


# Chapter 9

## Digital Healing: AI's Emerging Role in Psychotherapeutic Practice

**Summaira Rehman**


 <https://orcid.org/0009-0009-2009-831X>

*Hazara University, Mansehra, Pakistan*

**Shagufta Parveen**

*Hazara University, Mansehra, Pakistan*

**Nida Munawar**

 <https://orcid.org/0009-0009-8910-1839>

*Hazara University, Mansehra, Pakistan*

### Abstract

*Artificial intelligence (AI) is transforming psychotherapeutic practice by enhancing accessibility, personalization, and early intervention in mental health care. This chapter explored diverse AI applications, including chatbots delivering cognitive behavioral therapy (CBT), virtual reality (VR) exposure therapy, digital phenotyping, and clinical decision support systems. Tools like Woebot and Tess demonstrate promise in reducing depressive symptoms and engaging users, while AI-augmented VR enables real-time adaptation of therapeutic environments. Digital phenotyping offers continuous monitoring for early detection of crises, and natural language processing facilitates objective assessment of therapeutic alliance and empathy. However, challenges such as ethical risks, algorithmic bias, data privacy, and clinician acceptance must be addressed. The concept of “Artificial Wisdom” is proposed to integrate empathy, cultural sensitivity, and ethical reasoning into AI systems. The*

DOI: 10.4018/979-8-3373-4217-7.ch009

Copyright © 2026, IGI Global Scientific Publishing. Copying or distributing in print or electronic forms without written permission of IGI Global Scientific Publishing is prohibited. Use of this chapter to train generative artificial intelligence (AI) technologies is expressly prohibited. The publisher reserves all rights to license its use for generative AI training and machine learning model development.

*chapter advocated for collaborative human AI models that preserve the relational depth of therapy while leveraging AI's scalability and analytical capabilities for improved mental health outcomes.*

## **INTRODUCTION**

The integration of artificial intelligence (AI) and mental health care represents one of the most promising yet complex frontiers in contemporary healthcare. As traditional therapeutic models grapple with accessibility challenges, workforce shortages, and increasing demand for mental health services, AI technologies (AI-driven chatbots delivering cognitive behavioral therapy (CBT), virtual reality (VR) exposure therapy enhanced by machine learning, and digital phenotyping) are emerging as potential allies in the quest to democratize and enhance psychotherapeutic practice (Rehman et al., 2025; Zafeer et al., 2022). This chapter explores the multifaceted landscape of AI applications in mental health, examining both the transformative potential and critical challenges that define this rapidly evolving field (Samra Maqbool, Hafiz Muhammad Ihsan Zafeer, Pingfei Zeng, et al., 2024).

The integration of AI into psychotherapy is not merely a technological upgrade to existing practices but represents a fundamental reimagining of how therapeutic interventions can be delivered, monitored, and personalized. From conversational agents that provide round-the-clock support to sophisticated algorithms that detect early warning signs of mental health crises, AI is reshaping the therapeutic landscape in ways that were unimaginable just a decade ago (Samra Maqbool, Hafiz Muhammad Ihsan Zafeer, Sufyan Maqbool, et al., 2024).

## **THE FOUNDATION: UNDERSTANDING AI'S ROLE IN MENTAL HEALTH**

The application of artificial intelligence in mental health encompasses a broad spectrum of technologies and approaches, each addressing different aspects of therapeutic care. Graham et al. (2019) provide a comprehensive framework for understanding these applications, categorizing them into three primary domains: diagnosis and assessment, treatment delivery, and predictive analytics. This tripartite structure offers a useful lens through which to examine the current state and future potential of AI in psychotherapy (Maqbool et al., 2023).

The diagnostic capabilities of AI have shown particular promise in early detection scenarios. Machine learning algorithms can now identify patterns in speech, text, and behavioral data that may indicate the onset of mental health conditions (Zafeer

16 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: [www.igi-global.com/chapter/digital-healing/395828](http://www.igi-global.com/chapter/digital-healing/395828)

## Related Content

---

### Introducing a Hybrid Model SAE-BP for Regression Analysis of Soil Temperature With Hyperspectral Data

Miaomiao Ji, Keke Zhang and Qiufeng Wu (2020). *International Journal of Ambient Computing and Intelligence* (pp. 66-79).

[www.irma-international.org/article/introducing-a-hybrid-model-sae-bp-for-regression-analysis-of-soil-temperature-with-hyperspectral-data/258072](http://www.irma-international.org/article/introducing-a-hybrid-model-sae-bp-for-regression-analysis-of-soil-temperature-with-hyperspectral-data/258072)

### Data Privacy and Security in AI-Driven Ghost Kitchens

Sandip Dey (2025). *Impact of AI and the Evolution of Future Ghost Kitchens* (pp. 35-62).

[www.irma-international.org/chapter/data-privacy-and-security-in-ai-driven-ghost-kitchens/375397](http://www.irma-international.org/chapter/data-privacy-and-security-in-ai-driven-ghost-kitchens/375397)

### Enhanced Autonomous Driving: Various YOLO Models for Pothole Detection

Abderrahim Waga, Said Benhlima and Ali Bekri (2025). *Practical Applications of Machine Learning and AI: Medicine, Environmental Science, Transportation, and Education* (pp. 237-260).

[www.irma-international.org/chapter/enhanced-autonomous-driving/371004](http://www.irma-international.org/chapter/enhanced-autonomous-driving/371004)

### Using the Business Ontology to Develop Enterprise Standards

Mark von Rosing and Henrik von Scheel (2016). *International Journal of Conceptual Structures and Smart Applications* (pp. 48-70).

[www.irma-international.org/article/using-the-business-ontology-to-develop-enterprise-standards/171391](http://www.irma-international.org/article/using-the-business-ontology-to-develop-enterprise-standards/171391)

### Secure Software Engineering for AI-Powered HyFlex Learning: Building Trustworthy and Engaging Educational Platforms

Hanh Le (2026). *AI-Powered HyFlex Learning for Student Engagement* (pp. 331-360).

[www.irma-international.org/chapter/secure-software-engineering-for-ai-powered-hyflex-learning/411314](http://www.irma-international.org/chapter/secure-software-engineering-for-ai-powered-hyflex-learning/411314)