

## **RESEARCH PLAN**

### **A. RATIONAL**

Post-Traumatic Stress Disorder (PTSD) is very common amongst people who return from war or have witnessed other traumatic events in their everyday life. One of the largest recorded instances that caused PTSD in the United States was in the New York City metropolitan area following the attacks on the World Trade Center (WTC) on September 11th. In addition to typical first responders (Police officers, EMT's, etc...), many untrained bystanders were forced to witness horrific scenes that they were never prepared to deal with. That was the population that became most affected with PTSD and its symptoms. Many of these people did not know the risks that they were taking when they aided in the recovery efforts, and thus did not know to seek treatment. Research into PTSD among WTC first responders (both traditional and non-traditional) has concluded that there have been many other psychological disorders that have accompanied and/or caused PTSD including but not limited to anhedonia and depression.

### **B. HYPOTHESIS**

Individuals with PTSD will be at an increased risk to develop anhedonic depression than those who are not affected by PTSD. These differences will be also apparent along demographic lines with African-American males reporting the highest rates of both Anhedonia and PTSD, largely caused by mental health treatment stigma and lack of available resources due to socioeconomic conditions. Previous research has proven that PTSD patients often have several additional psychological conditions that are often caused by their PTSD. Most of these conditions relate to a newfound sense of depression or lack of joy (anhedonia). Research into this understudied subject has the possibility to improve the lives of millions of people around the world who are affected by PTSD.

### **C. METHODS**

- **Procedures-** 33,443 observations of data from over 8,000 participants will be made available for inclusion in the study. Original study: *Data was collected over the course of thirteen years, between 2004 and 2015. All participants were*

*recruited from the World Trade Centre Health Program (WTCHP) clinical center at Stony Brook University and form the general responder's cohort. All observations contain data that was either self-reported or gathered through clinical interviews, as well as physical examinations and then compiled into the General Responders Cohort (GRC). Additionally, the vast majority of subjects were white non-Hispanic males with a high school education. Participants were also asked to answer questions regarding basic demographic information including age, gender, income, marital status, and education levels as well as clinical information including the PCL, Exposure Assessment Questionnaire (EAQ), and the Patient Health Questionnaire two question Anhedonia Subscale (PHQ-2). All data used will be received in a de-identified and anonymous fashion in order to maintain privacy standards.*

- **Risk and Safety-** All data is anonymous and de-identified.
- **Data Analysis-** Data analysis will be conducted using SAS software provided by the Program in Public Health at Stony Brook University. Odds ratios, ANOVAs, and logistic regression tests will be performed, in addition to numerous other tests.

#### **D. BIBLIOGRAPHY**

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**THERE ARE NO ADDENDUMS TO THIS  
RESEARCH PLAN**