Recoding and Regression Analysis with GSS Dataset

Summary:

The exercise was fully reproducible with no significant issues found in the plot or the regression table. Given the simplicity of the model and the limited scope of the analysis, the results were consistent with expectations. No discrepancies between expected and obtained outputs were observed.

Replicator's Computing Environment:

Software:

Operating System: Windows 11

R version: 4.3.1

Hardware:

Model: Dell Inspiron 14 2-in-1

Processor: Intel Core i7

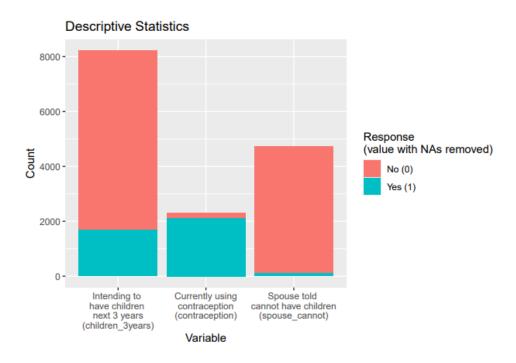
System type: 64-bit operating system, x64-based processor

Replication steps:

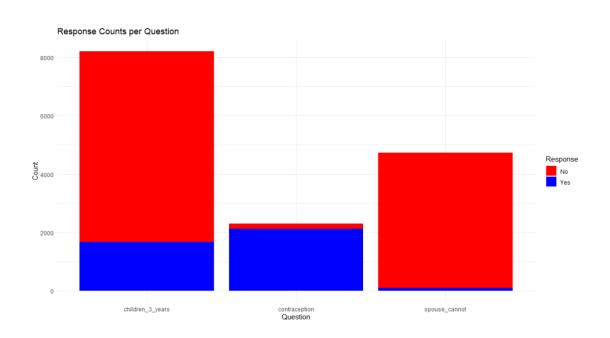
- 1. Loaded the gss data dataset.
- 2. Recoded variables FI 505, FI 105, and FI 240 according to given specifications.
- 3. Created subsetted dataframe containing recoded variables.
- 4. Reshaped the data to facilitate visualization.
- 5. Generated the plot to visualize counts of 'Yes' and 'No' responses for each recoded variable.
- 6. Constructed a linear regression model using contraception as the dependent variable and children 3 years and spouse cannot as independent variables.
- 7. Generated the regression table using stargazer.

Code testing summary:

Distribution graph in Manuscript:



Replicated graph



Regression table in manuscript vs reproduced regression table

##		
##		
##		Dependent variable:
##		
##		contraception
##		
##	children_3years	-0.142***
##		(0.012)
##		
##	spouse_cannot	
##		
##		
##	Constant	0.966***
##		(0.007)
##		
##		

Regression Results	
	Dependent variable:
	contraception
children_3_years	-0.142*** (0.012)
spouse_cannot Constant	0.966*** (0.007)
Observations R2 Adjusted R2 Residual Std. Error F Statistic	2,058 0.060 0.059 0.266 (df = 2056) 130.950*** (df = 1; 2056)
Note:	*p<0.1; **p<0.05; ***p<0.01

Discrepancies:

No discrepancies observed between expected and obtained outputs. The data reshaping process did indicate potential issues with the spouse_cannot variable, but these were issues related to the instructions containing typos. This was addressed and did not impact the final results.

Classification:

Full reproduction with no issues observed.