

**ARTIFICIAL INTELLIGENCE AND THERAPEUTIC RELATIONSHIPS IN MENTAL HEALTH:
POSSIBILITIES AND CHALLENGES**

**INTELIGENCIA ARTIFICIAL Y RELACIONES TERAPÉUTICAS EN SALUD MENTAL: POSIBILIDADES Y
DESAFÍOS**

**INTELIGÊNCIA ARTIFICIAL E AS RELAÇÕES TERAPÊUTICAS NA SAÚDE MENTAL:
POSSIBILIDADES E DESAFIOS**

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Submission: 12-06-2024

Approval: 12-06-2024

Artificial Intelligence (AI) has made significant inroads in several fields, including the area of mental health care and services. With the advancement of AI technologies, there is growing interest in their potential in transforming therapeutic relationships. This editorial explores this context and reflects on the possibilities of AI replacing therapeutic relationships, examining benefits, limitations, ethical considerations and future possibilities.

There are fundamental and guiding questions that we must ask: do we want AI to replace therapeutic relationships? Do we value subtly differentiated human contact? Is there perhaps a generational divide within this scenario?

In terms of definition, a therapeutic relationship in mental health nursing is a professional and interpersonal alliance, in which the nurse and patient collaborate to promote the patient's health and well-being. This relationship is built on trust, empathy, respect and clear limits, which allows the patient to feel safe and understood when discussing their personal issues. It also involves active listening, validation of the patient's experiences and consistent, compassionate care, which helps to promote a supportive environment conducive to the recovery and stability of the patient's mental health.

On a positive note, AI is evolving rapidly and has offered innovative solutions for mental health care. AI-powered chatbots, virtual therapists, and mental health apps are designed to provide immediate support, monitor mental health conditions, and even offer Cognitive Behavioral Therapy (CBT) techniques. These technologies open up the possibility of continuous access, 24 hours a day and seven days a week, filling gaps in the availability of mental health services.

Regarding the benefits of AI, it can be highlighted that: (1) AI-based therapeutic tools offer unparalleled accessibility and can provide immediate support to individuals, regardless of their location or time of day. This becomes a particularly relevant point for areas with a shortage of mental health professionals, for individuals with mobility problems or for those who need services at “anti-social” times; (2) mental health services can be expensive and AI solutions represent a more affordable alternative, in addition to reducing costs for both health systems and patients, automating routine tasks and offering scalable solutions; (3) AI tools allow users to seek help anonymously, which can reduce the stigma associated with seeking mental health treatments. Individuals reluctant to see a therapist in person may feel more comfortable using a digital platform; (4) unlike human therapists, who have limited work hours, AI systems offer consistent and constant support; Furthermore, AI tools can provide standardized interventions and maintain a non-judgmental stance.

Although amidst the multiple benefits, we must consider other questionable points. Creating expressions in an empathetic tone and using standardized phrases is one thing. But, do we want systems to evolve that allow eccentric characters into life? For neurodiverse people, would AI provide standardized responses? There is no denying that there are benefits of AI in mental health therapy, but could it replace therapeutic relationships?

But it is clear that there are limitations of AI in therapeutic interactions.

AI systems rely heavily on data and algorithms, which can introduce potential bias if the data used is not representative or the algorithms are flawed. These irregularities can lead to inappropriate or ineffective therapeutic interventions. In addition, one of the most significant drawbacks of AI in therapeutic settings is the lack of genuine human empathy. Therapeutic relationships are based on trust, empathy and emotional connection – qualities that AI currently struggles to learn and copy. While AI can simulate empathy through programmed responses, it cannot truly understand or reciprocate human emotions. One question we need to face is whether this lack of genuineness matters.

As mentioned, human emotions are complex and nuanced. Effective therapy often involves understanding and navigating these subtleties. AI systems, despite their advanced algorithms, can have difficulty fully understanding and responding to the intricate dynamics of human emotions and relationships. Furthermore, humans may not be honest, especially with themselves. When we are asked a difficult or challenging question about our inner turmoil, we often don't have a simple answer. We often lie to ourselves to make life more comfortable.

The art of being a skilled therapist is the ability to unravel this incongruity and help the person understand their conflicts. The therapeutic relationship involves more than just the exchange

of words; It includes body language, tone of voice, and the therapist's intuitive understanding of the client's needs, which are crucial elements for building trust and facilitating meaningful therapeutic progress. Human therapists bring a depth of understanding and emotional intelligence that AI cannot replicate. However, there are new discoveries being revealed: the author's study¹ brought important conclusions about the association between AI technologies and compassion in healthcare. The analysis is that, in a series of health contexts, AI technologies are being used to expand competencies, such as: awareness and empathic response, relational behavior, communication skills, therapeutic interventions, learning moral development, bonds and therapeutic alliance.

In the results of the study, it is suggested that a new conceptualization of compassion as a human system - AI of cyclical intelligent care is needed to alleviate different types of suffering, built from six elementary axes: (1) Awareness of suffering (pain/ anguish); (2) Understanding suffering (meaning/context); (3) Connection with suffering (verbal/physical, signs/symbols); (4) Judgment in relation to suffering (judge/act); (5) Action with the intention of alleviating suffering; (6) Attention to the effect and results of the response. Considering the complexity of healthcare, intelligent care based on the human system - AI will have to be implemented through adapted strategic choices, regulations, professional education and training.

And, then, another question arises: to what extent do the combinations of these six elements constitute the formation of a therapeutic relationship?

Without a doubt, the near future will lie in complementary roles that recognize the benefits of AI, although they still do not eliminate the need for human therapists. Rather than viewing AI as a replacement for human therapists, it may be more productive to consider AI as complementary to human therapy. AI can assist therapists by offering immediate support to individuals in crisis, providing coping strategies, and de-escalating situations until professional help is available. Furthermore, AI can help track clients' progress over time, providing valuable data to therapists, improving continuity of care, and ensuring that therapeutic interventions are adjusted as needed. AI can further augment traditional therapeutic techniques with data-driven insights and evidence-based interventions, potentially improving therapy effectiveness.

This integration of AI into therapeutic relationships must be discussed carefully and in detail, especially regarding ethical considerations. Some essential ethical issues include ensuring that users are fully informed about how AI systems work, what data is being collected and how it will be used. Informed consent is critical to maintaining trust and transparency. Furthermore, users must be clearly informed that they are interacting with generative AI, not a human. AI systems must also be designed and tested to avoid risks and inconsistencies that could harm users. This involves

using diverse datasets and regularly auditing algorithms to ensure fairness and impartiality of the system.

The future of AI in therapy will likely involve a hybrid model, in which AI and human therapists work together to provide comprehensive mental health care. Advances in natural language processing, machine learning, and affective computing can improve AI's ability to understand and respond to human emotions more effectively. Research and development in this area should focus on creating AI systems that can better mimic human empathy and emotional intelligence, including improving AI's ability to recognize and respond to nonverbal cues and emotional subtleties.

And what can we consolidate about all this?

While AI offers significant potential benefits for mental health care, it cannot replace the therapeutic relationship between a human therapist and their client. The depth of understanding, empathy, and emotional connection that human therapists provide is irreplaceable. However, AI can play a valuable complementary role in improving the accessibility, consistency and effectiveness of mental health services. For now, the future of AI in therapy lies in integrating these technologies in ways that support and augment human therapists, rather than replace them. By addressing ethical concerns and leveraging the strengths of AI and human therapists, we can create a more accessible, effective, and compassionate mental health care system.

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Funding and Acknowledgment: The authors declare that the research did not receive funding

Authorship criteria

Christopher Wagstaffe; Márcia Astrês Fernandes: contributed substantially to the conception and/or planning of the study and to obtaining, analyzing and/or interpreting the data; as well as in the writing and/or critical review and final approval of the published version.

Declaration of conflict of interest

Nothing to declare

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