

Indicators of Anxiety or Depression

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2025-10-26

Description of the Dataset

First, the dataset used in this project is the product of a data collection effort aimed at quantitatively monitoring the mental health status of adults living in the United States. The source of the data is a survey study called the Household Pulse Survey (HPS) conducted by the U.S. Census Bureau. This survey was conducted in collaboration with the Centers for Disease Control and Prevention (CDC)– National Center for Health Statistics (NCHS) and aimed to track the course of anxiety and depression symptoms in the community on a weekly basis following the COVID-19 pandemic. Additionally, the Household Pulse Survey is designed to quickly assess not only the economic impacts but also changes in community mental health during the pandemic. Data is obtained by having participants report the frequency of anxiety or depression symptoms they experienced over the past seven days. These participant responses have become important indicators reflecting the community’s mental resilience, stress levels, and psychological support needs. In the dataset, mental health indicators are presented not only as overall averages but also by various demographic variables, such as age, gender, education level, and geographic region. This allows for the study of how the mental well-being of different segments of society differs. For example, data often show that symptoms of anxiety and depression are higher in young adults (especially those aged 18-29) than in other age groups, and that these rates are significantly higher in women than in men, or vice versa. This can be explored through visualizations. There will also be trends showing how symptoms change as education level increases or decreases. This means this dataset is suitable for both time series (weekly/monthly trends) and cross-sectional comparative analyses. Observations are presented as percentages, not individual data; this means the data is a set of statistical indicators summarizing the mood of the nationwide population over a specific period. This feature allows researchers to present fluctuations in the mental health status of large populations in quick and easy-to-understand graphs. In short, the project’s goal is to use this data to visually interpret changes in anxiety and depression rates and reveal which segments of society are experiencing greater mental strain. The graphs will allow us to clearly observe the psychological recovery process of society in the post-pandemic period, as well as gender inequalities and differences between age groups. Moreover, one of the most important features of this data is the visualization of confidence intervals, which will emphasize that the rates obtained are not just scores but estimates that include uncertainty; this will increase the reliability of the statistical interpretation.

Variables in the Dataset

- **Indicator:** Indicator name (e.g., “Depressive Disorder Symptoms”).
- **Group/Subgroup:** Type of detail (by age, gender, education, state, etc.) and relevant category (e.g., 18-29, female, bachelor’s degree or higher).
- **State:** Geographic region (e.g., “United States” for National Estimate).

- **Stage:** HPS stage number (stage clusters).
- **Time.Period/Time.Period.Label/Start.Date/End.Date:** Period number, readable label, and date range.
- **Value:** Percentage value (symptom rate).
- **Low.CI/High.CI:** 95% lower and upper limits of CI.

The link to my dataset is below.

<https://www.kaggle.com/datasets/subidit/indicators-of-anxiety-or-depression>

NOTE:

Finally, although there are some missing (NA) values in the dataset, they will not significantly affect the analysis since the project mainly focuses on data visualization rather than statistical modelling.

References:

[1] *Indicators of Anxiety or Depression Based on Reported Frequency of Symptoms During Last 7 Days*

<https://catalog.data.gov/dataset/indicators-of-anxiety-or-depression-based-on-reported-frequency-of-symptoms-during-last-7->

[2] <https://www.kaggle.com/datasets/subidit/indicators-of-anxiety-or-depression>

[3] *Indicators of Anxiety or Depression Based on Reported Frequency of Symptoms During Last 7 Days, National Center for Health Statistics*

https://data.cdc.gov/National-Center-for-Health-Statistics/Indicators-of-Anxiety-or-Depression-Based-on-Repor/8pt5-q6wp/about_data

[4] https://datahub.hhs.gov/CDC/Indicators-of-Anxiety-or-Depression-Based-on-Repor/xpsn-dxxd/about_data

In general, you can review resources by typing “Indicators of Anxiety or Depression by Frequency of Symptoms Reported in the Last 7 Days” into the browser.