Artificial intelligence can help people feel heard, study finds

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A new study published in the *Proceedings of the National Academy of Sciences* has found that AI-generated messages made recipients feel more "heard" than messages generated by untrained humans, and that AI was better at detecting emotions than these individuals. However, recipients reported feeling less heard when they learned a message came from AI.

As AI becomes more ubiquitous in daily life, understanding its potential and limitations in meeting human psychological needs becomes more pertinent. With dwindling empathetic connections in a fast-paced world, many are finding their human needs for feeling heard and validated increasingly unmet.

The research conducted by Yidan Yin, Nan Jia, and Cheryl J. Wakslak from the USC Marshall School of Business addresses a pivotal question: Can AI, which lacks human consciousness and emotional experience, succeed in making people feel heard and understood?

"In the context of an increasing loneliness epidemic, a large part of our motivation was to see whether AI can actually help people feel heard," said the paper's first author, Yidan Yin, a postdoctoral researcher at the Lloyd Greif Center for Entrepreneurial Studies at USC Marshall.

The team's findings highlight not only the potential of AI to augment human capacity for understanding and communication, but raise important conceptual questions about the meaning of being heard and practical questions about how best to leverage AI's strengths to support greater human flourishing.

In an experiment and subsequent follow-up study, "we identified that while AI demonstrates enhanced potential compared to non-trained

human responders to provide emotional support, the devaluation of AI responses poses a key challenge for effectively deploying AI's capabilities," said Nan Jia, associate professor of strategic management.

The USC Marshall research team investigated people's feelings of being heard and other related perceptions and emotions after receiving a response from either AI or a human. The survey varied both the actual source of the message and the ostensible source of the message: Participants received messages that were actually generated by an AI or by a human responder, with the information that it was either AI or human generated.

"What we found was that both the actual source of the message and the presumed source of the message played a role," said Cheryl Wakslak, associate professor of management and organization at USC Marshall. "People felt more heard when they received an AI than a human message, but when they believed a message came from AI this made them feel less heard."

AI bias

Yin noted that their research "basically finds a bias against AI. It's useful, but they don't like it."

Perceptions about AI are bound to change, added Wakslak: "Of course these effects may change over time, but one of the interesting things we found was that the two effects we observed were fairly similar in magnitude. Whereas there is a positive effect of getting an AI message, there is a similar degree of response bias when a message is identified as coming from AI, leading the two effects to essentially cancel each other out."

Individuals further reported an "uncanny valley" response—a sense of

unease when made aware that the empathetic response originated from AI, highlighting the complex emotional landscape navigated by AI-human interactions.

The research survey also asked participants about their general openness to AI, which moderated some of the effects, explained Wakslak.

"People who feel more positively toward AI don't exhibit the response penalty as much and that's intriguing because over time, will people gain more positive attitudes toward AI?" she posed. "That remains to be seen … but it will be interesting to see how this plays out as people's familiarity and experience with AI grows."

AI offers better emotional support

The study highlighted important nuances. Responses generated by AI were associated with increased hope and lessened distress, indicating a positive emotional effect on recipients. AI also demonstrated a more disciplined approach than humans in offering emotional support and refrained from making overwhelming practical suggestions.

Yin explained, "Ironically, AI was better at using emotional support strategies that have been shown in prior research to be empathetic and validating. Humans may potentially learn from AI because a lot of times when our significant others are complaining about something, we want to provide that validation, but we don't know how to effectively do so."

Instead of AI replacing humans, the research points to different advantages of AI and human responses. The advanced technology could become a valuable tool, empowering humans to use AI to help them better understand one another and learn how to respond in ways that provide emotional support and demonstrate understanding and validation.

Overall, the paper's findings have important implications for the integration of AI into more social contexts. Leveraging AI's capabilities might provide an inexpensive scalable solution for social support, especially for those who might otherwise lack access to individuals who can provide them with such support. However, as the research team notes, their findings suggest that it is critical to give careful consideration to how AI is presented and perceived in order to maximize its benefits and reduce any negative responses.

More information: Yidan Yin et al, AI can help people feel heard, but an AI label diminishes this impact, *Proceedings of the National Academy of Sciences* (2024). DOI: 10.1073/pnas.2319112121

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