

Here's Hope: Assistive Technology Supporting Mental Health

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www.gatfl.gatech.edu

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www.amacusg.org



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Tools for Life Mission

We're here to help Georgians with disabilities gain access to and acquisition of assistive technology devices and assistive technology services so they can live, learn, work, and play independently in the communities of their choice.





Learning Objectives

- Identify 3 facts regarding mental health in the US.
- Identify 3 AT approaches to avoid the “FAST” track in the educational planning process
- Identify 3 AT solutions to support or accommodate individuals with mental health issues
- *For Handouts:* <http://www.gatfl.gatech.edu/tflwiki>



THE FACTS !!!

- One out of four American families has a relative who has a mental illness or about 57.7 million Americans diagnosed per year.
- Mental illness typically strikes young people in their most productive years, 16-25.
- WHO reports that 4 of the 10 leading causes of disability are mental disorders
- Mental illness costs the US \$444 billion/year - mainly lost wages
- With proper Diagnosis, Medications and Therapies 70%-90% of individuals have reduced symptoms and better quality of life.



A Quick Overview

One in 5 children and adolescents have some type of mental, behavioral or emotional problem; one in 10 are significant issues.

One in 8 adolescents have depression.

Suicide is the third leading cause of death among young people 15 – 24.



Student Traits Impacted by Mental Illness

- Concentration**
 - Depression or Racing Thoughts**
 - Fatigue**
- Memory / Organization**
 - Medication Side Effects**
 - Treatment Residual - ECT**
- Inconsistency**
 - Mood Changes**
 - Decision Making Skills**
- Unpredictability**
 - Agitation**
 - Risky Behavior**



Barriers

- Only 30% of students struggling with these issues receive treatment.
- Fewer than half of students with mental health conditions complete high school (40%).
- Employment is consistently less robust than peers without mental health conditions.
- Homelessness and arrests are high.



What you should know:

- Educators and families must work together to recognize the symptoms and know the next steps (refer!)
- Functional Behavior Assessments (FBA) are necessary and required
- Behavior Intervention Plans (BIP) are part of the Individualized Education Program (IEP)
- Behavior plans typically used for overt behaviors with over-representation by males and students of color.



The "FAST" Track

- **Frustration**
- **Anxiety**
- **Stress**
- **Tension**

Examples of Interventions

- “Check in” for positive behavior
 - Catch them on their best behavior!
- Self monitoring
- Video prompting
- Cognitive behavior therapy
- Cooling down and mindfulness practice



AT is Most Frequently Associated With:

- Mobility
- Communication
- Vision
- Learning
- Hearing



Mental Health Technologies

- Soothers / Comforters - (Anxiety)
- Distracters / Disrupters - (Agitation)
- Reminders / Schedulers - (Memory)
- Safety / Monitoring - (Risk Behaviors)
- Mood Trackers / Screeners - (Therapeutic)



AT as a Supplement to Treatment

- Digital Hand Held Devices**
 - Smart Phones, Pagers, Watches**

- Tablets, Computers, Sound Machines**
 - Video Conferencing, Social Networking, Sleep Aids**

- Apps, On-line or On-Board Accessibility Software**
 - Commercial Apps, Text Reader, Color Options**

- Low Tech**
 - Ear Buds, Pocket Stone, Note Pads, Service Animal**

Considering No/Low Tech to High Tech



Trackers

- **Graph moods over time making it easy for the individual or their therapist to track daily rhythms**
- **Important to use secure and encrypted online tools when sharing data with family, providers or certified peer specialists**
- **Your phone “reminds” you to complete daily input**
- **Supplemental Tracking of:**
 - **Medications taken**
 - **Exercise completed**
 - **Food eaten**



DBSA Wellness Tracker

www.DBSAlliance.org/Tracker

On-line - iOS App - Android App

Provides key health trends for mood disorder

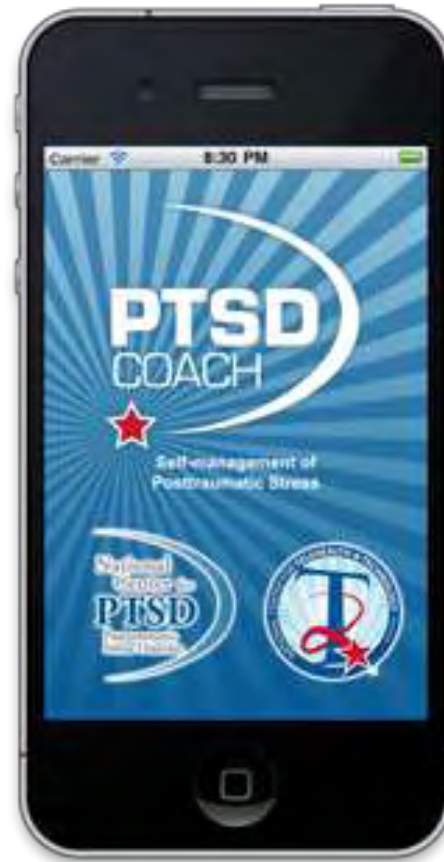
- **Overall Mood** – (depressed to manic)
- **Well-Being** – (cheerful, calm, active, rested)
- **Mood Disorder Symptoms** – (rate and comment)
- **Lifestyle** (including sleep, exercise, etc.)
- **Medication and Side Effects**
- **Physical Health**

PTSD Coach

FREE!

Android & iOS

- PTSD Coach was designed for Veterans and military Service Members who have, or may have, Posttraumatic Stress Disorder (PTSD). This app provides users with education about PTSD, information about professional care, a self-assessment for PTSD, opportunities to find support, and tools that can help users manage the stresses of daily life with PTSD. Tools range from relaxation skills and positive self-talk to anger management and other common self-help strategies. Users can customize tools based on their preferences and can integrate their own contacts, photos, and music. This app can be used by people who are in treatment as well as those who are not. PTSD Coach was created by VA





Emerging Technology

- **Devices that Monitor – Breathing, Heart Rate, Voice Pattern Changes**
- **Auto Texting to or from Consumers to their Therapist or Health Care Facility**
- **Virtual Reality Treatments – PTSD**
 - **provides real world environments during exposure therapy**



Behavior Trackers

- Easy Behavior Tracker for Teachers (1.99)
- Autism Tracker Lite: Track analyze and share ASD daily (free)
- Group Star Charts (.99)
- Social Stories for Problem Behaviors (9.99)
 - Calm Counter
 - Wait Timer
 - Turn Taker
 - Going Shopping
 - Running (when and where to run)



Self Monitoring

Student identifies and monitors her or his own behavior. Age and developmentally appropriate.

- Excel!
- iModeling Boundaries
- Calm Counter



Video Prompting & Modeling

- **Videos that show a task in the setting in which it occurs**
- **Student is recorded doing his or her best performance**
- **Used in transitioning activities, school to work activities, daily living skills, social skills**
- **“Make New Friends in Middle School”**
<https://www.youtube.com/watch?v=MJYLfekgw2I>

Cognitive Behavior Therapy

- CBT4Kids Toolbox (free)
- DBT Emotion Regulation Tools (7.99)
- Kid CBT ABC
- https://itunes.apple.com/us/app/kid-cbt*abc-way/id552651162?mt=8





Mindfulness

Class or individual “breathing break”.

- [Tips for Teaching Mindfulness to Kids](#)
- Relax Sounds – Relaxing Nature & Ambient Melodies (free)
- Take a Break! –Guided Meditation (free)
- Stop, Breathe & Think (free)
- Relaxing Sounds & Ambient Music for Sleep, Meditation, Yoga (\$2.00)

Reduce Stress

“The survey found that women who frequently use social media, along with other technologies, to connect with friends and family report feeling less stressed than women who connect less often.

The researchers at Rutgers University in New Jersey and the Pew Research Center in Washington, D.C., found that women who frequently email, text and use social media scored 21 percent lower on a test that measures stress than women who don't use these technologies”

- Elizabeth Palermo, LiveScience
Published: 01/15/2015 10:56 AM EST on LiveScience



WAZE

FREE!

iOS

- Waze is the world's largest community-based traffic and navigation app. Join drivers in your area who share real-time traffic & road info to save time, gas money, and improve daily commuting for all.



Key Ring App

FREE!

iOS and Android

- All those loyalty cards are hard to keep track of. Key Ring puts all your cards on your phone, so they're there when you need them. Scan and store grocery cards, gym cards, library cards, gift cards... you name it. Loyalty cards scan straight from your phone at the checkout counter, saving you money instantly



Get Out of Stress

FREE!

Android

- Modern life is full of deadlines, frustrations, and demands. For many people, stress is so commonplace that it has become a way of life. You can protect yourself by recognizing the signs and symptoms of stress and taking steps to reduce its harmful effects. This Application gives you complete idea about Stress , its symptoms and stress management in simple and efficient way.

The Application Includes

- ** What is stress
- ** Symptoms of short term stress
- ** Symptoms of longterm stress
- ** Ways to avoid stress
- ** Ways to overcome Stress
- ** Yoga for Stress



AT for Calming

T. Jacket by T. Ware

- Wearable technology
 - Provides deep touch pressure to calm/soothe individual who is anxious or stressed
 - Pressure controlled via smartphone iOS or Android
 - Child/Adult sizes; \$599



AT for Calming

b-Calm

- Products for adult and children
 - (\$109 -\$205)
- Preloaded audio sedation tracks
 - Acoustic masking signals work to make typically distracting noises unapparent to the user
 - Audio recordings to help with relaxation and focus



Modifications to the work environment

- Provide private office or work area with limited distractions/low traffic area
- Noise reducing headsets/ noise reduction ear muffs
 - Can decrease help to reduce stress and improve concentration
 - Can also reduce ambient noise at night and help with sleep



Modifications to the work environment

- Provide natural light or therapy lamps
 - Simulate outdoor lighting
 - Many options...make sure designed for SAD
 - Light box should emit reduced UV light
 - Brightness will affect hours of use; consult healthcare provider for hours of use
 - Recommended distance 2 feet from user

Source: mayoclinic.org





APPS for Mood/Emotion Management

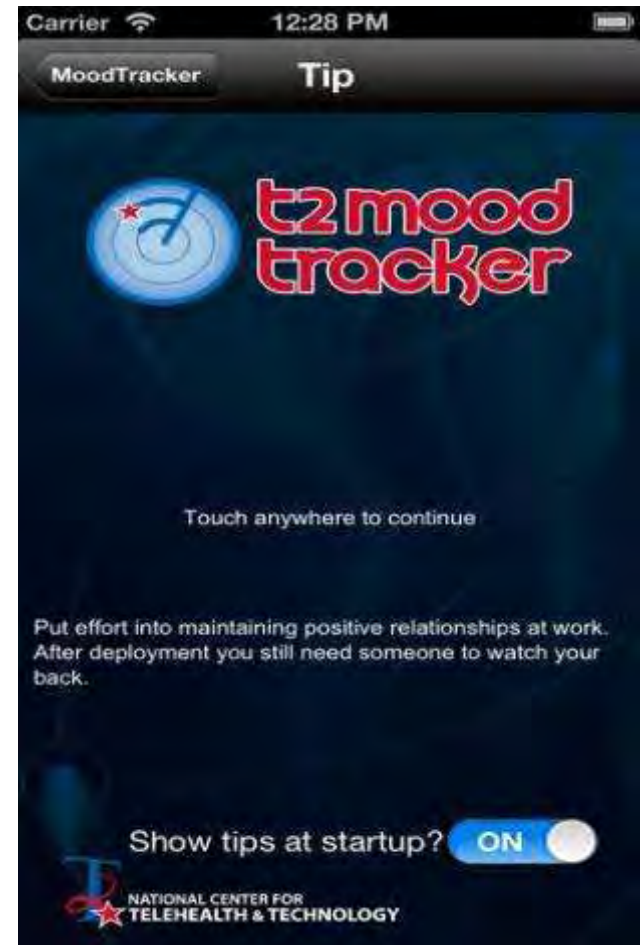
- **Operation Reach Out (free iOS, Android)**
 - **Developed by military to prevent suicide**
 - **Helps access thinking and when to reach out for help when in crisis**
- **T2 Mood Tracker (free iOS, Android)**
 - **Allows users to monitor moods on pre-loaded scales**
- **MindShift (free iOS, Android)**
 - **Tools for relaxation; develops new thinking; suggests healthy activities**
- **Breathe2Relax (free iOS, Android)**
 - **Uses guided breathing exercises to reduce anxiety**

T2 Mood Tracker

FREE!

iOS

- T2 Mood Tracker allows users to monitor their moods on six pre-loaded scales (anxiety, stress, depression, brain injury, post-traumatic stress, general well-being). Custom scales can also be built. Users rate their moods by swiping a small bar to the left or to the right. The ratings are displayed on graphs to help users track their moods over time. Notes can be recorded to document daily events, medication changes and treatments that may be associated with mood changes, providing accurate information to help health care providers make treatment decisions.



APPS for Mood/Emotion Management

- 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.
- iZen garden (\$4.99, iOS)
- Koi Pond (\$1, iOS)



APPS for Sleep Management

- Sleep Time-Alarm Clock (free, iOS, Android)
- Sleep Cycle (\$1, iOS, Android)
- Sleepbot (free, iOS, Android)
- Monitors sleep habits
- Uses accelerometer in the smartphone, tells you how quickly you fall to sleep, when you enter each phase of sleep, and how efficient each sleep cycle is. The app gently wakes you up at the right time, not in the middle of a deep sleep



Relax Melodies: Sleep & Yoga

FREE!

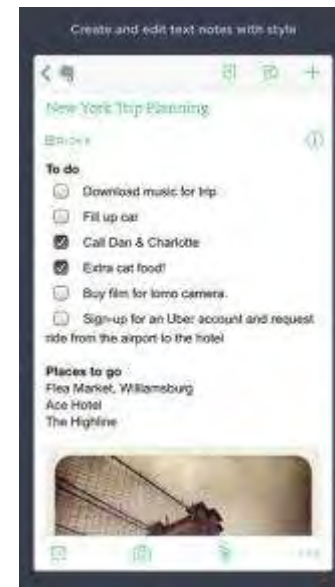
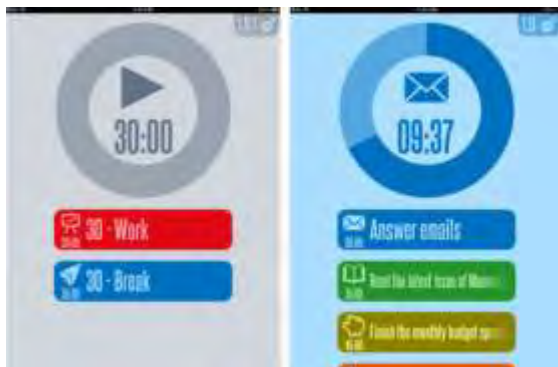
iOS and Android

- Relax Melodies is the LEADER in personalized relaxation and sleep assistance. No more lacking of sleep or insomnia for you! The sleep that you need and want is waiting for you. Relax Melodies and its many features such as high quality white noise sounds, music melodies and complete customizable mixes will help you sleep like never before!
- Here's how it works :
- 1. Create a sleep mix by selecting sounds and music that you like.
 2. Slip naturally into a relaxed state or a deep sleep...!
 3. Awake, feel refreshed and happier
 4. Do it again, anytime!
- Use it also in many other situation such as while exercising, during your yoga meditation sessions, while massaging, during a quick nap or even to help your baby fall asleep faster!



Task Management

- Evernote (free, iOS, Android, Windows)
 - allows you to store text, photos, and audio notes on your device of choice. Create "notebooks" and categorize notes for meetings and to-do lists. Notes are tagged with geo-location for mapping or search. Keep all info in one place
- 30/30 (free, iOS, Android, Windows)
 - Set up tasks and time needed to complete
 - App will tell you when to move onto next task





App Search Engines

Tools for Life-App Finder

<http://www.gatfl.org/favorite-search.php>

Bridging APPS

<http://bridgingapps.org/>

Appcrawlr

<http://appcrawlr.com/>

Organizations

- **Depression and Bipolar Support Alliance (DBSA) www.dbsa.org and www.FacingUs.org**
- **National Alliance on Mental Illness (NAMI)**



**My Question to You:
What have You Learned today?**

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