

Managing Social Isolation, Anxiety and Depression Through the Use of Assistive Technology Tools

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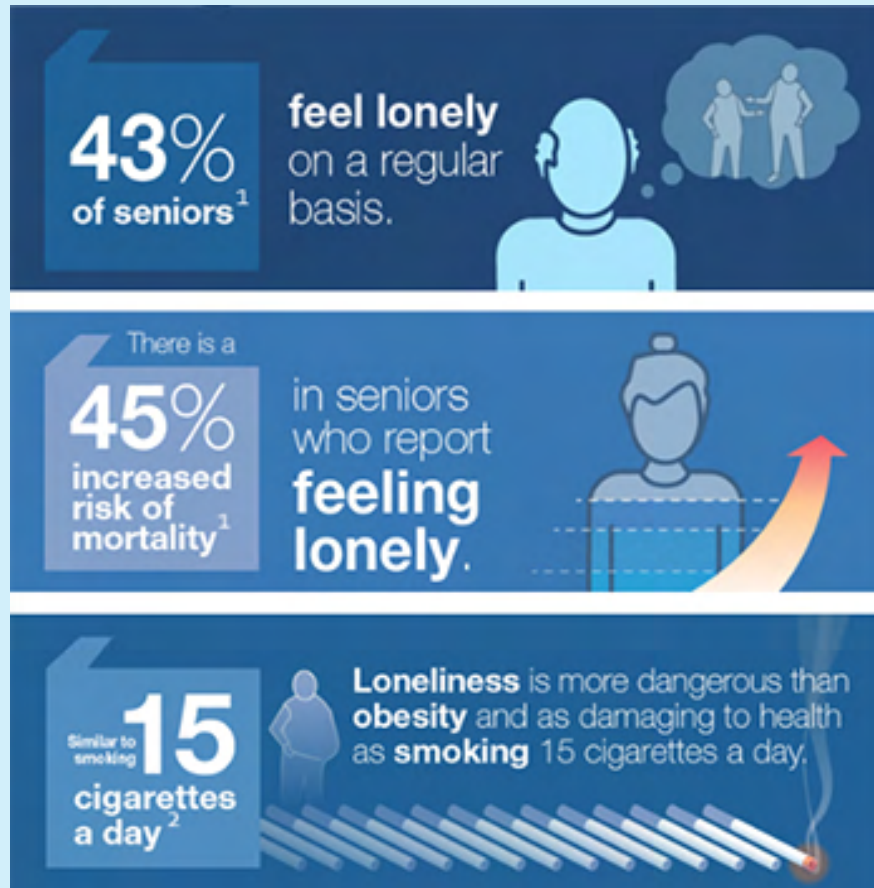
AT3 Center COVID-19 Webinar Series
May 14, 2020

GOALS FOR TODAY

Identify three assistive technology tools that can be used to reduce social isolation.

Identify three assistive technology solutions to help manage anxiety and depression.





Source: Health Resources & Services Administration (HRSA)

<https://www.hrsa.gov/enews/past-issues/2019/january-17/loneliness-epidemic>

HEALTH EFFECTS OF SOCIAL ISOLATION AND LONELINESS

Research supports that social isolation and loneliness can contribute to mental and physical health issues

- Depression
- Cognitive changes
- Cardiovascular changes

Source: <https://www.aginglifecarejournal.org/health-effects-of-social-isolation-and-loneliness/>

Depression: More than 17 million U.S. adults—over 7% of the population—had at least one major depressive episode in the past year. People of all ages and all racial, ethnic and socioeconomic backgrounds experience depression, but it does affect some groups more than others.

Anxiety Disorder: Anxiety disorders are the most common mental health concern in the United States. Over 40 million adults in the U.S. (19.1%) have an anxiety disorder. Meanwhile, approximately 7% of children aged 3-17 experience issues with anxiety each year. Most people develop symptoms before age 21.

SOURCE: National Alliance on Mental Illness (NAMI)

MENTAL HEALTH AND AT

A lot of research and practice about assistive technology for people with cognitive disabilities.

Almost none of it focuses on people with mental illness and the co-occurring cognitive disabilities that accompany many forms of mental illness.

Therefore need to apply what we know about AT for cognition to the needs of people with mental illness....

ASSISTIVE TECHNOLOGY IS A SUPPLEMENT TO TREATMENT

AT will likely be most effective when other symptoms of mental illness are under stable control either through medication or appropriate counseling.



MINDFULNESS AND COGNITIVE BEHAVIORAL THERAPY (CBT)

The Marriage of CBT and meditation practices = Mindfulness-based cognitive therapy (MBCT)

CBT approach: to help the individual change distorted unhelpful behaviors

Mindfulness: practice of being aware of our thoughts, feelings and emotions

Approach is being used to manage anxiety and depression

Many devices and applications are applying these methods

<https://positivepsychology.com/mbct-mindfulness-based-cognitive-therapy/>

MENTAL HEALTH TECHNOLOGIES

Soothers / Comforters - (Anxiety)

Distracters / Disrupters - (Agitation)

Reminders / Schedulers - (Memory)

Safety / Monitoring - (Risk Behaviors)

Mood Trackers / Screeners - (Therapeutic)

CALMING

SPIRE (MINDFULNESS/RELAXATION)

Measures your breath by the expansion and contraction of the torso

Companion App, iOS, Android

Measures breathing patterns and tracks steps.

Breathing visualizations.

Guided breathing meditations.

\$265



MUSE BRAIN SENSING

Muse EEG headband measures whether your mind is calm or active, and translates that data into weather sounds

When you're calm, you'll hear peaceful weather sounds. When your mind wanders, the weather will intensify, guiding you back to a calm state

\$250-\$300



CALM WEAR

Compression clothing to help with calming sensory system

Children and adult sizes

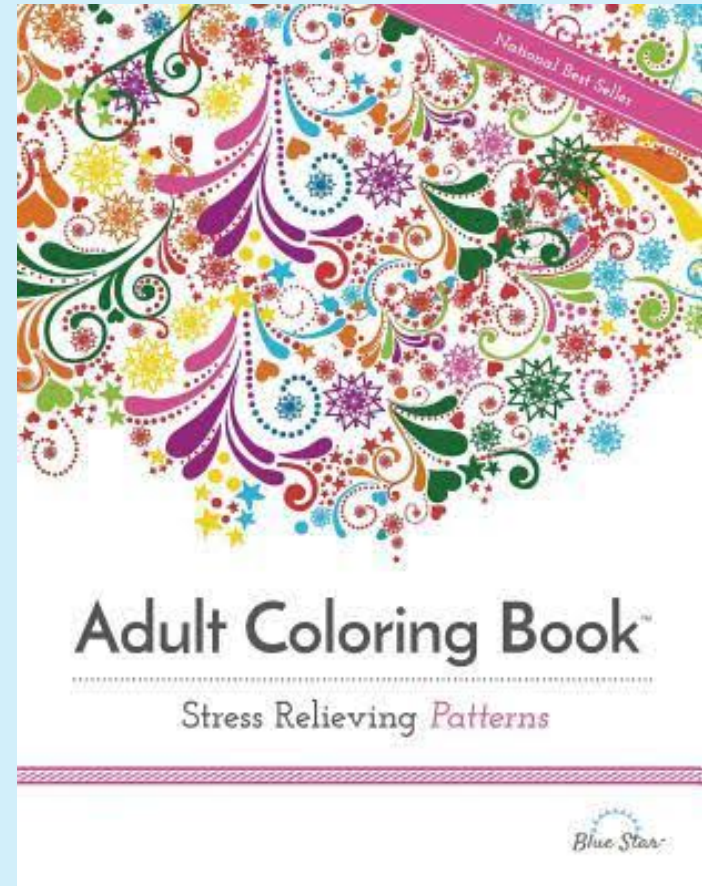
Price: \$120-\$150 for pack of 3

<https://calmwear.net/>



COLORING-MINDFULNESS

“When Did Coloring Books Become Mindful? Exploring the Effectiveness of a Novel Method of Mindfulness-Guided Instructions for Coloring Books to Increase Mindfulness and Decrease Anxiety”



<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5797627/>

APPS FOR MOOD & EMOTION MANAGEMENT

ANXIETY AND DEPRESSION ASSOCIATION OF AMERICA (ADAA)

Mental Health App guide

RATINGS KEY

Ease of Use	How is it to use this app?	1 = Very Difficult 5 = Very Easy
Effectiveness	How likely will the content provide the tools or methods to accomplish its purpose?	1 = Highly Unlikely 5 = Highly Likely
Personalization	What is its ability to personalize individual needs?	1 = No Ability 5 = Complete Ability
Interactive/ Feedback	How interactive is the app in giving feedback?	1 = Not Interactive 5 = Very Interactive
Research Evidence	Does scientific research demonstrate its effectiveness?	1 = No Research Evidence 5 = Ample Research Evidence

<https://adaa.org/finding-help/mobile-apps>

PSYBERGUIDE




Non-profit project - reviews apps based on the app's
Credibility, User Experience, and Transparency of Privacy
Practices

Funded by One Mind, non-profit organization in brain health
research

<https://onemind.org/>

<https://www.psyberguide.org/>


14 of the Best... assistive techn... Moodlytics | Ps... 14 Online Book... Action Book Cl... Senior Exercise... whatsmym3 ~... WhatsMyM3 |... Woebot - Your... Wysa | Psyber... how to do scre... +




Wysa is a smartphone app that offers an artificially intelligent smartbot to anonymously chat with and coach you to better cope with daily stresses. Wysa is designed to help with a variety of behavioral health issues like diabetes, smoking cessation, depression, etc. The home screen launches a chat box with Wysa who asks users how they are doing. Throughout the conversation Wysa offers multiple response options as well as a text box to type customized response if the given options don't fit. From there Wysa guides users through cognitive reframing, breathing exercises, and other strategies depending on how they report feeling and what is appropriate for that situation. Conversations are not saved in the app unless users choose to save them.

Get it on
iTunes


GET IT ON
Google Play



Credibility
Overall Score: 2.86/5.00
[Show Details](#)
Overall Score: 8/14
Research Base: 1/3
Research Support: 1/2
Proposed Intervention: 2/3



User Experience
Objective Quality Score: 3.86/5.00
[Show Details](#)
Subscale scores:
Engagement: 4.00
Functionality: 4.13
Aesthetics: 3.83



Transparency
Overall Score: Acceptable
[Show Details](#)
Overall Score: **Acceptable**
Does the app have a privacy policy?: **Yes**
Does the policy describe how the app collects, uses, and stores information?
information storage and
[Privacy & Cookie Consent](#)

WYSA



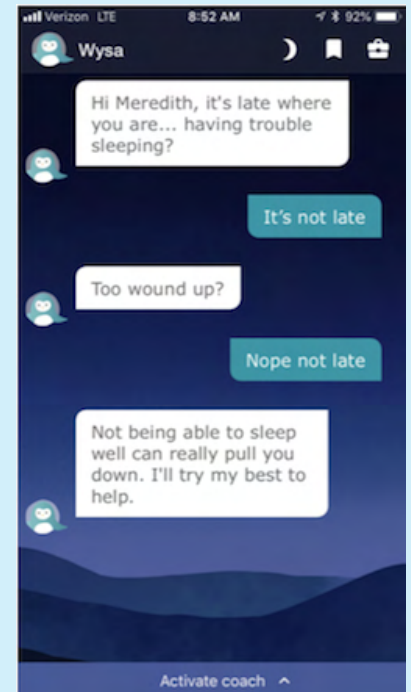
AI therapy chatbot

Free, iOS and Android

Conversations are secure

Premium Plus - \$99.99 per month
(Coach + Tools)

Premium - \$99.99 per year
(Tools)

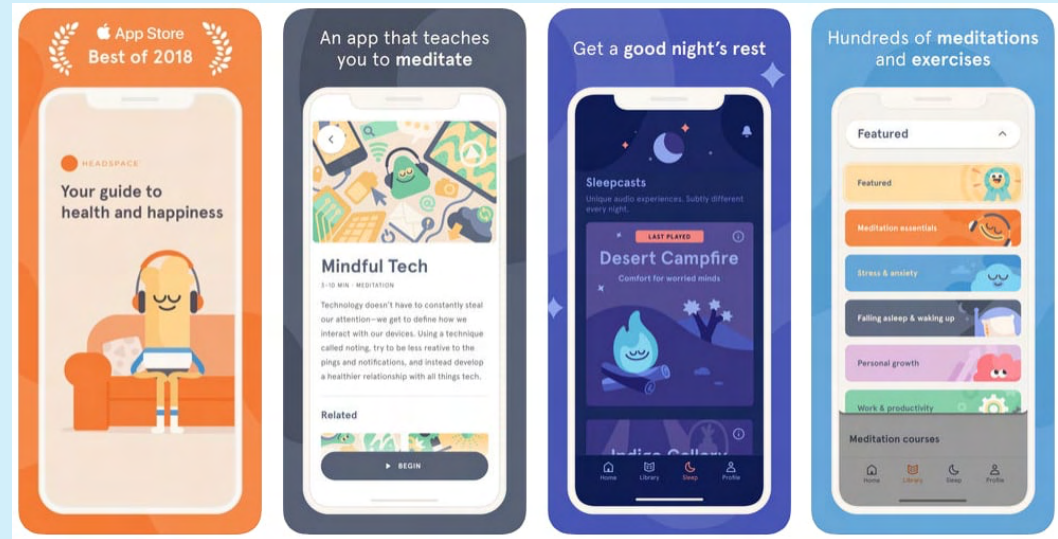


HEADSPACE

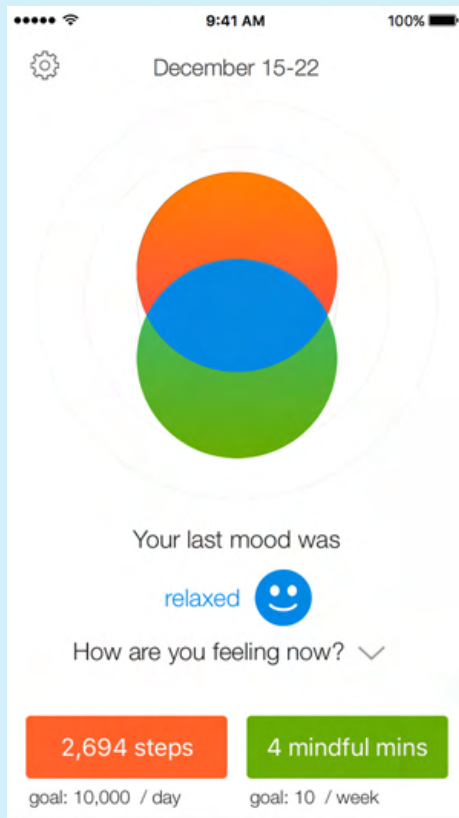
iOS and Android

Free version offers basic meditation and mindfulness activities

Monthly subscription, \$12.99 offers options for meditation, mindful exercises, sleep support



CENTERED



Free, iPhone only

Clinical research by Blue Cross and Blue Shield of Illinois, the University of Massachusetts School of Medicine and the Adler School of Professional Psychology

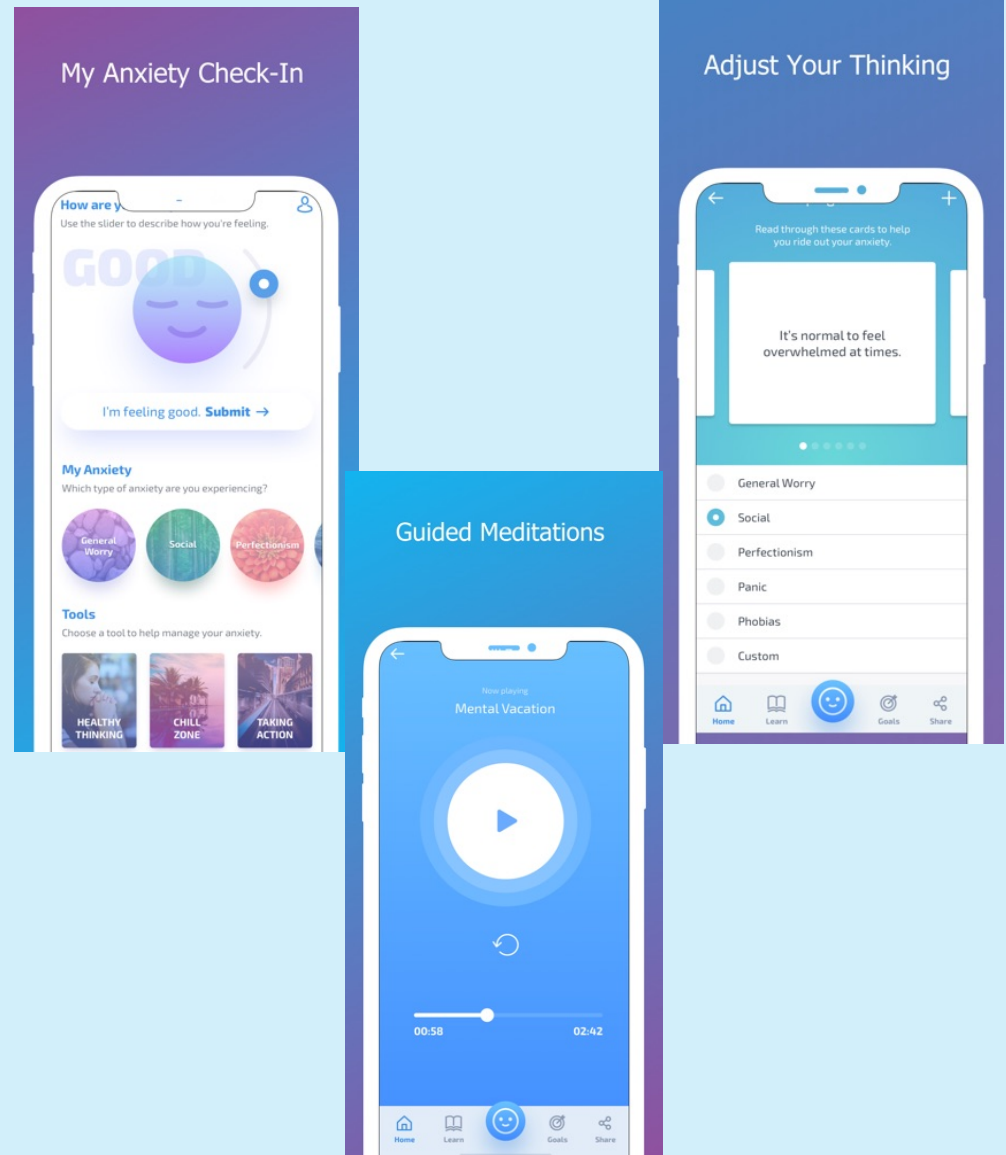
- Meditation sessions include: self guided meditation, mini meditation, mindful walk, meditation on activity, compassion meditation, mindful meditation and body awareness meditation
- See how mood is impacted by being more mindful and increased activity
- Schedule reminders to meditate with time suggestions based on open times on your calendar
- Integrates with Health App

MINDSHIFT CBT

Free, iOS, Android

Interactive Cognitive Behavior
Therapy strategies

Tools designed to reorient
thinking



MOODTOOLS

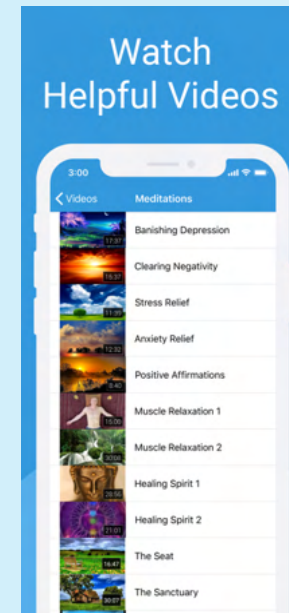
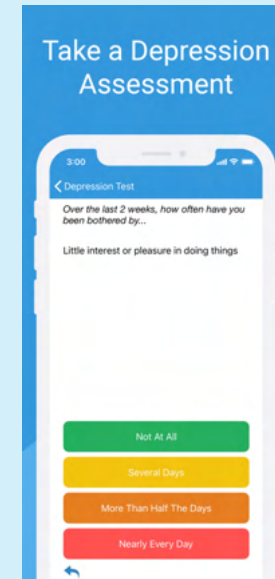
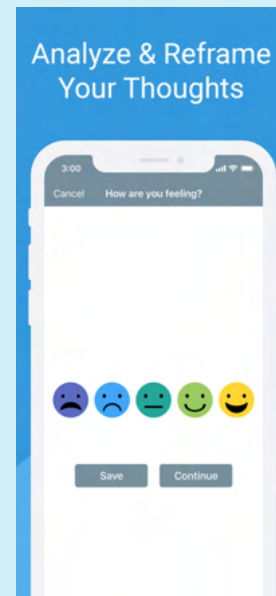
iOS and Android, Free

Depression symptoms questionnaire

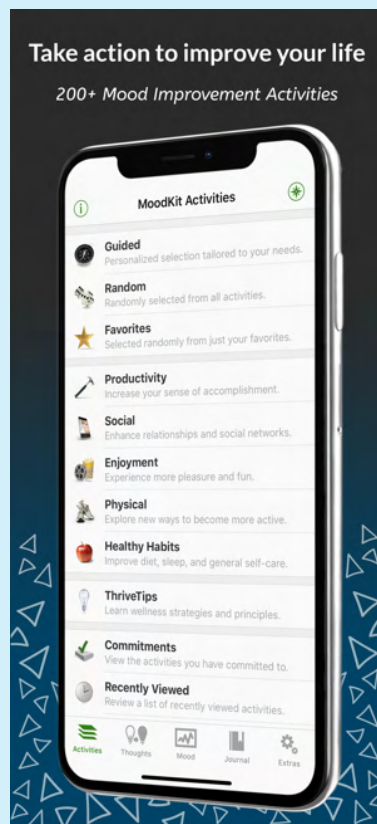
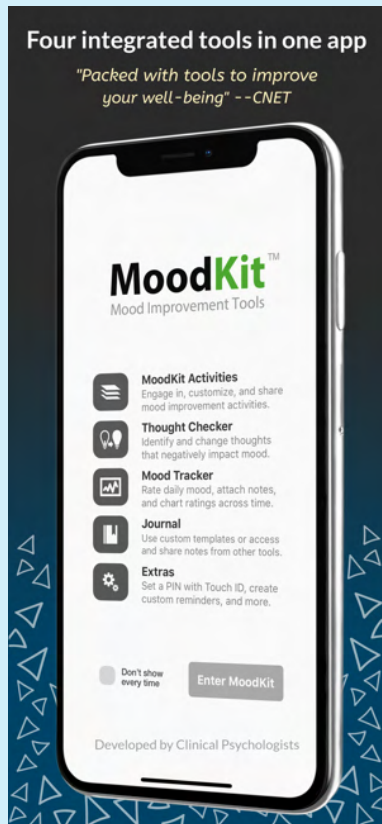
Thought diary

Videos for meditation

Suicide safety plan



MOODKIT



iOS only, \$4.99

- Thought checker; Guidance to modify distressing thoughts.
- Mood improvement activities.
- Unlimited/multiple mood ratings & notes per day.
- Exportable Mood Charts with 7 & 30-day views.
- Saves exportable notes to a central Journal.
- Add your own activities & journal templates.
- Link custom reminders to your favorite tools.
- Security PIN, Touch/Face ID, & AirPrint enabled.

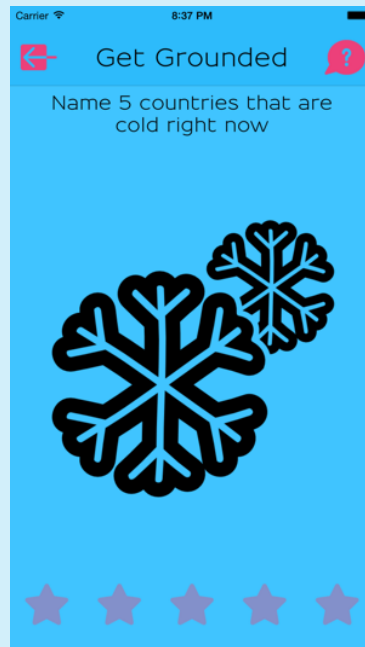
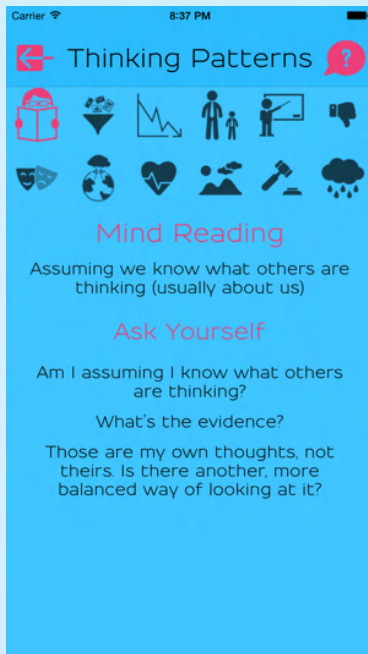
WHAT'S UP

Free, iOS, Android

Based on CBT

Diary to keep thoughts and feelings together in, including the ability to rate feelings on a scale out of 10

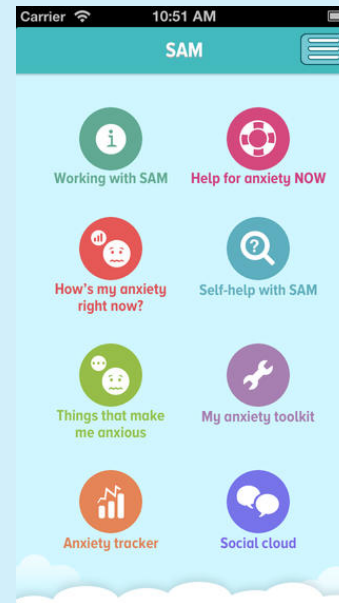
- A positive and negative habit tracker. Set goals to practice good habits
- A catastrophe scale. Put your problems into a better perspective when things are too much
- Grounding games containing to help keep you in the present when stress is taking over
- Forums! Talk with people that may be feeling just like you



SELF-HELP FOR ANXIETY MANAGEMENT (SAM)

Free iOS, Android

- Tell the app how you're feeling, how anxious you are, or how worried you are
- App's self-help features walk you through some calming or relaxation practices.



UPLIFT



iOS, Android

First session free; \$14.99 a month for a quarterly subscription.

Developed by The Atlanta-based startup UpLift Health

Uses (CBT) to help users with depression.

The platform includes 12 chatbot-guided sessions, each lasting 45-minutes, as well as a toolkit.

Users can participate by answering questions, completing mental exercises and getting feedback and guidance from a bot,

Problem Solver

- Mood Journal
- **Trigger Plan ***
- Thought Errors
- Reframing Struggles
- Goal Trainer
- Mood Boosters

SLEEP

Adaptive Sound Technologies
LectroFan White Noise Sound
Machine: \$50



Bose Noise-Masking Sleepbuds
\$250



Dreamegg; \$30

DREAM ON SLEEP AID

Wearable on wrist or ankle;
\$149

Tactile pulses for 15 minutes; auto
shut off

Technique is “brainwave
entertainment”

external stimulus (light, sound, or
in this case vibrations)
synchronizes to a person’s
brainwave frequencies to create
state of calmness



WEIGHTED BLANKET

Deep touch pressure to help reduce:

Anxiety and sleep issues



TIPS FOR CHOOSING THE CORRECT WEIGHT

Should be 5 to 10 percent of your body weight. The weighted blanket should also fit snugly to the size of the bed.

Adults can use medium-large weighted blankets ranging from 12 to 30 pounds.

For a 20- to 70-pound child, a small weighted blanket should weigh from 3 to 8 pounds.

For a 30- to 130-pound child, a medium weighted blanket should weigh from 5 to 15 pounds.

Older adults may want to use small or medium weighted blankets ranging from 5 to 8 pounds.

Source: <https://www.healthline.com/health/anxiety/do-weighted-blankets-work#risks>

PHILIPS SMARTSLEEP LIGHT

AmbiTrack sensor monitors room temp, noise and lighting via SleepMapper App

Able to set alarms and personalize light intensity and sounds

\$220 smart phone enable

\$179 standard



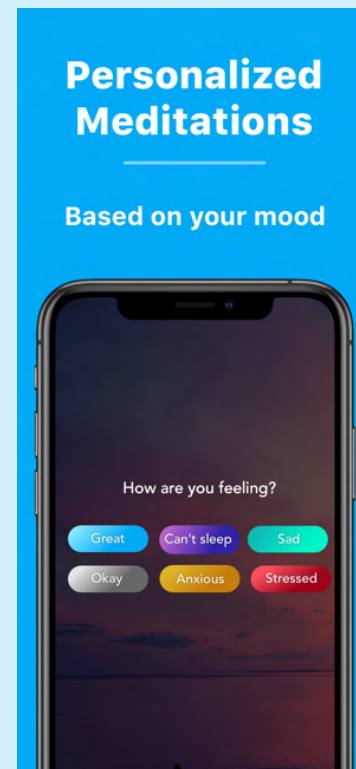
AURA: SLEEP & MINDFULNESS

Free iOS & Android; in app purchase; in app purchase

AI driven 3, 7 or 10 minute mediation sessions

Calming relaxing stories to aid with sleep, music

Tracks moods and suggests activities based on mood



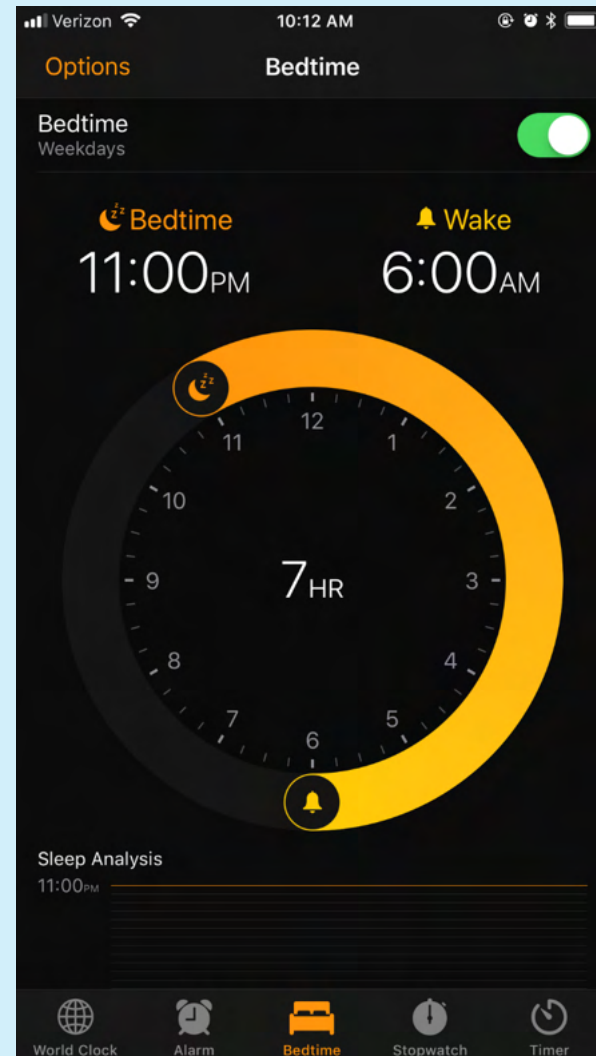
APPLE BEDTIME

Lets you set an exact time for waking up.

Select which days of the week you want your alarm to go off (weekdays only, weekends only, etc.).

Choose how many hours you want to sleep, and the app will tell you when to head to bed to wake up on time.

It will also give you a push notification before your bedtime.



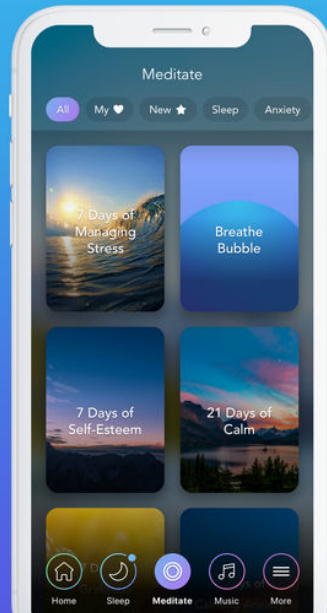
CALM

Free; iOS only

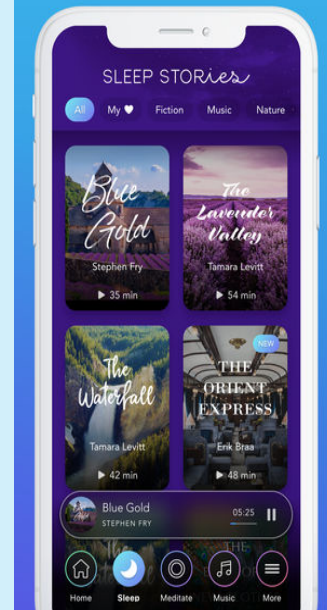
Brand new Daily Calm every day: a new 10-minute program added daily to help ease you into the day or unwind with before bed

- * 100+ Sleep Stories: adult bedtime stories
- * 7 and 21 day programs for both beginner and advanced users
- * Breathing exercises to help you relax
- * Music to help focus, relax or sleep
- * Unguided timed meditation
- * Open-ended meditation
- * 30+ soothing nature sounds and scenes to use during meditation, yoga or to help you sleep

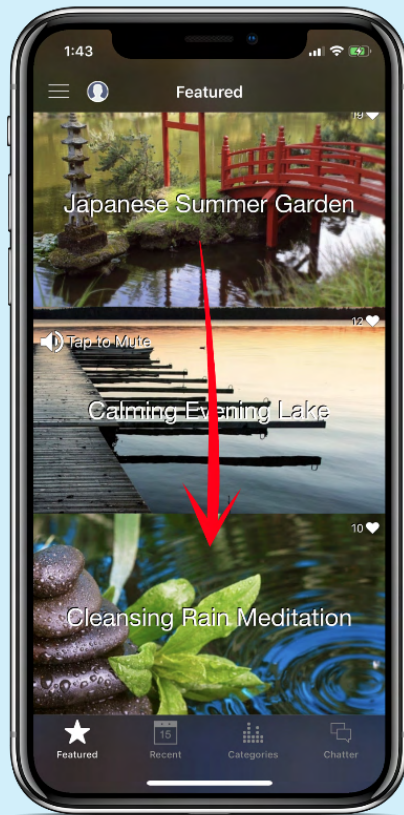
Learn the life-changing skill of meditation



Sleep Stories to help you fall asleep



TM SOFT WHITE NOISE



Free; iOS, Android, web based

Create soundscapes to calm mind and block out distractions

Sounds are looped

Examples of sounds: Air Conditioner, Airplane Travel, Amazon Jungle, Beach Waves Crashing, Blowing Wind, Blue Noise, Boat Swaying in Water, Brown Noise, Camp Fire, Cars Driving, Cat Purring, Chimes Chiming, City Streets, Clothes Dryer, Crickets Chirping, Crowded Room, Extreme Rain Pouring, Frogs at Night, Grandfather Clock, Hair Dryer Blowing, Heartbeat, Heavy Rain Pouring, Light Rain Pouring, Ocean Waves Crashing, Oscillating Fan

SOCIAL

RESOURCES FOR CAREGIVERS

AgingCare.com <https://www.agingcare.com/>

- Online community for caregivers: forums for advice and support

Wellspouse.org <https://wellspouse.org/>

- Support groups for individuals taking care of their spouse



STITCH.NET

International Online community for 50+year olds

Not just a dating app

Basic Free membership; \$5 per month access to online community and all events.



SKILLSHARE

Online learning community

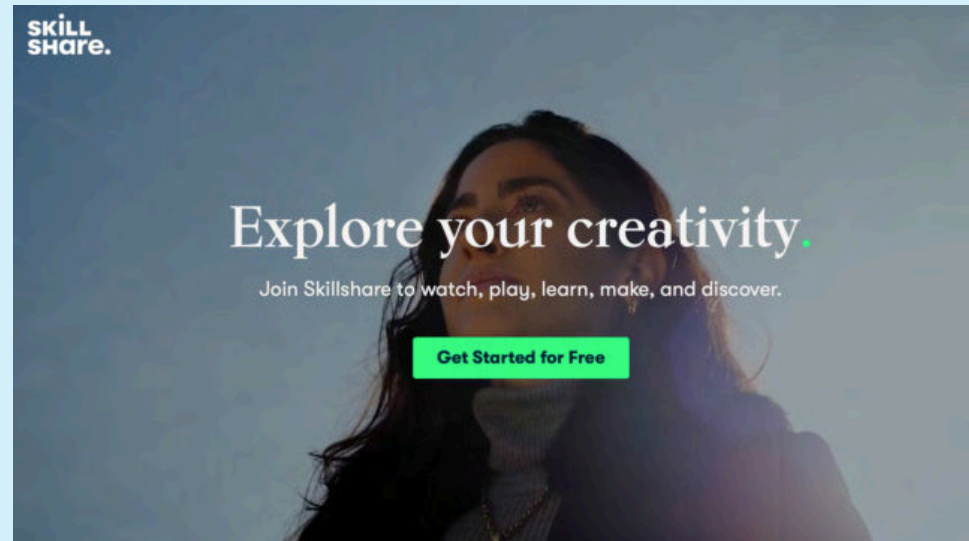
More than 19,000 classes

One month free

\$15 per month

\$99 per year

<https://www.skillshare.com>



ROBOTIC SUPPORT ANIMALS

TomBot

Touch sensors

Voice activated

Real puppy sounds

\$399



Joy For All Companion Pets

\$110



ELLI Q

Voice controlled assistant
designed for older adults

Video calls & messaging

Games

Music & Videos

Reminders

Photo Sharing



<https://elliq.com/pages/features>

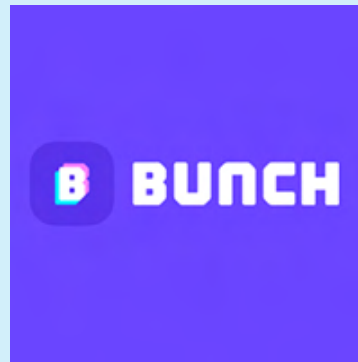
<https://www.youtube.com/watch?v=emrqHpC8Bs8#action=share>

VIRTUAL GAMES AND ENTERTAINMENT

Houseparty--Free, Android and iOS, Chrome



Bunch ---Free, iOS, Android



Both provide online chatting and playing games with friends and family

NETFLIX PARTY

Free, Google Chrome

Watch the same movie or TV series from different locations is an available alternative for hanging out with friends during quarantine



JOIN AN ONLINE BOOK CLUB

Free memberships

Action Book Club

Andrew Luck Book Club

Our Shared Shelf- Emily Watson (AKA Hermione)

Oprah's Book Club 2.0

Reese's Book Club

<https://www.goodreads.com/group>

HEALTH AND ENTERTAINMENT RESOURCES



FITNESS

YMCA <https://ymca360.org/> variety of free health and fitness videos for all ages

- Senior exercises online (Free) <https://www.seniorexercisesonline.com>
- HasFit YouTube station offering exercise workouts for diverse groups; seniors, limited mobility <https://hasfit.com/>



TELE HEALTH

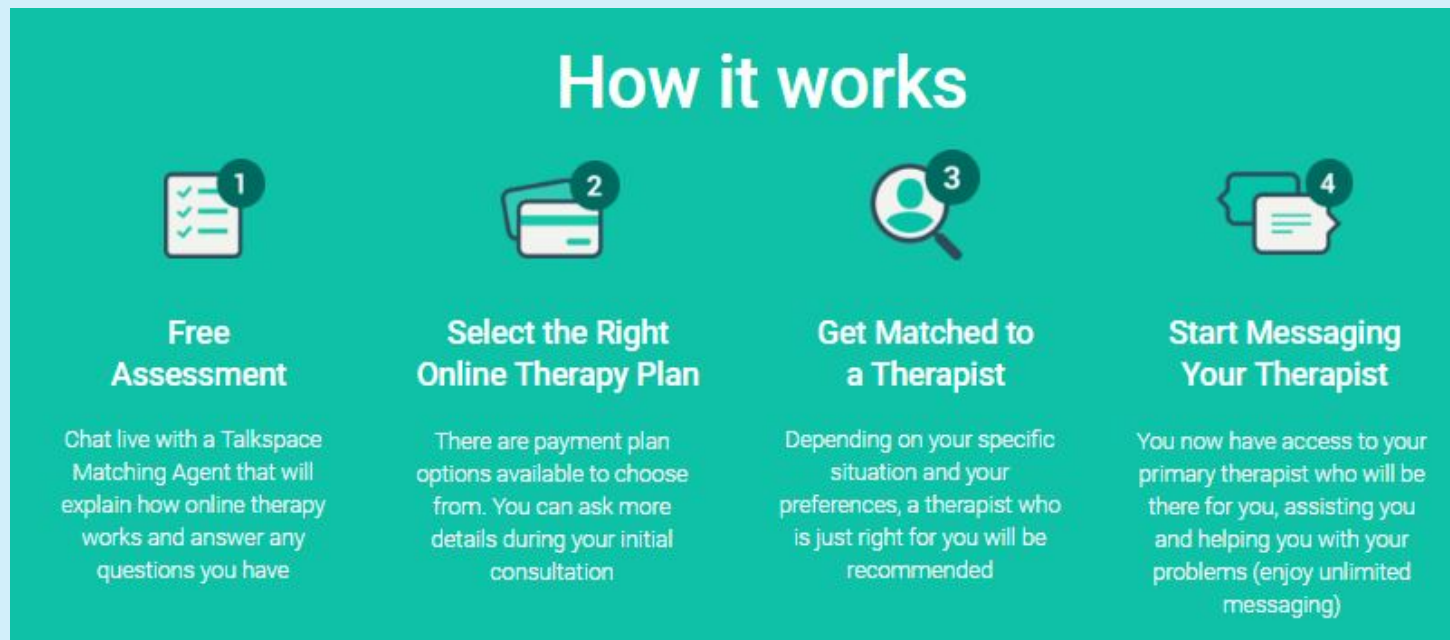
Wide range of services

- Telemedicine two way real time conference with physician
- Mobile Health- self monitoring and transferring of data to a provider i.e.: diabetics



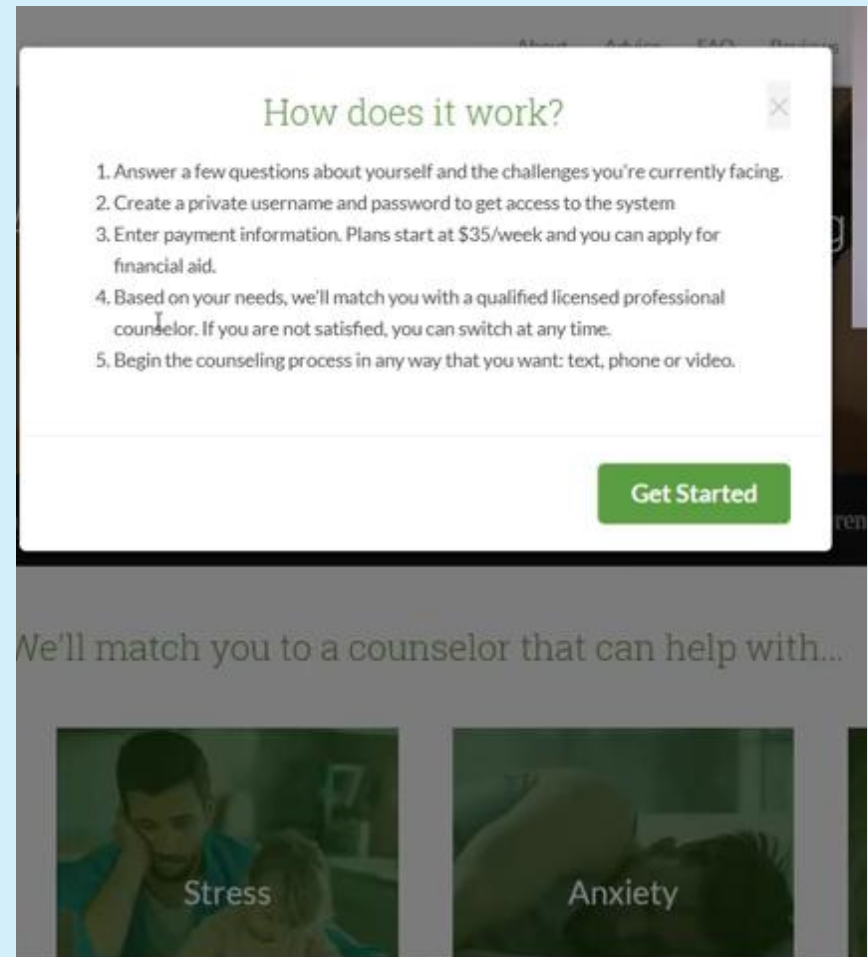
ONLINE MENTAL HEALTH THERAPY

Talkspace <https://www.talkspace.com/>



ONLINE MENTAL HEALTH THERAPY

Betterhelp www.betterhelp.com



NATIONAL PARK VIRTUAL TOURS



<https://artsandculture.withgoogle.com/en-us/national-parks-service/parks>

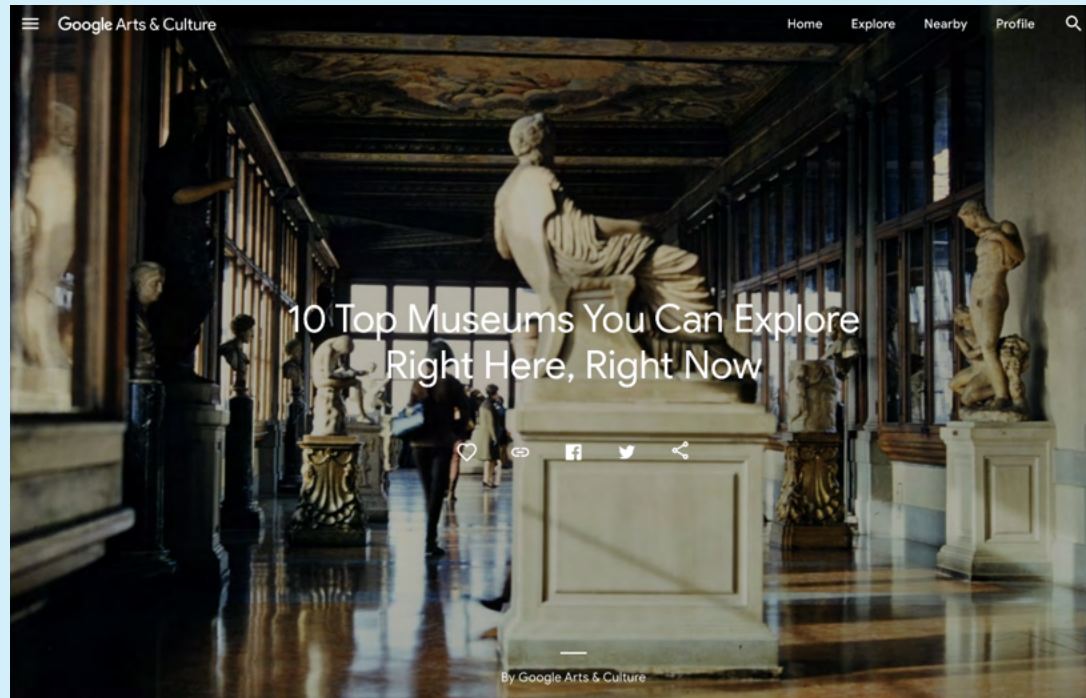
ART MUSEUMS VIRTUAL TOURS

Getty Museum

Van Gogh

d' Orsay

Guggenheim



<https://artsandculture.google.com>

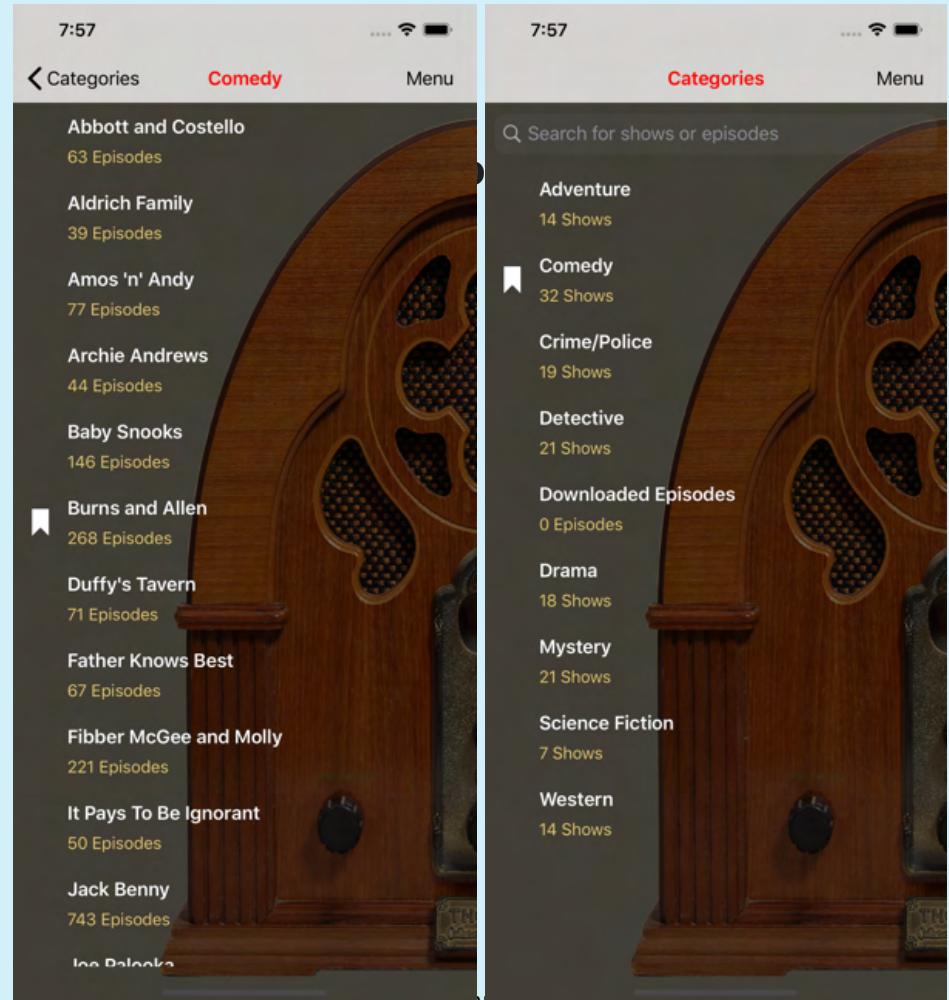
MUSIC AND THEATER PERFORMANCES

ALL ARTS <https://allarts.org/programs/>

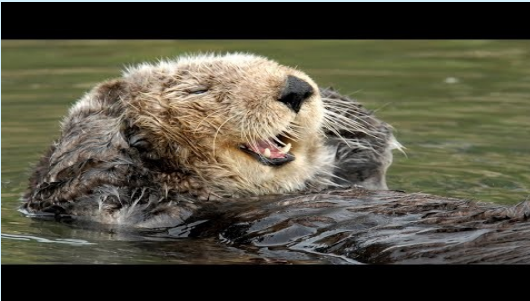
Free access to collection of short films about art, culture and music



OTR STREAMER OLD TIME RADIO



LIVE CAMS



Monterey Aquarium

<https://www.montereybayaquarium.org/animals/live-cams/sea-otter-cam>



San Diego Zoo

<https://zoo.sandiegozoo.org/live-cams>

VR

MyndVR

<https://www.myndvr.com/>

Rendever

<https://rendever.com/>



LIBRIVOX

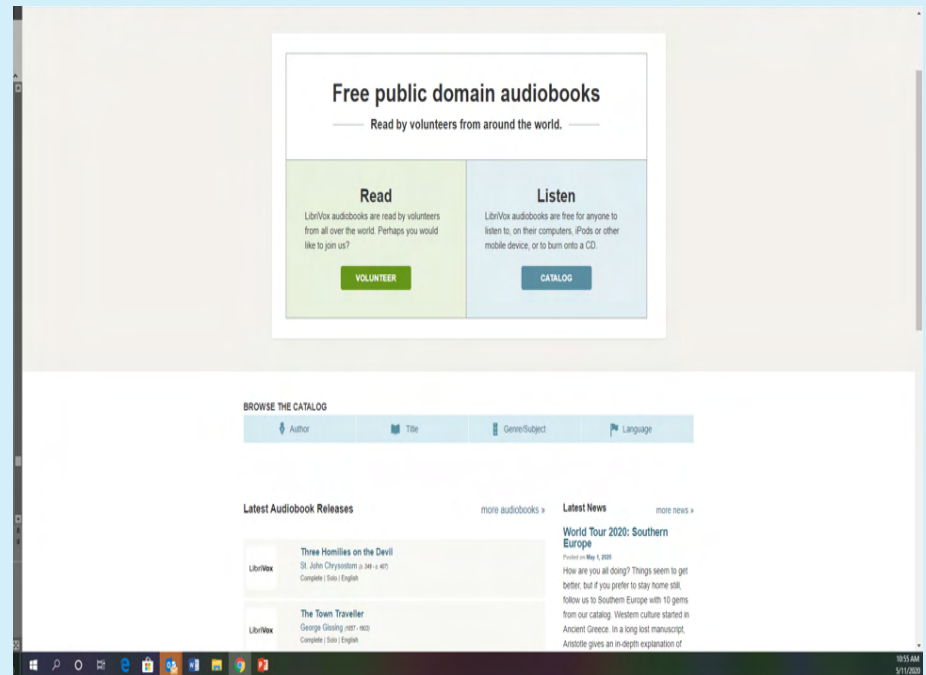
Non profit public domain

Ad- free

Volunteers record books

You can choose to volunteer to read

Many languages available



<https://librivox.org/>

RESOURCES

Anxiety and Depression Association of America

<https://www.adaa.org/finding-help/mobile-apps>

National Alliance on Mental Illness (NAMI) <http://www.nami.org/>

One Mind <https://onemind.org/>

Psyberguide <https://www.psyberguide.org/>

Instagram

Search

**it's ok
to fall apart
sometimes. tacos fall
apart and we
still love them.**

Carly's confessions



Log In to Instagram

Log in to see photos and videos from friends and discover other accounts you'll love.

CONTACT INFORMATION



Technology for Independence

University of Washington

Washington Assistive Technology Act Program

(800) 214-8731 Toll-Free Hotline

(206) 616-1396 TTY

(206) 543-4779 Fax

<http://watap.org/>

[Email: watap@uw.edu](mailto:watap@uw.edu)

