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.

Loading the CFPS data

Data\_Loading.R

Transform the data into the format for JAGS interface

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JAGS\_MODEL.R Functions define the model used in JAGS interface

JAGS\_Sampling.R Main Script to perform MCMC, save the posterior sample

Firstage\_Plotting.R Ploting the Probability of being treated, produce Figure 1

Average\_Estimands.R Calculate the estimands defined in average, as well as the MTE plots,

produce Table 2, Figure 2-4

Ordinal\_Estimands.R Calculate the estimands for ordinal outcome, produce Table 3 and 4

Average\_Utility\_Func.R Required functions for Average\_Estimands.R

Ordinal\_Utility\_Func.R Required functions for Ordinal\_Estimands.R

Model\_Checking\_SPPV.R Calculate sample posterior p-value, produce Table 5

OtherMethods.R Implement other methods in section 5.3 as comparison, produce Table 6

OtherMethods\_Utility\_Func.R Required functions for OtherMethods.R

## Datasets

IFPPR.txt Data for the instrumental variables

CFPS\_2010\_Adult\_Demo.RData Demo data to illustrate the methods

cfps2010adult\_report\_nat092014.dta Can be downloaded from http://www.isss.pku.edu.cn/cfps/EN/