

E Instruction on Source Code

All data cleaning and model estimations are implemented in R platform. The source code file `PeerEffect_942870.zip` includes:

- One instruction file: `readmefirst.pdf`, which is same with this instruction.
- One original dataset cleaned by Dr. Livia Shkoza: `data_network2.csv`
- Eight R programming scripts
- Seven Rdata files

Table E.1 gives the instructions on eight R programming scripts

File	Descriptions	Instruction
<code>PeerEffect_fun.R</code>	Self-written functions for this project	Instructions can be found in the file
<code>PeerEffect_matrix.R</code>	Clean the dataset again by removing NAs; Construct the block matrix for directed and undirected network; Primary test by fitting ERGM models	In the end, it will produce main dataset and save as: kgpclean.Rdata kgpcleanmat.Rdata kgpcleanmat_undirt.Rdata kgpcleanblock.Rdata kgpcleanblock_undirt.Rdata need load <code>PeerEffect_fun.R</code>
kgpclean.Rdata : main dataset includes all network information and all covariate variables		
kgpcleanmat.Rdata : a list including 101 directed network adjacency matrix		
kgpcleanmat_undirt.Rdata : a list including 101 undirected network adjacency matrix		
kgpcleanblock.Rdata : a block directed adjacency matrix		
kgpcleanblock_undirt.Rdata : a block undirected adjacency matrix or matrix G in the model		
<code>PeerEffect_model1.R</code>	Code for model 1	Need load the above Rdatas and <code>PeerEffect_fun.R</code>
<code>PeerEffect_model2mle.R</code>	Code for model 2(MLE)	Need load the above Rdatas and <code>PeerEffect_fun.R</code>
<code>PeerEffect_model2sls.R</code>	Code for model 2(2SLS)	Need load the above Rdatas and <code>PeerEffect_fun.R</code>
<code>PeerEffect_model3.R</code>	Code for model 3	Need load the above Rdatas and <code>PeerEffect_fun.R</code>
<code>PeerEffect_simulation.R</code>	Code for simulation on 2SLS	Need load the above Rdatas and <code>PeerEffect_fun.R</code> It will save results simresults.Rdata simdensity.Rdata
<code>PeerEffect_plot.R</code>	Company code for plotting the figures	Need run with different models, in has same figure indexes with this paper