TherAPPist: Using Mobile Technology to Aid Therapy

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ABSTRACT

Mental Health patients afflicted with disorders such as schizophrenia and bipolar disorder often have trouble coping with everyday situations that many people take for granted. A seemingly simple situation such as waiting in line can feel insurmountable to these patients. In this article, we describe a new research project focused on the development of TherAPPist, a mobile application for users with severe mental illnesses. The app is designed to allow the user to leverage the ubiquitous nature of mobile devices to obtain help during periods of intense emotional stimulation in a manner that is inconspicuous.

1. INTRODUCTION

Waiting in line at the grocery store or DMV might be an inconvenience or minor annoyance for most of us, but for those with mental health disorders such as schizophrenia or bipolar disorder, these situations can seem insurmountable. Herein we describe a new research project for the development of a mobile device app called TherAPPist. This app aims to help individuals with severe mental illness keep calm in those moments. TherAPPist offers a suite of relaxation tools to help self-regulate mood in stressful situations. It has been designed to mimic techniques commonly taught in therapeutic practice. Additional features for journaling and tracking habits and moods are also included in the app. In this paper we describe the basic features of the app, and our plans for testing the efficacy of the app.

TherAPPist is part of a growing field of mobile health technology apps. Many applications on Google Play [2] are targeted towards mood regulation and tracking. However, they are not based on therapeutic foundations and do not provide mechanisms that both support the current needs of the user, and also provide mechanisms to track day-to-day mood and compliance which can be used during regular sessions with the human therapist.

2. RELATED WORK

The National Center for Telehealth and Techonology (T2) is a Department of Defense organization that uses mobile applications to help military personnel cope with the traumas of war [1]. Their T2 Mood Tracker application allows a user to use sliders to record their mood in several categories, and plots the results on a graph for analysis. A second app, PE Coach, is designed to help sufferers of PTSD recover and cope with their lives after war. TherAPPist is similar to these applications, in that they share a focus on providing therapy aids to patients and on usage in psychotherapy settings; however, TherAPPist is intended for use by individuals with severe mental illnesses, such as schizophrenia spectrum disorders.

3. THE TherAPPist APP

TherAPPist currently has six main features: Relaxation Routine, Soothing Scenes, Supportive Smiles, Journal, Tracker, and Emergency Contacts (figure 1).

Relaxation Routine and Soothing Scenes are designed to provide calming mechanisms to be used when the users is frustrated. The Relaxation Routine guides the user through a standard meditation script, including breathing and relaxation exercises. Soothing Scenes displays a scrollable list of images (figure 2), which, when an individual image is selected, displays the selected image fullscreen and an accompanying audio piece begins. A similar feature, Refocus, provides a series of soothing images with no audio component.

When a user is feeling isolated, Supportive Smiles can be used to present images of friendly, smiling faces, with supportive and encouraging quotes to go along with them (figure 3). Both Soothing Scenes and Supportive Smiles allow the user to add custom items by selecting their own images, sounds, and quotes, thus allowing the user to use media that are personally meaningful.

The Journal and Tracker features are intended to support the therapeutic process and encourage the user to take more responsibility for managing his/her

life. Journal allows users to enter their thoughts for the day for review with their psychotherapist later. Tracker lets the user track a habit they are working on and their mood each day, so upon review with their psychotherapist they can see how their habit affects their mood.

Figure 1: Main Screen

The Emergency Contacts option is simply a list of important emergency numbers such as 9-1-1 and a suicide hotline.

Figure 2: Soothing Scenes

4. DISCUSSION
We plan to integrate customization options into every section of the application, when it makes sense to do
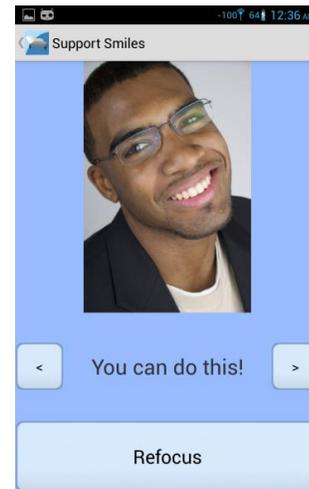

Figure 3: Support Smiles

so. For example, the Emergency Contacts feature will allow the user to add additional phone numbers for family members, friends, or health providers. Eventually each user will have a version of TherAPPist that is completely personalized. Personalization will likely improve the efficacy of the app, as users will be more likely to engage with and use the application consistently. We believe consistent use will allow users to increase their independence because they will have a personal therapy tool at their disposal at all times.

We also plan to conduct clinical trials to test the efficacy of the TherAPPist app, in order to identity which features of the app are most helpful, and how we can improve sections that are deemed less useful. As this is an application designed for individuals with mental illness, feedback from these users will be essential for further refinement of TherAPPist.

5. ACKNOWLEDGMENTS

6. REFERENCES
[1] National Center for Telehealth and Technology (2013). http://t2health.org/about.html.

[2] Google Inc.(2013). http://developer.android.com/about/index.html.