

Readme file of R codes and datasets for
“Is being the only child harmful to psychological
health? Evidence from a local instrumental variable
analysis”

by Shuxi Zeng, Fan Li and Peng Ding

Description

This folder contains contains several R code files for implementing the approaches proposed in the paper “Is being the only child harmful to psychological health? Evidence from a local instrumental variable analysis” by Zeng,Li and Ding, and the dataset from the empirical applications of the paper.

Authors

Shuxi Zeng

E-mail:shuxi.zeng@duke.edu

Fan Li

E-mail: fl35@duke.edu

Peng Ding

E-mail: pengdingpku@gmail.com

R Code Files

`Data.Reading.R`

Loading the CFPS data

`Data.Loading.R`

Transform the data into the format for JAGS interface

JAGS_MODEL.R	Functions define the model used in JAGS interface
JAGS_Sampling.R	Main Script to perform MCMC, save the posterior sample
Firststage_Plotting.R	Plotting the Probability of being treated, produce results for Figure 2
Average_Estimands.R	Calculate the estimands defined in average, as well as the MTE, produce results for Figure 4 and 5
Ordinal_Estimands.R	Calculate the estimands for ordinal outcome, produce results for Figure 5
Model_Checking_SPPV.R	Calculate sample posterior p-value, produce results for Figure 6
OtherMethods.R	Implement other methods as comparison, produce results for Figure 7
Utility_Functions.R	Contain all the utility functions for previous files
Average_Utility_Func.R	Required functions for <code>Average_Estimands.R</code>
Ordinal_Utility_Func.R	Required functions for <code>Ordinal_Estimands.R</code>
OtherMethods_Utility_Func.R	Required functions for <code>OtherMethods.R</code>
Figure1-7.R	Draw Figure 1-7 in the paper
Main_Outline.R	Outline the procedures to produce all the results This single script can replicate all the results

Datasets

IFPPR.txt	Data for the instrumental variables
CFPS_Cleaned_Data.RData	Cleaned CFPS data
Figure.RData	Data for drawing all the Figures in the paper
cfps2010adult_report_nat092014.dta	Original CFPS data, can be downloaded from http://www.isss.pku.edu.cn/cfps/EN/