

Presented by:

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National Academies AI and Neuroscience Workshop

Disclosures

Alison Darcy is an employee of Woebot Health and owns stock options in the company

The company has received grant funding from the National Institutes of Mental Health

NIDA: Small Business Innovation Research (SBIR)

- R44DA048712: RCT of Woebot for Substance Use Disorders [2019–2024]
- R44DA048712-01S1: Covid Supplement [2020]

MAY A.I. HELP YOU?

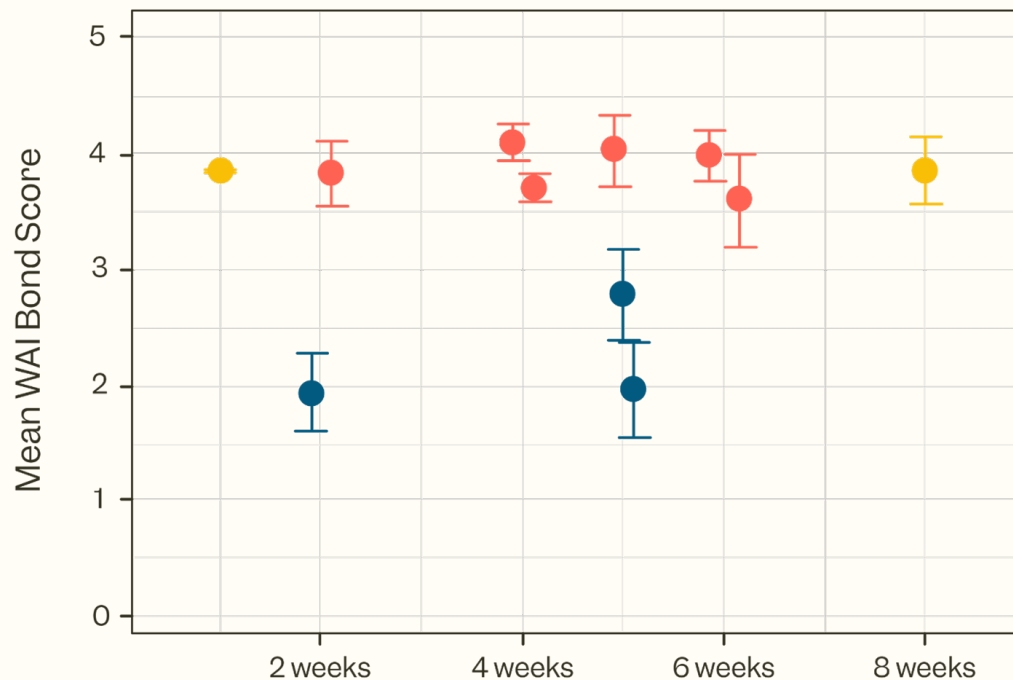
↳ INTELLIGENT CHATBOTS COULD
AUTOMATE AWAY NEARLY ALL OF
OUR COMMERCIAL INTERACTIONS
— FOR BETTER OR FOR WORSE.

“The rise of conversational agents is the next great shift in computer interfaces — one arguably as significant as the “point-and-click” interface that emerged in the ’80s...”

↳ BY CLIVE THOMPSON



(Some) chatbots create human -level bond



Working Alliance
Scores among

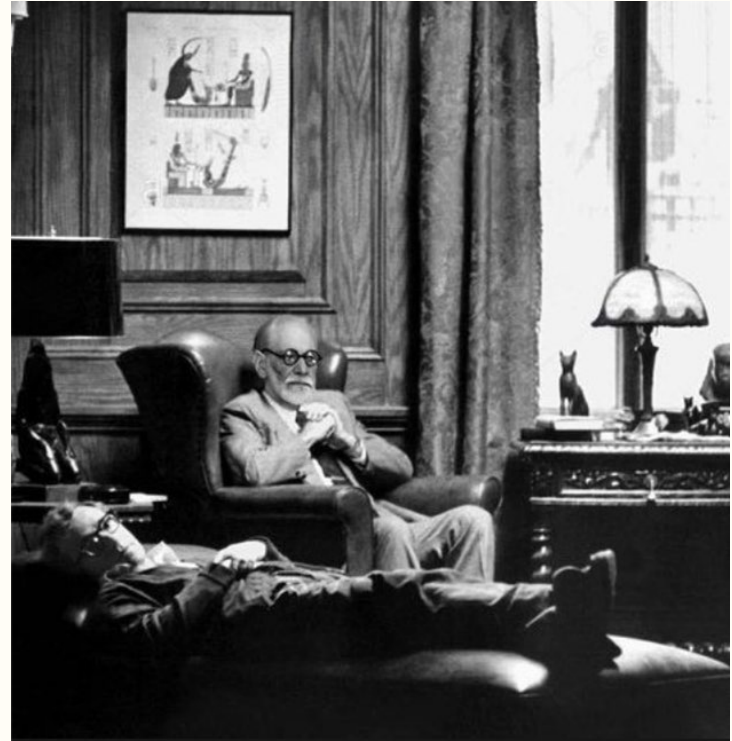
N=36,070 users

Woebot | Internet | Human involvement

Findings from peer-reviewed study involving 36,070 Woebot users, published in JMIR Formative Research.

The role of the therapist depends on approach & mechanism

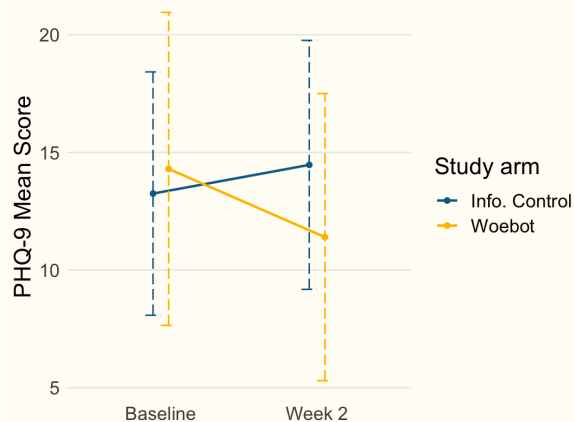
In Cognitive Behavior Therapy, the therapeutic relationship is characterized by “collaborative empiricism”



Meaningful clinical outcomes in clinical studies

22%

Reduction in symptoms of Depression in 18-28 year olds as demonstrated in PHQ-9 scores (2 weeks) N=70



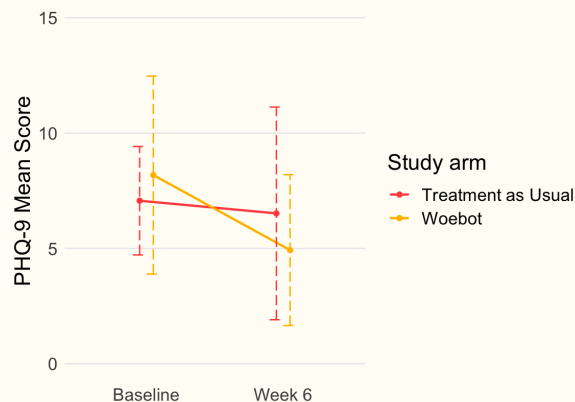
Error bars correspond to standard deviations

**Woebot for Mood & Anxiety
W-MA-00**

<https://mental.jmir.org/2017/2/e19/>

40%

Reduction in PHQ-9 scores over 6 weeks in RCT (Overall N = 192) for postpartum mothers with at least mild depression symptoms (n = 28)

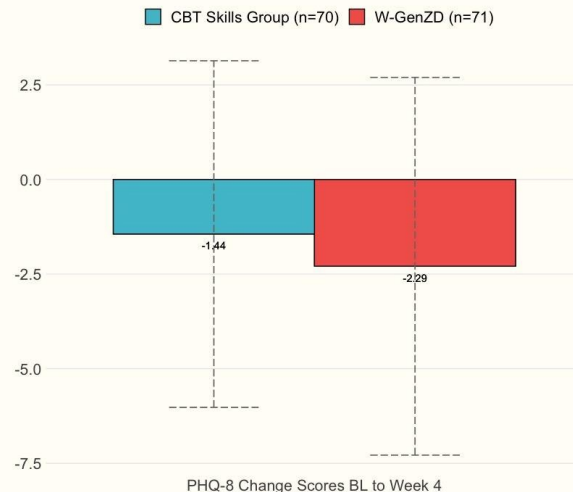


Error bars correspond to standard deviations

**Woebot for Postpartum Mood & Anxiety
W-PPMA-00**

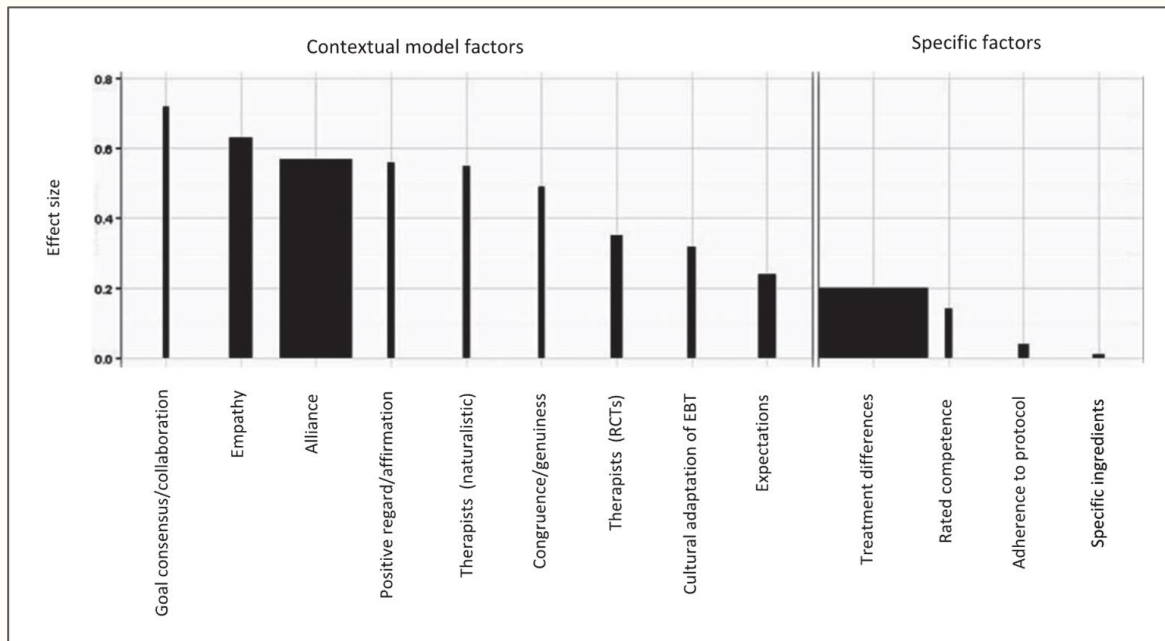
[Feasibility and impact of a mental health chatbot on postpartum mental health: a randomized controlled trial](#)

W-GenZD was statistically non-inferior to CBT Skills Group in reducing depression symptoms¹ at 4-Weeks End of Intervention, as measured by the Patient Health Questionnaire (PHQ-8)



Error bars correspond to standard deviations
*p<.01

Conversational AI unlocks therapeutic benefit



Wampold [study](#) outlines three pathways to therapeutic benefits:

1. The real relationship
2. Expectations
3. Enactment of health-promoting actions

Thank you