## HARVARD MEDICAL SCHOOL

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# **Apple Apps to Help Manage Pain & Pain-related Stress**

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## Overview

The following list of apps have been independently reviewed and tested to ensure that they are child and adolescent friendly and that they emphasize skills that are consistent with empirically supported treatments in pediatric pain management. These apps may offer clinical utility for reinforcing skills that are taught as part of a comprehensive pain-management program.

All apps are less than \$10 and many apps are free to download. Some may require the use of headphones. These apps will work for iPhone, iTouch, and iPad devices and can be downloaded from the App Store. Please note that pricing and availability are subject to change.

## **General Meditation & Relaxation**

- Relax & Rest Guided Meditations \$0.99
  - This easy-to-use guided meditation app has three different lengths of meditation, and both the voice and background music are very soothing. The longest meditation (24 min) has components of muscle relaxation, which may be particularly helpful for pain. Other meditations focus on breath (5 min) and deep rest (13 min). (Meditation Oasis, 2011).
- Simply Being-Guided Meditation for Relaxation & Presence \$0.99
  - This app is designed for adults but is one of the highest-rated meditation apps in the App Store and would work well for adolescents. Meditations have several different lengths, so adolescents could work up to the longer meditations. Emphasis is on "letting go" and "just being." (Meditation Oasis, 2009).
- Take a Break! Guided Meditations for Stress Relief- \$0.99
  - This simple and easy to follow stress relief app has two different lengths of guided meditation (7 min and 13 min). You can customize the background sound and the volume of the voice speaking (Meditation Oasis, 2011).
- Cleveland Clinic Stress Meditations \$0.99
  - This application is better suited for older adolescents. The app includes a good selection of meditations; each meditation includes helpful educational information about the benefits of relaxation before each exercise (Cleveland Clinic Wellness Enterprise, 2012).
- Autogenic Training & Progressive Muscle Relaxation \$2.99
  - This application has great education throughout, including some explanation of every exercise. This
    app includes muscle relaxation, autogenic training, breathing meditation, and imagery, and each
    exercise is under 15 minutes long (01 Digitales Design GmbH, 2012).

# Diaphragmatic "Belly" Breathing

#### Breathe2Relax – Free

 This app teaches people how to belly breathe. It includes instruction and practice exercises, although there is only one exercise included for people to practice. This app is especially helpful for pacing one's breathing and the practice screen is very customizable (The National Center for Telehealth and Technology, 2011).

### • Relax HD- Stress and Anxiety Relief - Free

 Although this application is marketed for stress and anxiety relief, it is primarily for breathing. The app teaches 3 and 4 part breathing technique which offers a nice variation on diaphragmatic breathing. This app has helpful visual and audio cues and a customizable session length (Saagara, 2011).

### Pranayama – Free

• This breathing app is based on principles of breathing in yogic practice. This guide to deep breathing has a progressive course that includes music and animated visuals (Saagara, 2011).

## **Biofeedback**

## BellyBio Interactive Breathing – Free

This app turns the iTouch or iPhone into a biofeedback device that measures breath rate. The user places the iPhone or iTouch on his or her belly and the device tracks the movement of the belly with each breath. It includes visual and audio cues for improved breathing. Although using this app takes some practice, it can be an engaging way to reinforce proper diaphragmatic breathing techniques. This app also includes a helpful YouTube tutorial to teach users the proper technique. Note: this app cannot be used with an iPad (RelaxLine, 2010).

# **Stress and Anxiety**

#### At Ease: Anxiety & Worry Relief - \$2.99

 This app has three different guided breathing meditations designed to reduce anxiety, which range from 9-12 minutes long. This app also features support for technical difficulties, and a journaling component that allows users to keep track of 'inner resources' (Meditation Oasis, 2010).

## Anxiety Coach - \$4.99

 This application has great information and education about anxiety, but may be too text-heavy or complicated for children. The app tries to provide guidance on exposure based principles of anxiety reduction, but can be confusing to navigate. This app should be used primarily with adolescents (Mayo Clinic, 2012).

## Take a Chill – Stressed Teens - \$1.99

This app is good for teenagers who are stressed, especially about school. It includes exercises that target test anxiety and thought stopping. Users can track their progress over time. It also includes reminders to engage in practice (Channel Capital, LLC).

# Pain-specific

### • General Pain Management Guided Imagery - \$5.99

 This application has three different guided imagery exercises specific to pain management. Each track is under 10 minutes, which is good for children of all ages. The guided imagery in this application is geared for pain management (Shelley Spencer-Hellmich, 2013).

## • Camp Pain Retreat - \$1.99

 This app features many different techniques to help kids manage their pain. Some of these include breathing techniques, muscle relaxation, and guided imagery, as well as a pain tracker. It also includes a place to keep a list of your favorite techniques, and resources for pain management. This app can also be accessed via the web for computer based practice (Joel Epstein, 2011).

#### • Healing Buddies Comfort Kit – \$4.99

This application is best for children under age 12. It incorporates several different biobehavioral
exercises, including relaxation, imagery, acupressure, and aromatherapy. The voice can be either
male or female, and both are very soothing and helpful. This app also includes a parent portion
(Designwise Medical, 2013).

#### Pain Tricks – Free

This application has a lot of great information for parents and some good information for younger children. It includes examples and information about pain, distraction techniques, relaxation, and breathing, but does not incorporate much practice (Cilein Kearns, 2012).

# **General Cognitive-Behavioral Therapy (CBT)**

#### • CBT4Kids Toolbox – Free

This application is designed by psychologists for children ages 6-12. It is to be used in conjunction with therapy and is very user-friendly and good for beginners. This application features a breathing game and a progressive muscle relaxation exercise, and the user can buy more modules within the app (CBT4Kids; A Henry & LL Kokkoris, 2013).

### • **CBT Tools for Kids** – \$1.99

This application is designed by a psychologist and is good for most ages. It contains excellent relaxation exercises. It is also designed to supplement CBT. It includes a strong cognitive component and could be useful for children and parents to do together (Veronica Cregg).

## • **eCBT Mood** – \$0.99

 This application is best for adolescents. It has a strong education component regarding what CBT is and its potential benefits, and includes an optional password. This app's strong cognitive component includes a thought log, thought identification tool, thought challenging tool, and mood assessments.
 The user can also set a medication reminder (MindApps LLC, 2012).

#### • **Bubble Wrap** – Free

This very simplistic app is a fun example of a quick and easy distraction for kids of all ages. It can be
used in conjunction with other techniques; for example, kids may enjoy popping 5 bubbles while
breathing in and 5 bubbles breathing out (Lima Sky, 2011).

# Sleep

## • iSleep Easy-Meditations for Restful Sleep - \$4.99

 This app has nine different meditations that focus on initiation of sleep. It also includes a good meditation to be used for middle of the night awakenings. These meditations vary in length from 2-15 min and include education and practice for diaphragmatic breathing and autogenic relaxation (Meditation Oasis, 2012).

#### Sleep Well! - \$3.00

 This application has child-friendly education incorporated into it, and a soothing voice (male or female) to calm listeners. The app is simple and straightforward and incorporates deep breathing into every exercise. Each exercise is 6-10 minutes long (Somatiq, LLC).

### Bedtime Meditations for Kids by Christiane Kerr- \$4.99

This app is particularly good for younger children (ages 7-13). Although the meditations are longer (15-20 minutes), they move at a good pace for children and incorporate imaginative guided imagery exercises (Diviniti Publishing Ltd).

## Yoga

### Super Stretch Yoga – Free

This app was created as a story led by a superhero that kids follow through different yoga poses.
 This app is good for very young children. Parents and children can use this app together (The Adventures of Super Stretch, LLC, 2001).

## My Five-Minute Yoga Practice - \$2.99

 This app has several different routines that are just 5-minutes long that target different body parts and stretches. It also includes longer yoga sessions-some that are premade and others where you can combine different shorter modules for your own customized routine. The app is very user friendly for adolescents, but the model in the video is an older woman (with grey hair) which may not appeal as much to teens (Eve Johnson, 2011).