Jordan Katz

Fall 2024

CAnD3 Replication Project

Study Overview:

In this study, we look at the relationship between self-rated mental health and country of birth (i.e., born in Canada versus outside of Canada). In addition, we include marital status, sex, and age as covariates in our analysis, which uses ordinal logistic regression.

Replication Program (short):

1. Import GSS data
2. Clean and recode data for analysis
3. Create table of summary statistics
4. Run ordinal logistic regressions

Replication Program (extended): “CAnD3 Replication Project.Rmd”

1. Import GSS data
   1. Set file path in script file to your working directory
   2. **UNZIP** folder with data (GSS 2017 – Family, Cycle 31.zip)
2. Clean and recode data for analysis
   1. Select the variables for analysis: SRH\_115, BRTHCAN, MARSTAT, AGEC, SEX
   2. Create a new variable called “mental.health” by recoding SRH\_115 so that lower values represent lower levels of self-reported mental health (e.g., 1 = poor mental health) and higher values correspond to higher levels of self-reported mental health (e.g., 5 = excellent). Drop skips, refusals, and “don’t know” responses (i.e., values between 6 and 8).
   3. Recode each of the following independent variables to binary variables: SEX, MARSTAT, and BRTHCAN. Name these new, binary variables *female, married*, and *migrant*. Drop skips, refusals, and “don’t know” responses.
   4. Drop any skips, refusals, and “don’t know” responses from AGEC and rename this variable *age*.
3. Create table of summary statistics
   1. Calculate the mean, standard deviation, and sample counts for each recoded variable: *mental.health, female, married*, *migrant, age*
   2. Format results in output table.
4. Run ordinal logistic regressions
   1. Run a basic model that regresses *mental.health* on *migrant.*
   2. Run a full model that also includes the additional independent variables (*female, married, age*).
   3. Format results in output table.

**Data accessibility statement:**

Data used in this exercise were obtained through ODESI, a service provided by the Ontario Council of University Libraries ([https://search1.odesi.ca/#/Links to an external site.](https://search1.odesi.ca/#/)).

Access is restricted to those users who have a DLI License and can be used for statistical and research purposes. The terms of the license can be viewed here ([https://www.statcan.gc.ca/eng/dli/licenceLinks to an external site.](https://www.statcan.gc.ca/eng/dli/licence)).

As part of McGill University, the CAnD3 initiative has a license to use the data for the purposes of training. Those outside of McGill university should not use the data provided through CAnD3's training activities for purposes not related to their CAnD3 training.

GSS data citation:

Statistics Canada. 2020. General Social Survey, Cycle 31, 2017 [Canada]: Family (version 2020-09). Statistics Canada [producer and distributor], accessed September 10, 2021. ID: gss-12M0025-E-2017-c-31