

INSTRUCTIONS TO INSTALL the allstatGUI APPLICATION

Note: there are issues running GUI-developed R applications on a Macintosh machine. This application will most likely not run properly on a Mac, if at all.

Also Note: You can separately install all of the available Rcmdr Plugins with this code:

```
## Obtain names of all packages on CRAN
names.available.packages <- rownames(available.packages())
## Extract packages names that contain Rcmdr
Rcmdr.related.packages <- names.available.packages[grepl("Rcmdr",
names.available.packages)]
## Install these packages
install.packages(pkgs = Rcmdr.related.packages)
```

- 1) Place the **allstatGUI.R** application source file into a non-write-protected folder on your Windows machine hard drive. It is a good idea to create a new folder just to hold this application file.
- 2) Start R, you can use either the R console or RStudio. Issue the following three commands. Upper case and lower case matter.
- 3) **source(file.choose())** This command will assist you in loading the entire **allstatGUI application** into your R session and into your computer memory. The command opens a browsing window in Windows. Look for this browsing window, as it may be hidden or obscured behind other open applications on your desktop. Use this browsing window to drill down to the **allstatGUI.R** application source file. Click on that file and then click 'OK.' Then issue the next command in R:
- 4) **setwd(choose.dir())** This command will set the default directory to the folder that contains the **allstatGUI.R application**. When you issue this command, it will open up another browsing window in Windows. Look for this browsing window, as it may be hidden or obscured behind other open applications on your desktop. Use this browsing window to drill down and click on the **name of the folder** (not the file) where you placed the **allstatGUI.R** application source file. Click 'OK'
- 5) **allstatGUI()** This will start up the allstat application. It will also look into your system and identify which other R packages you need to run the application and it will attempt to both: (1) install them (download from the Comprehensive R Archive Network (CRAN)) server; and (2) to load them into your current R session, or workspace (computer memory) so that they are active and accessible in your current R session.

Give the application a little time to start up. If it fails, gives you lots of errors, and then stops doing anything, wait a minute or two and then close down your R application (the R console or RStudio) altogether. Then start R up again and begin this process anew at step 3) above. If you had problems on the first try, you will most likely be successful on the second or third try.

As the developers, Dean and I would appreciate any feedback, bad or good, always, and perhaps also the citation, whenever appropriate: "ALLSTAT GUI application developed by Dean Lim and Geoffrey Hubona, June, 2014".

MEDMOD GUI Application (Lim and Hubona):

MEDIATION AND MODERATION ANALYSES FOR CONDITIONAL PROCESS ANALYSIS REPORTING: REGRESSION AND LATENT VARIABLE PATH MODELING

Mediator/Moderator Analysis

Choose dependent variable:
Dependent Variable
sexism
liking
respappr
protest

Choose independent variable(s):
Independent Variable(s)
sexism
liking
respappr
protest

Choose mediator(s):
Mediator(s)
sexism
liking
respappr
protest

Choose covariate(s):
Covariate(s)
sexism
liking
respappr
protest

Choose a moderator W variable:
Select a variable...

Choose a moderator Z variable:
Select a variable...

Choose a moderator V variable:
Select a variable...

Choose a moderator Q variable:
Select a variable...

Choose a cluster variable:
Select a variable...

Specify model number:
1

Test specific values for conditional effects
W
V
Q
X
M
Z

Select a bootstrap method:
Use bias-corrected confidence intervals

Select M and Y vars as covariates:
Both M and Y

Select options:
☐ Mean center all interaction variables
☐ Use heteroscedasticity consistent SEs
☐ Suppress printing OLS/ML confidence intervals
☐ Generate data for plotting (models 1,2,3 only)
☐ Estimate indirect effect sizes (models 4 and 6 only)
☐ Run sobel test (model 4 only)
☐ Show total effects (model 4 and 6 only)
☐ Test differences in indirect effects (models 4 and 6 only)
☐ Show model coefficient covariance matrix
☐ Use Johnson-Neyman Technique (Models 1 and 3 only)
☐ Probe interactions with percentiles instead of mean +/- SD
☐ Suppress detailed model information
☐ Use 1st order instead of 2nd order SE estimators (Sobel)

Specify desired confidence interval:
95

Specify sample size for bootstrap (0 for none):
5000

Save final report to reports directory?
☐ Yes

Save bootstrap results to files directory? (will override existing file)
☐ Yes

OK Close

VIMGUI Application (Alexander Kowarik):

ATION and MODERATION ANALYSES / DATA IMPUTATION and VISUALIZATION / STATISTICAL ANALYSES with R COMMANDER / DATA MINING with RATTLE

VIM GUI

Data Survey Edit Miscellaneous

Data Imputation Visualization

variables
protest
respappr
sexism
liking

AUTO

☐ robust

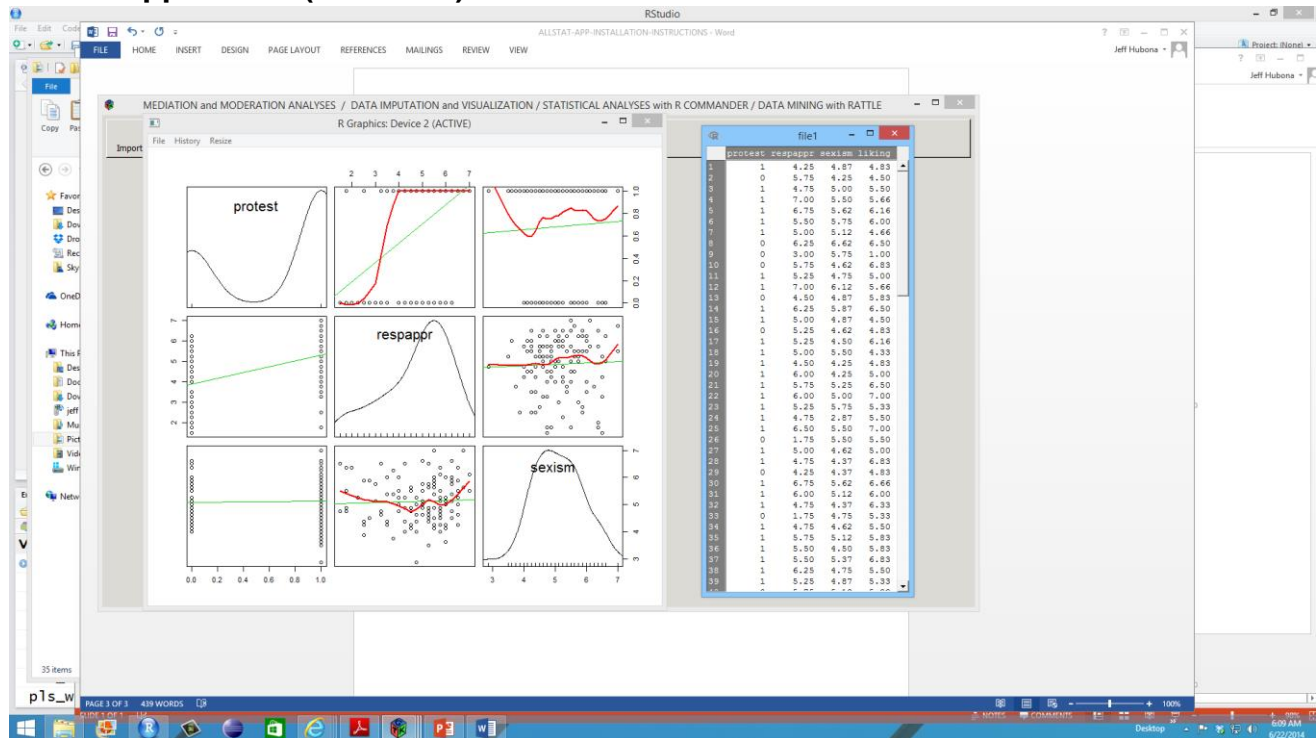
Summary of imputed dataset:

| Name | Class | NA. | Min | Lower | Median | Upper | Max |
|----------|---------|-----|------|-------|--------|-------|-----|
| protest | integer | 0 | 0 | 0 | 1 | 1 | 1 |
| respappr | numeric | 0 | 1.5 | 4 | 5.25 | 5.75 | 7 |
| sexism | numeric | 0 | 2.87 | 4.5 | 5.12 | 5.62 | 7 |
| liking | numeric | 0 | 1 | 5 | 5.83 | 6.5 | 7 |

Apply Imputation

header files
tions
vice using cairo graphics I
SVG, PostScript) and displa

Rcmdr Application (John Fox):



Data Miner [Rattle] Application (Graham Williams):

The screenshot displays the Rattle application window, titled "R Data Miner - [Rattle]". The window has a menu bar with "Project", "Tools", "Settings", and "Help". Below the menu bar is a toolbar with buttons for "Execute", "New", "Open", "Save", "Report", "Export", "Stop", and "Quit". The main area is divided into several sections. The "Data" section has tabs for "Explore", "Test", "Transform", "Cluster", "Associate", "Model", "Evaluate", and "Log". The "Source" section has radio buttons for "Spreadsheet", "ARFF", "ODBC", "R Dataset", "RData File", "Library", "Corpus", and "Script". The "Filename" section has a text box for the filename and a "Separator" dropdown menu. The "Partition" section has a "Partition" dropdown menu and a "Seed" text box. The "Target Data Type" section has radio buttons for "Auto", "Categorical", "Numeric", and "Survival". The bottom section contains a large text area with the following text:

Welcome to Rattle (rattle.togaware.com).

Rattle is a free graphical user interface for Data Mining, developed using R. R is a free software environment for statistical computing and graphics. Together they provide a sophisticated environments for data mining, statistical analyses, and data visualisation.

See the Help menu for extensive support in using Rattle. The book Data Mining with Rattle and R is available from Amazon. The Togaware Desktop Data Mining Survival Guide includes Rattle documentation and is available from datamining.togaware.com

Rattle is licensed under the GNU General Public License, Version 2. Rattle comes with ABSOLUTELY NO WARRANTY. See Help -> About for details.

Rattle Version 3.0.2 r169. Copyright 2006-2014 Togaware Pty Ltd.
Rattle is a registered trademark of Togaware Pty Ltd.
Rattle was created and implemented by Graham Williams.

To Begin: Choose the data source, specify the details, then click the Execute button.