Wroclaw Medical University, Poland

Luba Ślósarz, PhD
Magdalena Kazimierska-Zając, PhD

Mental health - expert advice vs. chat GPT

BACKGROUND

INTRODUCTION. Artificial intelligence is increasingly being used in healthcare. Although it is not yet widely used by mental health professionals, in the future, it may have broad applications in this area as well [1]. The use of AI can address, among other things, the process of diagnosis. Improving this process can occur through algorithms' detection of patterns and correlations not always observable by a specialist. AI can also monitor the therapy process - by analyzing the patient's voice, facial expressions, text, and gestures. One wonders if AI can be successfully applied in the area of support. Chatbots are widely available and can be used 24/7, which is a definite advantage. However, the question of whether the advice generated by chatGPT is comparable to that of specialists arises.

THE AIM

The purpose of this study was to substantively analyze the responses of experts and chatGPTs to selected mental health questions.

THE METHODS

Eight areas of mental health were selected: anxiety disorders, mood disorders, personality disorders, psychotic disorders, eating disorders, addictions, sexual health, crises, and psychotherapy. A selection of 8 questions from users of the mental health portal, falling into the categories mentioned, was made. The responses of the experts (ER) were then collected and compared with those of the chatGPT (GPT).

Illustration generated by AI (Midjourney)

RESULTS AND CONCLUSIONS

ER and GPT responses to the same questions were analyzed for content, structure, and style. Basic similarities and differences:

1. **Response structure:** GPT: introduction, valuable tips, conclusion; ER similarly, but without listing/enumerating tips. GPT answers are longer.

2. **Relationship with the questioner:** Both GPT and experts answer with more personal questions have answers that begin with empowerment, e.g., "I understand that it's difficult for you right now."; Addressing the questioner : GPT: first person; ER: using Mr./Ms. in the case of adults; both distinguish the form by gender.

3. **Language: style is similar;** in GPT, there is more frequent use of scientific terms; technical aspect: in both GPT and ER responses, there is attention to Polish characters, punctuation

4. **Factual value:** In GPT and experts' responses, pointing to sources is sporadic (one case each in the entire analysis). In the case of ER, the answer's author is known, about whom additional information can be found. The portal checks the author's qualifications, which increases accountability. Experts take more into account the context and local/cultural character and show specificity: for example, in the question about the difference between a psychologist and a psychotherapist, there is a requirement for a 4-year school of psychotherapy. GPT answers are more culturally universal.

5. **Method of helping:** Common elements in both GPT and ER are explanation, comforting/showing understanding, and referral to specialists.

Conclusions. With the increasing use of AI in mental health, professionals should enrich their knowledge and be prepared for the coming changes. ChatGPT can provide general information on mental health. Currently, there has yet to be a consensus among researchers that it could replace the knowledge and expertise of experts. More research is needed on the usefulness of AI psychological therapy.

Bibliography
[1] Irshad, Seema & Azmi, Shabana & Begum, Nurjahan. (2022). Uses of Artificial Intelligence in Psychology. 10.31219/osf.io/2hx5n.
[2] Ayers JW, Poliak A, Dredze M, et al. Comparing Physician and Artificial Intelligence Chatbot Responses to Patient Questions Posted to a Public Social Media Forum. JAMA Intern Med. 2023;183(6):589–596. doi:10.1001/jamainternmed.2023.1838
[3] Apurvakumar P, Pragya L, Amit G,. Is ChatGPT ready to change mental healthcare? Challenges and considerations: a reality-check, Frontiers in Human Dynamics. 2024,5 doi:10.3389/fhumd.2023.1289255
[4] Dergaa I, Fekih-Romdhane F, Hallit S, Loch AA, Glenn JM, Fessi MS, Ben Aissa M, Souissi N, Guelmami N, Swed S, El Omri A, Bragazzi NL, Ben Saad H. ChatGPT is not ready yet for use in providing mental health assessment and interventions. Front Psychiatry. 2024 Jan 4;14:1277756. doi: 10.3389/fpsyt.2023.1277756. PMID: 38239905; PMCID: PMC10794665.)
[5] Howe PDL, Fay N, Saletta M, Hovy E. ChatGPT's advice is perceived as better than that of professional advice columnists. Front Psychol. 2023 Nov 21;14:1281255. doi: 10.3389/fpsyg.2023.1281255. PMID: 38078232; PMCID: PMC10702579.