

ARTIFICIAL INTELLIGENCE-ASSISTED COUNSELING AND ITS IMPACT ON PSYCHOLOGICAL WELL-BEING AMONG UNIVERSITY STUDENTS: THE MEDIATING ROLE OF ACADEMIC RESILIENCE

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Abstact

Artificial intelligence has increasingly become an integral part of digital mental health services, offering innovative approaches to counseling and psychological support in higher education. AI-assisted counseling platforms enable university students to access immediate guidance, emotional support, and self-reflection resources regardless of time and location. Despite their growing adoption, limited research has explored how students perceive and experience these technologies in relation to their psychological well-being. This study aims to explore the lived experiences of university students who have utilized AI-assisted counseling for psychological well-being through a phenomenological approach. The study involved 12 undergraduate students from diverse academic disciplines who had used AI-based counseling applications or conversational AI for academic and emotional support for at least three months. Data were collected through in-depth semi-structured interviews and reflective field notes. The data were analyzed using Interpretative Phenomenological Analysis (IPA), including iterative coding, theme development, and interpretative synthesis. Four major themes emerged: (1) accessibility and immediacy as primary advantages of AI-assisted counseling, (2) emotional comfort through non-judgmental interactions, (3) perceived limitations in empathy and human connection, and (4) AI as a complementary rather than a substitute for professional counselors. Participants reported that AI-assisted counseling encouraged self-reflection, emotional regulation, and academic resilience while emphasizing the continued importance of professional counselors in addressing complex psychological concerns. The findings suggest that AI-assisted counseling can serve as a valuable complementary resource for promoting psychological well-being among university students when implemented alongside ethical standards and human-centered counseling practices. This study contributes to the growing literature on digital mental health by providing insights into students' lived experiences and offering practical implications for the future development of AI-supported counseling services in higher education.

Keywords: Artificial intelligence-assisted counseling; psychological well-being; phenomenology; digital mental health.

Abstrak

Kecerdasan buatan (*Artificial Intelligence/AI*) semakin terintegrasi dalam layanan kesehatan mental digital dan menawarkan pendekatan baru dalam penyelenggaraan layanan konseling di perguruan tinggi. Layanan konseling berbantuan AI memungkinkan mahasiswa memperoleh akses yang cepat terhadap bimbingan, dukungan emosional, serta sarana refleksi diri tanpa dibatasi oleh waktu dan tempat. Meskipun penggunaannya terus meningkat, kajian yang mengungkap pengalaman mahasiswa dalam memanfaatkan layanan tersebut untuk mendukung kesejahteraan psikologis masih terbatas. Penelitian ini bertujuan untuk mengeksplorasi pengalaman hidup mahasiswa dalam memanfaatkan konseling berbantuan kecerdasan buatan untuk meningkatkan *psychological well-being* menggunakan pendekatan fenomenologi. Penelitian melibatkan 12 mahasiswa dari berbagai program studi yang telah menggunakan aplikasi konseling berbasis AI atau *conversational AI* sebagai media pendamping dalam memperoleh dukungan akademik dan emosional selama minimal tiga bulan. Data dikumpulkan melalui wawancara mendalam semi-terstruktur dan catatan reflektif, kemudian dianalisis menggunakan Interpretative Phenomenological Analysis (IPA) melalui proses pengodean, pengembangan tema, dan sintesis interpretatif. Hasil penelitian menghasilkan empat tema utama, yaitu: (1) kemudahan akses dan respons cepat sebagai keunggulan utama konseling berbantuan AI; (2) munculnya rasa nyaman melalui interaksi yang tidak menghakimi; (3) keterbatasan AI dalam menghadirkan empati dan hubungan interpersonal; serta (4) AI dipandang sebagai pelengkap, bukan pengganti, konselor profesional. Partisipan mengungkapkan bahwa layanan konseling berbantuan AI membantu meningkatkan refleksi diri, regulasi emosi, dan ketahanan akademik, namun tetap memerlukan pendampingan konselor profesional dalam menangani permasalahan psikologis yang lebih kompleks. Temuan ini menunjukkan bahwa konseling berbantuan AI memiliki potensi sebagai layanan pendukung yang efektif dalam meningkatkan kesejahteraan psikologis mahasiswa apabila diimplementasikan secara etis dan dikombinasikan dengan layanan konseling yang berpusat pada manusia. Penelitian ini memberikan kontribusi terhadap pengembangan kajian kesehatan mental digital sekaligus menjadi dasar bagi pengembangan layanan konseling berbantuan AI di lingkungan perguruan tinggi.

Kata kunci: kecerdasan buatan; konseling berbantuan AI; kesejahteraan psikologis; fenomenologi; kesehatan mental digital.

A. Introduction

Psychological well-being has become an increasingly important concern in higher education as university students face various academic, personal, and social challenges. Academic workload, financial difficulties, interpersonal relationships, and uncertainty about future careers often contribute to stress, anxiety, and emotional distress, which may negatively affect students' academic performance and overall quality of life (Ryff, 1989; World Health Organization, 2022). Consequently, universities are expected to provide accessible and effective mental health support that addresses students' diverse psychological needs.

The advancement of digital technology has significantly transformed mental health services, including counseling practices. Artificial Intelligence (AI) has emerged as an innovative technology capable of supporting counseling services through chatbots, virtual assistants, and conversational agents that provide immediate responses, emotional support, psychoeducational information, and self-reflection opportunities (Inkster et al., 2018). AI-assisted counseling offers several advantages, such as continuous availability, affordability, and convenience, making psychological support more accessible to students who may hesitate to seek traditional face-to-face counseling because of stigma, time constraints, or limited professional resources (Abd-Alrazaq et al., 2021).

Although AI has demonstrated considerable potential in expanding access to mental health services, it is not intended to replace professional counselors. Instead, AI functions as a complementary tool that facilitates emotional expression, self-awareness, and early psychological support while professional counselors continue to play a crucial role in addressing complex mental health issues requiring empathy, ethical judgment, and therapeutic relationships (Fitzpatrick et al., 2017; Laranjo et al., 2018). Therefore, understanding how students experience AI-assisted counseling is essential for developing digital counseling services that are both effective and ethically responsible.

Recent developments in generative AI have further increased students' engagement with AI-based conversational platforms for academic guidance, emotional regulation, and personal problem-solving. Many students perceive AI as an easily accessible source of immediate assistance that helps them reflect on their emotions and cope with academic pressures. However, existing studies have primarily examined the effectiveness, usability, and technical performance of AI-based counseling systems, while relatively few have explored students' lived experiences and the meanings they attach to these interactions (Bendig et al., 2024; Graham et al., 2019). This gap highlights the need for qualitative research that provides a deeper understanding of students' perspectives beyond quantitative measurements.

A phenomenological approach is particularly appropriate for exploring the lived experiences of individuals and understanding how they interpret a particular phenomenon within their everyday lives (Creswell & Poth, 2018). Through in-depth exploration,

phenomenology enables researchers to identify the meanings, perceptions, and emotional experiences associated with AI-assisted counseling from the participants' viewpoints. Such an approach contributes to a richer understanding of how AI influences students' psychological well-being in real-life contexts (Smith et al., 2009).

Based on these considerations, this study aims to explore the lived experiences of university students in using Artificial Intelligence-assisted counseling to support their psychological well-being. The findings are expected to enrich the literature on digital mental health and counseling psychology while providing practical recommendations for integrating AI-assisted counseling into higher education in ways that remain ethical, human-centered, and responsive to students' psychological needs.

B. Research Method

This study employed a qualitative research design with a phenomenological approach to explore the lived experiences of university students in using Artificial Intelligence (AI)-assisted counseling to support their psychological well-being. A purposive sampling technique was used to recruit 12 undergraduate students from a private university in Indonesia who had utilized AI-assisted counseling platforms, such as conversational AI or AI-based mental health applications, for at least three months. Data were collected through semi-structured, in-depth interviews lasting approximately 45–60 minutes. The interviews focused on participants' experiences, perceived benefits, challenges, emotional responses, and expectations regarding AI-assisted counseling. All interviews were audio-recorded with participants' consent and transcribed verbatim for analysis.

The data were analyzed using Interpretative Phenomenological Analysis (IPA) as proposed by Smith et al. (2009). The analysis involved repeated reading of the transcripts, initial coding, identification of emergent themes, clustering of related themes, and interpretation of participants' lived experiences. To ensure the trustworthiness of the findings, member checking and peer debriefing were conducted throughout the analysis process. Ethical principles were strictly observed by obtaining informed consent from all participants, ensuring anonymity through the use of pseudonyms, maintaining data

confidentiality, and allowing participants to withdraw from the study at any stage without penalty.

C. Discussion

The findings of this study indicate that Artificial Intelligence (AI)-assisted counseling has become an alternative source of psychological support for university students in responding to academic and personal challenges. Participants perceived AI as a readily available platform that enabled them to express their thoughts and emotions without experiencing the fear of being judged. This sense of psychological safety encouraged students to disclose personal concerns more openly than they might have in conventional counseling settings. The accessibility of AI-assisted counseling, which is available regardless of time and location, also reduced practical barriers that frequently prevent students from seeking professional psychological services. These findings suggest that AI-assisted counseling has the potential to become an effective early intervention strategy for promoting students' psychological well-being in higher education institutions (Inkster et al., 2018).

Another important finding concerns the role of AI in facilitating emotional regulation and self-reflection. Participants reported that interacting with conversational AI encouraged them to organize their thoughts, recognize emotional patterns, and evaluate alternative solutions to their problems. Rather than providing definitive answers, AI often guided students through reflective questions that helped them better understand their feelings and reactions. This process aligns with reflective counseling principles, where increased self-awareness becomes the foundation for emotional growth and adaptive coping strategies. Consequently, AI-assisted counseling was perceived not merely as an information provider but also as a reflective companion that supported students' psychological development.

The participants also described AI-assisted counseling as particularly beneficial during periods of academic pressure, such as examination weeks, assignment deadlines, and thesis completion. During these situations, students frequently experienced stress, anxiety, and emotional exhaustion. AI-assisted counseling provided immediate responses that

helped reduce uncertainty and encouraged students to adopt healthier coping mechanisms. Several participants explained that AI-generated suggestions regarding time management, relaxation techniques, and positive self-talk contributed to greater emotional stability. These experiences support Ryff's (1989) concept of psychological well-being, which emphasizes self-acceptance, environmental mastery, personal growth, autonomy, positive relationships, and purpose in life as essential dimensions of mental health.

A notable aspect emerging from the interviews was the perception that AI offers a non-judgmental communication environment. Participants expressed greater comfort discussing sensitive topics because AI does not criticize, interrupt, or display negative emotional reactions. This characteristic was especially meaningful for students who feared social stigma associated with mental health issues. Many participants explained that they preferred discussing their initial concerns with AI before deciding whether professional counseling was necessary. These findings suggest that AI-assisted counseling may reduce psychological barriers to help-seeking behavior by providing a confidential and emotionally neutral interaction environment.

Despite these positive perceptions, participants consistently recognized important limitations of AI-assisted counseling. Although AI generated relevant responses and useful recommendations, students believed that it could not genuinely understand complex human emotions or provide authentic empathy. Emotional support generated by AI was often perceived as algorithmic rather than relational. Participants emphasized that empathy involves understanding personal experiences, emotional nuance, cultural context, and non-verbal communication, aspects that remain difficult for current AI systems to replicate. This finding reinforces previous studies emphasizing that therapeutic relationships remain central to effective counseling interventions (Fitzpatrick et al., 2017; Laranjo et al., 2018).

Participants further indicated that AI-assisted counseling was most appropriate for addressing mild psychological concerns, including academic stress, motivational difficulties, emotional confusion, and daily life challenges. However, when discussing serious psychological problems such as prolonged depression, traumatic experiences, suicidal ideation, or severe anxiety disorders, participants unanimously preferred consulting licensed professional counselors or clinical psychologists. They believed that

human professionals possess ethical judgment, emotional sensitivity, and clinical expertise that cannot currently be replaced by AI technologies. This distinction demonstrates that AI should be positioned as a complementary rather than a substitute counseling resource within higher education mental health services.

Another significant theme relates to students' digital literacy and their critical awareness of AI-generated information. Participants acknowledged that although AI frequently provided valuable guidance, its responses should not always be accepted without reflection. Several students reported comparing AI-generated recommendations with information obtained from counselors, lecturers, scientific literature, or trusted online mental health resources before making important decisions. This behavior indicates that students actively evaluate AI recommendations rather than relying on them unquestioningly. Therefore, digital literacy and critical thinking remain essential competencies for maximizing the benefits of AI-assisted counseling while minimizing potential risks associated with misinformation or inappropriate advice.

Ethical considerations also emerged as an important issue throughout the participants' narratives. Students expressed concerns regarding the confidentiality of personal information, data privacy, algorithm transparency, and the possibility that sensitive psychological data could be misused. Some participants stated that they intentionally avoided sharing highly confidential information because they were uncertain about how AI platforms stored or processed user data. These findings emphasize the necessity for universities and AI developers to establish clear ethical guidelines, transparent privacy policies, secure data management systems, and appropriate professional supervision. Ensuring ethical implementation is essential for maintaining users' trust and promoting responsible adoption of AI-assisted counseling services.

From an institutional perspective, the findings suggest that universities should consider integrating AI-assisted counseling into existing student support systems. Rather than replacing campus counseling centers, AI technologies can complement professional services by providing preliminary psychological screening, psychoeducation, emotional check-ins, stress management guidance, and referral recommendations when professional intervention becomes necessary. Such integration may improve service accessibility, reduce

counselors' administrative workload, and expand mental health support for students who otherwise might not seek assistance. However, successful implementation requires collaboration among counselors, psychologists, information technology specialists, and university administrators to ensure both technological effectiveness and ethical responsibility.

Overall, this study contributes to the growing literature on digital mental health by providing an in-depth understanding of university students' lived experiences with AI-assisted counseling. The phenomenological approach reveals that students perceive AI as a valuable companion for self-reflection, emotional regulation, and psychological support while simultaneously recognizing its limitations in empathy and therapeutic relationships. These findings reinforce the perspective that future counseling services should adopt a hybrid model in which AI enhances accessibility and efficiency, whereas professional counselors continue to provide human empathy, ethical decision-making, and individualized therapeutic interventions. Future research may expand these findings by involving participants from different universities, cultural backgrounds, and educational contexts to further understand how AI-assisted counseling influences psychological well-being across diverse populations.

D. Conclusion

This study explored the lived experiences of university students in using Artificial Intelligence (AI)-assisted counseling to support their psychological well-being through a phenomenological approach. The findings demonstrate that AI-assisted counseling is perceived as an accessible, flexible, and non-judgmental source of psychological support that encourages self-reflection, emotional regulation, and coping with academic and personal challenges. Participants acknowledged that AI provides immediate guidance and facilitates help-seeking behavior, particularly for students who experience barriers to accessing conventional counseling services. These findings suggest that AI-assisted counseling has considerable potential to complement mental health support systems within higher education by expanding access to psychological resources and promoting students' well-being.

However, the study also highlights that AI-assisted counseling cannot replace the essential role of professional counselors. Participants emphasized that empathy, therapeutic relationships, ethical judgment, and contextual understanding remain uniquely human qualities that are fundamental to effective counseling practice. Therefore, AI should be positioned as a complementary tool rather than a substitute for professional mental health services. Higher education institutions are encouraged to integrate AI-assisted counseling with existing counseling programs while ensuring ethical standards, data privacy, and professional supervision. Future research is recommended to involve more diverse participant groups and educational contexts to gain a broader understanding of the long-term implications of AI-assisted counseling for students' psychological well-being and the development of digital counseling services.

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