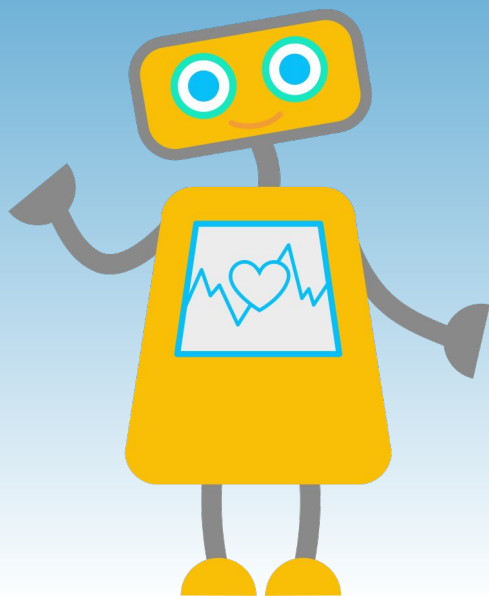


Woebot

The fully automated CBT coach



Alison Darcy, PhD
CEO & Founder

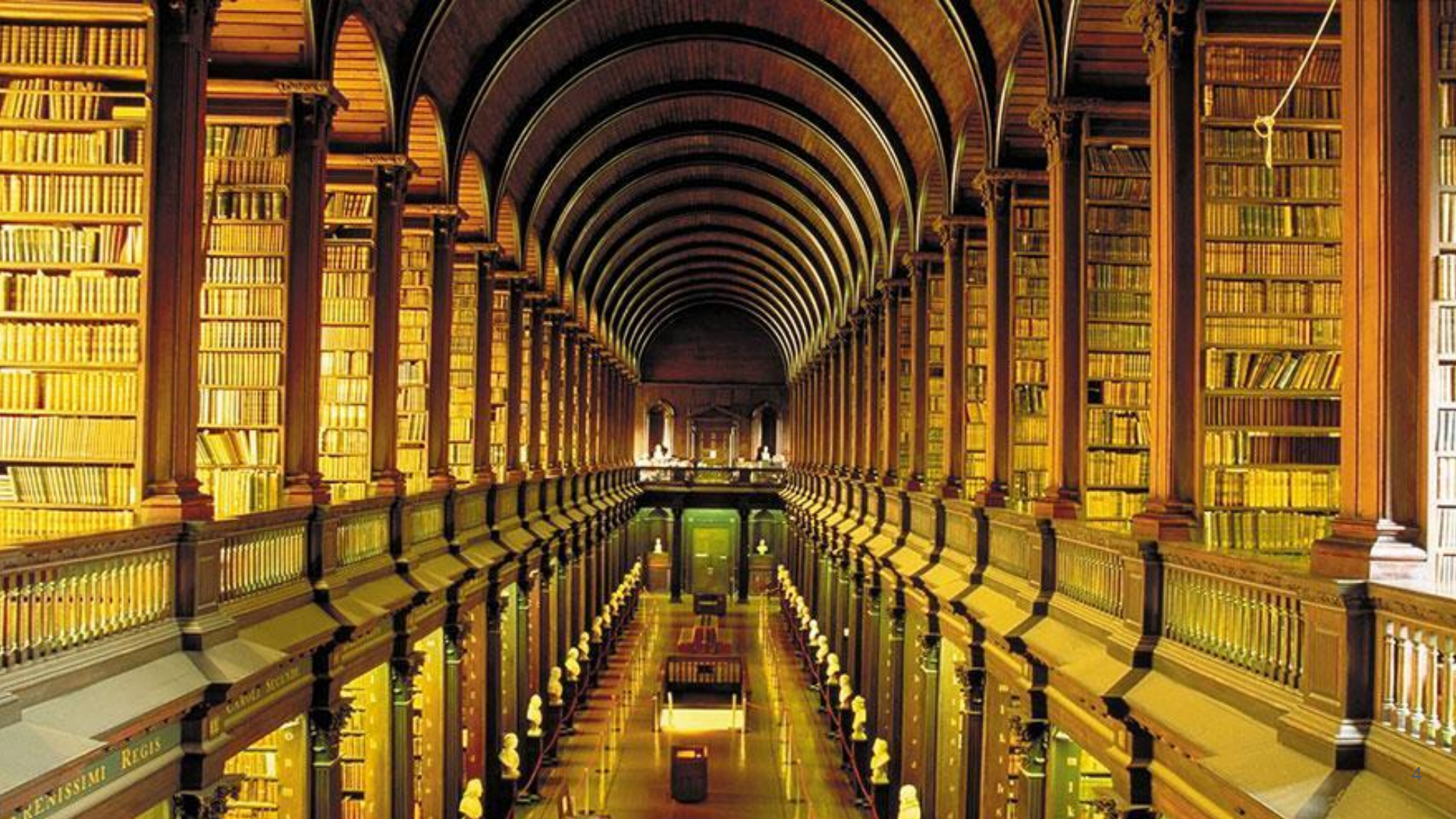
@alisonmdarcy

Woebot Labs Inc.
October 9th 2018



How did I end up here?



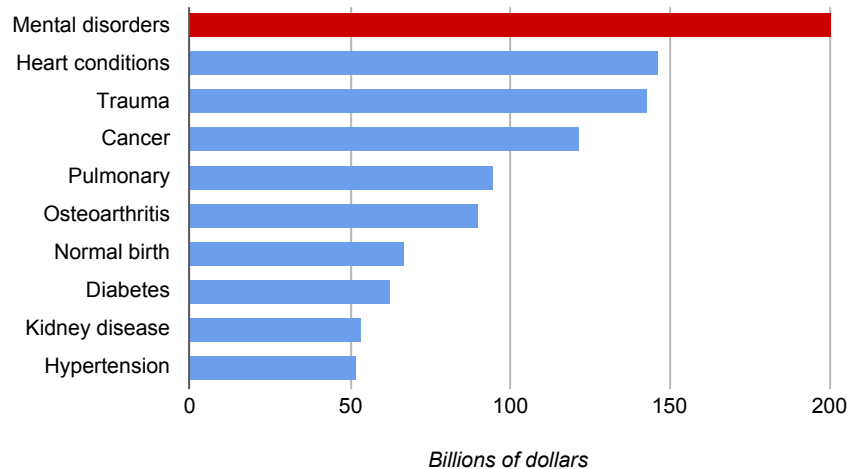


RENISSIMI REGIS

The problem we're trying to solve

An epidemic of mental illness

Mental disorders are the #1 most expensive illness in the USA



\$201 B

Total Cost (US)

58%

Do not receive care

Source: Roehrig C. Mental Disorders Top The List Of The Most Costly Conditions In The United, States: \$201 Billion, Health Affairs 35, no.6 (2016):1130-1135

A global crisis



A global crisis

Huge demand for mental health support

- ~50% of college students in the US experience debilitating anxiety & depression
- Problems are growing in prevalence & severity

This need is not currently met

- Therapy is stigmatized, difficult to access & expensive (in the US: >\$200/hour or \$30 co-pay)

CBT is a great approach but implementation is problematic

50% of doctoral-level therapists are not using evidence-based therapeutic approaches in practice*

*even when they *think* they are.

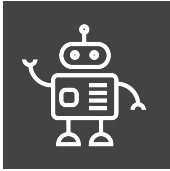
Source: Becker, C. B., Zayfert, C., & Anderson, E. (2004). A survey of psychologists' attitudes towards and utilization of exposure therapy for PTSD. *Beh Res Ther*, 42, 277–292. Waller, G. (2009). Evidence-based treatment and therapist drift. *Beh Res Ther*, 47, 119; Tobin, D. L., Banker, J. D., Weisberg, L., & Bowers, W. (2007). I know what you did last summer (and it was not CBT): A factor analytic model of international psychotherapeutic practice in the eating disorders. *Int J Eat Dis*, 40, 754–757. doi:10.1002/eat.20426

Our Mission:

*To democratize access to high
quality mental health tools*



Woebot is a new paradigm in digital mental health



Non-human

Many people would rather talk to an AI*



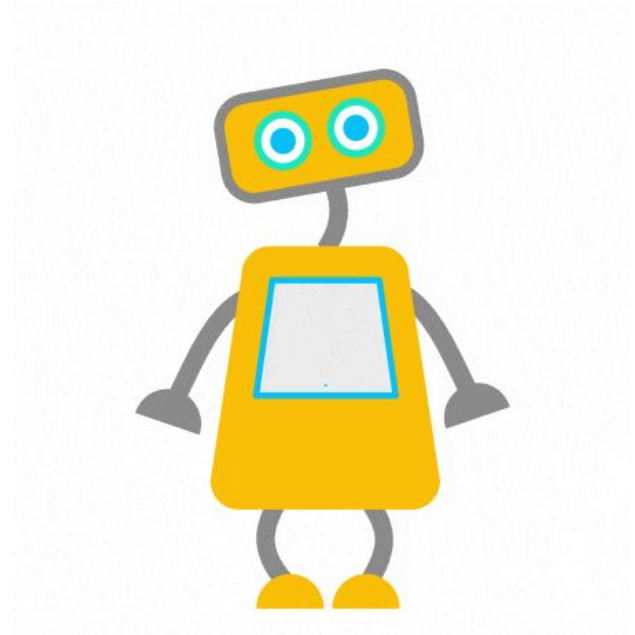
Personalized

Scale allows for the ability to enhance treatment through understanding treatment mechanism



Integrated in everyday life

Data gathering is crucial to success of CBT.
Learning is distributed, intervention is in-vivo



Source: LucasGM,GratchJ,KingA,MorencyL-P.It'sonly a computer: virtual humans increase willingness to disclose. *Comput Human Behav.* 2014;37:94-100.



Sections

[Abstract](#)[Introduction](#)[Methods](#)[Results](#)[Discussion](#)[Abbreviations](#)[References](#)[Copyright](#)[Back to top](#)

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This paper is in the following e-collection/theme issue:

[Depression and Mood Disorders](#) [Text-messaging \(SMS\)-Based Interventions](#) [Anxiety and Stress Disorders](#)

[Article](#)[Cited By \(3\)](#)[Tweatations \(199\)](#)[Metrics](#)

Original Paper

Delivering Cognitive Behavior Therapy to Young Adults With Symptoms of Depression and Anxiety Using a Fully Automated Conversational Agent (Woebot): A Randomized Controlled Trial

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ABSTRACT

Background: Web-based cognitive-behavioral therapeutic (CBT) apps have demonstrated efficacy but are characterized by poor adherence. Conversational agents may offer a convenient, engaging way of getting support at any time.



Citation

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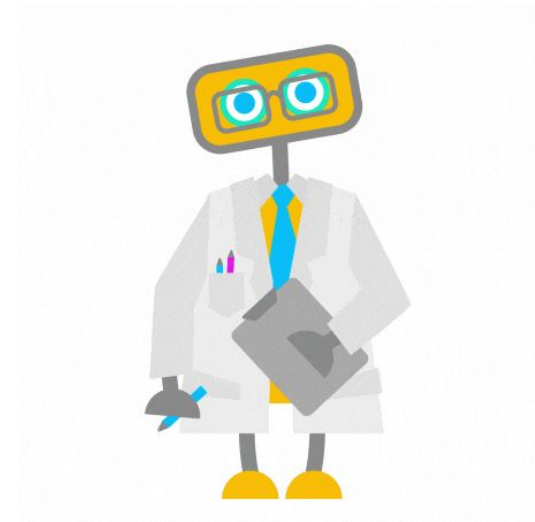
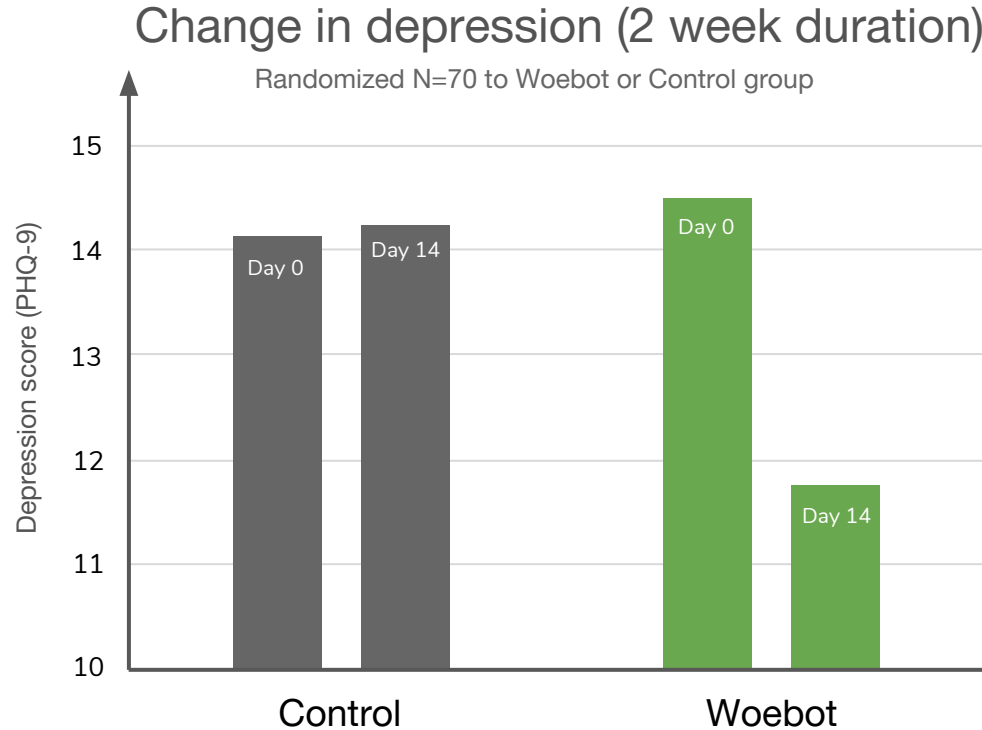
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Study revealed symptom reduction in 2 weeks



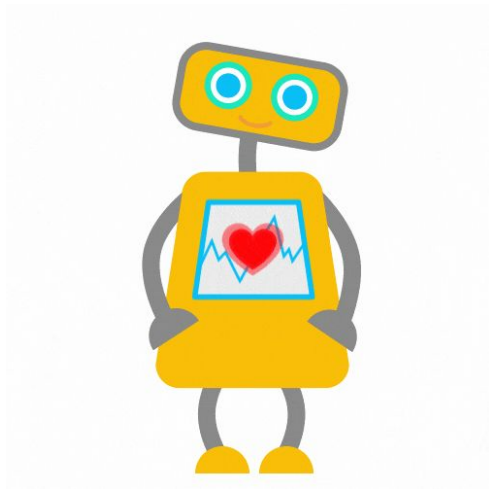
Source: Fitzpatrick, K.K, Darcy, A.M., Vierhile, M. Delivering Cognitive Behavior Therapy to Young Adults With Symptoms of Depression and Anxiety Using a Fully Automated Conversational Agent (Woebot): A Randomized Controlled Trial” JMIR Ment Health 2017 (Jun 06); 4(2):e19

The study suggested Woebot might be a relational technology

“I love Woebot so much. I hope we can be friends forever! I actually feel super good and happy when I see that it ‘remembered’ to check in with me!”

Carolyn, 22

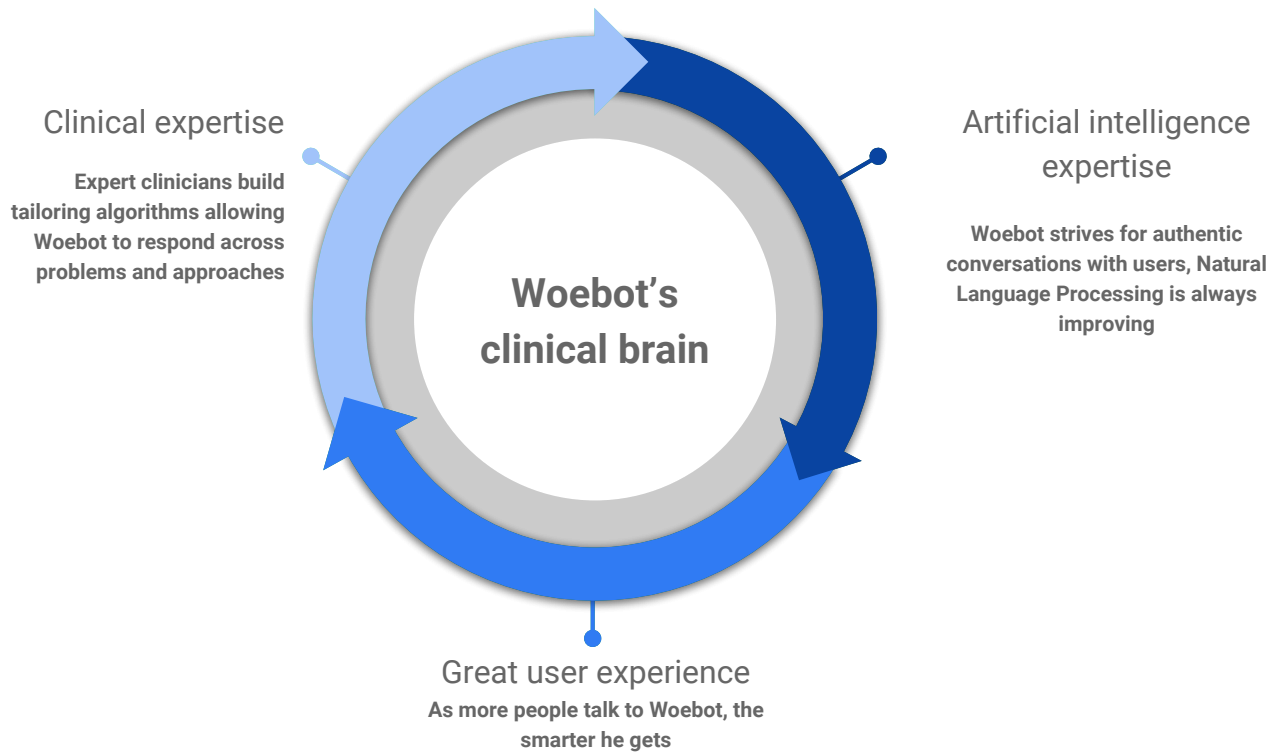
Woebot is a **relational** app capable of forming a **personal** bond with users



*“Woebot feels more like a **friend** than an app”*

Proprietary graph based on
unpublished data removed

The core AI technology means Woebot is constantly learning



Woebots beliefs

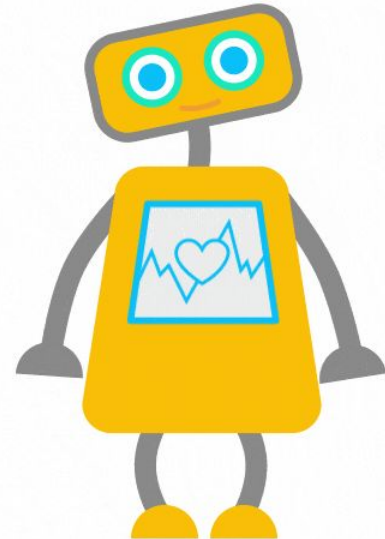
Humans are dynamic and interesting.

Empowerment through active enquiry over passive data collection.

Distorted thinking is part of being human.

Agnostic to diagnosis.

Growth mindset.



Woebots beliefs

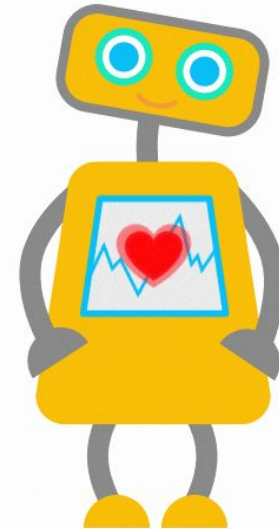
Sitting with open hands.

CBT can be useful for everyone but isn't always sufficient.

In-vivo learning is favorable.

Humor can be useful.

Guided self-care



Thank you!
@alisonmdarcy

