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# MENTAL HEALTHCARE PROVIDER PERSPECTIVES OF AI ON REDDIT

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## ABSTRACT

Artificial intelligence (AI) has significantly impacted various fields, including healthcare. However, there are still areas within healthcare, such as mental health, where AI has yet to flourish fully. Consumers are open to the use of AI to manage their mental health. However, mental healthcare providers have expressed concerns about the ethical implications and potential adverse effects of AI on the human element. Understanding provider perspectives and concerns could result in AI being a viable solution to help provide greater accessibility to mental healthcare services. The purpose of this study is to explore the challenges and opportunities of using AI in mental healthcare by examining the views of mental healthcare providers on Reddit. We will utilize a two-phase approach to (1) identify the emotional tone of mental health providers' comments and (2) develop overarching themes based on those comments. The results of this research could have significant implications for both AI designers and mental healthcare providers.

## Keywords

Mental health, AI, artificial intelligence, Reddit, technology adoption

## EXTENDED ABSTRACT

Artificial intelligence (AI) has significantly impacted various fields, including healthcare. However, there are still areas within healthcare where AI has yet to flourish fully. One such area is mental healthcare, where the use of AI has the potential to fundamentally transform the consumer experience. The integration of AI in mental healthcare can offer many benefits, such as personalized treatment and digital phenotyping (Thieme et al., 2023). Research suggests that consumers are open to the use of AI in mental healthcare, which makes it even more promising (Reading Turchioe et al., 2023).

Though AI has the potential to revolutionize mental healthcare, mental healthcare providers have expressed concerns about the ethical implications and potential adverse effects on the human element (Khawaja, 2023). Moreover, there is the possibility of AI bias in algorithms and datasets, which could further exacerbate existing inequalities in mental healthcare. Yet, the mental healthcare industry is facing a shortage of qualified professionals to meet the growing demand for service (*American Psychological Association's Practitioner Pulse Survey*, 2023). As a result, AI could be a viable solution to help provide greater accessibility to mental healthcare services.

While AI is expected to play a significant role in mental healthcare, it is not seen as a replacement for human connection but rather as an aid to mental healthcare providers (Moghimi et al., 2023). Achieving the right balance between human oversight and AI integration is crucial for providing an optimal consumer experience. A number of studies have focused on the consumer perspective on AI in mental healthcare, but the provider's perspective has yet to receive much attention despite their significant role in technology adoption. Therefore, it is critical to further explore the provider's perspective to ensure the successful implementation and adoption of AI in mental healthcare.

Social news sites like Reddit provide an excellent platform for discussing various topics. Reddit is a valuable source of information for a number of reasons. As of 2023, Reddit has over 70 million daily active unique users (Reddit, 2023). Those users can post anonymously, helping them feel relaxed and comfortable while freely expressing their views (Kang, Brown, & Kiesler, 2013). Reddit's 'Therapists' community, which has over 96,000 members, is a large group of verified mental health providers. Thus, this Reddit community is an ideal environment to study providers' perspectives on the use of AI in mental healthcare.

This study's goal is to explore the challenges and opportunities of using AI in mental healthcare by examining the views of mental healthcare providers on Reddit. We will use Pushshift API to crawl posts in the Therapists subreddit and identify relevant data for analysis. The Pushshift API connects directly to Reddit and allows users to extract data from 2015, allowing us to extract a large and rich dataset that will help us identify emerging themes regarding potential human-AI collaboration. We will filter posts that contain at least one relevant term (artificial intelligence, AI) and crawl the comments of these posts. The data analysis will follow a two-phase approach. The qualitative phase will consist of a sentiment analysis to differentiate positive, negative, and neutral statements. The qualitative phase will utilize a Grounded Theory-light approach (Clarke & Braun, 2013) to extract mental health providers' attitudes toward AI using open, axial, and selective coding.

This effort reflects an initial approach to identify the topics associated with AI adoption in mental healthcare. The results of this research could have significant implications for both AI designers and mental healthcare providers. We anticipate mental health providers' comments to provide insight on how they envision using AI to supplement their service offerings. Such information could be utilized by designers to develop an AI that is embraced by the mental health provider community.

## REFERENCES

- American Psychological Association's Practitioner Pulse Survey. (2023). Retrieved from <https://www.apa.org/pubs/reports/practitioner/2023-practitioner-pulse-survey.pdf>
- Clarke, V., & Braun, V. (2013). Successful qualitative research: A practical guide for beginners. *Successful qualitative research*, 1-400.
- Kang, R., Brown, S., & Kiesler, S. (2013). *Why do people seek anonymity on the internet? Informing policy and design*. Paper presented at the Proceedings of the SIGCHI conference on human factors in computing systems.
- Khawaja, N. (2023). AI chatbots offer mental health care, but therapists have concerns. Retrieved from <https://spectrumlocalnews.com/nys/central-ny/news/2023/10/19/human-therapists-worry-about-the-limitations-of-chatbots>
- Moghim, E., Stephenson, C., Gutierrez, G., Jagayat, J., Layzell, G., Patel, C., . . . Ayonrinde, O. (2023). Mental health challenges, treatment experiences, and care needs of post-secondary students: a cross-sectional mixed-methods study. *BMC public health*, 23(1), 1-16.
- Reading Turchioe, M., Harkins, S., Desai, P., Kumar, S., Kim, J., Hermann, A., . . . Benda, N. C. (2023). Women's perspectives on the use of artificial intelligence (AI)-based technologies in mental healthcare. *JAMIA open*, 6(3), ooad048.
- Reddit. (2023). Keeping it Dialed: In 2023, redditors sought honest feedback, rallied together, obsessed over all things pop culture, and elevated the everyday to the hilarious. Retrieved from [https://www.reddit.com/r/recap/comments/18c4kvr/keeping\\_it\\_dialed\\_in\\_2023\\_redditors\\_sought\\_honest/](https://www.reddit.com/r/recap/comments/18c4kvr/keeping_it_dialed_in_2023_redditors_sought_honest/)
- Thieme, A., Hanratty, M., Lyons, M., Palacios, J., Marques, R. F., Morrison, C., & Doherty, G. (2023). Designing human-centered AI for mental health: Developing clinically relevant applications for online CBT treatment. *ACM Transactions on Computer-Human Interaction*, 30(2), 1-50.