

Mental Health Activities

Analysis based on the experimental data of the U.S. Census Bureau to measure the social and economic impact of the pandemic across the country

The **GOAL** is to perform an initial data and exploratory analysis of some of the data and derive insights or correlations between the selected socio-demographic characteristics and perform a better segmentation based on possible correlations.

Project goals

Estimate the impact of the pandemic across 15 U.S. metropolitan areas by evaluating the mental health support aspect.

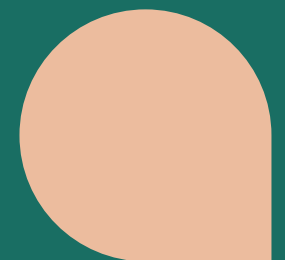
Data set

Table 4, Household Pulse Survey (Phase 3.1), U.S. Census Bureau

Note: experimental data

Tools

Excel, Python (scipy, matplotlib), Tableau Public



Q1

Received counseling or therapy from a mental health professional such as a psychiatrist, psychologist, psychiatric nurse, or clinical social worker

Q2

Needed counseling or therapy from a mental health professional, but did not get it for any reason

Q3

Took prescription medication to help with any emotions or with your concentration, behavior or mental health

Key Questions of the Analysis

respondents replied to
three main questions
which can be identified
as Q1, Q2 and Q3

Technologies and methodologies:

- creating a project brief
- sourcing and cleaning of the databases
- conducting statistical analysis and correlation between variables
- creating visualization to show the correlation between chosen characteristics



Challenges & Learnings

Dataset

Time for finding a suitable and publicly available dataset has been underestimated.

LEARNING: taking the time to find a dataset of a field of interest makes the challenge of conducting the analysis more rewarding

Geo-visualization

Since metropolitan areas are defined by different characteristics, it was not possible to find a shapefile for the U.S. metropolitan areas

LEARNING: geovisualization has been conducted on Tableau after integrating geospatial names on the Excel file

Age

younger ages do have a higher % of getting/needing mental support

Marital Status and Household size

smaller household do have a higher % of getting/needing mental support

Income

respondents with an income lower than 25K reported a higher % of getting/needing mental support

Insights and prediction

The analysis was conducted across 15 U.S. Metropolitan areas.

New York and Los Angeles reported a higher percentage of job loss compared to other areas.

Exploratory analysis showed some similar patterns across the areas based on AGE ranges, Marital Status and Household size, Income.

Correlation Analysis conducted on Python showed a strong correlation between replying "yes" to the three questions columns (Q1, Q2, and Q3) and the loss of job income

Project deliverables

Details of the descriptive analysis and visualization are available

GitHub

<https://github.com/LauraAstraData/MentalHealthActivitiesUSMetroAreas>

Tableau Public

https://public.tableau.com/app/profile/laura.asara/viz/DRAFTPhase3_1HouseholdPulseSurveyMentalHealthActivitiesMetropolitanAreas/Story1