

Request #: 565 - HDFS - Other

Tactile Bilateral Stimulation Among Clinical Mental Health Populations

Spencer Bradshaw [A00546034] - HDFS Faculty

August 13, 2021

Background

We will be proposing to do a clinical study at several inpatient and outpatient treatment centers in Utah that serve those with mental health conditions ranging from Anxiety/OCD, to depression and bipolar disorder, to substance use, trauma, and ADHD. We will evaluate the supplementation of a product called BrainSculpt which users employ for tactile bilateral stimulation of their brain. I plan to have an initial data collection time point where there is a control group and experimental group, and half of the experimental group will utilize different aspects of brain sculpt. Then there will be a three week period during which there will be a control group and experimental group that is followed by another assessment, and after three weeks, the control group and experimental group will switch, and there will be another three weeks before a final assessment. Therefore, there will be three assessment/data collection points, with intervention during and in between them.

Sample

I am collecting fNIRS brain imaging data as well as some psychophysiological data measures (ekg, emg, gsr) during the assessment during cognitive and stress inducing tasks. Additional, we will have a small battery of psychometric measures. I have not collected any data yet.

Hypothesis

The use of the full BrainSculpt protocol will enhance executive functioning in real time, and also be associated with an attenuated affective modulation of startle, in comparison with the tactile bilateral stimulation only group, and the control group. Overtime, the use of the full BrainSculpt protocol will also be associated with further evidences of enhanced executive functioning and reduced startle in these populations.

Progress

We are still in design set up, and IRB proposal writing stages.

Request

I would like to have a consultation about the design, power and sample size.

Timeline

No specific deadlines, we are just trying to move forward on it as soon as we can. We would like to have some data that we can collect and analyze by some conferences in January of 2022.