

Institutional Quality and Citizen Compliance- Data Cleaning Project for Programming Course

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1 Data Cleaning Project for Programming Course

Description:

Data cleaning project for programming course. This is a data cleaning and merging process of three waves (waves 5, 6, and 7) of afrobarometer survey data for subsequent data analysis and then merged with liberal democracy indicator from vdem and corruption control data from the world bank.

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2 COMPUTE ENVIRONMENT

Instructions: This project is completed in R. Thus, to run all the codes, you need to install R on your computer. Currently, these codes run on R version 4.2.2 which is the latest version of R available. The codes are mostly written for base R. However a few packages are still required, namely “wbstats” for worldbank api, “countrycodes” for converting country names to codes, and “tidyr” for cleaning and pivoting data.

R version R version 4.2.2 (2022-10-31)

Platform: aarch64-apple-darwin20

Running under: MacOS Ventura Version 13.1.

Attached Packages

- tidyr_1.3.0
- countrycode_1.4.0
- wbstats_1.0.4

3 FILE LIST

Data

1. “wave5_cleaned.csv” is the output file after cleaning wave 5, i.e. after running “wave 5 cleaning.R”

2. “wave6_cleaned.csv” is the output file after cleaning wave 6, i.e. after running “wave 6 cleaning.R”
3. “wave7_cleaned.csv” is the output file after cleaning wave 7, i.e. after running “wave 7 cleaning.R”
4. “vdem.csv” is a predownloaded data from varieties of democracy website.
5. “forAnalysis.csv” is the final dataset after merging everything, i.e. after running “merging data.R”

Code

1. “wave 5 cleaning.R” is the R script for scraping and cleaning wave 5 of the afrobarometer survey
2. “wave 6 cleaning.R” is the R script for scraping and cleaning wave 6 of the afrobarometer survey
3. “wave 7 cleaning.R” is the R script for scraping and cleaning wave 5 of the afrobarometer survey
4. “merging data.R” is the R script that binds all three afrobarometer data from waves 5, 6, 7, and merges them with liberal democracy and corruption control data.

Documentation

1. README - File for instructions and description of the project

4 Project Update

I have so far cleaned three waves of the afrobarometer survey and merged them with data from world bank and the varieties of democracy. From afrobarometer, I recoded waves 5, 6, and 7 into values that would be meaningful for my analysis. Following that, I used worldbank api to download national level data for governments’ control of corruption which I then merged with the cleaned afrobarometer data based on country. I also downloaded and merged liberal democracy index from v-dem and so I now have a dataset ready for analyses. In addition to running some analysis, I intend to do some data visualization.