# Instructions for Reproducing This Analysis

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#### Introduction

This document provides an overview of the steps required to reproduce the analysis of disparities in self-rated mental health among young adults (aged 18-39) in Canada using the 2017 General Social Survey-Public Microdata Files. The analysis is organized into three stages using three R scripts:

- 1. Data Wrangling: Cleaning and recoding variables.
- 2. Descriptive Statistics: Producing frequencies and proportions of self-rated mental health by various socio-demographic variables among young adults (aged 18-39).
- 3. Chi-Square Tests and Logistic Regression: Analyzing associations between self-rated mental health and predictors using chi-square tests and logistic regression.

# Step 1: Download Files.zip in this repository

Download the Files.zip in this repository, unzip it and save it in a directory of your choice on your machine.

## Step 2: Download the GSS 2017 Dataset

The GSS-2017 dataset is not included in the repository due to licensing restrictions. Download it from ODESI at [https://odesi.ca/] and follow the steps below:

- 1. Unzip the file and rename it to gss2017.csv.
- 2. Move the gss2017.csv file to the main directory that you placed the R scripts in the Files.zip.

#### Step 3: Run R Scripts

Follow the steps below to reproduce the analysis:

#### 3.1 Data Wrangling

First, run the Code for Data Wrangling.R script. This will recode the variables of interest, drop cases with missing values, and output a cleaned dataset with only the selected variables named (gss\_2017\_selected.csv), which is used in the subsequent analysis. The gss\_2017\_selected.csv will be saved in the main directory where the R scripts are located.

#### 3.2 Descriptive Statistics

Second, run the Code for Descriptive Statistics.R script. It will first filter the saved dataset from the previous step to include only young adults (aged 18-39) and then calculate the frequencies and proportions of self-rated mental health by various predictors such as sex, marital status, household income, etc.

#### 3.3 Chi-Square and Logistic Regression

Third, run the Code for Logistic Regression.R script. It will perform chi-square tests for associations between self-rated mental health and the categorical predictors. It will also fit a logistic regression model to further explore these associations adjusting for confounders. The script will display the results of the chi-square tests and the logistic regression model, including odds ratios and confidence intervals.

#### **Final Words**

By following the steps outlined above, you will be able to reproduce the analysis of disparities in self-rated mental health among young adults (aged 18-39) in Canada using the 2017 General Social Survey data. Ensure the dataset is placed in the correct directory, and run the R scripts to reproduce this analysis.

If you encounter any issues, feel free to reach out for assistance!