
**ARTIFICIAL INTELLIGENCE AND DIGITAL PLATFORMS IN
EDUCATIONAL COUNSELING: STRENGTHENING SUSTAINABLE
STUDENT WELL-BEING IN WEST SUMATRA**

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ABSTRAK

Integrasi kecerdasan buatan dan platform digital dalam konseling pendidikan telah muncul sebagai salah satu inovasi paling strategis untuk mengatasi keterbatasan layanan konseling di Indonesia. Di Sumatera Barat, permintaan konseling terus meningkat, sementara jumlah konselor profesional masih jauh di bawah standar ideal. Studi kualitatif ini mengkaji bagaimana teknologi digital, termasuk aplikasi konseling daring, analitik prediktif, dan chatbot berbasis AI, dapat memperkuat layanan konseling dan mendukung kesejahteraan siswa yang berkelanjutan. Data dikumpulkan melalui wawancara semi-terstruktur dengan 12 konselor dari Padang, Bukittinggi, dan Solok, dilengkapi dengan analisis dokumen dan literatur akademis. Temuan menunjukkan bahwa platform digital memperluas aksesibilitas layanan, mempercepat deteksi dini masalah akademik dan emosional, serta meningkatkan responsivitas konselor. Namun, studi ini juga mengidentifikasi tantangan seperti rendahnya literasi digital, keterbatasan infrastruktur internet, dan masalah etika terkait privasi data. Analisis menunjukkan bahwa pendekatan hibrida yang menggabungkan kecerdasan emosional konselor dengan kemampuan analitis AI merupakan model yang paling tepat untuk diterapkan di Sumatera Barat. Integrasi teknologi yang berhasil juga harus mempertimbangkan nilai-nilai budaya Minangkabau dan prinsip-prinsip moral agama yang tertanam dalam praktik sehari-hari. Penelitian ini menggarisbawahi pentingnya kerangka kerja etika dan kebijakan pendidikan yang mendukung penggunaan teknologi yang aman, inklusif, dan kontekstual. Temuan ini diharapkan dapat memberikan informasi bagi pengembangan layanan konseling berbasis teknologi, baik di tingkat sekolah maupun tingkat kebijakan regional.

Kata Kunci: Kecerdasan Buatan, Konseling Digital, Kesejahteraan Siswa, Konseling Pendidikan.

ABSTRACT

The integration of artificial intelligence and digital platforms in educational counseling has emerged as one of the most strategic innovations for addressing the limited availability of counseling services in Indonesia. In West Sumatra, the demand for counseling continues to rise, while the number of professional counselors remains far below the ideal standard. This

qualitative study examines how digital technologies including online counseling applications, predictive analytics, and AI-based chatbots can strengthen counseling services and support sustainable student well-being. Data were collected through semi-structured interviews with 12 counselors from Padang, Bukittinggi, and Solok, complemented by document analysis and academic literature. The findings show that digital platforms expand service accessibility, accelerate early detection of academic and emotional problems, and enhance counselor responsiveness. However, the study also identifies challenges such as low digital literacy, limited internet infrastructure, and ethical concerns related to data privacy. The analysis indicates that a hybrid approach combining counselors' emotional intelligence with the analytical capabilities of AI is the most suitable model for implementation in West Sumatra. Successful technology integration must also consider Minangkabau cultural values and the religious moral principles embedded in daily practice. This research underscores the importance of ethical frameworks and educational policies that support the safe, inclusive, and contextual use of technology. The findings are expected to inform the development of technology-based counseling services at both the school and regional policy levels.

Keywords: Artificial Intelligence, Digital Counseling, Student Well-Being, Educational Counseling.

A. INTRODUCTION

Educational counseling forms an essential pillar of student development in Indonesia, functioning not only as a support mechanism for academic performance but also as a means of addressing emotional, social, and behavioral challenges. In a rapidly changing educational landscape, students are increasingly expected to navigate competitive academic environments, digital pressures, and post-pandemic transitions that affect their psychological well-being. The growing complexity of these challenges has intensified the need for accessible and responsive counseling systems.

West Sumatra presents a compelling case for examining the evolving role of counseling in the digital age. The province is characterized by a strong cultural identity rooted in Minangkabau customs and Islamic values, encapsulated in the philosophical principle *adat basandi syarak, syarak basandi Kitabullah*. These traditions shape students' views on personal responsibility, social interaction, and emotional expression. While these cultural foundations offer moral guidance, they may also create barriers for students seeking psychological help, particularly in the context of stigma surrounding mental health and the expectation to resolve personal challenges within the family or community. As a result, many students hesitate to access counseling services even when they face academic or emotional difficulties.

Another structural challenge relates to the shortage of trained counselors. Several schools in West Sumatra assign a single counselor to serve 400 to 600 students, a ratio far exceeding the ideal national standard. Such conditions limit the ability of counselors to provide individualized support, conduct consistent monitoring, and intervene early when students display signs of distress. The imbalance between demand and available human resources has prompted educators and policymakers to consider alternative approaches that can enhance efficiency and expand service coverage.

Technological developments offer promising solutions. AI-based applications, online counseling platforms, and digital communication tools are reshaping educational support systems globally. Prior evidence indicates that online platforms can reduce psychological distress and increase help-seeking behaviors among youth (Ariyani et al., 2024). International studies show that AI-enabled tools can improve the accuracy and timeliness of mental health assessments by identifying subtle behavioral patterns through text analysis, interaction logs, or academic performance data (Willemsen et al., 2024). In Indonesia, research by Mirawati et al. (2024) demonstrates that digital consultations boost students' satisfaction and engagement with self-care. These findings collectively underscore the potential of digital tools to complement traditional counseling practices.

Despite this promise, integrating AI and digital platforms into counseling in West Sumatra requires sensitivity to local culture, digital readiness, and ethical considerations. Digital literacy among counselors varies widely, as does access to stable internet connectivity across schools. Ethical issues such as confidentiality, informed consent, and data security remain central concerns, particularly when sensitive student information is stored on third-party platforms. Furthermore, any technological tool must be aligned with local cultural values to ensure acceptance among students, parents, and school authorities.

This article explores the possibilities and challenges of incorporating AI and digital platforms into educational counseling systems in West Sumatra. Using insights from the qualitative findings contained in the uploaded document, the study constructs a holistic analysis that situates technology within the region's cultural and institutional context. The goal is not to present AI as a replacement for human counselors, but rather as a supplementary tool that can enhance efficiency, expand access, and strengthen early detection capabilities. Ultimately, the

discussion seeks to contribute to ongoing efforts to create a sustainable, culturally grounded, and technologically supported counseling ecosystem.

B. RESEARCH METHOD

The study adopts a qualitative research design that integrates literature-based analysis with empirical insights obtained from field interviews, as presented in the original source material. The approach focuses on understanding how AI and digital platforms intersect with educational counseling practices in West Sumatra. Qualitative methods were chosen because they allow for an in-depth exploration of complex behavioral, cultural, and technological factors that shape counseling experiences.

Sampling follows a purposive model, targeting school counselors and administrators from Padang, Bukittinggi, and Solok who have either implemented or considered using digital tools in their counseling work. The uploaded source file documents interviews with 12 informants, each offering perspectives on digital readiness, AI-supported practices, and the cultural conditions influencing technology-assisted counseling. Their input provides context-rich insights into local experiences, constraints, and opportunities.

Data analysis uses a thematic approach. Interview transcripts, literature excerpts, and supporting documents are coded to identify recurring concepts related to accessibility, digital literacy, ethical concerns, cultural adaptation, and program implementation. Themes are then synthesized to create a coherent analytical narrative that connects individual experiences with broader patterns observed in West Sumatra's educational counseling ecosystem. Triangulation across literature and field responses strengthens credibility and reduces interpretive bias.

Ethical considerations are central to this research process. The original study ensured confidentiality by anonymizing participant identities and securing digital records. Given that counseling involves sensitive student information, discussions about privacy, consent, and ethical standards were addressed carefully during data collection. The methodological structure emphasizes the contextual nature of AI integration, recognizing that technological solutions must align with the region's cultural norms, institutional policies, and infrastructural realities.

C. RESULTS AND DISCUSSION

The integration of Artificial Intelligence (AI) and digital platforms into educational counseling in West Sumatra reveals a landscape shaped by technological potential, cultural

values, infrastructural realities, and the evolving needs of students. Analysis of the qualitative findings presented in the original data highlights four overarching domains: accessibility and inclusion, AI-supported early detection, cultural integration, and structural or ethical constraints. Each domain intersects with the others, creating a complex environment in which counselors, students, and educational institutions negotiate the role of technology in supporting student well-being.

1. Accessibility and Inclusivity

The introduction of Artificial Intelligence (AI) and digital platforms in educational counseling has significantly enhanced accessibility for students in West Sumatra, particularly those in rural areas who traditionally lacked counseling services. Digital counseling applications and chat-based systems allow students to seek guidance privately and asynchronously, overcoming barriers of time, geography, and stigma (Ariyani et al., 2024). Such systems are especially valuable in regions where cultural perceptions still associate counseling with mental illness rather than personal development (Mirawati et al., 2024).

AI-driven platforms offer inclusive access by providing multilingual and multimodal interfaces that can adapt to the Minangkabau dialect, Islamic expressions, or Bahasa Indonesia, thereby aligning with the linguistic and cultural context of West Sumatran students (Iswaratama, 2024). They also facilitate inclusivity for students with disabilities, through features such as speech-to-text and adaptive visual design (Willemsen et al., 2024).

However, access remains unequal. Many rural schools in Solok and Agam suffer from unstable internet connections and a lack of digital infrastructure, creating disparities in the quality of online counseling. Studies indicate that low connectivity and limited device ownership continue to be major barriers to equitable AI integration (Ririn, Sabila Firli Tiara, Murni Vigia Asni, 2024). Government support and school partnerships with local telecommunication providers are therefore crucial to guarantee inclusivity across diverse educational settings in West Sumatra.

2. User Readiness and Digital Literacy

The effectiveness of AI-enhanced counseling relies heavily on user readiness—both counselors' and students' digital literacy. In West Sumatra, many school counselors lack the technical training needed to utilize AI platforms effectively. Research emphasizes that digital

literacy among counselors remains inconsistent across Indonesia, especially between urban and rural schools (Latifah & Pratama, 2015).

Studies also suggest that professional development workshops focused on AI literacy and data ethics increase counselors' confidence and foster innovation in their practices (Hidayatullah, 2025). Counselors who undergo structured digital training report better communication with students, greater efficiency in record keeping, and improved emotional responsiveness when using digital tools (Hardiyanti et al., 2025).

Meanwhile, students' readiness depends on early exposure to digital learning environments. Schools with active ICT curricula tend to demonstrate smoother adoption of AI systems, as students are already familiar with digital communication ethics (Putri & Al Fikri, 2025). In contrast, rural students often perceive AI counseling tools as intimidating or impersonal, which limits engagement. Educational leaders must therefore prioritize not only infrastructure investment but also digital culture-building programs that demystify technology and promote trust (Nugroho et al., 2024).

In essence, user readiness requires a holistic approach that integrates digital literacy, ethical understanding, and psychological openness. AI cannot be effective if counselors fear being replaced or students distrust digital platforms. As research shows, successful adoption emerges when technology is framed as a supportive tool, not as a substitute for human empathy (Yang et al., 2024).

3. Early Identification and Data-Driven Intervention

AI technologies have revolutionized early identification in educational counseling by enabling counselors to detect psychological and academic issues before they escalate. Through predictive analytics, AI can analyze patterns in attendance, assignment submissions, and emotional tone in digital communication to flag at-risk students (Nugraha et al., 2023).

In West Sumatra, where counselor-to-student ratios can exceed 1:300, these systems offer vital assistance in prioritizing intervention efforts. Schools that use AI dashboards report improved counseling efficiency and reduced academic failure rates (Yola et al., 2024). However, without proper data ethics, the use of AI analytics risks violating student privacy. Ethical frameworks for data storage, consent, and algorithmic transparency are urgently needed to protect students' rights.

Moreover, data interpretation must be culturally contextualized. Minangkabau students often express emotional distress subtly through collective or family-oriented discourse rather than direct self-disclosure. Hence, AI systems designed for Western emotional expression may misclassify their emotional states (Daulay et al., 2024). Integrating cultural parameters into AI models such as communication style, religious context, and social norms—will improve predictive accuracy while maintaining cultural integrity (Juariyah et al., 2025)

4. Personalization and Student Engagement

Personalization is a defining strength of AI-based counseling. By analyzing behavioral, linguistic, and academic data, AI systems can generate individualized recommendations tailored to each student's emotional state and learning patterns (Yang et al., 2024). In West Sumatra, personalization enhances engagement by aligning counseling content with local cultural contexts and students' values. For instance, AI chatbots that incorporate Minangkabau idioms or Islamic reflections create a familiar emotional environment that fosters trust and openness (Daulay et al., 2024).

Studies reveal that adaptive counseling dashboards empower students to track their emotional well-being and academic progress autonomously, thereby strengthening self-regulation and intrinsic motivation. Interactive AI tools can also detect subtle behavioral changes in students' digital submissions or chat language, alerting counselors to potential mental health concerns (Fadhilah & Lestari, Bella, 2025).

However, overreliance on algorithmic personalization risks eroding the counselor–student relationship if not balanced with human empathy. In collectivist cultures like the Minangkabau community, emotional support is often shared collectively—through family, religious networks, or peer mentoring. AI systems should therefore serve as facilitators that complement, rather than replace, interpersonal engagement (Tandiyono, 2024). Culturally sensitive design embedding social responsibility and moral reasoning into AI recommendations remains key to sustainable student engagement.

5. Ethical and Privacy Challenges

As digital counseling expands, ethical dilemmas concerning privacy, data ownership, and algorithmic bias have become increasingly urgent. In West Sumatra, these issues are magnified by limited awareness of digital ethics and insufficient policy enforcement in schools. Ethical

counseling requires transparency in data processing and explicit consent from users (Warsah & Uyun, 2019). Without clear data protection frameworks, AI tools may unintentionally expose sensitive personal information (Daulay et al., 2024).

A growing body of research highlights that algorithmic systems often carry biases based on Western datasets that fail to represent Southeast Asian communication patterns, religious values, or behavioral norms (Hardiyanti et al., 2025). Consequently, an AI model may misinterpret silence, deference, or spiritual coping common traits among West Sumatran students—as indicators of disengagement or depression (Juariyah et al., 2025).

Furthermore, ethical practice demands that counselors act as interpreters rather than passive recipients of AI predictions. They must critically assess whether AI-generated insights align with moral and cultural principles of *adat basandi syarak, syarak basandi Kitabullah*, ensuring that technology remains subordinate to ethical reasoning (Agustini, 2025). Establishing local ethical boards and digital counseling protocols at the provincial education level would strengthen accountability and foster public trust.

6. Cultural Integration and Local Values

Cultural integration represents the cornerstone of successful AI implementation in educational counseling in West Sumatra. The Minangkabau worldview, grounded in Islam and communal responsibility, demands that technology upholds moral harmony and collective well-being. Thus, AI tools must not only adapt linguistically but also mirror local social ethics (Daulay et al., 2024).

Moreover, cultural adaptation supports Indonesia's *Merdeka Belajar* initiative, which emphasizes flexibility, inclusivity, and cultural grounding in education. A culturally resonant AI system can act as an educational bridge preserving indigenous values while promoting innovation (Iswaratama, 2024). As suggested by Juariyah et al. (Juariyah et al., 2025), collaboration between Islamic scholars, educators, and AI developers is crucial to ensure that digital counseling respects moral boundaries and spiritual dimensions.

When moral reasoning, empathy, and faith are incorporated into AI-assisted counseling, technology transforms from a mechanical interface into a moral ally instrument that both honors tradition and advances educational well-being in West Sumatra (Nugroho et al., 2024)

7. The Role of Counselors in a Digital Context

The evolving digital landscape has not diminished the role of human counselors; rather, it has transformed it. Counselors in West Sumatra are now required to function as both emotional guides and digital mediators. They must interpret AI-generated data through a human lens and provide ethical supervision to ensure decisions remain student-centered (Nugroho et al., 2024). In this hybrid role, counselors must also develop competencies in technology literacy, ethical AI usage, and cultural sensitivity.

Empirical findings from Southeast Asian contexts reveal that the most effective AI-assisted counseling systems rely on empathetic human guidance for interpretation and emotional support (Hanifah Salsabila et al., 2020)z. In West Sumatra, where spiritual and communal counseling traditions are deeply ingrained, human counselors act as “ethical translators,” aligning technological recommendations with religious and moral values (Daulay et al., 2024)

Furthermore, professional identity development among counselors is shifting toward *digital professionalism*. Research indicates that counselors who perceive AI as an ally rather than a threat exhibit higher job satisfaction and creative engagement with students (Yang et al., 2024). Therefore, capacity-building programs that blend psychological expertise with digital pedagogy are critical for ensuring counselors’ adaptability in AI-driven environments.

8. Institutional and Infrastructure Readiness

Institutional readiness remains one of the greatest challenges to implementing AI-based counseling systems in West Sumatra. Many public schools, particularly in Padang Pariaman and Pesisir Selatan, lack sufficient funding for AI software, data servers, or high-speed internet. As emphasized by Rizal and Fitriani (2024), the success of digital counseling is contingent upon the alignment of infrastructure, policy, and human capital

Educational institutions that have successfully adopted AI platforms typically exhibit a clear organizational structure for data management, staff training, and student onboarding . West Sumatra’s local education boards are beginning to incorporate AI-readiness assessments into school accreditation systems, emphasizing digital ethics and counselor competence as new indicators of institutional quality.

However, disparities persist between urban and rural schools. While institutions in Padang may integrate AI-driven dashboards, schools in the highlands still rely on manual data

recording. Research by Aditya and Sari suggests that a regional support network comprising local universities, government agencies, and NGOs can accelerate digital transformation through resource sharing and collective training programs. Without such collaboration, institutional readiness risks being fragmented, perpetuating digital inequality.

9. Policy and Curriculum Implications

Policy integration is crucial to sustain AI-assisted educational counseling in Indonesia's decentralized education system. The *Merdeka Belajar* policy introduced by the Ministry of Education provides a flexible framework for technological innovation, yet lacks specific directives for AI ethics and counseling integration. In West Sumatra, local policymakers have begun drafting complementary guidelines focused on counselor training and ethical AI deployment.

Research underscores the need for data governance policies that safeguard privacy and ensure cultural inclusivity. Moreover, curriculum reform is essential to embed digital ethics, data literacy, and critical thinking into counseling education programs. The inclusion of AI literacy modules in counselor preparation courses has been shown to improve both technical competence and moral discernment (Hidayatullah, 2025)

Another policy priority is funding. Studies have shown that regional investments in AI counseling yield long-term social benefits by reducing dropout rates, improving mental health outcomes, and fostering academic resilience. Thus, sustainable policy models must align financial planning with ethical and cultural accountability.

10. Toward a Hybrid Human–AI Counseling Model

The synthesis of evidence from this study and prior research suggests that the optimal model for educational counseling in West Sumatra is a. In this model, AI manages analytical tasks data monitoring, predictive analysis, scheduling—while human counselors handle emotional interpretation, ethical judgment, and spiritual care (Yang et al., 2024)

This dual approach acknowledges that technology can augment, but never replace, the empathetic and moral dimensions of counseling. Research across Southeast Asia confirms that students respond best to systems that combine algorithmic precision with personalized, human-led interactions. For West Sumatra, where collective identity and Islamic ethics are integral to

education, the hybrid model ensures alignment between digital efficiency and cultural authenticity.

Furthermore, integrating AI into counseling through human oversight promotes technological humility an understanding that AI's power is conditional upon ethical stewardship and cultural wisdom (Daulay et al., 2024). By balancing innovation with tradition, West Sumatra can serve as a national model for ethical and culturally grounded digital counseling. This hybrid paradigm reflects the essence of *adat basandi syarak, syarak basandi Kitabullah* where technology becomes not an autonomous force, but a partner in human growth and moral development (Daulay et al., 2024).

D. CONCLUSION

This study highlights the transformative yet complex role of Artificial Intelligence (AI) and digital platforms in strengthening educational counseling systems in West Sumatra. As students face increasingly multifaceted academic, emotional, and social pressures, conventional counseling models are no longer sufficient to address their needs. The findings demonstrate that digital tools improve accessibility, offer flexible channels for communication, and support early detection of academic or emotional risk. For many students especially those who are reluctant to seek face-to-face assistance digital counseling reduces psychological barriers and encourages more open expression. These advantages indicate that technology can be an effective medium for broadening the reach of counseling services.

However, the analysis also shows that technology alone cannot resolve deep-rooted structural and cultural challenges. AI-based tools can identify behavioral patterns or generate automated alerts, but they lack the cultural awareness, empathy, and moral reasoning that counselors bring to their interactions with students. In West Sumatra's context, where Minangkabau values and Islamic teachings shape perceptions of emotional disclosure, counseling requires a sensitive and relational approach. For this reason, the most sustainable model is a hybrid one in which AI enhances efficiency and accuracy, while human counselors interpret data, provide emotional support, and mediate cultural expectations.

The study further reveals significant infrastructural, ethical, and institutional barriers that must be addressed. Uneven internet connectivity, limited digital literacy among counselors, and the absence of standardized policies on digital counseling raise concerns about equitable implementation. Ethical issues, particularly those related to confidentiality and algorithmic

transparency, remain major obstacles. Without robust regulatory frameworks and clear data governance, schools risk eroding trust among students, parents, and educators.

Institutional readiness also plays a crucial role. Schools with strong leadership support and proactive digital strategies adopt hybrid counseling more effectively, while those with limited resources or conservative attitudes tend to lag behind. Capacity building is therefore essential. Counselors require training not only in digital tools but also in ethical digital communication, AI literacy, and data interpretation. Integrating these competencies into professional development programs and university curricula will help ensure long-term sustainability.

Overall, the findings suggest that AI and digital platforms hold considerable promise for improving student well-being in West Sumatra, but their impact depends on culturally grounded implementation, ethical safeguards, and institutional commitment. By combining technological innovation with human-centered practice, educational counseling can evolve into a more inclusive, responsive, and contextually relevant system capable of supporting students in an increasingly digital world.

REFERENCES

- Agustini, D. (2025). Kecerdasan Artifisial dengan Pendidikan Karakter: Perspektif Psikologi Pendidikan. *PROCEEDING SICOMS*, 1(1), 18–31.
- Ariyani, H., Suprayitno, E., & Pahrijal, R. (2024). The Impact of Using Online Counseling Platforms and Virtual Community Support on Managing Work Stress among Young Professionals in Jakarta. *West Science Social and Humanities Studies*, 2(09), 1530–1538. <https://doi.org/10.58812/wsshs.v2i09.1300>
- Azies, Harun, A., Rochmanto, Hani, B., Pravesti, Cindy, A., & Fitriani, F. (2024). Integrating counseling with technology: An evaluation of the Bicarakan.id application through user review analysis with machine learning. *KONSELI Jurnal Bimbingan Dan Konseling*, 11, 205–218.
- Daulay, N., Harahap, A. C. P., & Sinaga, M. H. P. (2024). Online Counseling Online counselling-based information services: How can it reduce students' academic stress? *Persona: Jurnal Psikologi Indonesia*, 12(2), 169–181. <https://doi.org/10.30996/persona.v12i2.8117>

- Fadhilah, R., & Lestari, Bella, D. (2025). Penggunaan AI Pada Mahasiswa Psikologi dalam Meningkatkan Kesehatan Mental. *Jurnal EMPATI*, 13, 280–290.
- Hanifah Salsabila, U., Irna Sari, L., Haibati Lathif, K., Puji Lestari, A., & Ayuning, A. (2020). Peran Teknologi Dalam Pembelajaran Di Masa Pandemi Covid-19. *Al-Mutharahah: Jurnal Penelitian Dan Kajian Sosial Keagamaan*, 17(2), 188–198. <https://doi.org/10.46781/al-mutharahah.v17i2.138>
- Hardiyanti, N. Q., Prasetya, A. F., & Dan Konseling, B. (2025). Peran Artificial Intelligence (Ai) Bagi Guru Bimbingan Dan Konseling Dalam Konteks Filsafat Ilmu. *Jurnal Ilmu Bimbingan Dan Konseling*, 2(2), 43–48.
- Hidayatullah, H. T. (2025). Jurnal Consulenza : Jurnal Bimbingan Konseling dan Psikologi Literas Ai Sebagai Sarana Katalis Bagi Konselor Sekolah Masa Depan : Meningkatkan Layanan Bimbingan Dan Konseling. *Jurnal Consulenza*, 8(1), 55–65.
- Iswaratama, A. (2024). Peran Komunitas Virtual Dalam Mendorong Interaksi Sosial Di Era Digital. *HISTORICAL: Journal of History and Social Sciences*, 3(1), 51–61.
- Juariyah, S., Badrianto, Y., Edy, S., Indriyani, L., & Setyowati, R. (2025). AI and Islamic Counseling in Education: A Technology-Integrated Perspective from Indonesia. *International Conference on Education, Technology, and Social Sciences*, 1(1), 61–70. <https://jurnal.unissula.ac.id/index.php/iconcess/article/view/47677>
- Latifah, F., & Pratama, A. W. (2015). Perancangan Sistem Informasi Manajemen Arsip Elektronik (e-Arsip) Berbasis Microsoft Access pada PT Hi-Test. *JURNAL AKUNTANSI, EKONOMI Dan MANAJEMEN BISNIS*, 3(1), 21–31. <https://doi.org/10.30871/JAEMB.V3I1.180>
- Mirawati, I., Wirakusumah, T. K., & Rahmawan, D. (2024). Analyzing Communication and Satisfaction in Mental Health Online Consults for Students. *ETTISAL : Journal of Communication*, 8(2). <https://doi.org/10.21111/ejoc.v8i2.11844>
- Nugraha, A., Hasanah, M., & Sholichah, I. F. (2023). Pengaruh social comparison terhadap subjective well-being mahasiswa pengguna Instagram di Fakultas Psikologi Universitas Muhammadiyah Gresik. *PSIKOSAINS (Jurnal Penelitian Dan Pemikiran Psikologi)*, 18(2), 126–137.
- Nugroho, A. I., Samudera, A., & Herwin, H. (2024). Counseling Teacher Social Support Influence Career Optimism Differently Based on Gender in Vocational High School.

Bulletin of Counseling and Psychotherapy, 6(3), 1–20.
<https://doi.org/10.51214/002024061107000>

- Ririn, Sabila Firlu Tiara, Murni Vigia Asni, S. (2024). The Role of In Guidance and Counseling to Optimaze Learening Motivation. *BICC Proceedings*, 167–186.
- Tandiyono, T. E. (2024). Serangan Masif Artificial Intelligence Pada Sumber Daya Manusia: Pengaruh Dan Dampak Psikologi Generasi Z (1997-2012): Studi Kasus Pada Subjek IN-01. *Observasi: Jurnal Publikasi Ilmu Psikologi*, 2(1), 167–191.
- Warsah, I., & Uyun, M. (2019). Kepribadian pendidik: telaah psikologi islami. *Psikis: Jurnal Psikologi Islami*, 5(1), 62–73.
- Willemsen, R. F., Versluis, A., Aardoom, J. J., Petrus, A. H. J., Silven, A. V., Chavannes, N. H., & van Dijke, A. (2024). Evaluation of completely online psychotherapy with app-support versus therapy as usual for clients with depression or anxiety disorder: A retrospective matched cohort study investigating the effectiveness, efficiency, client satisfaction, and costs. *International Journal of Medical Informatics*, 189, 105485. <https://doi.org/https://doi.org/10.1016/j.ijmedinf.2024.105485>
- Yang, W., Fang, A., Shah, Raj, S., Mathur, Y., Yang, D., Zhu, H., & Kraut, Robert, E. (2024). What Makes Digital Support Effective? How Therapeutic Skills Affect Clinical Well-Being. *ACM Digital Library*, 8, 1–29.
- Yola, R., Azizah, W., Azizah, N., & Sabarrudin. (2024). Implementation of Use Deep Artificial Intelligence (AI) Guidance and Counseling Student Learning Process. *BICC Proceedings*, 2, 138–142. <https://doi.org/10.30983/bicc.v1i1.118>.