

Readme file of R code and dataset 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 the data set 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

<code>JAGS_MODEL.R</code>	Functions define the model used in JAGS interface
<code>JAGS_Sampling.R</code>	Main Script to perform MCMC, save the posterior sample
<code>Firststage_Plotting.R</code>	Plotting the Probability of being treated, produce Figure 1
<code>Average_Estimands.R</code>	Calculate the estimands defined in average, as well as the MTE plots, produce Table 2, Figure 2-4
<code>Ordinal_Estimands.R</code>	Calculate the estimands for ordinal outcome, produce Table 3 and 4
<code>Average_Utility_Func.R</code>	Required functions for <code>Average_Estimands.R</code>
<code>Ordinal_Utility_Func.R</code>	Required functions for <code>Ordinal_Estimands.R</code>
<code>Model_Checking_SPPV.R</code>	Calculate sample posterior p-value, produce Table 5
<code>OtherMethods.R</code>	Implement other methods in section 5.3 as comparison, produce Table 6
<code>OtherMethods_Utility_Func.R</code>	Required functions for <code>OtherMethods.R</code>

Datasets

<code>IFPPR.txt</code>	Data for the instrumental variables
<code>CFPS_2010_Adult_Demo.RData</code>	Demo data to illustrate the methods
<code>cfps2010adult_report_nat092014.dta</code>	Can be downloaded from http://www.issp.pku.edu.cn/cfps/EN/