

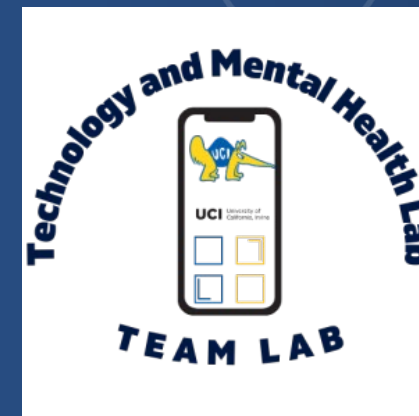
State of the Science Digital Tools for Youth Mental Health

Stephen Schueller, PhD
Professor of Psychology & Informatics, UC Irvine

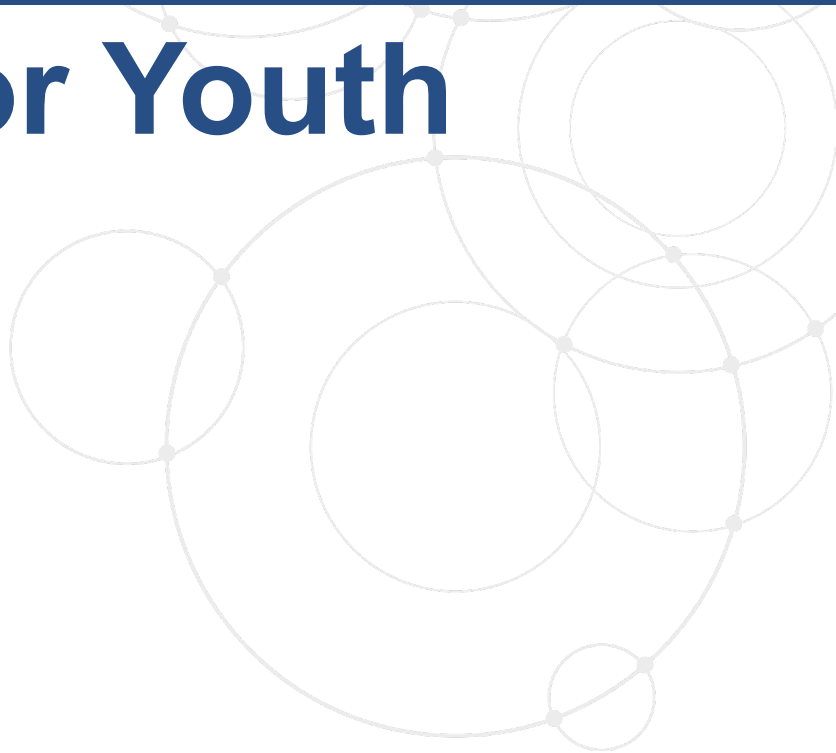
November 17, 2025



UC Irvine



Overview of Digital Mental Health for Youth



Digital mental health can work for youth

Clinical trials evidence, youth interest

Digital mental health currently isn't working for youth

Engagement, quality, and fit

We need to think about continuums of care

Self-help, therapy extender, virtual care platforms

And we have work to do

Quality, reimbursement, and regulation

Internet- and mobile-based DMH interventions have clear and consistent RCT evidence!

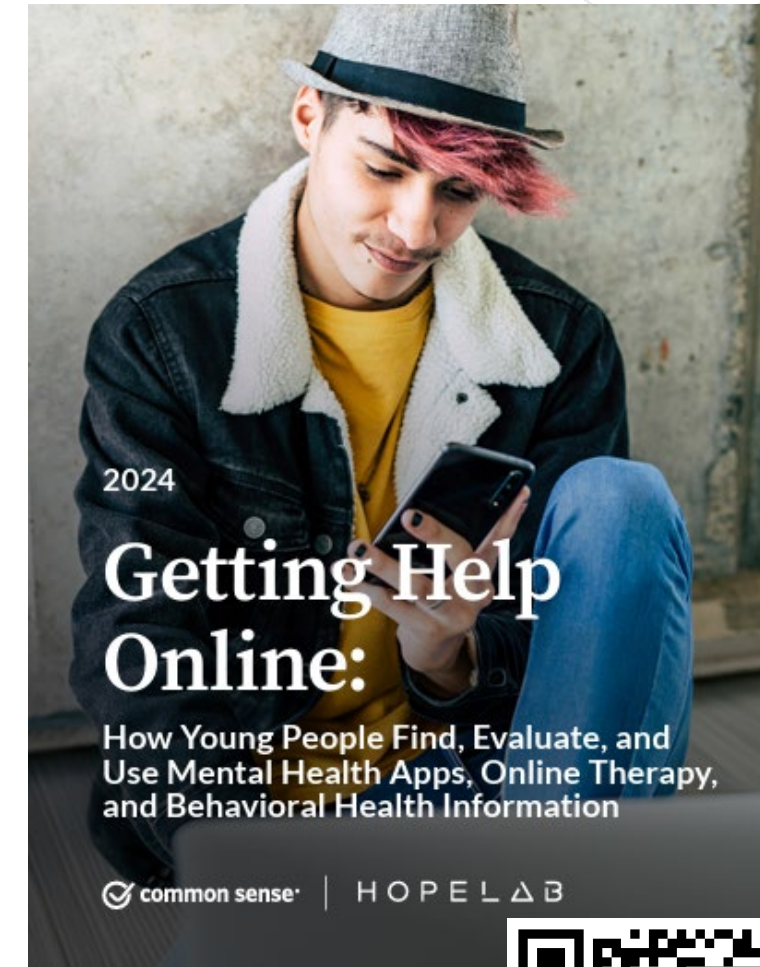
Condition	# of RCTs	Effects	Meta-Analysis
Depression	83	$g = 0.52$	Moshe, Psych Bull 2021: 147; 749-786
Anxiety	47	$g = 0.80$	Pauley, Psych Med 2023: 53; 567-579
Posttraumatic Stress Disorder (PTSD)	33	$g = 0.36$	Steubl, Eur J Psychotraumatology 2021: 12; 1879551
Sleep	54	$d = 0.39$ (ISI)	Hasan, Sleep Med Rev 2022: 61; 101567
Schizophrenia (as an adjunct to care)	58	$gs = 0.13-0.32$	Morales-Pillado, Psych Med 2022: 53; 6304-6315

The youth DMH evidence is much more sparse

Condition	# of RCTs	Effects	Meta-Analysis
Depression in youth	4	$g = 0.15$	Moshe, Psych Bull 2021: 147; 749-786
Mental health	10	$g = 0.29$ depression $g = 0.59$ mental health (due to COVID) $g = 0.29$ (bullying)	Chen, Frontiers in Psychology 2024: 15; 1356554

But we have clear signals youth want these tools

- More than half of teens (54%) have used an app to support their mental health or well-being
- Most common areas are for sleep, meditation, happiness or well-being, or stress reduction
 - Higher among teens with depression and anxiety
 - Severe: 38% for depression, 36% for anxiety
 - Mild: 22% for depression, 24% for anxiety
 - None: 6% for depression, 9% for anxiety



In their own voices...

Safe Spaces

“It’s something that’s not judgmental, it’s like you’re talking to a person... you’re kind of able to just vent... To talk about what’s going on for you”

Simple

“I think my favorite thing about [the app] was that the exercises are very, very short and small. So, you know when you hop on your phone you want convenience and ease, [this app], I think, really understood that.”

Trustworthiness?

“When people Google stuff, I think especially around mental health... there’s a lot of misinformation, or information that’s based on one person’s experience, or on one person’s opinion, that might not be supported by actual medical research. I think a filter that goes through them and highlights the ones that might be more reputable would be good, so young people can look at resources that might be more reputable.”

DIGITAL TOOLS AND SOLUTIONS FOR TEEN MENTAL HEALTH

ONE MIND
PsyberGuide

Connected
Learning Lab

AUTHORS:

Martha Neary
Kris Tran
Hutton Grabiell
John Bunyi
Stephen M. Schueller



Digital opportunities diversify access



Age Range	Percentage	Number
8-10	0.95%	N = 19,057
11-17	37.6%	N = 801,908
18-24	25.29%	N = 506,353
25-54	32.59%	N = 652,350
55+	3.86%	N = 70,103

• **Information** about mental health **48.55%**

• **Use at home** - worksheets or coping skills to **46.16%**



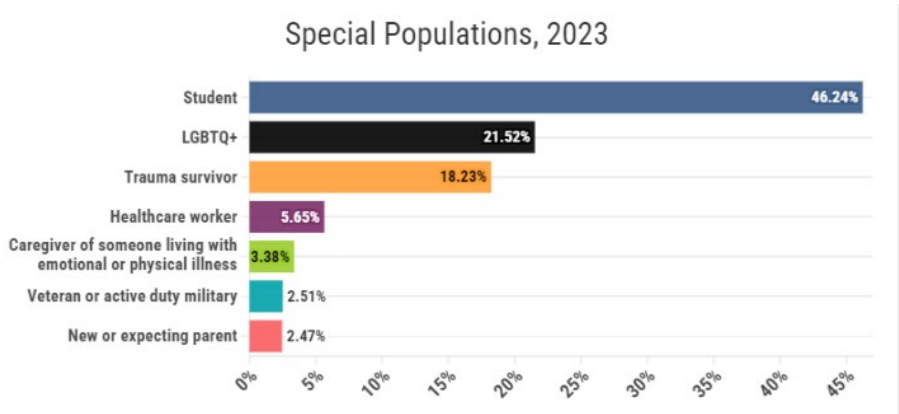
• **Online or mobile program** that can help you track or manage your symptoms **45.25%**



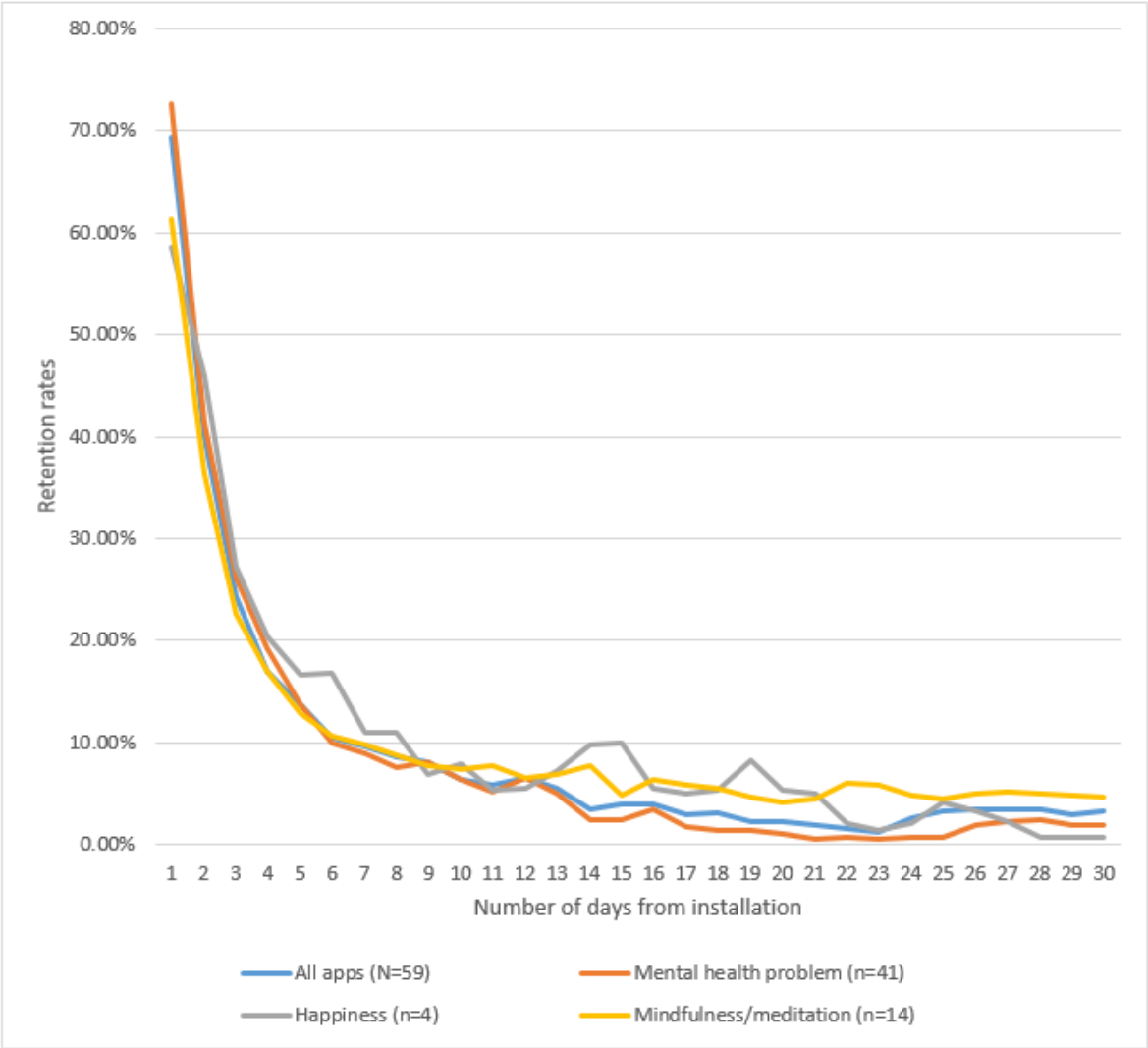
• **Referrals** to those that can help **18.80%**



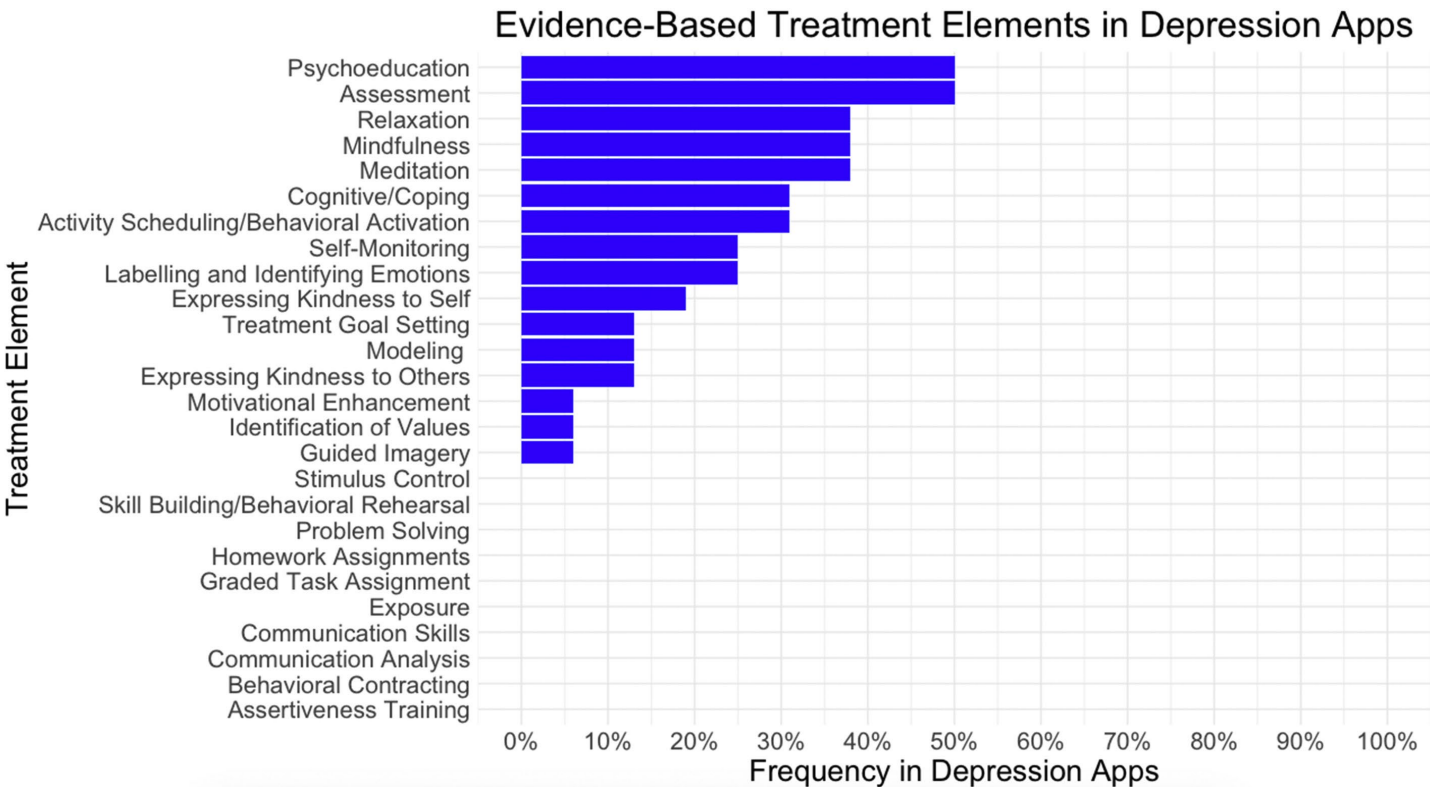
• **Phone** number for immediate support **13.74%**



Digital mental health faces an engagement and a quality problem

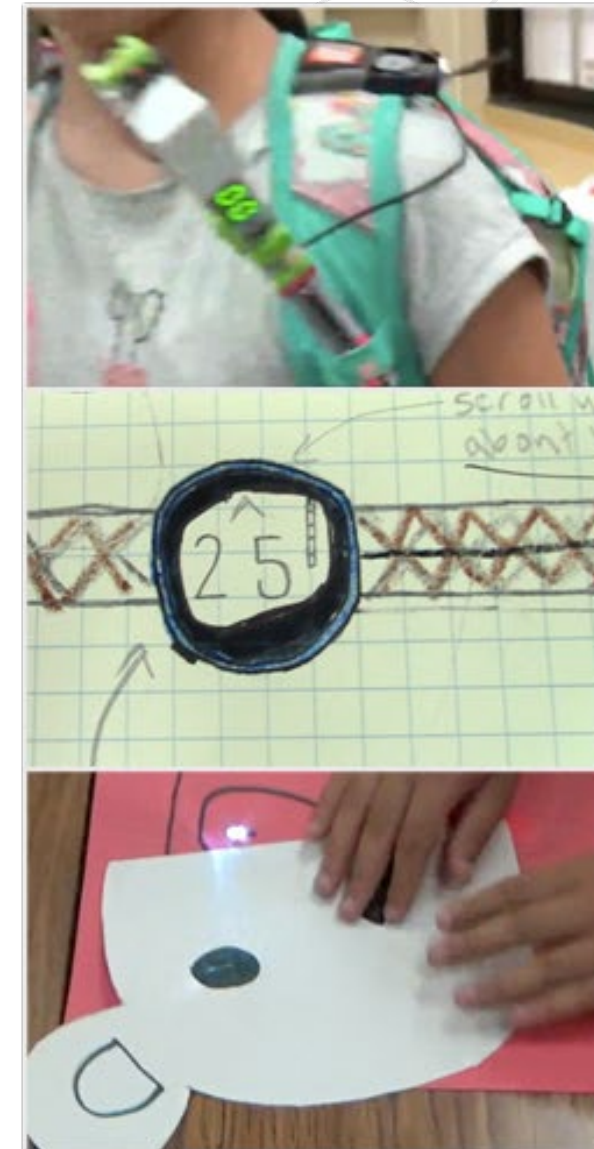
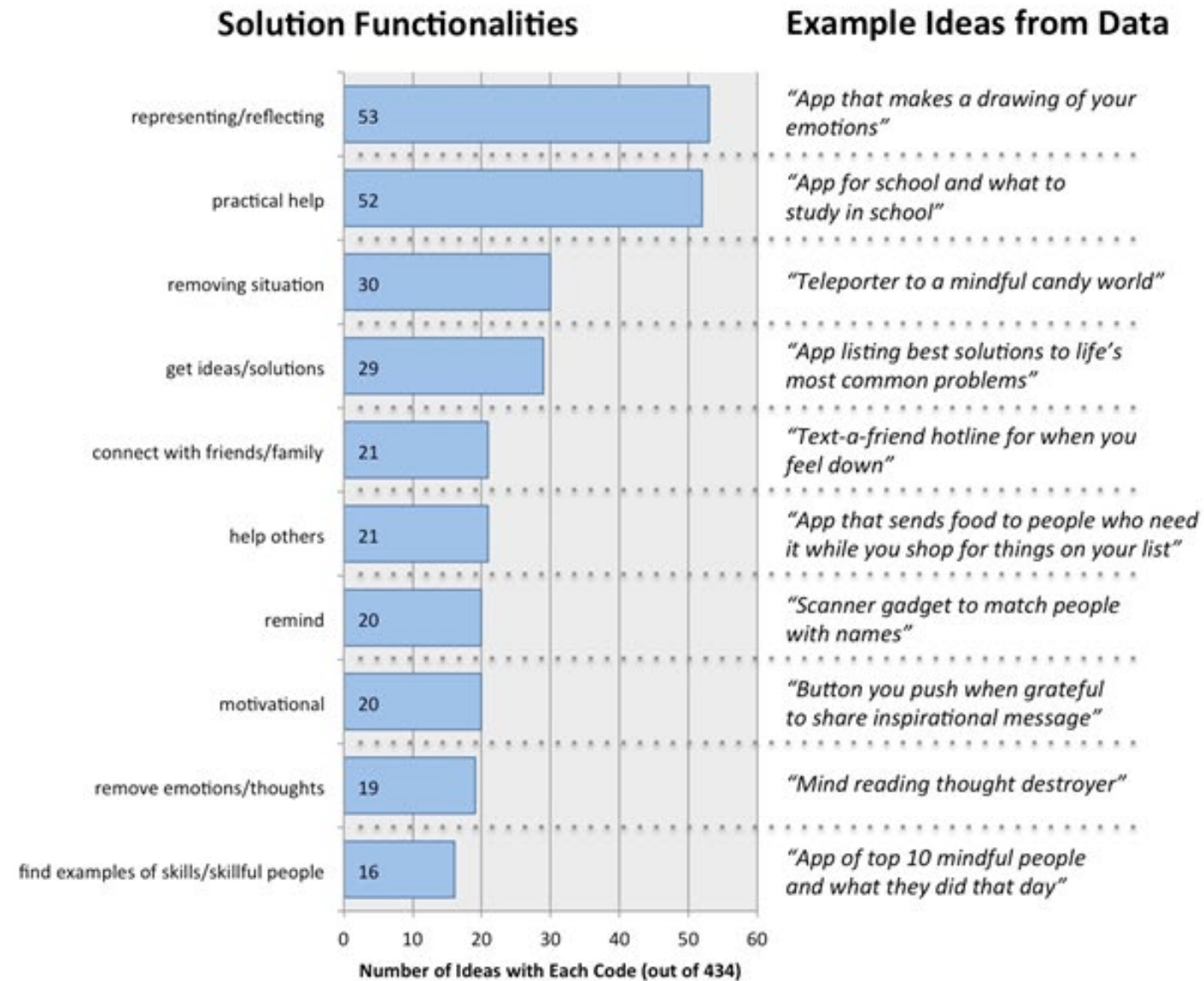


Baumel, Muench, Edan, & Kane, 2019



Wasil et al., 2019

We don't build DMHs that youth want



Yarosh & Schueller, 2017

And often we *really* don't build DMHs for youth

5:19

Search

Terms of Service

Done

and an applicable laws and regulations.

Disclaimer of Warranties and Limitation of Liability

YOU AGREE THAT YOUR USE OF THE APPLICATION AND ACCESS TO ALL CONTENT FORMING PART OF OR RELATED TO THE APPLICATION, SHALL BE AT YOUR SOLE RISK. THE APPLICATION IS PROVIDED ON AN "AS IS" AND "AS AVAILABLE" BASIS AND IS NOT INTENDED TO BE A SUBSTITUTE FOR MEDICAL CARE OR A TOOL FOR OBTAINING MEDICAL ADVICE. TO THE FULLEST EXTENT PERMITTED BY LAW, ISLAND HEALTH AND ITS OFFICERS, DIRECTORS, EMPLOYEES, AND AGENTS, DISCLAIM ALL WARRANTIES AND CONDITIONS, EXPRESS OR IMPLIED OR STATUTORY, IN CONNECTION WITH THE APPLICATION AND YOUR USE THEREOF, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, ACCURACY, COMPLETENESS, PERFORMANCE, HARDWARE COMPATIBILITY, QUIET ENJOYMENT, TITLE AND NON-INFRINGEMENT.

IN NO EVENT SHALL ISLAND HEALTH OR ITS OFFICERS, DIRECTORS, EMPLOYEES, OR AGENTS, BE LIABLE TO YOU FOR ANY INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE OR CONSEQUENTIAL DAMAGES OR LOSS OF REVENUE, INCOME, PROFIT, REPUTATION OR GOODWILL WHATSOEVER RESULTING FROM YOUR USE OF OR ACCESS TO THE APPLICATION, INCLUDING WITHOUT LIMITATION RESULTING FROM ANY: (I) ERRORS, MISTAKES, INACCURACIES OR OMISSIONS IN THE APPLICATION, (II) PERSONAL INJURY OR PROPERTY DAMAGE, OF ANY NATURE WHATSOEVER, RESULTING FROM YOUR ACCESS TO OR USE OF THE APPLICATION, (III) UNAUTHORIZED ACCESS TO OR USE OF APPLICATION, (IV) BUGS, VIRUSES, TROJAN HORSES, OR THE LIKE WHICH MAY BE TRANSMITTED TO OR THROUGH THE APPLICATION BY ANY THIRD PARTY, OR (V) ERRORS, MISTAKES, INACCURACIES OR OMISSIONS IN ANY CONTENT OR FOR ANY LOSS OR DAMAGE OF ANY KIND INCURRED AS A RESULT OF THE USE OF THE APPLICATION, WHETHER BASED ON WARRANTY, CONTRACT, TORT, MISREPRESENTATION

<

Your Symptoms

Now how about:
Delusions

Do you sometimes have beliefs about reality that are very different from what others believe? Have you been told these thoughts are not true?



Yes

No

<

Welcome!

Always remember...
This app isn't a substitute for healthcare. If you think you have a mental health problem, make sure you see a doctor for advice.



I Understand

Edit Crisis Plan

✓

3 digit emergency phone number:

Required (Example: 911, 999, 112)

Add your nearest hospital emergency room.

Hospital Name:

Required

Hospital Address:

Hospital City:

☰

📅

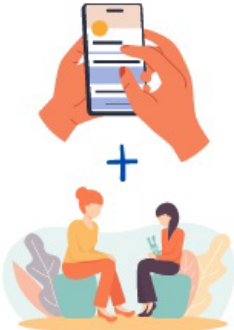
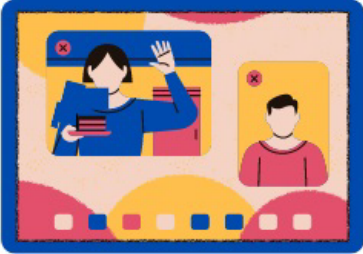
★

🛡️

💬

🏠

Continuums of care in digital mental health

Self-Help Tools	Therapy Extenders	Virtual Care Platforms
 Self-help tools that youth can use on their own	 Therapy extenders that can support youth receiving therapy	 Virtual care platforms provide access to therapists through technologies
Technology	Technology + Therapy	Therapy through Technology

Non-consumable

Non-consumable

Consumable

Schueller &
Histon, 2023



Self-help Tools

Welcome to Project YES!

Youth Empowerment & Support



Learn about your
power to change in
ways that matter.



Learn to be
kind to yourself
and why it matters.



Learn how to
take action and
manage your mood.



Build strength in the face
of minority stress
[LGBTQ+ focused]

Click [HERE](#) to start Project YES!
free, anonymous mental health tools for teens

[Need HELP now? Click HERE for more!](#)



Project YES (Youth Empowerment & Support) offers free, anonymous, brief, self-guided mental health tools for teens. YES empowers teens to learn new ways of dealing with stress while helping others do the same.

Project YES was designed with teens (ages 11-17) in mind, but people of all ages are welcome to try the tools in Project YES, anywhere and anytime.

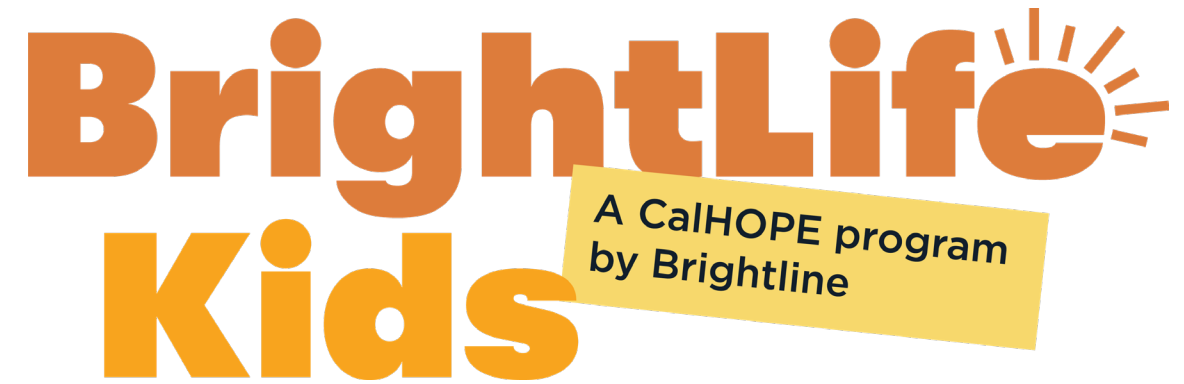
Project YES is run by scientists at the [Lab for Scalable Mental Health](#), with partners at [University of Texas Health Science Center at San Antonio](#), the [University of Miami](#), [Lebanese American University](#), and [Ankara University](#).

Therapy Extenders

To be used in conjunction with evidence-based psychotherapies



Virtual Care Platforms



We have work to do

- Digital mental health works
 - Although we need more evidence for work
- Youth want digital mental health options
 - Although we need to give them what they want
- Digital mental health is not one thing
 - But a continuum of things intersecting with human care
- We need to think about
 - Quality not just access
 - This costs money, and the ROI may take time
 - If we're going to pay for things, we need to know what's worth paying for

