## ReadME file for Bor & Littvay: Putin's Performance Dilemma...

## Alexander Bor & Levente Littvay

2016.08.17.

The data management and analysisforthis paper were conducted with R version 3.3.0 (2016-05-03) – "Supposedly Educational" and with Mplus VERSION 7.4.

## Required packages:

Install these with dependencies first in order for the code to run properly.

- car version 2.1-3
- foreign version 0.8-66
- qdata version 2.17.0
- ggplot2 version 2.1.0
- stargazer version 5.2

The documentation provided here is stored in folders that are organized as illustrated below:

- An electronic copy of the complete final paper: Bor Littvay Putins Performance dilemma.pdf
- This README.md file for your repository
- Original Data and Metadata original-data-and-metadata
  - Original Data original-data
    - \* ESS5RU.sav
  - Metadata metadata
    - \* Metadata Guide metadata\_guide.md
    - \* Supplements supplements
      - $\cdot$  ESS5\_data\_protocol.pdf
      - $\cdot \ ESS5\_main\_and\_supplementary\_a\_questionnaires\_RU.pdf$
      - $\cdot \ ESS5\_source\_main\_questionnaire\_EN.pdf$
- Processing and Analysis processing-and-analysis
  - Importable Data importable-data

- \* ESS5RU.sav
- Command Files command-files
  - \* ess mplus 2wayint.inp
  - \* ess mplus 2wayint.out
  - \* ess\_mplus\_3wayint.inp
  - \* ess mplus 3wayint.out
  - \* ess\_mplus\_model1.inp
  - \* ess mplus model1.out
  - \* ess\_mplus\_model2.inp
  - \* ess mplus model2.out

  - \* ess\_mplus\_model3.inp
  - \* ess\_mplus\_model3.out
  - \* ess5ru\_analysis.R
  - \* ess5ru importing.R
  - \* ess5ru\_processing.R \* README.md
- Analysis Data analysis-data
  - \* data appendix.pdf
  - \* data\_appendix.Rmd
  - \* datamplus.dat
  - \* datamplus.var
  - \* ESS5RU clean.Rdata
  - \* ESS5RU final.Rdata
  - \* ess5ru from mplus.txt
  - \* README.md

## To reproduce the tables, figures and statistical results reported in the text of the paper:

- 1. Copy the "Processing and Analysis" folder, and all of its contents, on to the hard disk of the computer you are working on.
- 2. Launch R and set the working directory to the "Command Files" folder in each time you see setwd("<PATH TO 'Command files' DIRECTORY>").
- 3. Execute the  $ess5ru\_importing.R$  file. This will load the data file and save it as ESS5RU.Rdata to the "Command Files" folder.
- 4. Execute the ess5ru\_processing.R command file. This subsets the relevant data and recodes some of the variables. It has two outputs.
  - First the data is exported in formats compatible with Mplus to the files datamplus.var and datamplus.dat. Both of these are saved in the "Analysis Data" folder.

- Second in order to ensure that most of the analysis could be run without an Mplus licence, the Mplus data output is imported and exported as *ESS5RU\_clean.Rdata*. This is also saved in the "Analysis Data" folder.
- Finally this command will erase *ESS5RU.Rdata* from the "Command files" folder.
- 5. There are five pairs of Mplus files. Three models reported in the paper and two additional robustness checks (referenced in footnote 6.). The .inp files specify the models, the .out files contain results.
  - $\bullet$   $ess\_mplus\_model1.inp$  is a model with no latent classes
  - ess\_mplus\_model2.inp is a model with two latent classes but no predictors
  - ess\_mplus\_model3.inp is a model with two latent classes and predictors.
  - ess\_mplus\_2wayint.inp is a model checking robustness with all relevant two-way interactions specified and included in the model.
  - ess\_mplus\_3wayint.inp is a model checking robustness with a threeway interaction, but it's results should be ignored because of data limitation issues. Model fit statistics for the 3 models are reported in Table 2.
- 6. Execute the command file *ess5ru\_analysis.R* This import the data including latent class information from the Mplus model and produces all statistical tables and models.
- 7. Finally, run data\_appendix.Rmd which contains a brief explanation and descriptive statistics on all variables used in the data.