

Knowledge Exchange
Provincial Addiction & Mental Health

Addiction and Mental Health



Mobile Apps Directory

January 2024

Contents

Project team.....	4
About this directory	5
Intended audience.....	5
Search	5
Effectiveness of mental health apps.....	5
Selecting and evaluating apps.....	6
Inclusion criteria for this directory	7
Directory format.....	8
Major Disorder Category	8
Specific disorder category	8
Online version of this directory	9
1.0 Neurodevelopmental Disorders	10
1.1 Communication Disorders & Autism Spectrum Disorders	10
1.2 Attention Deficit/Hyperactivity Disorder.....	12
2.0 Schizophrenia Spectrum and Psychotic Disorders	13
3.0 Depressive Disorders	14
4.0 Anxiety Disorders	18
5.0 Obsessive-Compulsive Disorder	21
6.0 Posttraumatic Stress Disorder.....	22
7.0 Feeding and Eating Disorders	24
8.0 Disruptive, Impulse-Control, and Conduct Disorders	26
9.0 Substance-Related and Addictive Disorders	27
9.1 Alcohol-Related Disorders.....	27
9.2 Opioid-Related Disorders	30
9.3 Tobacco-Related Disorders.....	31
9.4 Gambling Disorder	32
10.0 Neurocognitive Disorders	33
10.1 Parkinson’s Disease.....	33
10.2 Unspecified Neurocognitive Disorders.....	34

Addiction & Mental Health
Mobile Apps Directory

11.0 Other Conditions	35
11.1 Suicidal Behaviour Disorder	35
11.2 Nonsuicidal Self-Injury.....	36
11.3 Stress.....	37
11.4 Sleep.....	40
11.5 COVID-19-related Concerns	42
12.0 General Information	43
12.1 Education Tools	43
12.2 Medication Management	44
12.3 On-Demand Care	45
References	47
General references	47
Research studies for individual apps.....	50

Project team

Project manager

Rie Tamagawa, Manager, Knowledge Exchange, Addiction and Mental Health

Prepared by

Oghenekevwe Dabor, Coordinator
Jason Mumme, Research Officer
Knowledge Exchange, Addiction and Mental Health

Contact

Knowledge Exchange, Addiction and Mental Health, Alberta Health Services
amh.knowledgeexchange@ahs.ca

© 2024 Alberta Health Services, Provincial Addiction & Mental Health – Knowledge Exchange.



This work is licensed under the [Creative Commons Attribution-NonCommercial-NoDerivative 4.0 International licence](https://creativecommons.org/licenses/by-nc-nd/4.0/). You are free to copy and distribute the work (including in other media and formats) for non-commercial purposes, as long as you attribute the work to Alberta Health Services, do not adapt the work, and abide by the other licence terms. To view a copy of this licence, see <https://creativecommons.org/licenses/by-nc-nd/4.0/>. The licence does not apply to Alberta Health Services trademarks, logos or content for which Alberta Health Services is not the copyright owner.

This material is intended for general information only and is provided on an "as is", "where is" basis. Although reasonable efforts were made to confirm the accuracy of the information, Alberta Health Services does not make any representation or warranty, express, implied or statutory, as to the accuracy, reliability, completeness, applicability or fitness for a particular purpose of such information. This material is not a substitute for the advice of a qualified health professional. Alberta Health Services expressly disclaims all liability for the use of these materials, and for any claims, actions, demands or suits arising from such use.

For citation purposes, please use the following format:

Alberta Health Services. (2024). *Addiction and Mental Health Mobile Apps Directory*.

About this directory

This document provides a directory of mobile applications (apps) that may be used as aids in mental health or addiction conditions. This information was gathered from various organizational websites and other sources in the public domain, and provides a brief overview of available evidence-based apps related to addiction and mental health. Apps have been grouped into categories of disorders according to the *Diagnostic and Statistical Manual of Mental Disorders*, 5th edition (DSM-5) (American Psychiatric Association, 2013).

Intended audience

This directory may be useful for:

- Clinicians looking for information about apps related to mental health or addiction for their patients. (Note: We encourage further evaluation and clinical judgment before recommending apps to patients.)
- Clinicians looking for technologies to supplement care.
- Researchers interested in learning about mobile health technology.
- App developers identifying gaps in the current app market.

Search

A comprehensive search for apps was conducted in Google and academic databases (e.g., MEDLINE, PsycINFO). Apps were also identified from organizational websites, news articles, and other information sources in the public domain.

Effectiveness of mental health apps

There is a wealth of commercial mental health apps available to smartphone users. Apps are viewed as a promising alternative to traditional face-to-face mental health care by offering tools of assessment, tracking, and treatment through the convenience of a handheld device (Van Ameringen et al., 2017). They have the potential to overcome treatment barriers, such as geographic location and financial cost, and to provide effective interventions for clinical populations. In recent years, there has been an increase in research examining mental health apps' efficacy and effectiveness, although more research is needed to determine long-term outcomes (Fowler et al., 2016; Magee et al., 2018; Rathbone et al., 2017; Rathbone & Prescott, 2017; Van Ameringen et al., 2017).

There is some evidence suggesting that mental health interventions delivered via smartphone devices may help improve certain mental health conditions, such as anxiety and depression (Dubad et al., 2018; Firth et al., 2017a and 2017b; Karyotaki et al., 2021; Lecomte et al., 2020; Linardon et al., 2019; Weisel et al., 2019) and in some cases of tobacco dependence (Regmi et

al., 2017; Weisel et al., 2019; Whittaker et al., 2019). However, it is not yet clear if app interventions can be as effective as traditional treatments. While many Canadians have reported that they believe apps can help them cope with mental illness (Ipsos, 2018), evidence suggests that user engagement with mental health apps can be low (Baumel et al., 2019; Torous et al., 2019).

As such, patients and healthcare providers should be cautious when selecting apps for treatment to ensure they are evidence-based, user-friendly, and engaging.

Selecting and evaluating apps

Due to the large number of mental health apps available, it can be a challenge to identify apps that are user-friendly and clinically effective. Most people searching for apps rely on app store ratings as an indication of an app's quality. Unfortunately, these ratings are based on subjective experiences of users, typically from a usability or visual standpoint, and do not reflect an app's quality in terms of improving health outcomes (Bidargaddi et al., 2017). In addition, mental health app descriptions often include claims about their effectiveness, but research has found that these claims are rarely based on high-quality evidence (Larsen et al., 2019).

In an effort to enhance app assessment, several evaluation tools have been developed, including:

- The Mental Health Commission of Canada's [Mental Health Apps: How to Make an Informed Choice](#) framework
- The American Psychiatric Association's [App Evaluation Model](#)
- The Canadian Medical Association's [Guiding Principles for Physicians Recommending Mobile Health Applications to Patients](#)
- The [Mobile App Rating Scale \(MARS\)](#)

Common evaluation criteria for mental health apps include:

- Classification (intended audience, program aim)
- Usability (ease of use, navigation)
- Visual design (aesthetics, layout)
- User engagement (interactivity, personalization)
- Business model (for-profit, not-for-profit)
- Privacy and security (terms of use, secure data, information sharing with third parties)
- Credibility (owner's credibility, evidence-based program, third-party endorsement)
- Content (evidence-based content, quality of information)
- Therapeutic persuasiveness (therapeutic rationale and pathway, ongoing feedback) (Baumel et al., 2017; Bidargaddi et al., 2017; Chan et al., 2017; Torous et al., 2019; Zelmer et al., 2018).

Inclusion criteria for this directory

We include apps that have supporting evidence (such as research articles or positive expert reviews). When supporting evidence has been identified, a link to the source is provided.

In rare cases, we will include apps that do not have supporting evidence. In these cases, we include the apps only if:

- There are very few apps on a particular topic, and we want to provide a starting point.
- The app is created by a known reliable source.

Beyond identifying supporting evidence, we do not evaluate the apps in this directory. We recommend that you personally evaluate app quality before use—the tools listed in the “Selection and evaluation of apps” section above may be useful for this.

Conflicts of interest

In some cases, one or more authors of a research article we've included as supporting evidence may have a potential conflict of interest. For example, an author may be a co-developer of an app or co-founder of the company that owns an app. We do not identify conflicts of interest in this directory. It is the reader's responsibility to do so.

Directory format

Information is provided in a standard format throughout this directory. The apps have been divided into categories based on their intended addiction or mental health use.

Major Disorder Category

Specific Disorder Category

App Name

Developer (Year of last update)

Cost*

Available on: [iOS](#) | [Android](#)

Summary of the main features of the app.

Supporting evidence:

- [Links to available research studies or expert reviews](#)

This app also applies to:

- DSM-5 section number and name for additional relevant conditions (if applicable)

*Cost Legend:

- » Free
- » \$ = \$1-\$5.99
- » \$\$ = \$6-\$10.99
- » \$\$\$ = \$11-\$20.99
- » \$\$\$\$ = \$21-\$50
- » \$\$\$\$\$ = More than \$50

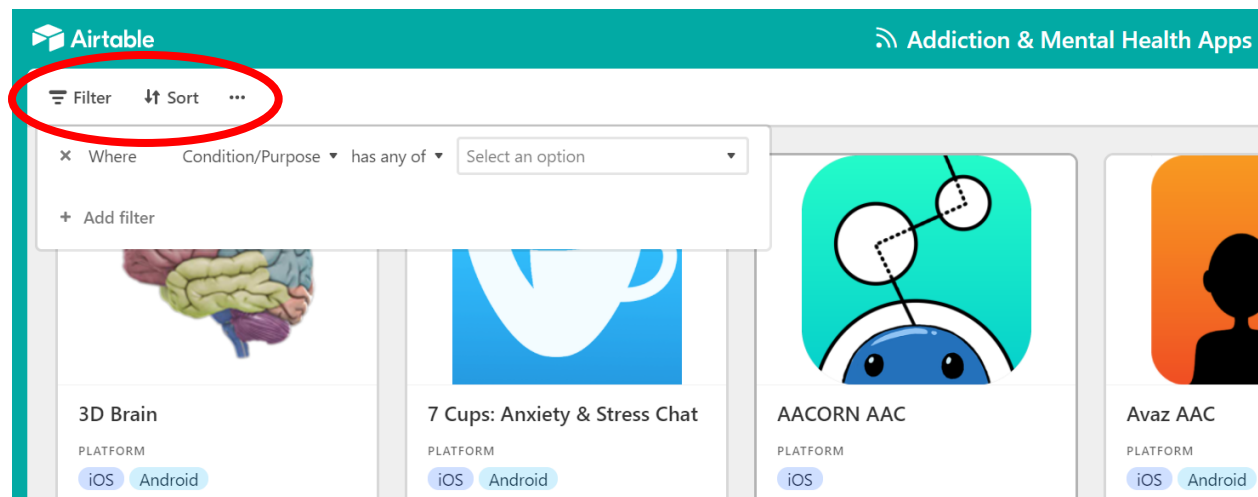
Note:

Apps listed as Free might also have “in-app” add-ons that have a cost associated with them.

Online version of this directory

This directory is also available as an [online database](#). This version is hosted on the free Airtable platform. It looks similar to an Excel spreadsheet, but is more flexible for sorting and filtering the information that interests you (see below). You can also print the filtered database, or download the data in CSV format.

The **top menu bar** includes all the options for manipulating the data.



Note that you can apply **multiple filters** to limit results by cost, platform, disorder, main features, target population, and supporting evidence.

1.0 Neurodevelopmental Disorders

1.1 Communication Disorders & Autism Spectrum Disorders

These articles may be helpful in choosing an appropriate app for children with autism:

- [iPads and the Use of “Apps” by Children with Autism Spectrum Disorder: Do They Promote Learning?](#) (2016) – See “Recommendations for app use”
- [Evaluating iPad Technology for Enhancing Communication Skills of Children with Autism Spectrum Disorders](#) (2015)

Avaz AAC

Avaz, Inc. (2023)

\$\$\$\$\$

Available on: [iOS](#) | [Android](#)

Augmentative and alternative communication (AAC) app for children and adults with complex communication needs. Uses a variety of learning and speech therapy tools to help children and adults communicate.

Supporting evidence:

- [Research study](#) (Sonawane & Varshneya, 2020)
- [Research study](#) (Sreekumar et al., 2020)
- [Research study](#) (Sankardas & Rajanahally, 2017)

Language Therapy for Children (MITA)

ImagiRation LLC (2023)

Free

Available on: [iOS](#) | [Android](#)

Mental Imagery Therapy for Autism (MITA) is an early-intervention app for children with language delay and autism spectrum disorder. MITA aims to train mental integration and receptive language, starting with simple vocabulary, and progressing towards higher forms of language, such as adjectives, verbs, pronouns, and syntax.

Supporting evidence:

- [Research study](#) (Vyshedskiy et al., 2020)
- [Research study](#) (Dunn et al., 2017)

Naming Therapy

Tactus Therapy Solutions Ltd. (2023)

\$\$\$

Available on: [iOS](#) | [Android](#)

Helps people with communication disorders and children with special needs practice naming and description skills.

Supporting evidence:

- [Research study](#) (Vaezipour et al., 2020)

Proloquo2Go

AssistiveWare (2023)

\$\$\$\$\$

Available on: [iOS](#)

Augmentative and alternative communication (AAC) app for people who have difficulty speaking. Uses a variety of methods including picture symbols and text-to-speech voices to help people communicate effectively.

Supporting evidence:

- [Research study](#) (Nakkawita et al., 2021)
- [Research study](#) (Collette et al., 2019)
- [Research study](#) (Alzrayer et al., 2017)
- [Research study](#) (Krcek, 2015)

1.2 Attention Deficit/Hyperactivity Disorder

This article may be helpful in choosing an appropriate app for individuals with ADHD:

- [ADHD: Harnessing the Power of Technology & Apps](#) (2020)

Evernote

Evernote Corporation (2023)

Free

Available on: [iOS](#) | [Android](#)

Evernote is a planner app that helps its users organize their work in multiple formats, syncs content across devices, and allows for sharing and collaboration.

Supporting evidence:

- [Research study](#) (Moëll et al., 2015)

Inflow ADHD

Get Inflow Ltd. (2023)

Free

Available on: [iOS](#) | [Android](#)

Inflow is based on Cognitive Behavioural Therapy (CBT), it helps users manage symptoms of ADHD. Offers a resource library, practical tools, coaching, and a built-in community.

Supporting evidence:

- [Research study](#) (Knouse et al., 2022)

2.0 Schizophrenia Spectrum and Psychotic Disorders

7 Cups: Online therapy & chat

7 Cups of Tea (2023)

Free

Available on: [iOS](#) | [Android](#)

Provides an anonymous chat messaging platform (available via the app or a web browser) for users to receive emotional support and counselling through trained volunteers and self-help tools. There is also a fee-based option to speak with certified therapists.

Supporting evidence:

- [Research study](#) (Comtois et al., 2022)
- [Research study](#) (Baumel et al., 2018)
- [Research study](#) (Baumel et al., 2016)
- [Research study](#) (Baumel, 2015)
- [Expert review](#) (*Family Practice Management* journal)
- [Expert review](#) (MindTools.io)

This app also applies to:

- DSM-5 section 3.0: Depressive Disorders
- DSM-5 section 4.0: Anxiety Disorders
- DSM-5 section 11.3: Stress
- DSM-5 section 12.3: On-Demand Care

Schizophrenia HealthStorylines

Self Care Catalysts Inc (2018)

Free

Available on: [iOS](#)

Developed in partnership with the Schizophrenia and Related Disorders Alliance of America (SARDAA), this app allows users to record details about symptoms, medication, moods, and more.

Supporting evidence:

- [Research study](#) (Torous et al., 2017)
- [Expert review](#) (MindTools.io)

3.0 Depressive Disorders

7 Cups: Online therapy & chat

Available on: [iOS](#) | [Android](#)

See 2.0 *Schizophrenia Spectrum and Psychotic Disorders* for full description.

BreathingRoom

Canadian Institute of Natural and Integrative Medicine (2023)

Free

Available on: [iOS](#) | [Android](#)

Offers strategies to help teens and young adults aged 13-24 manage their well-being. Includes videos, meditations, stories, practices and tools.

Supporting evidence:

- [Research study](#) (Rickhi et al., 2019)
- [Research study](#) (Rickhi et al., 2015)

MoodMission

MoodMission (2023)

Free

Available on: [iOS](#) | [Android](#)

Users tell MoodMission how they're feeling and receive a tailored list of five Missions to help them feel better and improve their well-being, including mindfulness and relaxation exercises, fitness activities, and gratitude exercises.

Supporting evidence:

- [Research study](#) (Tan et al., 2023)
- [Research study](#) (Marshall et al., 2021)
- [Research study](#) (Aizenstros et al., 2021)
- [Research study](#) (Bakker et al., 2018)
- [Expert review](#) (PsyberGuide)

Sanvello: Anxiety & Depression (previously Pacifica)

Sanvello Health Inc. (2023)

Free

Available on: [iOS](#) | [Android](#)

Offers tools to help ease stress and anxiety, including meditations, a daily mood and goal tracker, and relaxation audio recordings.

Supporting evidence:

- [Research study](#) (Li et al., 2021)
- [Research study](#) (Moberg et al., 2019)
- [Expert review](#) (Anxiety and Depression Association of America)
- [Expert review](#) (PsyberGuide)
- [Expert review](#) (MindTools.io)

This app also applies to:

- DSM-5 section 4.0: Anxiety Disorders
- DSM-5 section 11.3: Stress

Sinasprite

Litesprite Inc. (2023)

Free

Available on: [iOS](#) | [Android](#)

This game-based app is a self empowerment tool that leads users through various exercises, including meditation, digital painting, journaling, scheduling worries, and understanding locus of control.

Supporting evidence:

- [Research study](#) (Almodovar et al., 2018)
- [Expert review](#) (PsyberGuide)

This app also applies to:

- DSM-5 section 4.0: Anxiety Disorders
- DSM-5 section 6.0: Posttraumatic Stress Disorder
- DSM-5 section 11.3: Stress

SuperBetter: Mental Health

SuperBetter, LLC (2023)

Free

Available on: [iOS](#) | [Android](#)

This app uses the psychology of gameplay to help users build resilience and stay motivated and optimistic to overcome life challenges.

Supporting evidence:

- [Research study](#) (Marshall et al., 2021)
- [Research study](#) (Devan et al., 2019)
- [Research study](#) (Roepke et al., 2015)
- [Expert review](#) (PsyberGuide)
- [Expert review](#) (MindTools.io)

Virtual Hope Box

National Center for Telehealth & Technology (2023)

Free

Available on: [iOS](#) | [Android](#)

Includes tools to help people suffering from depression with coping, relaxation, distraction, and positive thinking. This app can be used in collaboration with a mental health provider to address specific problem areas.

Supporting evidence:

- [Research study](#) (Melia et al., 2020)
- [Research study](#) (Gould et al., 2019)
- [Research study](#) (Denneson et al., 2018)
- [Research study](#) (Pospos et al., 2018)
- [Research study](#) (Bush et al., 2017)
- [Expert review](#) (American Psychological Association)
- [Expert review](#) (Healthify New Zealand)
- [Expert review](#) (PsyberGuide)

This app also applies to:

- DSM-5 section 11.1: Suicidal Behaviour Disorder
- DSM-5 section 11.2: Nonsuicidal Self-Injury

Woebot

Woebot Health Inc (2023)

Free

Available on: [iOS](#) | [Android](#)

Woebot is an AI-powered chatbot that guides users through the management of distressing thoughts and feelings using cognitive behavioural therapy principles.

Supporting evidence:

- [Research study](#) (Hoffman et al., 2023)
- [Research study](#) (Li et al., 2021)
- [Research study](#) (Prochaska et al., 2021)
- [Research study](#) (Fitzpatrick et al., 2017)
- [Research study](#) (Ly et al., 2017)
- [Expert review](#) (PsyberGuide)
- [Expert review](#) (MindTools.io)

This app also applies to:

- DSM-5 section 4.0: Anxiety Disorders
- DSM-5 section 9.1: Alcohol-Related Disorders

Wysa: Anxiety, therapy chatbot

Touchkin (2023)

Free

Available on: [iOS](#) | [Android](#)

Wysa is a chatbot that tracks your mood with friendly chats and helps fight stress and anxiety with a variety of tools and exercises, including calming meditation and mindfulness practices.

Supporting evidence:

- [Research study](#) (Leo et al., 2022)
- [Research study](#) (Malik et al., 2022)
- [Research study](#) (Meheli et al., 2022)
- [Research study](#) (Kretzschmar et al., 2019)
- [Research study](#) (Inkster et al., 2018)
- [Expert review](#) (PsyberGuide)
- [Expert review](#) (MindTools.io)

This app also applies to:

- DSM-5 section 4.0: Anxiety Disorders
- DSM-5 section 11.3: Stress

4.0 Anxiety Disorders

7 Cups: Online therapy & chat

Available on: [iOS](#) | [Android](#)

See 2.0 *Schizophrenia Spectrum and Psychotic Disorders* for full description.

Calm: Meditate, Sleep, Relax

Calm.com, Inc. (2023)

Free

Available on: [iOS](#) | [Android](#)

Helps users reduce stress and anxiety, improve sleep, and relax through the practice of mindfulness and meditation. Audio sessions range from 3 to 25 minutes, and the app tracks users' daily streaks and time spent meditating.

Supporting evidence:

- [Research study](#) (Comtois et al., 2022)
- [Research study](#) (Huberty et al., 2021)
- [Research study](#) (Laird et al., 2021)
- [Research study](#) (Clarke & Draper, 2020)
- [Research study](#) (Huberty et al., 2019a)
- [Research study](#) (Huberty et al., 2019b)
- [Expert review](#) (PsyberGuide)
- [Expert review](#) (MindTools.io)

This app also applies to:

- DSM-5 section 8.0: Disruptive, Impulse-Control, and Conduct Disorders
- DSM-5 section 11.3: Stress
- DSM-5 section 11.4: Sleep

Headspace: Mindful Meditation

Headspace Inc. (2023)

Free

Available on: [iOS](#) | [Android](#)

Includes hundreds of guided meditations on a wide range of topics, including sleep, focus, and exercise. Users can track their progress and time spent meditating. The free version is limited, but users can subscribe for expanded offerings.

Supporting evidence:

- [Research study](#) (Abbott et al., 2023)
- [Research study](#) (Taylor et al., 2022)
- [Research study](#) (O'Daffer et al., 2022)
- [Research study](#) (Haliwa et al., 2021)
- [Research study](#) (Flett et al., 2020)
- [Research study](#) (Bostock et al., 2019)
- [Research study](#) (Champion et al., 2018)
- [Research study](#) (Economides et al., 2018)
- [Research study](#) (Howells et al., 2016)
- [Expert review](#) (PsyberGuide)
- [Expert review](#) (MindTools.io)
- [Expert review](#) (Anxiety and Depression Association of America)
- [Expert review](#) (Healthify New Zealand)

This app also applies to:

- DSM-5 section 8.0: Disruptive, Impulse-Control, and Conduct Disorders
- DSM-5 section 11.3: Stress
- DSM-5 section 11.4: Sleep

MindShift CBT – Anxiety Relief

Anxiety Canada Association (2023)

Free

Available on: [iOS](#) | [Android](#)

Designed to help users cope with anxiety. In addition to providing strategies to deal with everyday anxiety, this app also offers specific tools to tackle issues like social anxiety and perfectionism.

Supporting evidence:

- [Research study](#) (Marshall et al., 2021)
- [Research study](#) (Paul & Fleming, 2019)
- [Expert review](#) (PsyberGuide)
- [Expert review](#) (Anxiety and Depression Association of America)
- [Expert review](#) (Healthify New Zealand)

Sanvello for Stress & Anxiety (previously Pacifica)

Available on: [iOS](#) | [Android](#)

See 3.0 Depressive Disorders for full description.

Sinasprite

Available on: [iOS](#) | [Android](#)

See 3.0 Depressive Disorders for full description.

Woebot

Available on: [iOS](#) | [Android](#)

See 3.0 Depressive Disorders for full description.

Wysa: Anxiety, therapy chatbot

Available on: [iOS](#) | [Android](#)

See 3.0 Depressive Disorders for full description.

5.0 Obsessive-Compulsive Disorder

OCD.app (previously GG OCD)

Ggtude Ltd (2023)

Free

Available on: [iOS](#) | [Android](#)

Aims to improve OCD symptoms by increasing the user's awareness of negative thoughts and training the brain to challenge them and overcome them. There are more than 40 levels to complete, which consist of short games with its own theme, such as positive self-task, self-esteem, belief in change, self-criticism, negative thinking, and coping.

Supporting evidence:

- [Research study](#) (Gamoran & Doron, 2023)
- [Research study](#) (Akin-Sari et al., 2022)
- [Research study](#) (Cerea et al., 2020)
- [Research study](#) (Roncero et al., 2019)
- [Research study](#) (Pascual-Vera et al., 2018)
- [Expert review](#) (PsyberGuide)

NOCD

NOCD INC (2023)

Free

Available on: [iOS](#) | [Android](#)

Designed for people with OCD, it matches users with licensed OCD therapists who are trained in exposure and response prevention (ERP). It offers online therapy sessions and other supports and provides a variety of personalized features to complement ongoing treatment.

Supporting evidence:

- [Research study](#) (Feusner et al., 2022)
- [Research study](#) (Gershkovich et al., 2021)
- [Research study](#) (Hong et al., 2020)
- [Expert review](#) (PsyberGuide)

6.0 Posttraumatic Stress Disorder

PTSD Coach

US Department of Veterans Affairs (2023)

Free

Available on: [iOS](#) | [Android](#)

Provides information about PTSD, self-assessment tools, support opportunities, and tools to manage post-traumatic stress.

Supporting evidence:

- [Research study](#) (Hensler et al., 2023)
- [Research study](#) (Hallenbeck et al., 2022)
- [Research study](#) (Hensler et al., 2022)
- [Research study](#) (Kuhn et al., 2017)
- [Research study](#) (Possemato et al., 2016)
- [Expert review](#) (Beacon)
- [Expert review](#) (PsyberGuide)
- [Expert review](#) (Anxiety and Depression Association of America)
- [Expert review](#) (Healthify New Zealand)

PTSD Coach Canada

Veterans Affairs Canada (2019)

Free

Available on: [iOS](#) | [Android](#)

Supplies information and self-help tools that aid individuals to learn about and manage symptoms after trauma. Also includes direct links to support.

Supporting evidence:

- [Research study](#) (Kuhn et al., 2018)

PTSD Family Coach

US Department of Veterans Affairs (2021)

Free

Available on: [iOS](#) | [Android](#)

Designed for family members of those living with PTSD, this app provides extensive information about PTSD, how to take care of yourself, how to take care of your relationship with your loved one or with children, and how to help your loved one get treatment.

Supporting evidence:

- [Research study](#) (Nolan et al., 2019)

Sinasprite

Available on: [iOS](#) | [Android](#)

See 3.0 Depressive Disorders for full description.

VetChange

US Department of Veterans Affairs (2023)

Free

Available on: [iOS](#) | [Android](#)

VetChange is designed for veterans, military members or anybody who is concerned about their drinking and post-traumatic stress after deployment. The app provides tools for cutting down or quitting drinking and managing stress symptoms, as well as education about alcohol use and how it relates to post-traumatic stress symptoms.

Supporting evidence:

- [Research study](#) (Newberger et al., 2022)
- [Research study](#) (Enggasser et al., 2021)
- [Research study](#) (Livingston et al., 2021)
- [Research study](#) (Livingston et al., 2020)
- [Research study](#) (Brief et al., 2018)
- [Research study](#) (Enggasser et al., 2015)
- [Expert review](#) (MindTools.io)

This app also applies to:

- DSM-5 section 9.1: Alcohol-Related Disorders

7.0 Feeding and Eating Disorders

Body+

Ggtude Ltd (2022)

Free

Available on: [iOS](#) | [Android](#)

Includes a wide range of features to help users focus on body positivity and acceptance.

Supporting evidence:

- [Research study](#) (Cerea et al., 2022)
- [Research study](#) (Cerea et al., 2021)
- [Research study](#) (Aboody et al., 2020)
- [Expert review](#) (PsyberGuide)

Recovery Record for Clinicians

Recovery Record (2023)

Free

Available on: [iOS](#) | [Android](#)

Designed for clinicians who treat eating disorders. With permission from the client, it links with the client's RR Eating Disorder Management self-monitoring app (listed below) to help clinicians track client data and outcomes.

Supporting evidence:

- *See description for RR Eating Disorder Management below.*

RR Eating Disorder Management

Recovery Record (2023)

Free

Available on: [iOS](#) | [Android](#)

Allows users to keep a record of meals, thoughts, and feelings. Users can customize meal plans, receive and send anonymous encouraging messages to users, and share progress with their treatment team.

Supporting evidence:

- [Research study](#) (Lindgreen et al., 2021)
- [Research study](#) (Neumayr et al., 2019)
- [Research study](#) (Tregarthen et al., 2019)
- [Research study](#) (Lindgreen et al., 2018a)
- [Research study](#) (Lindgreen et al., 2018b)
- [Expert review](#) (PsyberGuide)
- [Expert review](#) (Healthify New Zealand)
- [Expert review](#) (MindTools.io)

8.0 Disruptive, Impulse-Control, and Conduct Disorders

Calm: Meditate, Sleep, Relax

Available on: [iOS](#) | [Android](#)

Users with an active subscription can access the Calm Kids content library.

See 4.0 Anxiety Disorders for full description.

Headspace: Mindful Meditation

Available on: [iOS](#) | [Android](#)

Users with an active subscription can access Headspace for Kids content.

See 4.0 Anxiety Disorders for full description.

9.0 Substance-Related and Addictive Disorders

9.1 Alcohol-Related Disorders

Daybreak – Alcohol Support

Hello Sunday Morning (2023)

Free 3-week trial; monthly and annual subscriptions available after trial (\$\$\$ monthly).

**See app description for information about sponsorship if cost is a concern.*

Available on: [iOS](#) | [Android](#)

Daybreak is funded by the Australian Department of Health and offers professional coaches to help users get control of their drinking habits. Users are encouraged to make changes based on their goals and motivations through tailored activities and contribute to the online support community.

Supporting evidence:

- [Research study](#) (Tait et al., 2019)
- [Expert review](#) (MindTools.io)

Drink Less

Robert West (2021)

Free

Available on: [iOS](#)

The app allows users to keep track of their drinking and how it changes over time, set goals for the targets that are important to them, play games designed to strengthen their resolve to drink less alcohol, and create plans to deal with situations where they may be tempted to drink.

Supporting evidence:

- [Research study](#) (Garnett et al., 2021)
- [Research study](#) (Garnett et al., 2019)
- [Research study](#) (Crane et al., 2018)
- [Expert review](#) (Beacon)

Saying When: How to quit drinking or cut down

Centre for Addiction and Mental Health (2016)

Free

Available on: [iOS](#) | [Android](#)

Includes a variety of tools that provides step-by-step directions for users who want to quit or decrease drinking. Users complete a self-assessment and create personalized goals. Coping strategies and a drink tracker are also included.

Supporting evidence:

- [Research study](#) (Tofighi et al., 2019)

Stand Down: Think Before You Drink

Here and Now Systems LLC (2023)

Free

Available on: [iOS](#)

Designed for veterans who want to reduce or stop their drinking but are hesitant or unable to access in-person treatment. Provides a comprehensive assessment of a veteran's drinking patterns, norm-based feedback, and evidence-based tools and strategies for managing cravings and changing drinking habits.

Supporting evidence:

- [Research study](#) (Blonigen et al., 2021)
- [Research study](#) (Blonigen et al., 2020)

Step Away: Alcohol Help

Here and Now Systems LLC (2022)

Free

Available on: [iOS](#) | [Android](#)

Users complete a short screening questionnaire to establish their drinking profile and risk level. The program leads users to set a goal: either to moderate their drinking or stop drinking for a set number of days. The program is designed as a sequence of steps, which are recommended to be completed daily for three months.

Supporting evidence:

- [Research study](#) (Dulin et al., 2022)
- [Research study](#) (Malte et al., 2021)
- [Research study](#) (Blonigen et al., 2020)
- [Expert review](#) (MindTools.io)

Talk. They Hear You.

SAMHSA (2023)

Free

Available on: [iOS](#) | [Android](#)

Provides parents and caregivers of children and teens ages 9 to 15 with tools and information to start talking with their children early about the dangers of alcohol.

VetChange

Available on: [iOS](#) | [Android](#)

See 6.0 Posttraumatic Stress Disorder for full description.

Woebot

Available on: [iOS](#) | [Android](#)

See 3.0 Depressive Disorders for full description.

9.2 Opioid-Related Disorders

Spotlight by Scene Health

emocha Mobile Health (2023)

Free

Available on: [iOS](#) | [Android](#)

Helps patients achieve stability during buprenorphine treatment for opioid use disorder by video recording taking their dose each day and reporting side effects or symptoms. It also helps track appointments and provides general information.

Supporting evidence:

- [Research study](#) (Holtyn et al., 2021)
- [Research study](#) (Schramm et al., 2020)
- [Expert review](#) (Johns Hopkins Medicine)

Connect by Lifeguard

Lifeguard Health Inc (2023)

Free

Available on: [iOS](#) | [Android](#)

Created by provincial and regional health authorities in British Columbia in response to the overdose crisis. The user activates the app before they take their dose. After 50 seconds the app will sound an alarm. If the user doesn't hit a button to stop the alarm, it will grow louder. After 75 seconds, a text-to-voice call will go to 911 to alert emergency medical dispatchers of a potential overdose.

9.3 Tobacco-Related Disorders

My QuitBuddy

Australian National Preventive Health Agency (2020)

Free

Available on: [iOS](#) | [Android](#)

Includes customizable goals for different stages of readiness to quit smoking. Helps users set goals and stay motivated by achieving manageable milestones.

Supporting evidence:

- [Research study](#) (Peek et al., 2021)
- [Expert review](#) (MindTools.io)

QuitGuide – Quit Smoking

ICF International (2023)

Free

Available on: [iOS](#) | [Android](#)

Tracks cigarette cravings and moods, monitors progress toward milestones, and identifies triggers and strategies to deal with them.

Supporting evidence:

- [Research study](#) (Gowarty et al., 2021)
- [Research study](#) (Bricker et al., 2020)
- [Research study](#) (Bricker et al., 2014)
- [Expert review](#) (Beacon)
- [Expert review](#) (Healthify New Zealand)

Smoke Free – Quit Smoking Now

David Crane (2023)

Free

Available on: [iOS](#) | [Android](#)

This app has over 40 different evidence-based techniques to help you quit smoking. It keeps track of money saved from being smoke free and the number of cigarettes avoided. Provides information to help deal with cravings and demonstrates how users' health is improving over time.

Supporting evidence:

- [Research study](#) (Crane et al., 2019)

9.4 Gambling Disorder

Gambling Therapy

The Gordon Moody Association (2019)

Free

Available on: [Android](#)

Provides a self-assessment questionnaire for users to determine if their gambling is a problem. Includes resources and advice on how to deal with problem gambling, including mindfulness and self-help exercises, tools to block online gambling, and crisis support information.

Supporting evidence:

- [Expert review](#) (Healthify New Zealand)

10.0 Neurocognitive Disorders

10.1 Parkinson's Disease

Swallow Prompt

Speechtools Ltd (2023)

\$

Available on: [iOS](#) | [Android](#)

Helps people with neurological conditions (e.g., Parkinson's disease) remember to swallow by delivering regular and discreet prompts.

Supporting evidence:

- [Expert review](#) (Healthify New Zealand)

Walking Tall

University of New South Wales (2023)

Free

Available on: [iOS](#) | [Android](#)

Helps people with Parkinson's disease to improve their walking ability. Includes a gait re-training tool that allows users to personalize their training time and pace.

Supporting evidence:

- [Research study](#) (Brodie, 2022)

10.2 Unspecified Neurocognitive Disorders

BrainHQ

Posit Science (2023)

Free

Available on: [iOS](#) | [Android](#)

Provides brain exercises that adapt to each user, getting more challenging as performance improves. The free version of the app includes one exercise every day. For full access, a subscription is required.

Supporting evidence:

- [Research study](#) (Meltzer et al., 2023)
- [Research study](#) (Nguyen et al., 2022)
- [Research study](#) (Pressler et al., 2022)
- [Research study](#) (Knoefel et al., 2018)
- [Expert review](#) (PsyberGuide)
- [Expert review](#) (MindTools.io)

CogniFit

CogniFit Inc. (2023)

Free

Available on: [iOS](#) | [Android](#)

Uses brain exercises to evaluate and improve users' cognitive abilities. Includes brain challenges, memory games, puzzles, intelligence games, educational, and learning games.

Supporting evidence:

- [Research study](#) (Embon-Magal et al., 2022)
- [Research study](#) (Nguyen et al., 2022)
- [Research study](#) (Bahar-Fuchs et al., 2020)
- [Expert review](#) (PsyberGuide)
- [Expert review](#) (MindTools.io)

11.0 Other Conditions

11.1 Suicidal Behaviour Disorder

Hope by CAMH

Centre for Addiction and Mental Health (2023)

Free

Available on: [iOS](#) | [Android](#)

Guides users through creating a personalized suicide safety plan to help when they are feeling sad or hopeless, or experiencing thoughts of suicide. The plan can be developed together with a healthcare professional but can also be built with the help of another trusted person. There is also general information on suicide prevention and crisis and support resources.

Stay Alive

Grassroots Suicide Prevention (2023)

Free

Available on: [iOS](#) | [Android](#)

Includes suicide prevention resources, a safety plan, customizable reasons for living, and a “life box” where users can store photos that are important to them.

Supporting evidence:

- [Research study](#) (Kent Surrey Sussex Academic Health Science Network, 2020)
- [Research study](#) (Pospos et al., 2018)

Suicide Safe by SAMHSA

SAMHSA (2023)

Free

Available on: [iOS](#) | [Android](#)

This learning tool offers tips and advice for care providers who are helping individuals cope with suicidal ideation. The app offers tips on how to communicate effectively with clients and their families, determine appropriate next steps, and make referrals to treatment and community resources.

Supporting evidence:

- [Expert review](#) (American Psychological Association)

Virtual Hope Box

Available on: [iOS](#) | [Android](#)

See 3.0 *Depressive Disorders* for full description.

11.2 Nonsuicidal Self-Injury

Calm Harm

Stem4 (2023)

Free

Available on: [iOS](#) | [Android](#)

Using principles from dialectical behaviour therapy (DBT), this app directs the user to “ride the wave” of the urge to self-harm. The user can choose 5- or 15-minute blocks of different activities to overcome urges as they arise.

Supporting evidence:

- [Expert review](#) (Healthify New Zealand)
- [Expert review](#) (MindTools.io)
- [Expert review](#) (PsyberGuide)
- [Expert review](#) (The British Psychological Society)

Virtual Hope Box

Available on: [iOS](#) | [Android](#)

See 3.0 *Depressive Disorders* for full description.

11.3 Stress

7 Cups: Online therapy & chat

Available on: [iOS](#) | [Android](#)

See 2.0 *Schizophrenia Spectrum and Psychotic Disorders* for full description.

Breathe2Relax

National Center for Telehealth & Technology (2023)

Free

Available on: [iOS](#) | [Android](#)

Includes stress management tools that provide information on the effects of stress on the body and practice exercises for diaphragmatic breathing.

Supporting evidence:

- [Research study](#) (Hoffman et al., 2019)
- [Expert review](#) (American Psychiatric Association)
- [Expert review](#) (Anxiety and Depression Association of America)
- [Expert review](#) (Healthify New Zealand)
- [Expert review](#) (MindTools.io)
- [Expert review](#) (PsyberGuide)

Calm: Meditate, Sleep, Relax

Available on: [iOS](#) | [Android](#)

See 4.0 *Anxiety Disorders* for full description.

Happify

Happify, Inc. (2023)

Free

Available on: [iOS](#) | [Android](#)

Designed to help adults improve overall well-being and happiness, with influences from positive psychology, cognitive behavioural therapy, and mindfulness. Users complete happiness activities to earn points and enter to win prizes.

Supporting evidence:

- [Research study](#) (Boucher et al., 2022)
- [Research study](#) (Li et al., 2021)
- [Research study](#) (Parks et al., 2020)
- [Research study](#) (Hunter et al., 2019)
- [Research study](#) (Parks et al., 2018)
- [Expert review](#) (Anxiety and Depression Association of America)
- [Expert review](#) (PsyberGuide)

Headspace: Mindful Meditation

Available on: [iOS](#) | [Android](#)

See 4.0 Anxiety Disorders for full description.

Healthy Minds Program

Healthy Minds Innovations, Inc (2023)

Free

Available on: [iOS](#) | [Android](#)

A meditation-based app that helps users manage stress. Users take a baseline survey and receive a score for each of the four pillars (Awareness, Connection, Insight, and Purpose). Users can then participate in brief courses focused on the pillars.

Supporting evidence:

- [Research study](#) (Hirshberg et al., 2022)
- [Research study](#) (Goldberg et al., 2020)
- [Expert review](#) (PsyberGuide)

Sanvello for Stress & Anxiety (previously Pacifica)

Available on: [iOS](#) | [Android](#)

See 3.0 *Depressive Disorders* for full description.

Sinasprite

Available on: [iOS](#) | [Android](#)

See 3.0 *Depressive Disorders* for full description.

Smiling Mind

Smiling Mind (2023)

Free

Available on: [iOS](#) | [Android](#)

Daily mindfulness meditations to help alleviate stress, anxiety, and depression. Includes programs tailored for different age groups (children, teens, adults) and settings (work, school, sports).

Supporting evidence:

- [Research study](#) (Bartlett et al., 2022)
- [Research study](#) (Marshall et al., 2021)
- [Research study](#) (Flett et al., 2019)
- [Research study](#) (Mani et al., 2015)
- [Expert review](#) (Healthify New Zealand)
- [Expert review](#) (MindTools.io)
- [Expert review](#) (PsyberGuide)

Wysa: Anxiety, therapy chatbot

Available on: [iOS](#) | [Android](#)

See 3.0 *Depressive Disorders* for full description.

11.4 Sleep

Calm: Meditate, Sleep, Relax

Available on: [iOS](#) | [Android](#)

See 4.0 Anxiety Disorders for full description.

CBT-i Coach

US Department of Veterans Affairs (2023)

Free

Available on: [iOS](#) | [Android](#)

Provides strategies to improve sleeping habits and ease symptoms of insomnia. May be used by people engaged in cognitive behavioural therapy (CBT) for insomnia.

Supporting evidence:

- [Research study](#) (Kaitz et al., 2023)
- [Research study](#) (Reilly et al., 2021)
- [Research study](#) (Reilly et al., 2019)
- [Research study](#) (Koffel et al., 2018)
- [Research study](#) (Miller et al., 2017)
- [Expert review](#) (American Psychiatric Association)
- [Expert review](#) (Healthify New Zealand)
- [Expert review](#) (PsyberGuide)

Headspace: Mindful Meditation

Available on: [iOS](#) | [Android](#)

See 4.0 Anxiety Disorders for full description.

Sleepio

Big Health Ltd (2023)

Free

Available on: [iOS](#) | [Android](#)

Designed to help users overcome persistent sleep problems with a personalized program of cognitive behavioural therapy (CBT) techniques.

Supporting evidence:

- [Evidence-based guidance](#) (National Institute for Health and Care Excellence)
- [Research study](#) (Henry et al., 2023)
- [Research study](#) (Stokes et al., 2022)
- [Research study](#) (Henry et al., 2021)
- [Research study](#) (Stott et al., 2021)
- [Research study](#) (Espie et al., 2019)
- [Research study](#) (Freeman et al., 2017)
- [Expert review](#) (Healthify New Zealand)
- [Expert review](#) (PsyberGuide)

11.5 COVID-19-related Concerns

COVID Coach

US Department of Veterans Affairs (2023)

Free

Available on: [iOS](#) | [Android](#)

Supports self-care and overall mental health during the coronavirus (COVID-19) pandemic through: education about coping during the pandemic, tools for self-care and to improve emotional well-being, and trackers to check mood and measure growth toward personal goals.

Supporting evidence:

- [Research study](#) (Kirykowicz et al., 2023)
- [Research study](#) (Comtois et al., 2022)
- [Research study](#) (Jaworski et al., 2021)
- [Expert review](#) (PsyberGuide)

Managing your stress & anxiety: Mental health during COVID-19

Centre for Addiction and Mental Health (CAMH) (2021)

Free

Available on: [iOS](#) | [Android](#)

This app provides information and evidence-based coping strategies to help users manage stress and anxiety during the COVID-19 pandemic.

12.0 General Information

12.1 Education Tools

mhGAP-IG 2.0 App (e-mhGAP)

Universal Projects and Tools S.L. (2020)

Free

Available on: [iOS](#) | [Android](#)

Official e-version of the World Health Organization's mhGAP Intervention Guide for mental, neurological, and substance use disorders in non-specialist health settings.

The Psychologist

The British Psychological Society (2023)

Free

Available on: [iOS](#) | [Android](#)

Reports on the latest science of mind and behaviour, including features, news, interviews, reviews and more.

12.2 Medication Management

Dosecast – My Pill Reminder

Montuno Software, LLC (2023)

Free

Available on: [iOS](#) | [Android](#)

Users receive notifications to take medications, vitamins, or birth control pills. Offers customizable dose instructions and scheduling to match specific user needs.

Supporting evidence:

- [Research study](#) (Backes et al., 2021)
- [Research study](#) (Wu et al., 2018)
- [Research study](#) (Santo et al., 2016)

Epocrates

Epocrates, Inc. (2023)

Free

Available on: [iOS](#) | [Android](#)

Provides a wide range of information and supports for healthcare providers regarding drug prescribing practices.

Supporting evidence:

- [Expert review](#) (*Journal of Digital Imaging*)

Medisafe Pill Reminder

MediSafe Inc. (2023)

Free

Available on: [iOS](#) | [Android](#)

Helps users take their medicine on time. Also allows users to engage their families or caregivers to assist with their medication management.

Supporting evidence:

- [Research study](#) (Backes et al., 2021)
- [Research study](#) (Diaz-Skeete et al., 2021)
- [Research study](#) (Huang et al., 2019)
- [Research study](#) (Santo et al., 2016)
- [Expert review](#) (Healthify New Zealand)
- [Expert review](#) (*Journal of Nurse Practitioners*)

12.3 On-Demand Care

7 Cups: Online therapy & chat

Available on: [iOS](#) | [Android](#)

See 2.0 Schizophrenia Spectrum and Psychotic Disorders for full description.

PocketWell

Wellness Together Canada (2023)

Free

Available on: [iOS](#) | [Android](#)

Connects Canadians with professional mental health and substance use supports.

Talkspace Counseling & Therapy

Talkspace (2023)

\$\$\$\$\$

Available on: [iOS](#) | [Android](#)

Provides unlimited access to on-demand therapy and counselling from a licensed therapist.

Supporting evidence:

- [Research study](#) (Darnell et al., 2022)
- [Research study](#) (Hull et al., 2020)
- [Research study](#) (DellaCrosse et al., 2019)
- [Expert review](#) (MindTools.io)
- [Expert review](#) (PsyberGuide)

References

General references

- Allen, M. L., Hartley, C., & Cain, K. (2016). iPads and the use of “apps” by children with autism spectrum disorder: Do they promote learning? *Frontiers in Psychology, 7*, 1305. doi:10.3389/fpsyg.2016.01305
- American Psychiatric Association. (n.d.). App evaluation model. <https://www.psychiatry.org/psychiatrists/practice/mental-health-apps/app-evaluation-model>
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Publishing.
- Baumel, A., Faber, K., Mathur, N., Kane, J. M., & Muench, F. (2017). Enlight: A comprehensive quality and therapeutic potential evaluation tool for mobile and web-based eHealth interventions. *Journal of Medical Internet Research, 19*(3), e82. doi:10.2196/jmir.7270
- Baumel, A., Muench, F., Edan, S., & Kane, J. M. (2019). Objective user engagement with mental health apps: Systematic search and panel-based usage analysis. *Journal of Medical Internet Research, 21*(9), e14567. doi:10.2196/14567
- Bidargaddi, N., Musiat, P., Winsall, M., Vogl, G., Blake, V., Quinn, S., ... Schrader, G. (2017). Efficacy of a web-based guided recommendation service for a curated list of readily available mental health and well-being mobile apps for young people: Randomized controlled trial. *Journal of Medical Internet Research, 19*(5), e141. doi:10.2196/jmir.6775
- Boyd, T. K., Hart Barnett, J. E., & More, C. M. (2015). Evaluating iPad technology for enhancing communication skills of children with autism spectrum disorders. *Intervention in School and Clinic, 51*(1), 19-27. doi:10.1177/1053451215577476
- Canadian Medical Association. (2015). Guiding principles for physicians recommending mobile health applications to patients. <https://policybase.cma.ca/en/permalink/policy11521>
- Chan, S., Godwin, H., Gonzalez, A., Yellowlees, P. M., & Hilty, D. M. (2017). Review of use and integration of mobile apps into psychiatric treatments. *Current Psychiatry Reports, 19*(12), 96. doi:10.1007/s11920-017-0848-9
- Dubad, M., Winsper, C., Meyer, C., Livanou, M., & Marwaha, S. (2018). A systematic review of the psychometric properties, usability and clinical impacts of mobile mood-monitoring applications in young people. *Psychological Medicine, 48*(2), 208-228. doi:10.1017/S0033291717001659

- Firth, J., Torous, J., Nicholas, J., Carney, R., Prata, A., Rosenbaum, S., & Sarris, J. (2017a). The efficacy of smartphone-based mental health interventions for depressive symptoms: A meta-analysis of randomized controlled trials. *World Psychiatry, 16*(3), 287-298. doi:10.1002/wps.20472
- Firth, J., Torous, J., Nicholas, J., Carney, R., Rosenbaum, S., & Sarris, J. (2017b). Can smartphone mental health interventions reduce symptoms of anxiety? A meta-analysis of randomized controlled trials. *Journal of Affective Disorders, 218*, 15-22. doi:10.1016/j.jad.2017.04.046
- Fowler, L. A., Holt, S. L., & Joshi, D. (2016). Mobile technology-based interventions for adult users of alcohol: A systematic review of the literature. *Addictive Behaviors, 62*, 25-34. doi:10.1016/j.addbeh.2016.06.008
- Ipsos. (2018). *4th Annual Canadian Mental Health Checkup*.
https://www.ipsos.com/sites/default/files/ct/publication/documents/2018-05/public-perspectives-4th-annual-canadian-mental-health-checkup_0.pdf
- Karyotaki, E., Efthimiou, O., Miguel, C., Genannt Bempohl, F. M., Furukawa, T. A., Cuijpers, P., & the Individual Patient Data Meta-Analyses for Depression Collaboration. (2021). Internet-based cognitive behavioral therapy for depression: A systematic review and individual patient data network meta-analysis. *JAMA Psychiatry, 78*(4), 361-371. doi:10.1001/jamapsychiatry.2020.4364
- Larsen, M. E., Huckvale, K., Nicholas, J., Torous, J., Birrell, L., Li, E., & Reda, B. (2019). Using science to sell apps: Evaluation of mental health app store quality claims. *NPJ Digital Medicine, 2*(1), 18. doi:10.1038/s41746-019-0093-1
- Lecomte, T., Potvin, S., Corbière, M., Guay, S., Samson, C., Cloutier, B., ... Khazaal, Y. (2020). Mobile apps for mental health issues: Meta-review of meta-analyses. *JMIR mHealth and uHealth, 8*(5), e17458. doi:10.2196/17458
- Linardon, J., Cuijpers, P., Carlbring, P., Messer, M., & Fuller-Tyszkiewicz, M. (2019). The efficacy of app-supported smartphone interventions for mental health problems: A meta-analysis of randomized controlled trials. *World Psychiatry, 18*(3), 325-336. doi:10.1002/wps.20673
- Magee, J. C., Adut, S., Brazill, K., & Warnick, S. (2018). Mobile app tools for identifying and managing mental health disorders in primary care. *Current Treatment Options in Psychiatry, 5*(3), 345-362. doi:10.1007/s40501-018-0154-0
- Mental Health Commission of Canada. (n.d.). Mental health apps: How to make an informed choice. https://www.mentalhealthcommission.ca/sites/default/files/2018-01/eMH_app_eng.pdf

- Rathbone, A. L., Clarry, L., & Prescott, J. (2017). Assessing the efficacy of mobile health apps using the basic principles of cognitive behavioral therapy: Systematic review. *Journal of Medical Internet Research*, 19(11), e399. doi:10.2196/jmir.8598
- Rathbone, A. L., & Prescott, J. (2017). The use of mobile apps and SMS messaging as physical and mental health interventions: Systematic review. *Journal of Medical Internet Research*, 19(8), e295. doi:10.2196/jmir.7740
- Regmi, K., Kassim, N., Ahmad, N., & Tuah, N. A. (2017). Effectiveness of mobile apps for smoking cessation: A review. *Tobacco Prevention & Cessation*, 3(4), 1-11. doi:10.18332/tpc/70088
- Saviet, M. (2020, December 17). ADHD: Harnessing the power of technology & apps. One Mind PsyberGuide. <https://onemindpsyberguide.org/blog/guest-blog/adhd-harnessing-the-power-of-technology-apps/>
- Stoyanov, S. R., Hides, L., Kavanagh, D. J., Zelenko, O., Tjondronegoro, D., & Mani, M. (2015). Mobile app rating scale: A new tool for assessing the quality of health mobile apps. *JMIR mHealth and uHealth*, 3(1), e27. doi:10.2196/mhealth.3422
- Torous, J., Andersson, G., Bertagnoli, A., Christensen, H., Cuijpers, P., Firth, J., ... Arean, P. A. (2019). Towards a consensus around standards for smartphone apps and digital mental health. *World Psychiatry*, 18(1), 97-98. doi:10.1002/wps.20592
- Van Ameringen, M., Turna, J., Pullia, K., & Patterson, B. (2017). There is an app for that! The current state of mobile applications (apps) for DSM-5 obsessive-compulsive disorder, posttraumatic stress disorder, anxiety and mood disorders. *Depression and Anxiety*, 34(6), 526-539. doi:10.1002/da.22657
- Weisel, K. K., Fuhrmann, L. M., Berking, M., Baumeister, H., Cuijpers, P., & Ebert, D. D. (2019). Standalone smartphone apps for mental health: A systematic review and meta-analysis. *NPJ Digital Medicine*, 2(1), 1-10. doi:10.1038/s41746-019-0188-8
- Whittaker, R., McRobbie, H., Bullen, C., Rodgers, A., Gu, Y., & Dobson, R. (2019). Mobile phone text messaging and app-based interventions for smoking cessation. *Cochrane Database of Systematic Reviews*, 10(10). doi:10.1002/14651858.CD006611.pub5
- Zelmer, J., van Hoof, K., Notarianni, M., van Mierlo, T., Schellenberg, M., & Tannenbaum, C. (2018). An assessment framework for e-mental health apps in Canada: Results of a modified delphi process. *JMIR mHealth and uHealth*, 6(7), e10016. doi:10.2196/10016

Research studies for individual apps

- Abbott, D., Lack, C. W., & Anderson, P. (2023). Does using a mindfulness app reduce anxiety and worry? A randomized-controlled trial. *Journal of Cognitive Psychotherapy*, 37(1), 26–42. doi:10.1891/JCPSY-D-20-00058
- Aboody, D., Siev, J., & Doron, G. (2020). Building resilience to body image triggers using brief cognitive training on a mobile application: A randomized controlled trial. *Behaviour, Research and Therapy*, 134, 103723. doi:10.1016/j.brat.2020.103723
- Aizenstros, A., Bakker, D., Hofmann, S. G., Curtiss, J., & Kazantzis, N. (2021). Engagement with smartphone-delivered behavioural activation interventions: A study of the MoodMission smartphone application. *Behavioural and Cognitive Psychotherapy*, 49(5), 569-581. doi:10.1017/S1352465820000922
- Akin-Sari, B., Inozu, M., Haciomeroglu, A. B., Cekci, B. C., Uzumcu, E., & Doron, G. (2022). Cognitive training via a mobile application to reduce obsessive-compulsive-related distress and cognitions during the covid-19 outbreaks: A randomized controlled trial using a subclinical cohort. *Behavior Therapy*, 53(5), 776-792. doi:10.1016/j.beth.2021.12.008
- Almodovar, A. S., Surve, S., Axon, D. R., Cooper, D., & Nahata, M. C. (2018). Self-directed engagement with a mobile app (Sinaspri) and its effects on confidence in coping skills, depression, and anxiety: Retrospective longitudinal study. *JMIR mHealth and uHealth*, 6(3), e64. doi:10.2196/mhealth.9612
- Alzrayer, N. M., Banda, D. R., & Koul, R. (2017). Teaching children with autism spectrum disorder and other developmental disabilities to perform multistep requesting using an iPad. *Augmentative and Alternative Communication*, 33(2), 65-76. doi:10.1080/07434618.2017.1306881
- Backes, C., Moyano, C., Rimaud, C., Bienvenu, C., & Schneider, M. P. (2021). Digital medication adherence support: Could healthcare providers recommend mobile health apps? *Frontiers in Medical Technology*, 2, 616242. doi:10.3389/fmedt.2020.616242
- Bahar-Fuchs, A., Barendse, M. E. A., Bloom, R., Ravona-Springer, R., Heymann, A., Dabush, H., ... Beerli, M. S. (2020). Computerized cognitive training for older adults at higher dementia risk due to diabetes: Findings from a randomized controlled trial. *The Journals of Gerontology: Series A*. doi:10.1093/gerona/glz073
- Bakker, D., Kazantzis, N., Rickwood, D., & Rickard, N. (2018). A randomized controlled trial of three smartphone apps for enhancing public mental health. *Behaviour Research and Therapy*, 109, 75-83. doi:10.1016/j.brat.2018.08.003
- Bartlett, L., Martin, A. J., Kilpatrick, M., Otahal, P., Sanderson, K., & Neil, A. L. (2022). Effects of a mindfulness app on employee stress in an Australian public sector workforce:

- Randomized controlled trial. *JMIR mHealth and uHealth*, 10(2), e30272.
doi:10.2196/30272
- Baumel, A. (2015). Online emotional support delivered by trained volunteers: Users' satisfaction and their perception of the service compared to psychotherapy. *Journal of Mental Health*, 24(5), 313-320. doi:10.3109/09638237.2015.1079308
- Baumel, A., Correll, C. U., & Birnbaum, M. (2016). Adaptation of a peer based online emotional support program as an adjunct to treatment for people with schizophrenia-spectrum disorders. *Internet Interventions*, 4, 35-42. doi:10.1016/j.invent.2016.03.003
- Baumel, A., Tinkelman, A., Mathur, N., & Kane, J. M. (2018). Digital peer-support platform (7Cups) as an adjunct treatment for women with postpartum depression: Feasibility, acceptability, and preliminary efficacy study. *JMIR mHealth and uHealth*, 6(2), e38. doi:10.2196/mhealth.9482
- Blonigen, D., Harris-Olenak, B., Kuhn, E., Humphreys, K., Timko, C., & Dulin, P. (2020). From "Step Away" to "Stand Down": Tailoring a smartphone app for self-management of hazardous drinking for veterans. *JMIR mHealth and uHealth*, 8(2), e16062. doi:10.2196/16062
- Blonigen, D. M., Harris-Olenak, B., Kuhn, E., Timko, C., Humphreys, K., Smith, J. S., & Dulin, P. (2021). Using peers to increase veterans' engagement in a smartphone application for unhealthy alcohol use: A pilot study of acceptability and utility. *Psychology of Addictive Behaviors*, 35(7), 829-839. doi:10.1037/adb0000598
- Bostock, S., Crosswell, A. D., Prather, A. A., & Steptoe, A. (2019). Mindfulness on-the-go: Effects of a mindfulness meditation app on work stress and well-being. *Journal of Occupational Health Psychology*, 24(1), 127. doi:10.1037/ocp0000118
- Boucher, E., Honomichi, R., Ward, H., Powell, T., Stoeckl, S. E., & Parks, A. (2022). The effects of a digital well-being intervention on older adults: Retrospective analysis of real-world user data. *JMIR Aging*, 5(3), e39851. doi:10.2196/39851
- Bricker, J. B., Mull, K. E., Kientz, J. A., Vilardaga, R. M., Mercer, L. D., Akioka, K., & Heffner, J. L. (2014). Randomized, controlled pilot trial of a smartphone app for smoking cessation using acceptance and commitment therapy. *Drug and Alcohol Dependence*, 143, 87-94. doi:10.1016/j.drugalcdep.2014.07.006
- Bricker, J. B., Watson, N. L., Mull, K. E., Sullivan, B. M., & Heffner, J. L. (2020). Efficacy of smartphone applications for smoking cessation: A randomized clinical trial. *JAMA Internal Medicine*, 180(11), 1-9. doi:10.1001/jamainternmed.2020.4055
- Brief, D. J., Solhan, M., Rybin, M., Enggasser, J. L., Rubin, A., Roy, M., ... Keane, T. M. (2018). Web-based alcohol intervention for veterans: PTSD, combat exposure, and alcohol outcomes. *Psychological Trauma*, 10(2), 154-162. doi:10.1037/tra0000281

- Brodie, M. A. (2022). The WalkingTall study: Comparing WalkingTall with Parkinson's disease (WalkingTall-PD) with mobility-plus to reduce falls and improve mobility. <https://clinicaltrials.gov/study/NCT04613141>
- Bush, N. E., Smolenski, D. J., Denneson, L. M., Williams, H. B., Thomas, E. K., & Dobscha, S. K. (2017). A virtual hope box: Randomized controlled trial of a smartphone app for emotional regulation and coping with distress. *Psychiatric Services, 68*(4), 330-336. doi:10.1176/appi.ps.201600283
- Cerea, S., Doron, G., Manoli, T., Patania, F., Bottesi, G., & Ghisi, M. (2022). Cognitive training via a mobile application to reduce some forms of body dissatisfaction in young females at high-risk for body image disorders: A randomized controlled trial. *Body Image, 42*, 297-306. doi:10.1016/j.bodyim.2022.07.010
- Cerea, S., Ghisi, M., Bottesi, G., Carraro, E., Broggio, D., & Doron, G. (2020). Reaching reliable change using short, daily, cognitive training exercises delivered on a mobile application: The case of Relationship Obsessive Compulsive Disorder (ROCD) symptoms and cognitions in a subclinical cohort. *Journal of Affective Disorders, 276*, 775-787. doi:10.1016/j.jad.2020.07.043
- Cerea, S., Ghisi, M., Bottesi, G., Manoli, T., Carraro, E., & Doron, G. (2021). Cognitive behavioral training using a mobile application reduces body image-related symptoms in high-risk female university students: A randomized controlled study. *Behavior Therapy, 52*(1), 170-182. doi:10.1016/j.beth.2020.04.002
- Champion, L., Economides, M., & Chandler, C. (2018). The efficacy of a brief app-based mindfulness intervention on psychosocial outcomes in healthy adults: A pilot randomised controlled trial. *PLoS One, 13*(12), e0209482. doi:10.1371/journal.pone.0209482
- Clarke, J., & Draper, S. (2020). Intermittent mindfulness practice can be beneficial, and daily practice can be harmful: An in depth, mixed methods study of the "Calm" app's (mostly positive) effects. *Internet Interventions, 19*, 100293. doi:10.1016/j.invent.2019.100293
- Collette, D., Brix, A., Brennan, P., DeRoma, N., & Muir, B. C. (2019). Proloquo2go enhances classroom performance in children with autism spectrum disorder. *OTJR: Occupation, Participation and Health, 39*(3), 143-150. doi:10.1177/1539449218799451
- Comtois, K. A., Mata-Greve, F., Johnson, M., Pullmann, M. D., Mosser, B., & Areal, P. (2022). Effectiveness of mental health apps for distress during covid-19 in us unemployed and essential workers: Remote pragmatic randomized clinical trial. *JMIR mHealth and uHealth, 10*(11), e41689. doi:10.2196/41689
- Crane, D., Garnett, C., Michie, S., West, R., & Brown, J. (2018). A smartphone app to reduce excessive alcohol consumption: Identifying the effectiveness of intervention components

- in a factorial randomised control trial. *Scientific Reports*, 8(1), 4384. doi:10.1038/s41598-018-22420-8
- Crane, D., Ubhi, H. K., Brown, J., & West, R. (2019). Relative effectiveness of a full versus reduced version of the 'Smoke Free' mobile application for smoking cessation: An exploratory randomised controlled trial. *F1000Research*, 7, 1524. doi:10.12688/f1000research.16148.2
- Darnell, D., Pullmann, M. D., Hull, T. D., Chen, S., & Areal, P. (2022). Predictors of disengagement and symptom improvement among adults with depression enrolled in Talkspace, a technology-mediated psychotherapy platform: Naturalistic observational study. *JMIR Formative Research*, 6(6), e36521. doi:10.2196/36521
- DellaCrosse, M., Mahan, K., & Hull, T. D. (2019). The effect of messaging therapy for depression and anxiety on employee productivity. *Journal of Technology in Behavioral Science*, 4, 1-5. doi:10.1007/s41347-018-0064-4
- Denneson, L. M., Smolenski, D. J., Bauer, B. W., Dobscha, S. K., & Bush, N. E. (2018). The mediating role of coping self-efficacy in hope box use and suicidal ideation severity. *Archives of Suicide Research*, 23(2), 234-246. doi:10.1080/13811118.2018.1456383
- Devan, H., Farmery, D., Peebles, L., & Grainger, R. (2019). Evaluation of self-management support functions in apps for people with persistent pain: Systematic review. *JMIR mHealth and uHealth*, 7(2), e13080. doi:10.2196/13080
- Diaz-Skeete, Y. M., McQuaid, D., Akinosun, A. S., Ekerete, I., Carragher, N., & Carragher, L. (2021). Analysis of apps with a medication list functionality for older adults with heart failure using the Mobile App Rating Scale and the IMS Institute for Healthcare Informatics Functionality Score: Evaluation study. *JMIR mHealth and uHealth*, 9(11), e30674. doi:10.2196/30674
- Dulin, P., Mertz, R., Edwards, A., & King, D. (2022). Contrasting a mobile app with a conversational chatbot for reducing alcohol consumption: Randomized controlled pilot trial. *JMIR Formative Research*, 6(5), e33037. doi:10.2196/33037
- Dunn, R., Elgart, J., Lokshina, L., Faisman, A., Khokhlovich, E., Gankin, Y., & Vyshedskiy, A. (2017). Children with autism appear to benefit from parent-administered computerized cognitive and language exercises independent of the child's age or autism severity. *Autism: Open Access*, 7(5). doi:10.4172/2165-7890.1000217
- Economides, M., Martman, J., Bell, M. J., & Sanderson, B. (2018). Improvements in stress, affect, and irritability following brief use of a mindfulness-based smartphone app: A randomized controlled trial. *Mindfulness*, 9(5), 1584-1593. doi:10.1007/s12671-018-0905-4

- Embon-Magal, S., Krasovsky, T., Doron, I., Asraf, K., Haimov, I., Gil, E., & Agmon, M. (2022). The effect of co-dependent (thinking in motion [TIM]) versus single-modality (CogniFit) interventions on cognition and gait among community-dwelling older adults with cognitive impairment: A randomized controlled study. *BMC Geriatrics*, 22, 720. doi:10.1186/s12877-022-03403-x
- Enggasser, J. L., Hermos, J. A., Rubin, A., Lachowicz, M., Rybine, D., Brief, D. J., ... Keane, T. M. (2015). Drinking goal choice and outcomes in a Web-based alcohol intervention: Results from *VetChange*. *Addictive Behaviours*, 52, 63-68. doi:10.1016/j.addbeh.2014.10.036
- Enggasser, J. L., Livingston, N. A., Ameral, V., Brief, D. J., Rubin, A., Helmuth, E., ... Keane, T. M. (2021). Public implementation of a web-based program for veterans with risky alcohol use and PTSD: A RE-AIM evaluation of *VetChange*. *Journal of Substance Abuse Treatment*, 122, 108242. doi:10.1016/j.jsat.2020.108242
- Espie, C. A., Emsley, R., Kyle, S. D., Gordon, C., Drake, C. L., Siriwardena, A. N., ... Freeman, D. (2019). Effect of digital cognitive behavioral therapy for insomnia on health, psychological well-being, and sleep-related quality of life: A randomized clinical trial. *JAMA Psychiatry*, 76(1), 21-30. doi:0.1001/jamapsychiatry.2018.2745
- Feusner, J. D., Farrell, N. R., Kreyling, J., McGrath, P. B., Rhode, A., Faneuff, T., ... Smith, S. M. (2022). Online video teletherapy treatment of obsessive-compulsive disorder using exposure and response prevention: Clinical outcomes from a retrospective longitudinal observational study. *Journal of Medical Internet Research*, 24(5), e36431. doi:10.2196/36431
- Fitzpatrick, K. K., Darcy, A., & Vierhile, M. (2017). 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 Mental Health*, 4(2), e19. doi:10.2196/mental.7785
- Flett, J. A. M., Conner, T. S., Riordan, B. C., Patterson, T., & Hayne, H. (2020). App-based mindfulness meditation for psychological distress and adjustment to college in incoming university students: A pragmatic, randomised, waitlist-controlled trial. *Psychology & Health*, 35(9), 1049-1074. doi:10.1080/08870446.2019.1711089
- Flett, J. A. M., Hayne, H., Riordan, B. C., Thompson, L. M., & Conner, T. S. (2019). Mobile mindfulness meditation: A randomised controlled trial of the effect of two popular apps on mental health. *Mindfulness*, 10(5), 863-876. doi:10.1007/s12671-018-1050-9
- Freeman, D., Sheaves, B., Goodwin, G. M., Yu, L. M., Nickless, A., Harrison, P. J., ... Espie, C. A. (2017). The effects of improving sleep on mental health (OASIS): A randomised controlled trial with mediation analysis. *The Lancet Psychiatry*, 4(10), 749-758. doi:10.1016/S2215-0366(17)30328-0

- Gamoran, A., & Doron, G. (2023). Effectiveness of brief daily training using a mobile app in reducing obsessive compulsive disorder (OCD) symptoms: Examining real world data of “OCD.app - Anxiety, mood & sleep”. *Journal of Obsessive-Compulsive and Related Disorders*, 36, 100782. doi:10.1016/j.jocrd.2023.100782.
- Garnett, C., Perski, O., Michie, S., West, R., Field, M., Kaner, E., ... Brown, J. (2021). Refining the content and design of an alcohol reduction app, Drink Less, to improve its usability and effectiveness: A mixed methods approach. *F1000Research*, 10, 511. doi:10.12688/f1000research.51416.2
- Garnett, C., Perski, O., Tombor, I., West, R., Michie, S., & Brown, J. (2019). Predictors of engagement, response to follow up, and extent of alcohol reduction in users of a smartphone app (Drink Less): Secondary analysis of a factorial randomized controlled trial. *JMIR mHealth and uHealth*, 6(12), e11175. doi:10.2196/11175
- Gershkovich, M., Middleton, R., Hezel, D. M., Grimaldi, S., Renna, M., Basaraba, C., ... Simpson, H. B. (2021). Integrating exposure and response prevention with a mobile app to treat obsessive–compulsive disorder: Feasibility, acceptability, and preliminary effects. *Behavior Therapy*, 52(2), 394-405. doi:10.1016/j.beth.2020.05.001
- Goldberg, S. B., Imhoff-Smith, T., Bolt, D. M., Wilson-Mendenhall, C. D., Dahl, C. J., Davidson, R. J., & Rosenkranz, M. A. (2020). Testing the efficacy of a multicomponent, self-guided, smartphone-based meditation app: Three-armed randomized controlled trial. *JMIR Mental Health*, 7(11), e23825. doi:10.2196/23825
- Gordon, E., Palmer, D. M., Liu, H., Rekshan, W., & DeVarney, S. (2013). Online cognitive brain training associated with measurable improvements in cognition and emotional well-being. *Technology & Innovation*, 15(1), 53-62. doi:10.3727/194982413X13608676060574
- Gould, C. E., Kok, B. C., Ma, V. K., Zapata, A. M. L., Owen, J. E., & Kuhn, E. (2019). Veterans Affairs and the Department of Defense mental health apps: A systematic literature review. *Psychological Services*, 16(2), 196-207. doi:10.1037/ser0000289
- Gowarty, M. A., Longacre, M. R., Vilardaga, R., Kung, N. J., Gaughan-Maher, A. E., & Brunette, M. F. (2021). Usability and acceptability of two smartphone apps for smoking cessation among young adults with serious mental illness: Mixed methods study. *JMIR Mental Health*, 8(7), e26873. doi:10.2196/26873.
- Haliwa, I., Ford, C. G., Wilson, J. M., & Shook, N. J. (2021). A mixed-method assessment of a 10-day mobile mindfulness intervention. *Frontiers in Psychology*, 12, 722995. doi:10.3389/fpsyg.2021.722995
- Hallenbeck, H. W., Jaworsk, B. K., Wielgosz, J., Kuhn, E., Ramsey, K. M., Taylor, K., ... Owen, J. E. (2022). PTSD Coach version 3.1: A closer look at the reach, use, and potential

- impact of this updated mobile health app in the general public. *JMIR Mental Health*, 9(3), e34744. doi:10.2196/34744
- Henry, A. L., Miller, C. B., Emsley, R., Sheaves, B., Freeman, D., Luik, A. I., ... Espie, C. A. (2021). Insomnia as a mediating therapeutic target for depressive symptoms: A sub-analysis of participant data from two large randomized controlled trials of a digital sleep intervention. *Journal of Sleep Research*, 30(1), e13140. doi:10.1111/jsr.13140
- Henry, A. L., Miller, C. B., Emsley, R., Sheaves, B., Freeman, D., Luik, A. I., ... Espie, C. A. (2023). Does treating insomnia with digital cognitive behavioural therapy (Sleepio) mediate improvements in anxiety for those with insomnia and comorbid anxiety? An analysis using individual participant data from two large randomised controlled trials. *Journal of Affective Disorders*, 339, 58-63. doi:10.1016/j.jad.2023.06.053
- Hensler, I., Sveen, J., Cernvall, M., & Arnberg, F. K. (2022). Efficacy, benefits, and harms of a self-management app in a Swedish trauma-exposed community sample (PTSD coach): Randomized controlled trial. *Journal of Medical Internet Research*, 24(3), e31419. doi:10.2196/31419
- Hensler, I., Sveen, J., Cernvall, M., & Arnberg, F. K. (2023). Longitudinal follow-up of the randomized controlled trial of access to the trauma-focused self-management app PTSD Coach. *Internet interventions*, 32, 100618. doi:10.1016/j.invent.2023.100618
- Hirshberg, M. J., Frye, C., Dahl, C. J., Riordan, K. M., Vack, N. J., Sachs, J., ... Goldberg, S. B. (2022). A randomized controlled trial of a smartphone-based well-being training in public school system employees during the COVID-19 pandemic. *Journal of Educational Psychology*, 114(8), 1895-1911. doi:10.1037/edu0000739
- Hoffman, L., Benedetto, E., Huang, H., Grossman, E., Kaluma, D., Mann, Z., & Torous, J. (2019). Augmenting mental health in primary care: A 1-year study of deploying smartphone apps in a multi-site primary care/behavioral health integration program. *Frontiers in Psychiatry*, 10, 94. doi:10.3389/fpsy.2019.00094
- Hoffman, V., Flom, M., Mariano, T. Y., Chiauzzi, E., Williams, A., Kirvin-Quamme, A., ... Perski O. (2023). User engagement clusters of an 8-week digital mental health intervention guided by a relational agent (Woebot): Exploratory study. *Journal of Medical Internet Research*, 25, e47198. doi:10.2196/47198.
- Holtyn, A. F., Toegel, F., Novak, M. D., Leoutsakos, J. M., Fingerhood, M., & Silverman, K. (2021). Remotely delivered incentives to promote buprenorphine treatment engagement in out-of-treatment adults with opioid use disorder. *Drug and Alcohol Dependence*, 225, 108786. doi:10.1016/j.drugalcdep.2021.108786

- Hong, N., Sanchez, A. L., & Comer, J. S. (2020). Multimedia field test: Can users strike out OCD with the NOCD app? *Cognitive and Behavioral Practice, 27*(1), 93-99. doi:10.1016/j.cbpra.2019.02.005
- Howells, A., Ivtzan, I., & Eiroa-Orosa, F. J. (2016). Putting the 'app' in happiness: A randomised controlled trial of a smartphone-based mindfulness intervention to enhance wellbeing. *Journal of Happiness Studies, 17*(1), 163-185. doi:10.1007/s10902-014-9589-1
- Huang, Z., Tan, E., Lum, E., Sloop, P., Boehm, B. O., & Car, J. (2019). A smartphone app to improve medication adherence in patients with type 2 diabetes in Asia: Feasibility randomized controlled trial. *JMIR mHealth and uHealth, 7*(9), e14914. doi:10.2196/14914
- Huberty, J., Green, J., Glissmann, C., Larkey, L., Puzia, M., & Lee, C. (2019a). Efficacy of the mindfulness meditation mobile app "Calm" to reduce stress among college students: Randomized controlled trial. *JMIR mHealth and uHealth, 7*(6), e14273. doi:10.2196/14273
- Huberty, J. L., Green, J., Puzia, M. E., Larkey, L., Laird, B., Vranceanu, A. M., ... Irwin, M. R. (2021). Testing a mindfulness meditation mobile app for the treatment of sleep-related symptoms in adults with sleep disturbance: A randomized controlled trial. *PLoS One, 16*(1), e0244717. doi:10.1371/journal.pone.0244717
- Huberty, J., Vranceanu, A. M., Carney, C., Breus, M., Gordon, M., & Puzia, M. E. (2019b). Characteristics and usage patterns among 12,151 paid subscribers of the Calm meditation app: Cross-sectional survey. *JMIR mHealth and uHealth, 7*(11), e15648. doi:10.2196/15648
- Hull, T. D., Malgaroli, M., Connolly, P. S., Feuerstein, S., & Simon, N. M. (2020). Two-way messaging therapy for depression and anxiety: Longitudinal response trajectories. *BMC Psychiatry, 20*, 297. doi:10.1186/s12888-020-02721-x
- Hunter, J. F., Olah, M. S., Williams, A. L., Parks, A. C., & Pressman, S. D. (2019). Effect of brief biofeedback via a smartphone app on stress recovery: Randomized experimental study. *JMIR Serious Games, 7*(4), e15974. doi:10.2196/15974
- Inkster, B., Sarda, S., & Subramanian, V. (2018). An empathy-driven, conversational artificial intelligence agent (Wysa) for digital mental well-being: Real-world data evaluation mixed-methods study. *JMIR mHealth and uHealth, 6*(11), e12106. doi:10.2196/12106
- Jaworski, B. K., Taylor, K., Ramsey, K. M., Heinz, A., Steinmetz, S., Pagano, I., ... Owen, J. E. (2021). Exploring usage of COVID Coach, a public mental health app designed for the covid-19 pandemic: Evaluation of analytics data. *Journal of Medical Internet Research, 23*(3), e26559. doi:10.2196/26559

- Kaitz, J., Robinson, S. A., Petrakis, B. A., Reilly, E. D., Chamberlin, E. S., Wiener, R. S., & Quigley, K. S. (2023). Veteran acceptance of sleep health information technology: A mixed-method study. *Journal of Technology in Behavioral Science*, 8(1), 57-68. doi:10.1007/s41347-022-00287-x
- Kent Surrey Sussex Academic Health Science Network. (2020). *Stay Alive evaluation report*. <https://www.prevent-suicide.org.uk/wp-content/uploads/2020/08/Stay-Alive-Evaluation-Report-2020.pdf>
- Kirykowicz, K., Jaworski, B., Owen, J., Kirschbaum, C., Seedat, S., & van den Heuvel, L. L. (2023). Feasibility, acceptability and preliminary efficacy of a mental health self-management app in clinicians working during the COVID-19 pandemic: A pilot randomised controlled trial. *Psychiatry Research*, 329, 115493. doi:10.1016/j.psychres.2023.115493
- Knoefel, F., Gaudet, C., Zunini, R. L., Breau, M., Sweet, L., Wallace, B., ... Taler, V. (2018). Implementation of a brain training pilot study for people with mild cognitive impairment. *Canadian Geriatrics Journal*, 21(3), 264-268. doi:10.5770/cgj.21.304
- Knouse, L. E., Hu, X., Sachs, G., & Isaacs, S. (2022). Usability and feasibility of a cognitive-behavioral mobile app for ADHD in adults. *PLoS Digital Health*, 1(8), e0000083. doi:10.1371/journal.pdig.0000083
- Koffel, E., Kuhn, E., Petsoulis, N., Erbes, C. R., Anders, S., Hoffman, J. E., ... Polusny, M. A. (2018). A randomized controlled pilot study of CBT-I Coach: Feasibility, acceptability, and potential impact of a mobile phone application for patients in cognitive behavioral therapy for insomnia. *Health Informatics Journal*, 24(1), 3-13. doi:10.1177/1460458216656472
- Krcek, T. E. (2015). Effectiveness of Proloquo2Go in enhancing communication in children with autism during ABA therapy. Tennessee Research and Creative Exchange. https://trace.tennessee.edu/utk_graddiss/3345/
- Kretzschmar, K., Tyroll, H., Pavarini, G., Manzini, A., Singh, I., & NeurOx Young People's Advisory Group. (2019). Can your phone be your therapist? Young people's ethical perspectives on the use of fully automated conversational agents (chatbots) in mental health support. *Biomedical Informatics Insights*, 11, 1178222619829083. doi:10.1177/1178222619829083
- Kuhn, E., Kanuri, N., Hoffman, J. E., Garvert, D. W., Ruzek, J. I., & Taylor, C. B. (2017). A randomized controlled trial of a smartphone app for posttraumatic stress disorder symptoms. *Journal of Consulting and Clinical Psychology*, 85(3), 267-273. doi:10.1037/ccp0000163

- Kuhn, E., van der Meer, C., Owen, J. E., Hoffman, J. E., Cash, R., Carrese, P., ... Schopp, M. (2018). PTSD Coach around the world. *mHealth*, 4, 15. doi:10.21037/mhealth.2018.05.01
- Laird, B., Puzia, M., Larkey, L., Ehlers, D., & Huberty, J. (2021). Feasibility of using a mobile app for stress in middle-aged men and women. *JMIR Formative Research*. doi:10.2196/30294
- Leo, A. J., Schuelke, M. J., Hunt, D. M., Metzler, J. P., Miller, J. P., Arean, P. A., ... Cheng, A. L. (2022). Digital mental health intervention for orthopedic patients with symptoms of depression and/or anxiety: Pilot feasibility study. *JMIR Formative Research*. doi:10.2196/34889
- Li, L. S. E., Wong, L. L., Yap, K. Y. (2021). Quality evaluation of stress, anxiety and depression apps for COVID-19. *Journal of Affective Disorders Reports*, 100255. doi:10.1016/j.jadr.2021.100255
- Lindgreen, P., Clausen, L., & Lomborg, K. (2018a). Clinicians' perspective on an app for patient self-monitoring in eating disorder treatment. *International Journal of Eating Disorders*, 51(4), 314-321. doi:10.1002/eat.22833
- Lindgreen, P., Lomborg, K., & Clausen, L. (2018b). Patient experiences using a self-monitoring app in eating disorder treatment: Qualitative study. *JMIR mHealth and uHealth*, 6(6), e10253. doi:10.2196/10253
- Lindgreen, P., Lomborg, K., & Clausen, L. (2021). Patient use of a self-monitoring app during eating disorder treatment: Naturalistic longitudinal cohort study. *Brain and Behavior*, 11(4), e02039. doi:10.1002/brb3.2039
- Livingston, N. A., Mahoney, C. T., Ameal, V., Brief, D., Rubin, A., Enggasser, J., ... Keane, T. (2020). Changes in alcohol use, PTSD hyperarousal symptoms, and intervention dropout following veterans' use of VetChange. *Addictive Behaviors*, 107, 106401. doi:10.1016/j.addbeh.2020.106401
- Livingston, N. A., Simpson, T., Lehavot, K., Ameal, V., Brief, D. J., Enggasser, J., ... Keane, T. M. (2021). Differential alcohol treatment response by gender following use of VetChange. *Drug and Alcohol Dependence*, 221, 108552. doi:10.1016/j.drugalcdep.2021.108552
- Ly, K. H., Ly, A. M., & Andersson, G. (2017). A fully automated conversational agent for promoting mental well-being: A pilot RCT using mixed methods. *Internet Interventions*, 10, 39-46. doi:10.1016/j.invent.2017.10.002
- Malik, T., Ambrose, A. J., & Sinha, Chaitali. (2022). Evaluating user feedback for an artificial intelligence-enabled, cognitive behavioral therapy-based mental health app (Wysa): Qualitative thematic analysis. *JMIR Human Factors*, 9(2), e35668. doi:10.2196/35668

- Malte, C. A., Dulin, P. L., Baer, J. S., Fortney, J. C., Danner, A. N., Lott, A. M. K., Hawkins, E. J. (2021). Usability and acceptability of a mobile app for the self-management of alcohol misuse among veterans (Step Away): Pilot cohort study. *JMIR mHealth and uHealth*, 9(4), e25927. doi:10.2196/25927
- Mani, M., Kavanagh, D. J., Hides, L., & Stoyanov, S. R. (2015). Review and evaluation of mindfulness-based iPhone apps. *JMIR mHealth and uHealth*, 3(3), e82. doi:10.2196/mhealth.4328
- Marshall, J. M., Dunstan, D. A., & Bartik, W. (2021). Smartphone Psychological Therapy During COVID-19: A study on the effectiveness of five popular mental health apps for anxiety and depression. *Frontiers in Psychology*, 12, 775775. doi:10.3389/fpsyg.2021.775775
- Meheli, S., Sinha, C., & Kadaba, M. (2022). Understanding people with chronic pain who use a cognitive behavioral therapy-based artificial intelligence mental health app (Wysa): Mixed methods retrospective observational study. *JMIR Human Factors*, 9(2), e35671. doi: 10.2196/35671
- Melia, R., Francis, K., Hickey, E., Bogue, J., Duggan, J., O’Sullivan, M., & Young, K. (2020). Mobile health technology interventions for suicide prevention: Systematic review. *JMIR mHealth and uHealth*, 8(1), e12516. doi:10.2196/12516
- Meltzer, J. A., Rose, M. K., Le, A. Y., Spencer, K. A., Goldstein, L., Gubanova, A., ... Bialystok, E. (2023). Improvement in executive function for older adults through smartphone apps: A randomized clinical trial comparing language learning and brain training. *Neuropsychology, Development, and Cognition*, 30(2), 150-171.
- Miller, K. E., Kuhn, E., Owen, J. E., Taylor, K., Yu, J. S., Weiss, B. J., ... Trockel, M. (2017). Clinician perceptions related to the use of the CBT-I Coach mobile app. *Behavioral Sleep Medicine*, 1-11. doi:10.1080/15402002.2017.1403326
- Moberg, C., Niles, A., & Beermann, D. (2019). Guided self-help works: Randomized waitlist controlled trial of Pacifica, a mobile app integrating cognitive behavioral therapy and mindfulness for stress, anxiety, and depression. *Journal of Medical Internet Research*, 21(6), e12556. doi:10.2196/12556
- Moëll, B., Kollberg, L., Nasri, B., Lindefors, N., & Kaldo, V. (2015). Living SMART—A randomized controlled trial of a guided online course teaching adults with ADHD or sub-clinical ADHD to use smartphones to structure their everyday life. *Internet Interventions*, 2(1), 24-31. doi:10.1016/j.invent.2014.11.004
- Nakkawita, S. G., Duncan, E. S., & Hartzheim, D. U. (2021). AAC apps for aphasia: A pilot study on the role of intuition and learning. *Disability and Rehabilitation: Assistive Technology*, 1-11. doi:10.1080/17483107.2021.1900932

- Neumayr, C., Voderholzer, U., Tregarthen, J., & Schlegl, S. (2019). Improving aftercare with technology for anorexia nervosa after intensive inpatient treatment: A pilot randomized controlled trial with a therapist-guided smartphone app. *International Journal of Eating Disorders*, 52(10), 1191-1201. doi:10.1002/eat.23152
- Newberger, N. G., Yeager, S., Livingston, N. A., Enggasser, J. L., Brief, D. J., Litwack, S., ... Keane, T. M. (2022). Life satisfaction following treatment-related reductions in alcohol use and PTSD symptoms: Results from VetChange. *Psychological Trauma*. Advance online publication. doi:10.1037/tra0001234
- Nguyen, L., Murphy, K., & Andrews, G. (2022). A game a day keeps cognitive decline away? A systematic review and meta-analysis of commercially-available brain training programs in healthy and cognitively impaired older adults. *Neuropsychology Review*. doi:10.1007/s11065-021-09515-2
- Nolan, J., Lindeman, S., & Varghese, F. P. (2019). Mobile app interventions for military and veteran families: Before, during, and after deployment. *Psychological Services*, 16(2), 208-212. doi:10.1037/ser0000272
- O'Daffer, A., Colt, S. F., Wasil, A. R., & Lau, N. (2022). Efficacy and conflicts of interest in randomized controlled trials evaluating headspace and calm apps: Systematic review. *JMIR Mental Health*, 9(9), e40924. doi:10.2196/40924
- Parks, A. C., Williams, A. L., Kackloudis, G. M., Stafford, J. L., Boucher, E. M., & Honomichl, R. D. (2020). The effects of a digital well-being intervention on patients with chronic conditions: Observational study. *Journal of Medical Internet Research*, 22(1), e16211. doi:10.2196/16211
- Parks, A. C., Williams, A. L., Tugade, M. M., Hokes, K. E., Honomichl, R. D., & Zilca, R. D. (2018). Testing a scalable web and smartphone-based intervention to improve depression, anxiety, and resilience: A randomized controlled trial. *International Journal of Wellbeing*, 8(2). doi:10.5502/ijw.v8i2.745
- Pascual-Vera, B., Roncero, M., Doron, G., & Belloch, A. (2018). Assisting relapse prevention in OCD using a novel mobile app-based intervention: A case report. *Bulletin of the Menninger Clinic*, 82(4), 390-406. doi:10.1521/bumc.2018.82.4.390
- Paul, A. M., & Fleming, C. J. E. (2019). Anxiety management on campus: An evaluation of a mobile health intervention. *Journal of Technology in Behavioral Science*, 4(1), 58-61. doi:10.1007/s41347-018-0074-2
- Peek, J., Hay, K., Hughes, P., Kostellar, A., Kumar, S., Bhikoo, Z., Serginson, J., & Marshall, H. M. (2021). Feasibility and acceptability of a smoking cessation smartphone app (My QuitBuddy) in older persons: Pilot randomized controlled trial. *JMIR Formative Research*, 5(4), e24976. doi:10.2196/24976

- Pospos, S., Young, I. T., Downs, N., Iglewicz, A., Depp, C., Chen, J. Y., ... Zisook, S. (2018). Web-based tools and mobile applications to mitigate burnout, depression, and suicidality among healthcare students and professionals: A systematic review. *Academic Psychiatry, 42*(1), 109-120. doi:10.1007/s40596-017-0868-0
- Possemato, K., Kuhn, E., Johnson, E., Hoffman, J. E., Owen, J. E., Kanuri, N., ... Brooks, E. (2016). Using PTSD Coach in primary care with and without clinician support: A pilot randomized controlled trial. *General Hospital Psychiatry, 38*, 94-98. doi:10.1016/j.genhosppsych.2015.09.005
- Pressler, S. J., Jung, M., Gradus-Pizlo, I., Titler, M. G., Smith, D. G., Gao, S., ... Giordani, B. (2022). Randomized controlled trial of a cognitive intervention to improve memory in heart failure. *Journal of Cardiac Failure, 28*(4), 519-530. doi:10.1016/j.cardfail.2021.10.008
- Prochaska, J. J., Vogel, E. A., Chieng, A., Baiocchi, M., Maglalang, D. D., Pajarito, S., ... Robinson, A. (2021). A randomized controlled trial of a therapeutic relational agent for reducing substance misuse during the COVID-19 pandemic. *Drug and Alcohol Dependence, 227*, 108986. doi:10.1016/j.drugalcdep.2021.108986
- Reilly, E. D., Robinson, S. A., Petrakis, B. A., Gardner, M. M., Wiener, R. S., Castaneda-Sceppa, C., & Quigley, K. S. (2021). Mobile intervention to improve sleep and functional health of veterans with insomnia: Randomized controlled trial. *JMIR Formative Research, 5*(12), e29573. doi:10.2196/29573
- Reilly, E. D., Robinson, S. A., Petrakis, B. A., Kuhn, E., Pigeon, W. R., Wiener, R. S., ... Quigley, K. S. (2019). Mobile app use for insomnia self-management: Pilot findings on sleep outcomes in veterans. *Interactive Journal of Medical Research, 8*(3), e12408. doi:10.2196/12408
- Rickhi, B., Kania-Richmond, A., Moritz, S., Cohen, J., Paccagnan, P., Dennis, C., ... Toews, J. (2015). Evaluation of a spirituality informed e-mental health tool as an intervention for major depressive disorder in adolescents and young adults – a randomized controlled pilot trial. *BMC Complementary Medicine and Therapies, 15*, 450. doi:10.1186/s12906-015-0968-x
- Rickhi, B., Kania-Richmond, A., Moritz, S., Dennis, C., Paccagnan, P., Cohen, J., ... Toews, J. (2019). What does it mean to be less depressed? Perceived impact of a spirituality informed e-mental health tool as an intervention for major depressive disorder in adolescents and young adults: A qualitative study. *Internal Medicine Review, 5*(1), 1-17.
- Roepke, A. M., Jaffee, S. R., Riffle, O. M., McGonigal, J., Broome, R., & Maxwell, B. (2015). Randomized controlled trial of SuperBetter, a smartphone-based/internet-based self-help tool to reduce depressive symptoms. *Games for Health Journal, 4*(3), 235-246. doi:10.1089/g4h.2014.0046

- Roncero, M., Belloch, A., & Doron, G. (2019). Can brief, daily training using a mobile app help change maladaptive beliefs? Crossover randomized controlled trial. *JMIR mHealth and uHealth*, 7(2), e11443. doi:10.2196/11443
- Sankardas, S. A., & Rajanahally, J. (2017). iPad: Efficacy of electronic devices to help children with autism spectrum disorder to communicate in the classroom. *Support for Learning*, 32(2), 144-157. doi:10.1111/1467-9604.12160
- Santo, K., Richtering, S. S., Chalmers, J., Thiagalingam, A., Chow, C. K., & Redfern, J. (2016). Mobile phone apps to improve medication adherence: A systematic stepwise process to identify high-quality apps. *JMIR mHealth and uHealth*, 4(4), e132. doi:10.2196/mhealth.6742
- Schramm, Z. A., Leroux, B. G., Radick, A. C., Venture, A. S., Klein, J. W., Samet, J. H., ... Tsui, J. I. (2020). Video directly observed therapy intervention using a mobile health application among opioid use disorder patients receiving office-based buprenorphine treatment: Protocol for a pilot randomized controlled trial. *Addiction Science & Clinical Practice*, 15(1), 30. doi:10.1186/s13722-020-00203-9
- Sonawane, J. V., & Varshneya, H. (2020). AVAZ application (trial version): A voice for the nonverbal children with autism spectrum disorder: A pilot study. *The Indian Journal of Occupational Therapy*, 52(1), 8-11. doi:10.4103/ijoth.ijoth_2_20
- Sreekumar, S., Sangeetha, G. S., & Mathew, B. S. (2020). Advancement to higher communicative functions with transition to iPad app - A case report. *Disability and Rehabilitation: Assistive Technology*, 15(4), 480-483. doi:10.1080/17483107.2019.1629116
- Stokes, E. A., Stott, R., Henry, A. L., Espie, C. A., & Miller, C. B. (2022). Quality-adjusted life years for digital cognitive behavioural therapy for insomnia (Sleepio): A secondary analysis. *BJGP Open*, 6(4). doi:10.3399/BJGPO.2022.0090
- Stott, R., Pimm, J., Emsley, R., Miller, C. B., & Espie, C. A. (2021). Does adjunctive digital CBT for insomnia improve clinical outcomes in an improving access to psychological therapies service? *Behaviour Research and Therapy*, 144, 103922. doi:10.1016/j.brat.2021.103922
- Tait, R. J., Castro, R. P., Kirkman, J. J. L., Moore, J. C., & Schaub, M. P. (2019). A digital intervention addressing alcohol use problems (the "Daybreak" program): Quasi-experimental randomized controlled trial. *Journal of Medical Internet Research*, 21(9), e14967. doi:10.2196/14967
- Tan, S., Ismail, M. A. B., Daud, T. I. M., Hod, R., & Ahmad, N., (2023). A randomized controlled trial on the effect of smartphone-based mental health application among outpatients with

- depressive and anxiety symptoms: A pilot study in Malaysia. *Indian Journal of Psychiatry*, 65(9), 934-940. doi:10.4103/indianjpsychiatry.indianjpsychiatry_240_23
- Taylor, H., Cavanagh, K., Field, A. P., & Strauss, C. (2022). Health care workers' need for headspace: Findings from a multisite definitive randomized controlled trial of an unguided digital mindfulness-based self-help app to reduce healthcare worker stress. *JMIR mHealth and uHealth*, 10(8), e31744. doi:10.2196/31744
- Tofighi, B., Chemi, C., Ruiz-Valcarcel, J., Hein, P., & Hu, L. (2019). Smartphone apps targeting alcohol and illicit substance use: Systematic search in in commercial app stores and critical content analysis. *JMIR mHealth and uHealth*, 7(4), e11831. doi:10.2196/11831
- Torous, J., Staples, P., Slaters, L., Adams, J., Sandoval, L., Onnela, J. P., & Keshavan, M. (2017). Characterizing smartphone engagement for schizophrenia: Results of a naturalist mobile health study. *Clinical Schizophrenia & Related Psychoses*. doi:10.3371/CSRP.JTPS.071317
- Tregarthen, J., Kim, J. P., Sadeh-Sharvit, S., Neri, E., Welch, H., & Lock, J. (2019). Comparing a tailored self-help mobile app with a standard self-monitoring app for the treatment of eating disorder symptoms: Randomized controlled trial. *JMIR Mental Health*, 6(11), e14972. doi:10.2196/14972
- Vaezipour, A., Campbell, J., Theodoros, D., & Russell, T. (2020). Mobile apps for speech-language therapy in adults with communication disorders: Review of content and quality. *JMIR mHealth and uHealth*, 8(10), e18858. doi:10.2196/18858
- Vyshedskiy, A., Khoklovich, E., Dunn, R., Faisman, A., Elgart, J., Lokshina, L., ... Ilyinskii, P. O. (2020). Novel prefrontal synthesis intervention improves language in children with autism. *Healthcare (Basel, Switzerland)*, 8(4), 566. doi:10.3390/healthcare8040566
- Wu, Y. P., Linder, L. A., Kanokvimankul, P., Fowler, B., Parsons, B. G., Macpherson, C. F., & Johnson, R. H. (2018). Use of a smartphone application for prompting oral medication adherence among adolescents and young adults with cancer. *Oncology Nursing Forum*, 45(1), 69-76. doi:10.1188/18.ONF.69-76