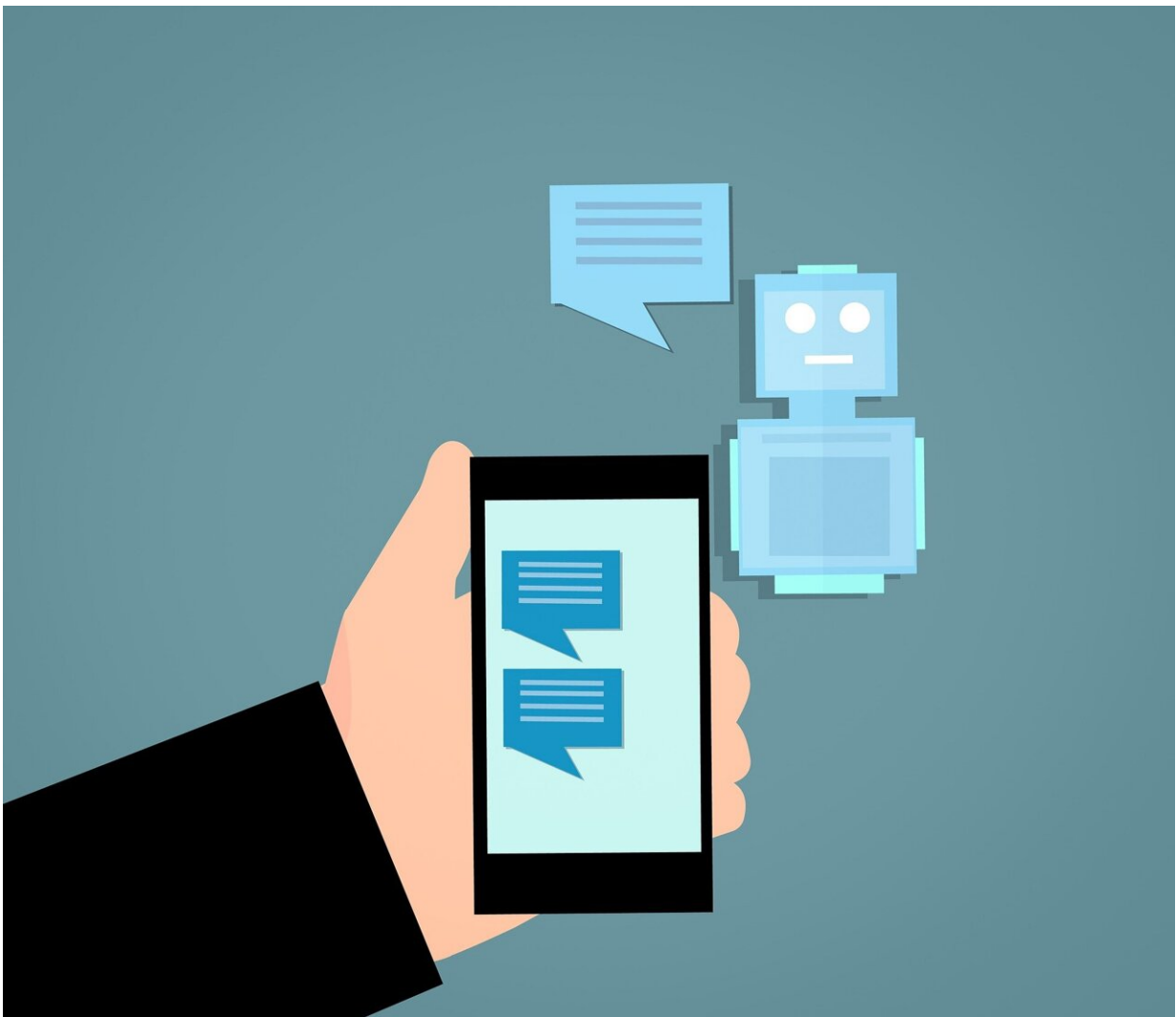


Increasingly sophisticated AI systems can perform empathy, but their use in mental health care raises ethical questions

April 1 2024, by A.T. Kingsmith



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In a world where technology is increasingly intertwined with our feelings, emotion-AI harnesses advanced computing and machine learning to assess, simulate, and interact with human emotional states.

As emotion-AI systems become more adept at detecting and understanding emotions in [real-time](#), [the potential applications for mental health care are vast](#).

Some examples of AI applications include: [screening tools in primary care settings](#), [enhanced tele-therapy sessions](#) and [chatbots offering accessible 24/7 emotional support](#). These can act as bridges for anyone waiting for professional help and those hesitant to seek traditional therapy.

However, this turn to emotion-AI comes with a host of ethical, social and regulatory challenges around consent, transparency, liability and data security.

[My research](#) explores these potentials and challenges of emotion-AI in the context of the ongoing mental health crisis [in the years since the COVID-19 pandemic](#).

When emotional AI is deployed for mental health care or companionship, it risks creating a superficial semblance of empathy that lacks the depth and authenticity of human connections.

What's more, issues of accuracy and bias can [flatten and oversimplify emotional diversity across cultures](#), reinforcing stereotypes and potentially causing harm to marginalized groups. This is particularly concerning in therapeutic settings, where understanding the full spectrum of a person's emotional experience is crucial for effective

treatment.

Age of emotional AI

The global emotion-AI market is projected to be worth [US\\$13.8 billion by 2032](#). This growth is driven by the expanding application of emotion-AI across sectors ranging from public [health care](#) and [education](#) to [transportation](#).

Advancements in [machine learning](#) and [natural language](#) processing allow for a more sophisticated analysis of people's emotional cues using facial expressions, voice tones and textual data.

Since its release in early 2023, OpenAI's generative-AI chatbot ChatGPT-4 has been leading the charge with human-like responses across a broad spectrum of topics and tasks. A recent study found that ChatGPT consistently scored higher on "[emotional awareness](#)"—identifying and describing emotions accurately—than general population averages.

While OpenAI dominates North American and European markets, [Microsoft's chatbot Xiaoice](#) is more popular in the Asia-Pacific region. Launched in 2014 as a "social chatbot" aimed at establishing emotional connections with users, [Xiaoice is capable of sustained empathetic engagement](#), remembering past interactions and personalizing conversations.

In the coming years, a mix of productivity and emotional connection will transform mental health care and redefine how we interact with AI on an emotional level.

Future risks

The rapid rise of emotion-AI raises profound ethical and philosophical questions about the nature of empathy and emotional intelligence in machines.

In [*The Atlas of AI*](#), AI Scholar Kate Crawford questions the accuracy of systems that claim to read human emotions through digital cues. She raises concerns about [the process of simplifying and decontextualizing human emotions](#).

Digital scholar Andrew McStay further explores the implications of attributing empathy to emotion-AI systems. In [*Automating Empathy*](#), McStay warns of "synthetic empathy," highlighting a key distinction between simulating a recognition of [human emotions](#) and truly experiencing empathy.

Additionally, emotion-AI's ability to analyze emotional states opens avenues for [surveillance, exploitation and manipulation](#). This raises questions about the boundaries of machine intervention in personal and emotional domains.

Rethinking human-AI relations

The widespread application of AI in therapy, counseling and [emotional support](#) holds the potential to revolutionize access to care and alleviate pressures on overworked and overburdened human practitioners. However, the personification of emotion-AI creates a paradox where humanizing AI might lead to the dehumanization of human beings themselves.

At the same time, attributing human-like qualities to AI risks making [mental health care](#) less interpersonal. The potential for AI chatbots to misinterpret cultural and individual emotional expressions could [lead to misguided advice or support](#). This can further complicate or exacerbate

mental health issues, especially [where the nuances of human empathy are essential](#).

These tensions underscore the need for the careful, ethically informed integration of emotion-AI in mental health treatment and care.

These technologies need to complement, rather than substitute, the human elements of [empathy](#), understanding and connection. This requires rethinking human-AI relations, [particularly around empathy](#).

By ensuring the ethical development of emotion-AI, we can aspire to a future where technology enhances mental health without diminishing what it means to be human.

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