

DIGITAL COUNSELING IN INDONESIAN ISLAMIC BOARDING SCHOOLS IN THE SOCIETY 5.0 ERA: A CRITICAL INTEGRATIVE REVIEW OF OPPORTUNITIES, ETHICAL RISKS, AND CONTEXTUAL READINESS

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Abstract

Digital transformation is reshaping how educational institutions provide psychosocial support, yet evidence concerning digital counseling in Indonesian Islamic boarding schools (pesantren) remains fragmented. This review critically examines how digital counseling can be positioned within traditional and modern pesantren under the human-centered vision of Society 5.0. Rather than treating digitalization as a linear process of technology adoption, the review analyzes four interrelated dimensions: contextual readiness, service modalities, ethical and relational safeguards, and compatibility with pesantren values. A critical integrative literature review was conducted using literature identified through academic databases and scholarly sources, with emphasis on publications from 2016 to September 2026 and additional foundational and professional guidance relevant to digital counseling, digital mental health, Society 5.0, and pesantren transformation. Thematic synthesis was used to compare evidence across the literature and to distinguish well-supported findings from contextual assumptions. The review indicates that digital counseling can improve flexibility, accessibility, and continuity of support, but these benefits depend on digital competence, infrastructure, governance, privacy protection, informed consent, risk management, and the preservation of therapeutic alliance. The literature also suggests that modern pesantren generally possess structural advantages for technology adoption, whereas traditional pesantren may possess relational and spiritual resources that can support culturally congruent counseling. These differences should be interpreted as contextual tendencies rather than universal characteristics. The review proposes a value-sensitive implementation framework consisting of readiness assessment, institutional governance, human-led service design, ethical safeguards, culturally responsive practice, and continuous evaluation. The central argument is that Society 5.0-oriented counseling in pesantren should not be technology-led; it should be human-centered, ethically governed, culturally grounded, and digitally enabled.

Keywords: digital counseling, online counseling, Islamic boarding schools, pesantren, Society 5.0, Islamic counseling, digital mental health, therapeutic alliance

Abstrak

Transformasi digital sedang mengubah cara lembaga pendidikan memberikan dukungan psikososial, namun bukti-bukti terkait konseling digital di pesantren-pesantren Indonesia masih terfragmentasi. Tinjauan ini secara kritis mengkaji bagaimana konseling digital dapat diposisikan di dalam pesantren tradisional dan modern di bawah visi Society 5.0

yang berpusat pada manusia. Alih-alih memperlakukan digitalisasi sebagai proses linier dalam adopsi teknologi, tinjauan ini menganalisis empat dimensi yang saling terkait: kesiapan kontekstual, model layanan, jaminan etika dan relasional, serta kesesuaian dengan nilai-nilai pesantren. Tinjauan literatur integratif kritis dilakukan dengan menggunakan literatur yang diidentifikasi melalui basis data akademik dan sumber ilmiah, dengan penekanan pada publikasi dari tahun 2016 hingga September 2026 serta panduan dasar dan profesional tambahan yang relevan dengan konseling digital, kesehatan mental digital, Society 5.0, dan transformasi pesantren. Sintesis tematik digunakan untuk membandingkan bukti di seluruh literatur dan membedakan temuan yang didukung dengan baik dari asumsi kontekstual. Tinjauan ini menunjukkan bahwa konseling digital dapat meningkatkan fleksibilitas, aksesibilitas, dan kelangsungan dukungan, namun manfaat ini bergantung pada kompetensi digital, infrastruktur, tata kelola, perlindungan privasi, persetujuan yang terinformasi, manajemen risiko, serta pelestarian aliansi terapeutik. Literatur juga menunjukkan bahwa pesantren modern umumnya memiliki keunggulan struktural untuk adopsi teknologi, sedangkan pesantren tradisional mungkin memiliki sumber daya relasional dan spiritual yang dapat mendukung konseling yang selaras secara budaya. Perbedaan ini sebaiknya ditafsirkan sebagai kecenderungan kontekstual, bukan karakteristik universal. Tinjauan ini mengusulkan kerangka kerja implementasi yang sensitif terhadap nilai, yang terdiri dari penilaian kesiapan, tata kelola kelembagaan, desain layanan yang dipimpin manusia, perlindungan etis, praktik yang responsif secara budaya, dan evaluasi berkelanjutan. Argumen utamanya adalah bahwa konseling yang berorientasi pada Society 5.0 di pesantren tidak boleh dipimpin oleh teknologi; melainkan harus berpusat pada manusia, diatur secara etis, berlandaskan budaya, dan didukung secara digital.

Kata kunci: konseling digital, konseling daring, pesantren, Society 5.0, konseling Islam, kesehatan mental digital, aliansi terapeutik

INTRODUCTION

Society 5.0 was originally articulated by the Japanese government as a human-centered vision in which cyberspace and physical space are integrated to address social problems while supporting safety, sustainability, and individual well-being. The concept therefore differs from a purely technology-driven digitalization agenda: technology is positioned as an instrument for solving human and social problems rather than as the primary objective of transformation (Cabinet Office of Japan, 2021). This distinction is important for educational institutions because the adoption of artificial intelligence (AI), data systems, mobile platforms, and online communication does not automatically produce better educational or psychosocial services.

Counseling is one domain in which this distinction becomes particularly consequential. Digital counseling may involve synchronous video sessions, asynchronous messaging, web-based services, mobile applications, or technology-supported assessment and referral. Digital delivery can reduce geographical and temporal barriers and may increase access to support. At the same time, digital counseling introduces risks that are not fully captured by the conventional face-to-face counseling framework, including privacy breaches, technology failure, identity verification, unequal digital access, boundary ambiguity, inadequate emergency procedures, and limitations in interpreting nonverbal communication. Professional guidance therefore treats technological competence,

informed consent, confidentiality, and risk management as core components of ethical digital counseling (American Counseling Association [ACA], 2014; National Board for Certified Counselors [NBCC], 2023).

The empirical literature also cautions against equating digital delivery with automated or technology-substituted counseling. Research on digital therapeutic alliance indicates that meaningful therapeutic relationships can be established through digital modalities, but the mechanisms and indicators may differ from conventional face-to-face practice. A systematic scoping review of text-based digital psychotherapy found generally positive associations between therapeutic alliance and outcomes, while also noting that conventional alliance measures may overlook features such as empathy and compassion in digital interaction (Philippe et al., 2021). More recent work continues to examine how therapeutic alliance is constructed in text-based and AI-mediated counseling environments (Li et al., 2024; Malouin-Lachance et al., 2025).

Safety is equally central. A systematic review of digital mental health interventions identified substantial variation in how safety was assessed and reported and emphasized the need for proactive risk assessment, repeated safety monitoring, and explicit risk-mitigation procedures (Taher et al., 2023). A 2024 systematic literature review further identified usability, accessibility, privacy and security, therapeutic goals, and clinical foundations as major dimensions in evaluating digital mental health technologies (Catania et al., 2024). These findings suggest that digital counseling should be understood as a socio-technical service system rather than merely a communication channel.

This issue is especially relevant in Indonesian pesantren. Pesantren are not homogeneous institutions: they differ in curriculum, leadership, governance, educational orientation, technological infrastructure, and relationships between kiai, educators, and santri. Some institutions maintain highly traditional educational practices, whereas others combine Islamic scholarship with formal schooling, digital learning, and professional management. Recent studies of pesantren digital transformation show that technology adoption is increasing, but infrastructure, digital competence, institutional capacity, and the preservation of religious identity remain important considerations (Nugroho & Astutik, 2024; Marzuki & Sudrajat, 2026).

The existing manuscript on which this article is based identifies an important practical intuition: modern pesantren appear more ready to adopt digital counseling than traditional pesantren, while both possess opportunities to develop services that respond to the needs of santri. However, this conclusion requires refinement. First, technological readiness should not be reduced to infrastructure or digital literacy. Second, the contrast between traditional and modern pesantren should not be treated as a binary hierarchy. Third, the counseling literature requires a stronger distinction between accessibility benefits and the ethical conditions necessary for safe practice. Finally, the relationship between digital counseling and Islamic values needs to be theorized rather than expressed only as a general recommendation to preserve spirituality.

The present review therefore asks four questions: (1) What opportunities can digital counseling provide for santri in the Society 5.0 context? (2) What technological, relational, ethical, and organizational risks constrain implementation? (3) How might traditional and modern pesantren differ in contextual readiness without assuming institutional superiority? and (4) What implementation principles can integrate digital innovation with Islamic counseling values and professional ethics? The contribution of this review is a value-sensitive framework that connects digital counseling evidence with the distinctive institutional ecology of pesantren.

Society 5.0 is used in this article as a normative context rather than as a technological checklist. Its central premise is the integration of digital and physical systems to address social problems and enhance human well-being. Accordingly, an educational service can be considered Society 5.0-oriented only when technological innovation is connected to human needs, inclusion, safety, and meaningful participation. In counseling, this means that digital tools should expand the counselor's capacity to provide appropriate support rather than displace professional judgment or the therapeutic relationship.

Digital counseling is conceptualized as professional counseling delivered or supported through information and communication technologies. The modality may be synchronous, such as video counseling; asynchronous, such as secure messaging; or hybrid, combining digital and face-to-face contact. The distinction is important because different modalities produce different requirements for identity verification, privacy, response time, documentation, emergency management, and interpretation of client communication.

Evidence from digital mental health research indicates that therapeutic alliance remains relevant in digital settings. Text-based interventions can support a strong working alliance, and alliance has generally been associated with positive outcomes, but digital interaction may alter how empathy, presence, responsiveness, and relational safety are communicated (Philippe et al., 2021; Tremain et al., 2020). Consequently, the central unit of analysis should not be the platform itself but the quality of the counseling relationship and the conditions under which technology mediates that relationship.

Pesantren should not be treated simply as schools with religious content. Their educational ecology commonly involves communal living, strong relationships with religious authorities, moral formation, routines of worship, and distinctive forms of authority and social interaction. Digital counseling introduced into such a setting therefore interacts with institutional norms concerning privacy, authority, family involvement, gender, communication, and religious values.

For this reason, the relevant question is not whether pesantren should become digital, but which functions should be digitized, under what governance arrangements, and with which elements of face-to-face relational practice retained. Digital transformation studies in pesantren show that technology can support learning and institutional management

while simultaneously creating questions about identity, authority, and value preservation (Nugroho & Astutik, 2024; Manaf et al., 2026).

METHOD

Review design

This article uses a critical integrative literature review. The design was selected because the objective is not to estimate a pooled intervention effect but to integrate evidence from counseling, digital mental health, educational technology, Society 5.0, and pesantren studies into a contextual framework. Integrative reviews are appropriate when a phenomenon spans heterogeneous evidence types and requires conceptual synthesis rather than statistical aggregation.

The source manuscript described the study as library research and reported searches of Google Scholar, Scopus, DOAJ, Garuda, and other scholarly sources. In this revision, the review procedure is made more explicit, but the article does not claim PRISMA compliance or a systematic-review effect estimate because the original manuscript did not preserve a reproducible screening log or a complete record of the number of records identified, screened, and excluded. This distinction is important for methodological transparency.

Search scope and eligibility

The literature scope covered 2016–September 2026, with earlier foundational and professional-ethics sources retained when they were necessary to define a concept or professional standard. The principal search concepts were combined around four domains: (a) digital counseling and online counseling; (b) digital mental health, therapeutic alliance, privacy, safety, and AI; (c) Society 5.0 and human-centered digital transformation; and (d) pesantren, Islamic boarding schools, Islamic education, and digital transformation.

DOMAIN	ILLUSTRATIVE SEARCH TERMS	PURPOSE
DIGITAL COUNSELING	"digital counseling"; "online counseling"; "cyber counseling"; "e-counseling"	Identify service modalities and counseling-specific evidence
DIGITAL MENTAL HEALTH	"digital mental health"; "therapeutic alliance"; privacy; safety; AI counseling	Identify evidence on effectiveness, relationship quality, and risks
SOCIETY 5.0	"Society 5.0"; human- centered digital transformation; Education 5.0	Define the normative technological context

PESANTREN	pesantren; boarding school"; digital transformation; literacy	"Islamic Characterize institutional readiness and contextual digital constraints
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Sources were considered eligible when they were directly relevant to at least one review question and provided conceptual, empirical, methodological, policy, or professional-ethical evidence. Peer-reviewed journal articles were prioritized, followed by authoritative professional codes, official policy sources, and scholarly books for foundational concepts. Sources were excluded when they focused on generic digital technology without relevance to counseling or education, lacked sufficient bibliographic information for verification, or repeated another source without adding substantive evidence.

Data extraction and synthesis

Evidence was extracted into four analytical categories: opportunities, risks, contextual readiness, and implementation principles. The synthesis proceeded through three stages: (1) descriptive mapping of the evidence; (2) thematic comparison across digital counseling and pesantren transformation literature; and (3) conceptual integration into a value-sensitive implementation framework. Particular attention was given to claims that could be overgeneralized from the literature, especially claims that modern pesantren are inherently more capable than traditional pesantren.

Quality and interpretive safeguards

Source credibility was assessed by considering peer-review status, methodological transparency, relevance to the review question, and the authority of professional or governmental guidance. The review distinguishes evidence directly supported by studies from contextual interpretation. Because the literature on digital counseling in pesantren remains limited and heterogeneous, conclusions about pesantren-specific implementation are presented as contextual propositions rather than population-level findings.

RESULTS AND DISCUSSION

Evidence map

The literature converges around a central tension: digital technology can improve access and flexibility, but the quality and safety of counseling depend on relational, ethical, organizational, and technical conditions. The following evidence map summarizes representative sources used in the synthesis.

EVIDENCE SOURCE	PRIMARY CONTRIBUTION	IMPLICATION FOR PESANTREN
CABINET OFFICE OF JAPAN (2021)	Society 5.0 is human-centered and links cyber-	Technology adoption should be justified by

	physical integration with social problem solving and well-being.	human and educational needs, not novelty.
PHILIPPE ET AL. (2021)	Text-based digital psychotherapy can support therapeutic alliance; alliance is generally associated with outcomes.	Digital counseling should preserve relational quality and not treat messaging as a purely technical exchange.
TREMAIN ET AL. (2020)	Digital therapeutic alliance can be cultivated, but its characteristics may differ from face-to-face alliance.	Counselor training should include digital relational competence.
TAHER ET AL. (2023)	Digital mental health safety requires proactive assessment, repeated monitoring, and risk mitigation.	Pesantren need emergency, referral, and safeguarding procedures before scaling digital counseling.
CATANIA ET AL. (2024)	Usability, accessibility, privacy/security, therapeutic goals, and clinical foundation are important in digital mental health evaluation.	Platform selection should use a multidimensional readiness and safety assessment.
LI ET AL. (2024)	Text-based counseling raises distinctive questions about therapeutic relationship and the potential use of LLM-supported analysis.	AI should be treated as an assistive technology subject to human oversight, not as an autonomous counselor.
MALOUIN-LACHANCE ET AL. (2025)	Digital therapeutic alliance research emphasizes goal alignment, task agreement, bond, engagement, and implementation barriers.	Counseling design should explicitly protect goals, tasks, and relational trust.
NUGROHO & ASTUTIK (2024)	Pesantren digital transformation can improve educational processes while facing infrastructure and tradition–technology tensions.	Digital counseling should be integrated with institutional digital capacity and value preservation.

MARZUKI & SUDRAJAT (2026)	Digital transformation in pesantren requires educator digital competence and integration with traditional values.	Counselor and educator competence is a core readiness condition.
ACA (2014); NBCC (2023)	Digital practice requires competence, informed consent, confidentiality, security, boundaries, and attention to legal/ethical requirements.	Ethical governance must be institutionalized before service expansion.

Opportunities for digital counseling in pesantren

The first opportunity is improved access. Residential students may have limited opportunities to seek private support within highly structured institutional routines. A carefully designed digital channel can provide an additional pathway for requesting help, arranging appointments, receiving psychoeducational materials, or maintaining continuity when face-to-face contact is temporarily difficult. Digital access can also be useful for referral coordination and follow-up, provided that the service does not imply unrestricted 24-hour counselor availability.

The second opportunity is continuity and flexibility. Digital platforms can support asynchronous communication for scheduling, psychoeducation, reminders, and follow-up. Synchronous video can be used when visual interaction is clinically and contextually appropriate. A hybrid model may be particularly suitable for pesantren because it allows digital tools to supplement, rather than replace, existing relational structures.

The third opportunity is data-supported service improvement. Digital systems can facilitate secure documentation, appointment management, aggregate service monitoring, and evaluation. However, data collection should follow data-minimization principles and must never turn counseling into institutional surveillance. The objective is to improve service quality while protecting the student's autonomy and confidentiality.

The fourth opportunity concerns culturally responsive psychoeducation. Digital content can be developed around themes relevant to pesantren life, including adjustment to communal living, academic stress, peer relationships, family communication, identity development, religious life, career development, and responsible technology use. Such content can connect psychological knowledge with Islamic values without reducing counseling to religious advice.

The fifth opportunity is professional collaboration. Digital systems can facilitate coordination among counselors, teachers, supervisors, and referral professionals when the client has provided appropriate consent and when information sharing is ethically justified. This is particularly relevant when a case requires expertise beyond the counselor's competence.

Ethical and relational risks

Privacy and confidentiality are the most immediate risks. Electronic communications may be stored, forwarded, accessed by unauthorized persons, or exposed through insecure devices and platforms. The ACA Code of Ethics specifically addresses informed consent, confidentiality, security, client verification, professional boundaries, and limitations of distance counseling. The NBCC Code of Ethics likewise establishes minimum ethical expectations for professional counselors. These principles are especially important in pesantren because the physical and social environment may make private communication difficult even when the technology itself is secure.

A second risk is relational attenuation. Digital counseling can reduce access to nonverbal cues, alter response timing, and change the way empathy and presence are communicated. Evidence nevertheless suggests that a meaningful therapeutic alliance can be developed online. The appropriate conclusion is therefore not that digital counseling is inherently inferior, but that counselors require specific competence in digital relational practice.

A third risk is inadequate crisis management. A messaging-based service may create expectations of immediate assistance without guaranteeing continuous counselor availability. Digital counseling in pesantren therefore requires explicit procedures for emergencies, suicidal or self-harm risk, abuse, acute psychiatric symptoms, and situations requiring face-to-face assessment or referral. The service should clearly define response times, escalation pathways, and the physical location of the client when a session begins.

A fourth risk concerns inequity. Digital counseling can expand access for some students while excluding others because of connectivity, device ownership, disability, digital literacy, language, or privacy constraints. A Society 5.0 orientation therefore requires multiple access pathways rather than a single mandatory digital channel.

A fifth risk concerns AI. AI can assist with psychoeducation, administrative tasks, language support, or structured information retrieval, but automated systems can produce inaccurate, biased, or contextually inappropriate responses. Current professional guidance emphasizes accountability, competence, client welfare, and confidentiality when AI is used in counseling. AI should therefore remain under meaningful human oversight, with explicit limits on autonomous decision making.

Traditional and modern pesantren: a contextual comparison

The literature supports a distinction between traditional and modern pesantren, but the distinction should be treated as an analytical ideal type rather than a universal classification. Modern pesantren often have structural advantages in formal educational management, digital infrastructure, technology-supported learning, and exposure to contemporary skills. Traditional pesantren may have stronger continuity in classical scholarship, communal routines, and close relational structures centered on kiai and teachers. Neither profile automatically determines counseling quality.

DIMENSION	TRADITIONAL-ORIENTED PESANTREN	MODERN-ORIENTED PESANTREN	COUNSELING IMPLICATION
EDUCATIONAL ORIENTATION	Stronger emphasis on classical Islamic scholarship and tradition	Greater integration of religious and general education	Counseling model should fit institutional goals and routines.
TECHNOLOGY ADOPTION	Often selective and gradual	Often broader and more integrated	Digital modality should follow actual readiness, not labels.
RELATIONAL ECOLOGY	Strong face-to-face authority and communal interaction	More differentiated professional roles may be present	Digital counseling must protect trust and culturally appropriate authority relations.
INFRASTRUCTURE	May vary and may be constrained	Often more developed, but not uniformly	Conduct a site-specific infrastructure audit.
DIGITAL COMPETENCE	May be uneven across staff	May be more systematically developed	Training should be role-specific for counselors and supervisors.
PRIMARY TRANSFORMATION RISK	Technology may disrupt valued traditions	Technology may outpace reflective value governance	Both require explicit value and ethics governance.

The key finding is therefore not that modern pesantren are 'better' settings for digital counseling. Rather, modern institutions may have fewer initial infrastructure barriers, while traditional institutions may possess relational resources that are highly valuable for counseling. A successful implementation strategy should combine technological readiness with relational and cultural readiness.

oward a value-sensitive digital counseling model

The synthesis supports a six-domain implementation framework. The framework is proposed as a conceptual contribution of this review and should be empirically tested rather than treated as a validated model.

DOMAIN	CORE QUESTION	MINIMUM IMPLEMENTATION PRINCIPLE
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1. READINESS	Can the institution support the service safely?	Assess infrastructure, connectivity, accessibility, counselor competence, privacy conditions, and referral capacity.
2. GOVERNANCE	Who is responsible for the service?	Define roles, supervision, documentation, response times, escalation, and platform governance.
3. HUMAN-LED DESIGN	What should technology actually do?	Use technology to extend access and continuity; retain human responsibility for counseling decisions.
4. ETHICAL SAFEGUARDS	How are clients protected?	Use informed consent, identity verification, secure communication, confidentiality procedures, and emergency protocols.
5. CULTURAL-SPIRITUAL INTEGRATION	How does the service fit pesantren life?	Integrate adab, ukhuwah, spirituality, and institutional norms without replacing professional counseling with moral instruction.
6. EVALUATION	Does the service improve support safely?	Monitor engagement, client experience, service outcomes, privacy incidents, referrals, and unintended harms.

The framework implies a staged implementation process: readiness assessment → governance design → counselor training → limited pilot → safety and service evaluation → iterative refinement → controlled scaling. This sequence is preferable to immediate platform deployment because it treats digital counseling as an institutional change process rather than a software purchase.

DISCUSSION

The central issue is not digitization but responsible mediation

The reviewed evidence suggests that the strongest argument for digital counseling in pesantren is not technological modernization itself. Its value lies in whether technology improves access, continuity, responsiveness, and service quality while preserving client welfare. This interpretation aligns with the human-centered logic of Society 5.0 and with

evidence showing that digital mental health technologies must be evaluated through usability, accessibility, privacy, therapeutic goals, and clinical foundations rather than technical functionality alone (Catania et al., 2024).

This reframing changes the question from 'How can pesantren adopt digital counseling?' to 'Which counseling functions should be digitally enabled, for whom, under what conditions, and with what safeguards?' The second question is more appropriate for international scholarship because it links technology adoption to professional practice, institutional governance, and cultural context.

Digital counseling should supplement, not displace, relational counseling

The evidence on therapeutic alliance provides an important corrective to technology-centered approaches. Digital counseling can support meaningful therapeutic relationships, but relationship quality depends on communication, responsiveness, goal alignment, trust, and counselor competence. The 2026 overview by Asgari et al. reports that recent systematic reviews identify therapist training, modality differences, user engagement, and personalization as important themes in digital therapeutic alliance research. Earlier scoping evidence likewise suggests positive relationships between alliance and outcomes in text-based digital psychotherapy.

For pesantren, this means that the counselor remains the primary professional agent. Technology can facilitate contact, documentation, psychoeducation, and continuity, but it should not become a substitute for empathy, judgment, ethical accountability, or culturally responsive interaction. This is especially important when counseling concerns high-risk problems or situations in which physical presence and multidisciplinary coordination are required.

Modernity should not be equated with readiness

The original article's conclusion that modern pesantren are more ready for digital counseling is plausible as a contextual hypothesis, but it is too categorical when presented without a standardized readiness measure or comparative empirical data. A modern institutional label does not guarantee secure infrastructure, trained counselors, adequate privacy, or effective governance. Conversely, a traditional pesantren may possess strong relational trust, committed leadership, and sufficient infrastructure for a carefully bounded digital service.

The appropriate scholarly position is therefore that institutional type may shape the probability of encountering particular readiness conditions, but actual readiness must be assessed at the level of infrastructure, human resources, governance, culture, and service processes. This distinction substantially strengthens the article's validity and prevents an unsupported binary comparison.

Islamic values as design principles rather than decorative language

A major conceptual opportunity is to move beyond the statement that digital counseling should 'maintain Islamic values.' In a stronger formulation, Islamic values can function

as design principles. Adab can inform respectful communication and professional boundaries; amanah can strengthen responsibility for confidentiality and data stewardship; ukhuwah can inform relational support and community responsibility; and spiritual well-being can be included when it is relevant to the client's goals and consistent with professional competence.

This approach avoids two opposite errors. The first is technological reductionism, in which counseling becomes a digital transaction. The second is religious reductionism, in which psychological concerns are treated primarily as moral or spiritual deficiencies. A professionally sound Islamic counseling model should allow psychological, relational, social, and spiritual dimensions to interact without collapsing one into another.

AI requires stricter boundaries than ordinary digital tools

AI deserves separate treatment because it changes the risk profile of digital counseling. A video platform primarily mediates communication; an AI system can generate content, infer patterns, summarize sensitive material, or influence a client's decision. This creates additional concerns about hallucination, bias, opacity, data governance, and accountability. Recent professional guidance from NBCC emphasizes client welfare, counselor competence, accountability, and confidentiality in AI-supported counseling.

Accordingly, the most defensible position for pesantren is human-supervised augmentation. AI may support administrative and informational functions when privacy and accuracy are controlled, but autonomous diagnosis, crisis management, or therapeutic decision making should not be delegated to a generative system. Any AI-enabled service should also include clear disclosure to clients about when and how AI is being used.

Practical and Theoretical Implications

Implications for pesantren leaders

Conduct a readiness audit before adopting a digital counseling platform, covering infrastructure, privacy, counselor competence, accessibility, supervision, and referral capacity.

Develop institutional policies for digital counseling that specify consent, confidentiality, data retention, response time, emergency escalation, and platform use.

Avoid making digital counseling the only access pathway; maintain face-to-face options and alternative channels for students with limited digital access or privacy.

Create protected counseling spaces for online sessions so that residential arrangements do not unintentionally compromise confidentiality.

Implications for counselors

Develop digital counseling competence in communication, risk assessment, boundary management, documentation, privacy, and platform security.

Use explicit opening procedures for identity, location, privacy, consent, and emergency contact arrangements.

Maintain clear distinctions between counseling, psychoeducation, religious guidance, and referral to other professionals.

Use AI only within clearly defined professional boundaries and with meaningful human oversight.

Theoretical contribution

The review contributes a contextual interpretation of digital counseling in which readiness is multidimensional. Technological readiness alone is insufficient. Effective implementation requires the convergence of technological, professional, ethical, relational, and cultural readiness. This proposition extends a technology-adoption perspective by placing therapeutic alliance, Islamic institutional values, and safeguarding at the center of the digital transformation process.

Limitations and Future Research

The principal limitation is the heterogeneous evidence base. Research directly examining digital counseling in Indonesian pesantren remains substantially smaller than the broader digital mental health literature. Much of the evidence concerning safety, therapeutic alliance, and AI is drawn from international mental health settings and must therefore be adapted cautiously to the pesantren context. The review is also not a systematic review with a reproducible PRISMA screening record; this is explicitly acknowledged rather than obscured.

Future research should develop and validate a pesantren-specific digital counseling readiness instrument covering infrastructure, digital competence, ethical governance, privacy, relational climate, cultural-spiritual compatibility, and referral capacity. Comparative multi-site studies should examine whether traditional and modern pesantren actually differ on these dimensions. Intervention studies should evaluate whether digital counseling improves access, engagement, psychological well-being, or service continuity while monitoring adverse events and privacy risks. Research on AI should examine human oversight, cultural and religious bias, transparency, and the conditions under which AI can safely support—rather than replace—professional counseling.

CONCLUSION

Digital counseling has meaningful potential to extend guidance and counseling services in Indonesian Islamic boarding schools, particularly by increasing flexibility, continuity, and access to psychoeducational and counseling support. However, the evidence does not support a technology-first interpretation of Society 5.0. Digital counseling is effective and responsible only when technological capability is integrated with professional competence, therapeutic relationship, ethical governance, safety procedures, and contextual fit.

Modern pesantren may possess structural advantages in technology adoption, whereas traditional pesantren may possess relational and spiritual resources that can strengthen culturally responsive counseling. These should not be interpreted as fixed institutional rankings. Actual readiness must be assessed at the level of infrastructure, human resources, governance, culture, and service processes.

The review therefore proposes a value-sensitive implementation pathway: readiness assessment, governance, human-led service design, ethical safeguards, cultural-spiritual integration, and continuous evaluation. The most important principle is that digital transformation should remain subordinate to the counseling mission. In pesantren, the goal is not to make counseling more technological; it is to make support more accessible, safe, relationally meaningful, culturally responsive, and consistent with the human-centered aspirations of Society 5.0.

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