementasi Pelaksanaan Bimbingan Dan Konseling Di Masa Pandemi Covid-19: A Literature Review. *Syiar: Jurnal Ilmu Komunikasi, Penyuluhan Dan Bimbingan Masyarakat Islam*, 3(2), 123–130. <https://doi.org/10.37567/syiar.v3i2.671>
- Renaningtias, N. et al. (2023). Peningkatan Literasi Digital Melalui Pemanfaatan Teknologi Informasi Dalam Pelaksanaan Layanan Bimbingan Konseling. *Communnity Development Journal*, 4(4), 9080–9083.
- Richards, D., & Viganò, N. (2020). Online Counseling: A Narrative and Critical Review of the Literature. *Journal of Clinical Psychology*, 76(6), 999–1013. <https://doi.org/https://doi.org/10.1002/jclp.22871>
- Rogers, C. R. (1961). *On Becoming a Person: A Therapist's View of Psychotherapy*. Houghton Mifflin.
- Shchedrinskaya, O. M., & Bechuk, M. A. (2020). Online Counseling Through the Lens of Professional Ethics: Challenges and Solutions. *Counseling Psychology and Psychotherapy*, 28(3), 84–99. <https://doi.org/10.17759/cpp.2020280306>
- Situmorang, D. D. B. (2020). Online/Cyber Counseling Services in the COVID-19 Outbreak: Are They Really New? *Journal of Pastoral Care & Counseling: Advancing Theory and Professional Practice through Scholarly and Reflective Publications*, 74(3), 166–174. <https://doi.org/10.1177/1542305020948170>
- Stoll, J. et al. (2020). Ethical Issues in Online Psychotherapy: A Narrative Review. *Frontiers in Psychiatry*, 10(February), 1–16. <https://doi.org/10.3389/fpsyg.2019.00993>
- Tuna, B., & Avci, O. H. (2023). Qualitative analysis of university counselors' online counseling experiences during the COVID-19 pandemic. *Current Psychology*, 42(10), 8489–8503. <https://doi.org/10.1007/s12144-023-04358-x>
- Ulum, N. H. et al. (2023). Use of Google Forms as an Instrument for Assessment of Student Needs. *Journal of Education Policy Analysis (JEPA)*, 1(1), 15–23. <https://businessandfinanceanalyst.com>
- Utami, C. A. et al. (2023). Sosialisasi Etika Konseling: Menjaga Kerahasiaan Dan Privasi Klien Di Era Digital. *PENDALAS: Jurnal Penelitian Tindakan Kelas Dan Pengabdian Masyarakat*, 3(3), 262–287. <https://doi.org/10.47006/pendalas.v3i3.505>
- Weightman, M. (2020). Digital psychotherapy as an effective and timely treatment option for depression and anxiety disorders: Implications for rural and remote practice. *Journal of International Medical Research*, 48(6). <https://doi.org/10.1177/0300060520928686>