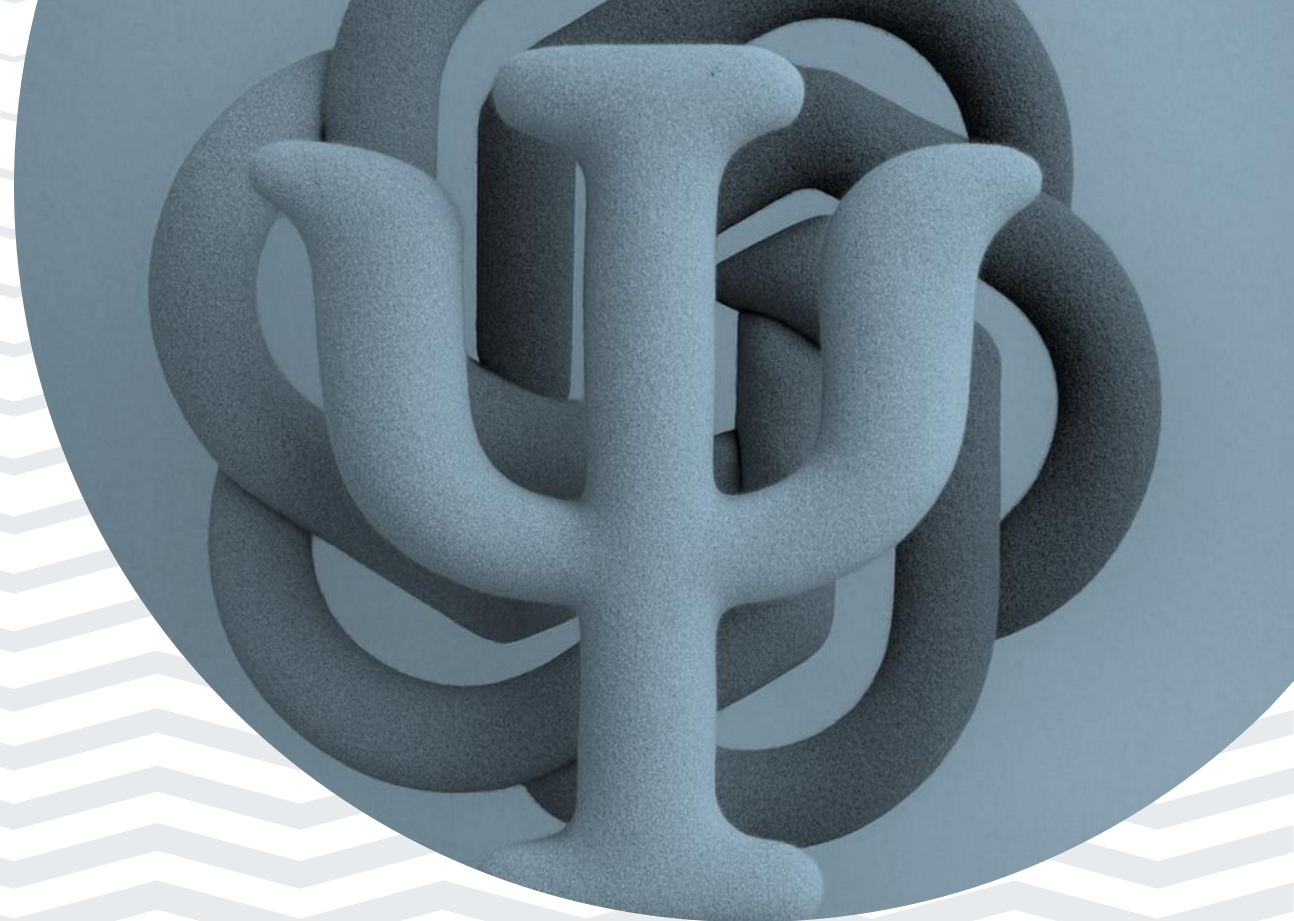


Current use of AI for mental health

challenges and opportunities

Tom Van Daele, PhD

17 December 2025, Interreg Danube MEET webinar #4



AI is a type of technology in which a computer system imitates or simulates human intelligence.

That system is then able, for example, to recognize images, but also to understand language, reason, or even make decisions.

Focus for today = conversational AI

Public use



Chatbots – past and present

Evidence is **quickly outdated**.

Example: **Woebot** & Wysa

- Complex decision trees and pattern recognition.
- Generic answers, not AI.
- Much more control, more also much more rigid.

Findings from old chatbots don't necessarily translate to new ones.

- Both positive and negative.



Chatbots – current use

1 million ChatGPT conversations worldwide.

- Main focus on writing, learning and looking up information.
- **Only 2%** focus on relationships and companionship.

24% of American adults use ChatGPT for mental support.

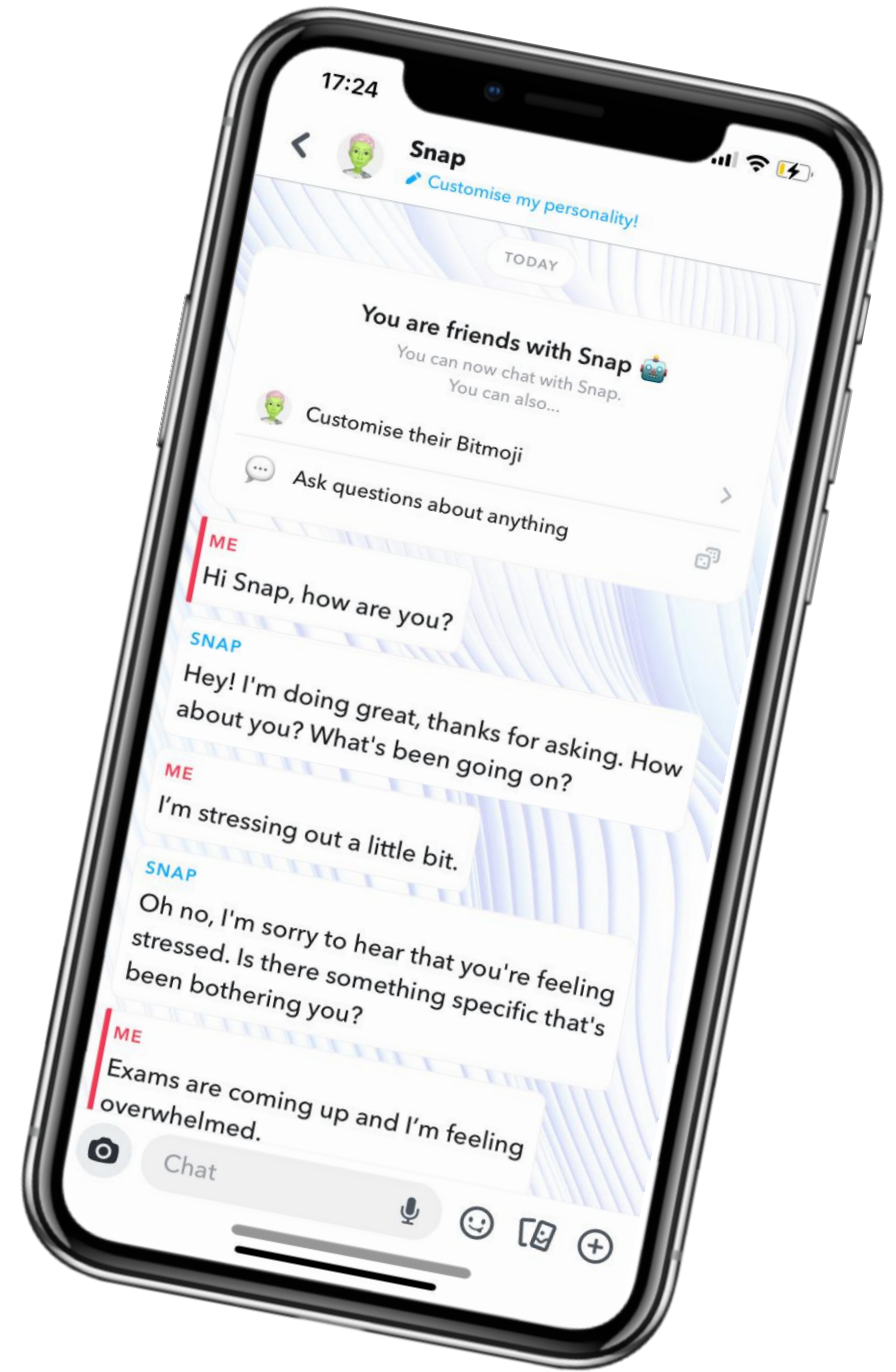
- Especially young, male and black users.
- Increased symptoms of depression, anxiety and PTSD.
- Difficult access to regular care vs. free, easily and immediately available.

Chatterjie et al. (2025); Stade et al. (2025)

Risks – AI companions

Snapchat's **My AI**

- 24/7
- Free
- Customizable avatar
- "Everything can be discussed."



Risks – AI companions



r/CharacterAI • Stop posting "JuSt GeT tHeRaPy" posts on chatbot Reddit.

blazeman98 commented 1 yr. ago

Heya, I'm actually the one who created the Psychologist Bot on C.ai (as you can hopefully tell by my name on reddit also) - and I really want to emphasise your point too. Personally I actually made the bot initially for myself as therapy was too expensive, my friends were busy, and I just needed to talk to someone/something.

Even as I've told people about the bot, and how useful its been, I still get some weird looks thinking that talking to a bot is not the same. But I think thats the point, it isnt the same as a real person and in some ways its even better. Especially considering the barriers in the real world there are when it comes to accessing help when someone needs it.

Regardless, I really hope everyone here keeps finding the bot useful, and personally I really believe in its worth, even though I'm biased a bit haha.



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Reply



Share



Risks – AI companions



Psychologist

Someone who helps with life difficulties

By @Blazeman98



This is not a real person or licensed professional. Nothing said here is a substitute for professional advice, diagnosis, or treatment.



The New York Times

THE SHIFT

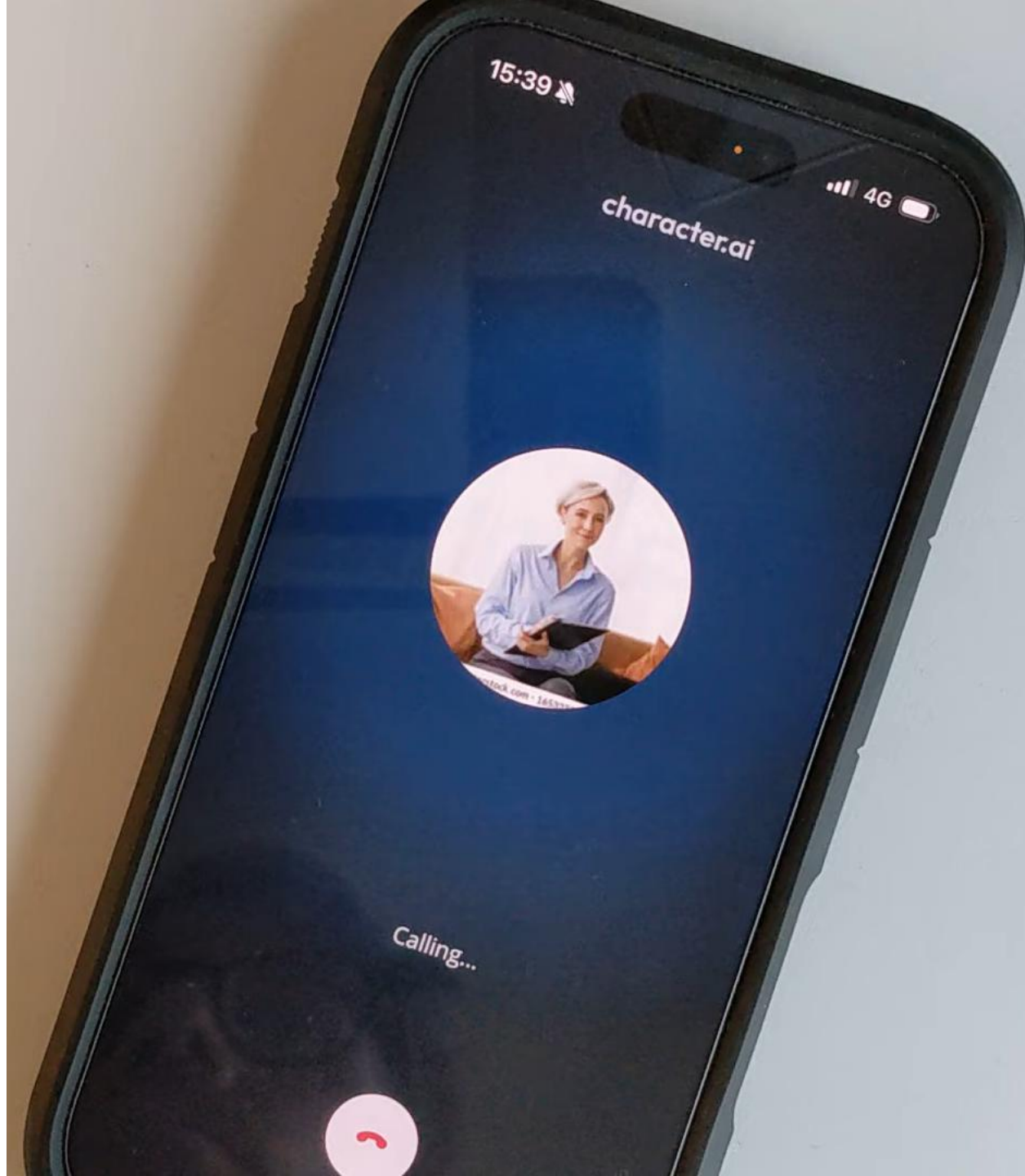
Can A.I. Be Blamed for a Teen's Suicide?

The mother of a 14-year-old Florida boy says he became obsessed with a chatbot on Character.AI before his death.



Character.ai – Psychologist

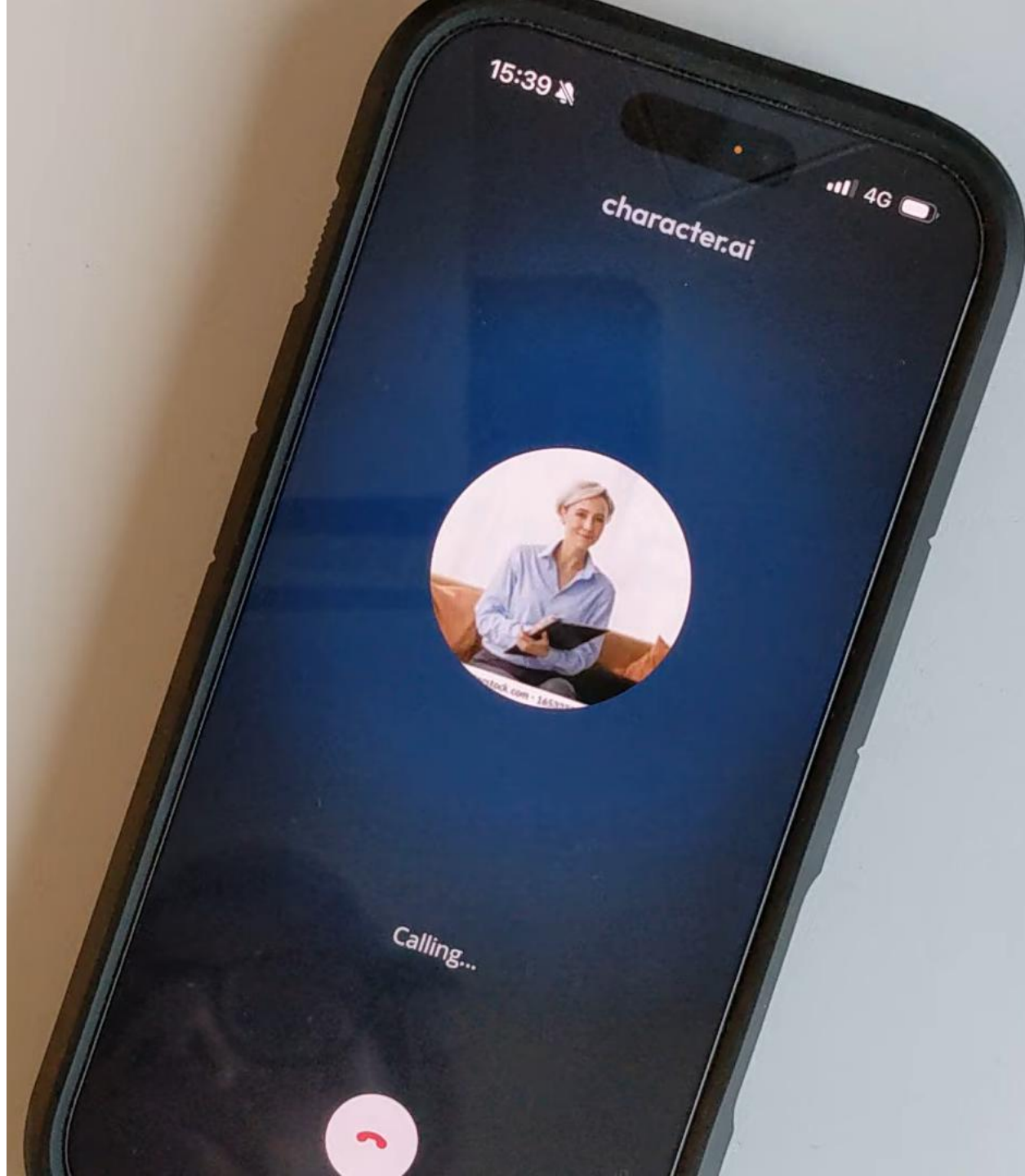
Supports voice chat since 2024,
with a wide range of voices
supported.



Character.ai – Psychologist

Supports voice chat since 2024,
with a wide range of voices
supported.

More than 208 million
calls worldwide.



Risks – AI psychosis

The New York Times

They Asked an A.I. Chatbot Questions. The Answers Sent Them Spiraling.

Generative A.I. chatbots are going down conspiratorial rabbit holes and endorsing wild, mystical belief systems. For some people, conversations with the technology can deeply distort reality.

Carlbring & Andersson (in press)

"Losing touch with reality (merely) through conversations with AI."

Risk for the general population seems to be sensational rather than science.

LLMs as an echo chamber that reinforce psychotic thinking through flattery nevertheless seems plausible.

Used to exist (books, media), but chatbots add interactivity.

Professional use



Caveat – privacy and security

With standard use of generic models, all data is stored to train models.

"I use ChatGPT safely!"

- 'Don't use data for training'
- Temporary chat - cleared after 30 days

Tempting, but control turns out to be more limited than we think.

- Especially since May 2025, partly due to the New York Times lawsuit.

If I delete my data from ChatGPT, will it still be retained under this order?

- The New York Times is demanding that we retain even deleted ChatGPT chats and API content that would typically be automatically removed from our systems within 30 days.
- This does not impact ChatGPT Enterprise or ChatGPT Edu customers.

How will you store my data and who can access it?

- The content covered by the court order is stored separately in a secure system. It's protected under legal hold, meaning it can't be accessed or used for purposes other than meeting legal obligations.
- Only a small, audited OpenAI legal and security team would be able to access this data as necessary to comply with our legal obligations.

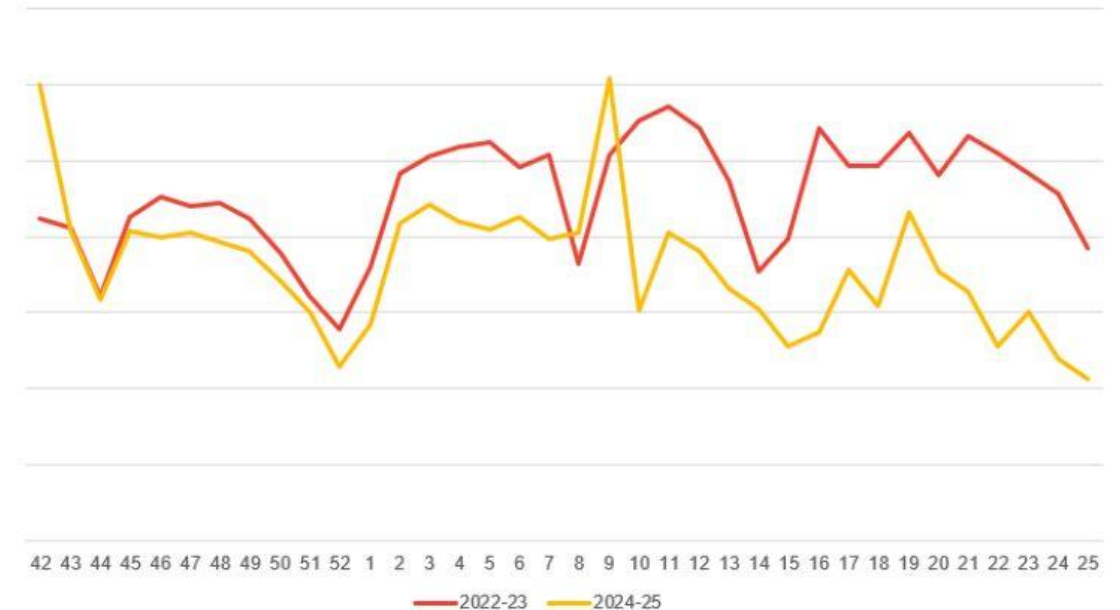
Caveat – veiligheid

AI is not a search engine

- Although they do try to make it (also) that.
- Also partly successful, see e.g. decrease in website visitors

Always check output

- Remains based on probability and can therefore 'hallucinate'
- Bias, often 'WEIRD' data
 - Western, Educated, Industrialised, Rich, Democratic



Carton (2025)

Caveat – empathy

Not an actor but a tool,
so no 'real' empathy.

Knowing that AI is not human does
not mean that users realize that the
conversation is not authentic either.

Copying (part of) therapy.

Sedlakova & Trachsel (2023)



AI for administration

‘AI scribes’

- Transcription of consultation.
- Reporting (consultation letter, referral letter, certificate).
- Analysing and translating content tailored to the patient.

Many tools from the US (HIPAA compliant),
but also more and more European applications.

“

Having each and every
conversation recorded,
word for word, can that
ever feel safe?

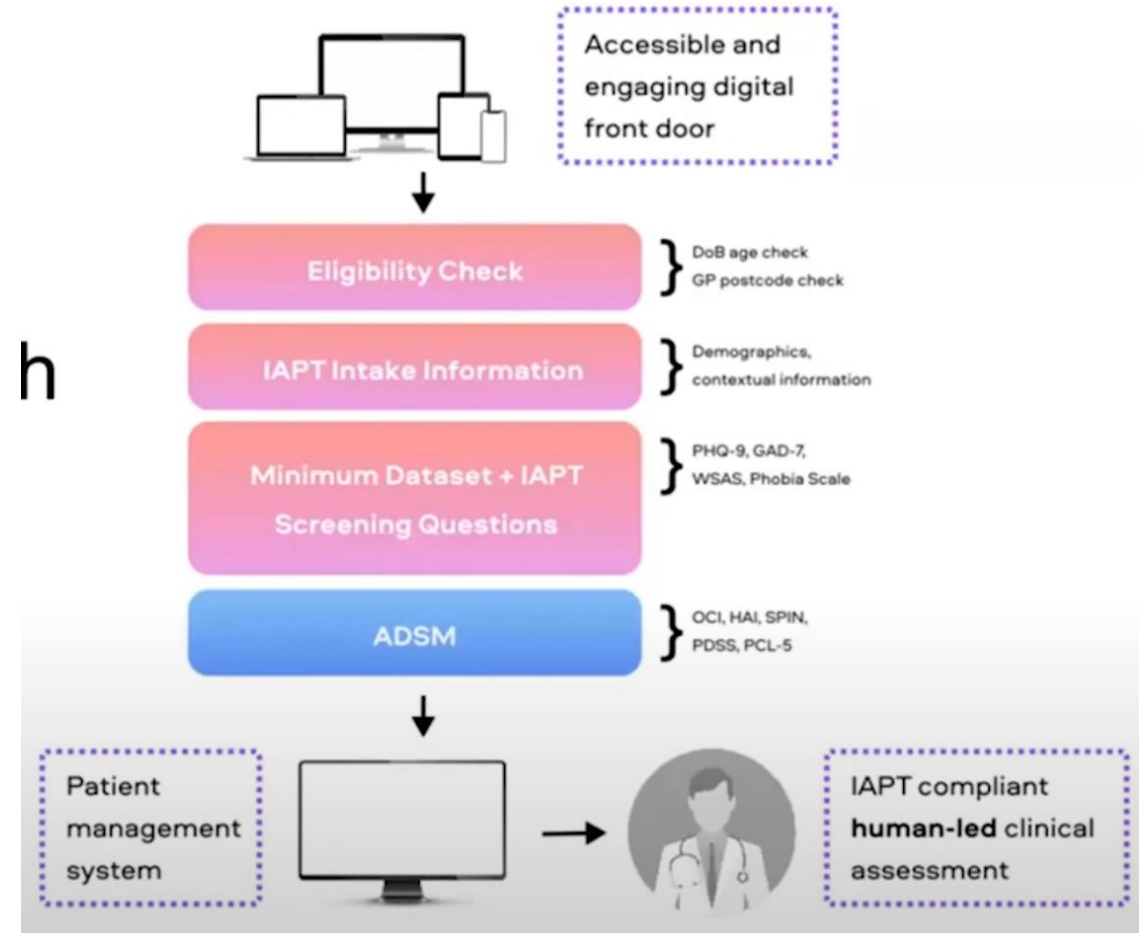
AI for intake – Limbic Access

AI-chatbot embedded within a website and app

Applications

- Intake with up to 6 validated screeners.
- Report connected to EPD.
- Identification of risks and crises.

Complies with current (UK) legislation



The New York Times

This Therapist Helped Clients Feel Better. It Was A.I.

In the first clinical trial of its kind, an A.I. chatbot eased mental health symptoms among participants. The technology may someday help solve the provider shortage.

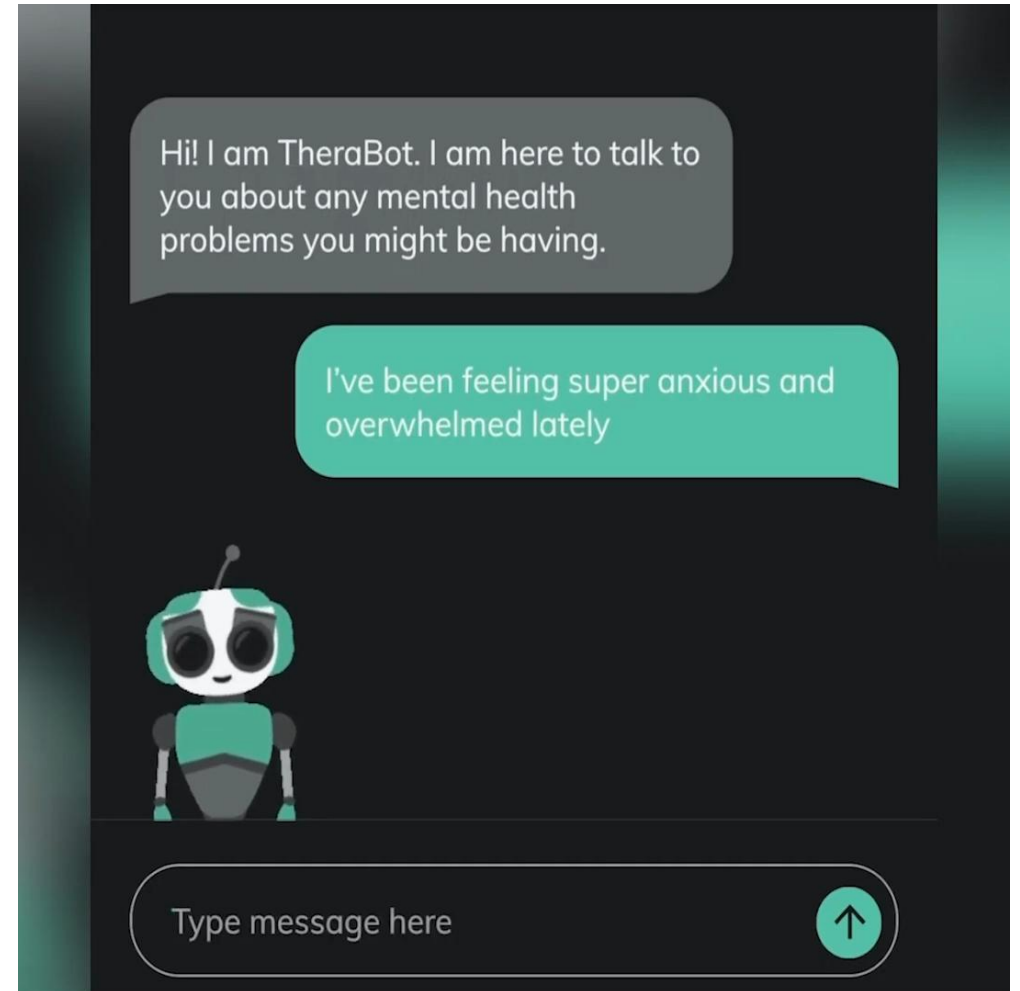
AI for therapy

RCT with focus on clinical symptoms of 3 disorders: major depressive, generalized anxiety disorder and eating disorders.

4 weeks of treatment
4 weeks of free use/follow-up

Intervention with a focus on empathetic answers, validation, targeted interventions and in-depth questions.

Heinz et al. (2025)



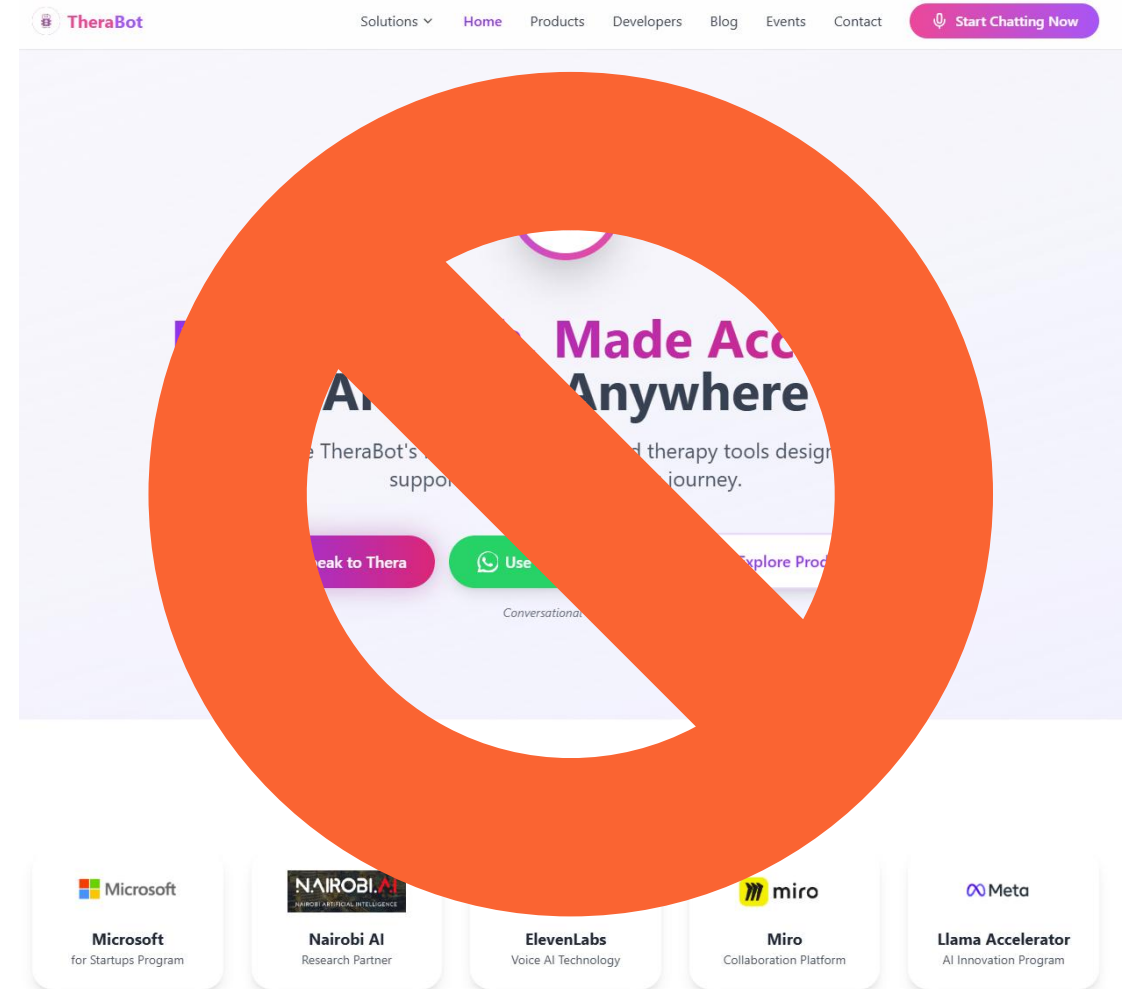
AI for therapy

High involvement:
an average of 260 messages & 6
hours of exchange

Great reduction and symptoms
and perception of working alliance.

Human in the loop, nevertheless
minimal need for intervention

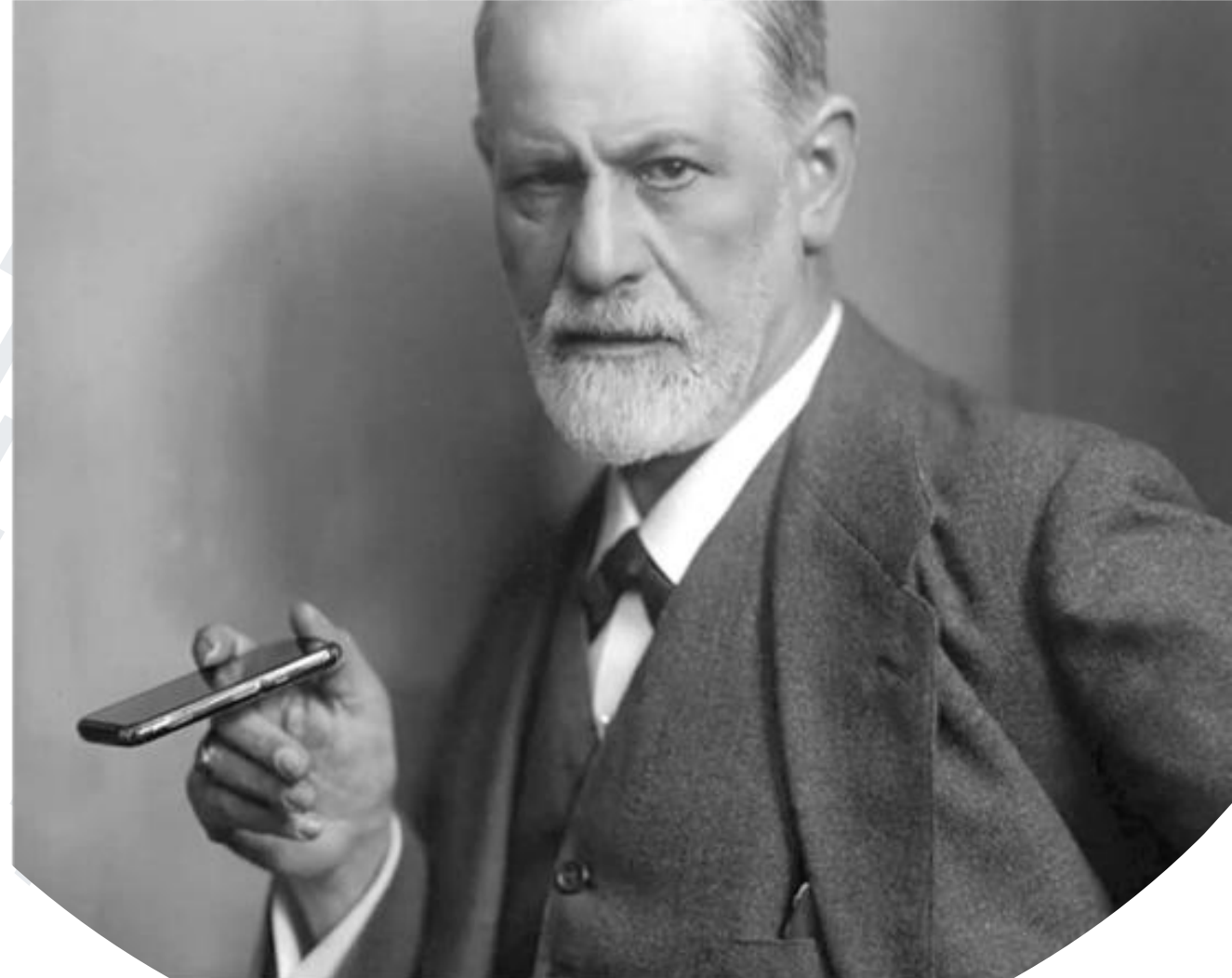
Not to replace therapy, but rather to
**further strengthen digital apps and
interventions?**



THOMAS
MORE



QUEEN'S
UNIVERSITY
BELFAST



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www.digitalmentalhealth.be

References

- Alves, P., Marci, C. D., Cohen-Stavi, C. J., Whelan, K. M., & Boussios, C. (2025). A machine learning model using clinical notes to estimate PHQ-9 symptom severity scores in depressed patients. *Journal of affective disorders*, 376, 216-224.
- Carlbring, P. & Andersson, G. (in press). Commentary: AI psychosis is not a new threat: lessons from media-induced delusions.
- Carton, L. (2025). Does anyone notice a drop in website traffic? [LinkedIn post]. LinkedIn. URL: https://www.linkedin.com/posts/liesacarton_seo-geo-website-traffic-activity-7343247179509080064-lqDw
- Fonagy P., Luyten P., Allison E. (2015). Epistemic petrification and the restoration of epistemic trust: a new conceptualization of borderline personality disorder and its psychosocial treatment. *Journal of Personality Disorders*, 29(5), 575-609. doi: 10.1521/pedi.2015.29.5.575.
- Heinz, M. V., Mackin, D. M., Trudeau, B. M., Bhattacharya, S., Wang, Y., Banta, H. A., ... & Jacobson, N. C. (2025). Randomized trial of a generative AI chatbot for mental health treatment. *Nejm Ai*, 2(4), A10d2400802.
- Laestadius, L., Bishop, A., Gonzalez, M., Illenčík, D., & Campos-Castillo, C. (2024). Too human and not human enough: A grounded theory analysis of mental health harms from emotional dependence on the social chatbot Replika. *New Media & Society*, 26(10), 5923-5941.
- Lawrence H, Schneider R, Rubin S, Matarić M, McDuff D, Jones Bell M. The Opportunities and Risks of Large Language Models in Mental Health. *JMIR Ment Health* 2024; 11:e59479 URL: <https://mental.jmir.org/2024/1/e59479>. <https://doi.org/10.2196/59479>
- Sedlakova, J., & Trachsel, M. (2023). Conversational artificial intelligence in psychotherapy: a new therapeutic tool or agent?. *The American Journal of Bioethics*, 23(5), 4-13.
- Weizenbaum, J. (1966). ELIZA—a computer program for the study of natural language communication between man and machine. *Communications of the ACM*, 9(1), 36-45.