

Evaluating an AI Simulation Tool for Enhancing Self-Efficacy in Therapist Trainees

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Introduction

In an era marked by widening educational disparities and declining trust in science, psychology education must champion innovation and accessibility. Simulation-based education (SBE) has become a vital component of psychotherapy training, yet traditional models remain costly and logistically demanding. This research explores the educational potential of generative AI-simulated patients in developing self-efficacy, critical thinking, and clinical reasoning among 15 first-year clinical psychology doctoral trainees in the UK NHS.

Methods

Using a mixed-methods, single-group design, 15 trainees engage in five progressive CBT sessions with “Aliyah,” a generative AI-simulated patient whose case includes intersectional concerns such as cultural identity, perfectionism, and workplace anxiety. The Counselor Activity Self-Efficacy Scale (CASE) is administered pre- and post-intervention to measure shifts in trainee self-efficacy. A focus group (n = 8) gathers qualitative insights into participants’ experiences and perceptions.

Preliminary Reflections and Anticipated Results

Findings from our systematic literature review (n = 16) indicate that simulation enhances trainee confidence, though realism and emotional complexity strongly influence engagement. We anticipate similar results, particularly in micro-competencies related to clinical reasoning and procedural skill. Trainees are expected to value the AI simulation’s accessibility, psychological safety, and capacity to simulate varied case complexities. Thematic analysis will explore perceptions of authenticity, technological limitations, and skill transferability to clinical settings.

Discussion

This study directly supports ESPLAT’s mission by evaluating scalable, psychologically-informed AI tools for therapeutic education in diverse, resource-constrained contexts. Beyond technical benefits, it raises critical epistemological and ethical questions about knowledge production and professional identity in AI-mediated training environments. The research contributes to a wider dialogue on the responsible integration of AI in psychological science education.

Is the first author also the speaker?

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Please indicate up to five keywords regarding the content of your contribution

psychotherapy training, simulation-based education, generative AI, therapist self-efficacy, psychology pedagogy

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