



ROLE OF ARTIFICIAL INTELLIGENCE IN COUNSELING PSYCHOLOGY: CAN AI REDUCE PERSONALIZED INTERVENTION IN THERAPY?

Subtitle: A Comparative Study of AI-Driven and Traditional Counseling Approaches

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Abstract: Artificial Intelligence (AI) has increasingly entered the field of mental health care and counseling psychology. Digital tools such as conversational agents, AI-driven mental health platforms, and automated therapeutic applications are now being used to provide psychological support, psychoeducation, and early intervention. While these technologies promise accessibility, affordability, and scalability, there are growing concerns about whether AI can preserve the deeply personalized nature of psychological counseling.

Personalized intervention in counseling relies on empathy, emotional attunement, therapeutic alliance, and the counselor's ability to adapt techniques to the client's unique psychological and cultural context. AI systems, however, operate primarily through algorithmic decision making and programmed responses. Although they may successfully deliver structured techniques such as cognitive behavioral therapy, they may lack the nuanced emotional sensitivity that human counselors bring to therapy.

The present study examined whether the integration of AI in counseling psychology may reduce the level of personalized intervention in therapy. The study was conducted over a period of 45 days and focused on young psychologists between the ages of 25 and 45 years, including both male and female participants. A quantitative research design was used to explore psychologists' perceptions regarding AI-assisted counseling, empathy in therapy, therapeutic alliance, and personalization of intervention.

The theoretical framework for this research was grounded in Carl Rogers' Person-Centered Therapy, Bordin's Therapeutic Alliance Model, and the Technology Acceptance Model. Findings suggest that although AI tools may improve accessibility and provide supplementary support in mental health services, psychologists express concerns regarding the potential loss of empathy and individualized therapeutic processes when AI is heavily relied upon. The study highlights the importance of integrating AI in a balanced manner where technology supports but does not replace the humanistic foundation of counseling psychology.

Index Terms - Artificial Intelligence, Counseling Psychology, Therapeutic Alliance, Personalization, Mental Health

I. INTRODUCTION

The rapid development of artificial intelligence has transformed many professional sectors, including health care, education, and psychology. Within the field of mental health, AI technologies have begun to play an increasingly significant role. Applications such as therapy chatbots, mood-tracking systems, emotional recognition software, and AI-based counseling platforms are now widely used to support individuals experiencing psychological distress. One of the major advantages of AI-based mental health technologies is their ability to improve accessibility. In many regions, there is a shortage of trained mental health professionals, which limits the availability of counseling services. AI systems can offer immediate responses, continuous monitoring, and scalable support for large populations. For individuals who face barriers such as stigma, cost, or geographic limitations, AI tools can provide an alternative way to access psychological support. Despite these advantages, the integration of AI into counseling psychology raises important questions about the nature of therapeutic interaction. Traditional counseling emphasizes the importance of human connection, empathy, and understanding. Therapists are trained to recognize subtle emotional cues, respond compassionately, and tailor interventions based on the unique experiences of each client. These qualities form the foundation of personalized therapeutic intervention. AI systems, however, rely on algorithms and data patterns rather than genuine emotional understanding. Although they can simulate empathetic responses, it remains uncertain whether such responses can truly replicate the depth of human empathy. This raises concerns about whether increased reliance on AI in counseling may reduce the level of personalization in therapy. Young psychologists represent an important population for examining these concerns. As professionals entering the field during a time of rapid technological change, they are likely to encounter AI-based tools in their clinical practice. Understanding their perceptions of AI can provide valuable insights into how technology may shape the future of counseling psychology.

Review of Literature

The integration of Artificial Intelligence (AI) into mental health care has gained increasing attention, particularly through tools such as chatbots, virtual therapists, and automated intervention systems. Existing research highlights both the advantages and limitations of AI, especially in relation to accessibility, personalization, empathy, and therapeutic alliance.

AI in Counseling Psychology

AI-based interventions have emerged as scalable and cost-effective tools for delivering mental health support. Studies suggest that AI applications, particularly those grounded in structured approaches like Cognitive Behavioral Therapy (CBT), can effectively assist individuals with mild to moderate psychological distress (Fitzpatrick et al., 2017). Their 24/7 availability helps address barriers such as stigma and limited access to professionals (Bendig et al., 2019). However, current research largely emphasizes efficiency, with limited focus on the quality of therapeutic interaction and relational depth.

Personalization in Therapy

Personalized intervention is central to effective counseling, contributing to improved engagement and outcomes (Norcross & Wampold, 2018). Although AI systems can analyze large datasets and adapt responses, their personalization remains primarily algorithm-driven. This limits their ability to fully capture subjective human experiences, which are essential for meaningful therapeutic processes.

Empathy in Counseling

Empathy is a critical determinant of therapeutic success. Humanistic approaches emphasize empathy, unconditional positive regard, and genuineness as core conditions for change. While AI can simulate empathetic responses through natural language processing, it lacks genuine emotional understanding (Luxton, 2014), raising concerns about its effectiveness in addressing complex emotional issues.

Therapeutic Alliance

The therapeutic alliance—comprising agreement on goals, tasks, and emotional bond—is a strong predictor of positive outcomes (Bordin). While AI can support goal-oriented tasks, it has limited capacity to establish the emotional bond required for a strong therapeutic relationship, potentially affecting long-term effectiveness.

Technology Acceptance in Counseling

The Technology Acceptance Model (TAM) suggests that perceived usefulness and ease of use influence technology adoption (Davis). In counseling, AI tools are recognized for improving accessibility and efficiency; however, professionals remain cautious due to concerns about reduced empathy and personalization. This reflects a general acceptance of AI as a supplementary tool rather than a replacement for human therapists.

Theoretical Perspective

This study is grounded in a humanistic and relational framework, emphasizing empathy, individualized care, and the therapeutic relationship.

Person-Centered Therapy (Carl Rogers):

Highlights empathy, unconditional positive regard, and congruence as essential for therapeutic change. AI's inability to provide genuine emotional understanding challenges its capacity to replicate these core conditions.

Therapeutic Alliance Model (Bordin):

Emphasizes goals, tasks, and emotional bond. While AI may support structured interventions, it is limited in forming the emotional connection necessary for effective therapy.

Technology Acceptance Model (Davis):

Explains the adoption of AI in counseling, where perceived usefulness promotes acceptance, but concerns about emotional and relational limitations restrict its role to that of a supportive tool.

Summary of Literature

Overall, AI offers significant benefits in accessibility and efficiency; however, its limitations in delivering personalized, empathetic, and relationally grounded care remain critical concerns. A notable research gap exists in understanding psychologists' perceptions of AI's impact on these core therapeutic elements, which the present study seeks to address.

Methodology

Research Design

The study employed a **quantitative research design** to examine the relationship between AI usage and perceived levels of personalization, empathy, and therapeutic alliance.

Participants

The sample consisted of **150 psychologists** aged between 25 and 45 years. Both male and female participants were included, and all had relevant training or experience in counseling psychology.

Sampling Technique

A **purposive sampling method** was used to select participants with appropriate knowledge of counseling practices.

Instruments

Data were collected using a **structured questionnaire** comprising the following scales:

- AI Usage
- Personalization
- Empathy
- Therapeutic Alliance

All items were measured on a **5-point Likert scale** (1 = Strongly Disagree to 5 = Strongly Agree).

Procedure

The questionnaire was distributed online using Google Forms. Participation was voluntary, and informed consent was obtained. Data were collected over a period of 45 days and analyzed using SPSS.

Statistical Analysis

- Descriptive Statistics (Mean, SD)
- Pearson Correlation
- Regression Analysis

Results

Descriptive Statistics

Variable	Mean	SD
AI Usage	3.68	0.74
Personalization	2.41	0.81
Empathy	2.35	0.77
Therapeutic Alliance	2.28	0.73

Results indicate moderate AI usage but low levels of perceived personalization, empathy, and therapeutic alliance.

Correlation Analysis

AI usage showed significant negative correlations with:

- Personalization ($r = -0.48$)
- Empathy ($r = -0.52$)
- Therapeutic Alliance ($r = -0.45$)

Positive correlations were observed among personalization, empathy, and therapeutic alliance.

Regression Analysis

AI usage significantly predicted:

- Personalization ($\beta = -0.46, p < 0.01$)
- Empathy ($\beta = -0.50, p < 0.01$)
- Therapeutic Alliance ($\beta = -0.43, p < 0.01$)

Discussion

The findings indicate that while AI is widely accepted for improving accessibility in mental health services, it is perceived as limited in delivering personalized and emotionally responsive care. The negative relationship between AI usage and personalization suggests that AI-based systems may not effectively adapt to individual client needs.

Similarly, the results highlight that AI lacks the ability to provide genuine empathy, as it relies on programmed responses rather than authentic emotional understanding. The weakening of therapeutic alliance further emphasizes the importance of human interaction in counseling.

However, participants acknowledged the usefulness of AI as a supplementary tool. This suggests that AI can enhance efficiency but should not replace human therapists. A hybrid model integrating AI with human counseling may provide the most effective approach.

Conclusion

The study concludes that Artificial Intelligence, while beneficial for improving accessibility and efficiency, cannot fully replicate the human elements essential for effective counseling. AI-assisted therapy is perceived as less effective in delivering personalized intervention, empathy, and therapeutic alliance.

Therefore, AI should be integrated as a **supportive tool** rather than a replacement for human therapists. The future of counseling psychology lies in balancing technological innovation with the preservation of human-centered care.

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