

To: World Federation for Mental Health (WFMH)  
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Subject: ORIE 4741 Project Proposal  
Date: March 17, 2024

## **I. SUMMARY**

In order to better address the concern of mental health, our group has decided to use the “Global Mental Health Disorders” on kaggle to understand the influences of global events on mental health and why that might be the case. We will be incorporating events, like natural disasters or wars, to see how it may cause or help with disorders such as depression, bipolar disorder, anxiety, etc. We would like to discuss our vision for this project with you.

## **II. PROJECT PROPOSAL**

Our primary goal of this project is to deepen our understanding of the mental health landscape at a global level. We will seek to uncover trends across different nations, thereby identifying regional disparities. Using this knowledge, we can help guide future interventions and policies that can effectively address mental health illnesses across varied contexts.

## **II. COURSE OF ACTION**

In order to gain insight into the variety of causes and sources of these different mental health disorders, we must first answer several questions that will help us discover and visualize underlying trends. Here are a few of the inquiries we are planning on exploring:

- What are the overall trends in the prevalence of mental health disorders globally over the years?
- Are there any significant differences in the prevalence rates of different types of mental health disorders across countries or regions?
- How have the prevalence rates of specific mental health disorders changed over time in different countries?
- Are there any noticeable patterns or trends in the prevalence rates of mental health disorders during certain time periods or in response to global events (e.g., pandemics, economic crises)?

We will use data analysis tools, such as linear regression and classification, to achieve our goals. We believe this is a worthwhile long term analysis project since it aligns with the organization’s goal to “promote the advancement of mental health awareness, prevention of mental disorders, and best practice recovery focused interventions worldwide.” Once we understand the influence of the potential global factors, we can help derive solutions and combat mental disorders and help with recovery.

### III. DATASET

The “[Global Mental Health Disorders](#)” dataset is 4.771 megabytes and comprises significant insights into the prevalence of 7 mental health conditions:

- Schizophrenia
- Bipolar Disorder
- Eating Disorders
- Anxiety Disorders
- Drug Use Disorders
- Depression
- Alcohol Use Disorders

It also gives us the geographical distribution of these disorders on a global scale, enabling us to dive deeper into the influence of global trends and events, which can be further supported by the “Year” column in the dataset.

### IV. WORK SPACE

While we work, we will continuously update our github repository: [Global Mental Health Analysis](#). From here our analysis, data manipulation, and reports will all be recorded, with given access to other collaborators and mentors.