README - Midlife Crisis

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Folder structure and files

This is the README file for all material on the R Markdown implementation of the Midlife Crisis project. The material is organized into three folders. The README file is on the top level of folder structure.

Note on working directories When the master script `master.R` is executed, the working directory needs to be set to the folder `ScriptsAndReports` hosting `master.R`.

When individual `.Rmd` files are knitted or selected code chunks are executed, the `.Rmd` file quietly uses the working directory hosting the file in the background and does not change the working directory.

Information about files and folders:

- `README.Rmd`: README file for entire project (this one)
- `README.rtf`: README file as rtf produced with `README.Rmd`
- `Data`: Stores data prepared for analysis in three subfolders
  - `InputData`: Stores original raw data
    - `original-wdi.xlsx`: Original WDI country data
    - `original-pew.sav`: Original PEW survey data

  - `TempData`: Stores intermediate data for further processing
    - `pew_processed.rds`
    - `wdi_processed.rds`

  - `AnalysisData`: Stores data produced in the analysis
    - `country_level.rds`: Data for country-level analysis
    - `individual_level.rds`: Data for individual-level analysis

- `Output`: Stores all output exported by analysis scripts
  - Tables are stored in Word and LaTeX format to be included in Word and LaTeX papers

- `ScriptsAndReports`: Stores all scripts and codebook
  - `master.R`: Master script executing all other scripts.
  - `data_processing.Rmd`:
    - Loads data from `InputData`
    - Stores data in `TempData` and `AnalysisData`

- `data_processing.html`: R Markdown html report for `data_processing.Rmd`
- `data_analysis.Rmd`:
  - Loads data from `AnalysisData`
  - Stores output (figures, tables) in `ScriptsAndResults`
  - `data_analysis.html`: R Markdown html report for `data_analysis.Rmd`

- `data_paper.Rmd`: File for producing a paper with tables and figures and no code.
- `data_paper.PDF`: PDF produced with `data_paper.Rmd`

Reproduction parameters

The system parameters and package versions for `knitr` and `rmarkdown` (used for all scripts) at the last execution of the script (`rSys.time()`):

- platform: x86_64-w64-mingw32
- R version: R version 4.0.3 (2020-10-10)
- RStudio: 1.4.1106
- knitr: 1.30
- rmarkdown: 2.7

Package versions used in scripts

If you want to use the same versions of the packages that are loaded with the `library()` commands, you first need the `devtools` package (we used 2.3.2 & 2.4.0). With this package, one can install older versions from CRAN. The current versions of the packages, if they have been installed before, *will be replaced* if the specified versions are installed in the R library.
For information on the version of all packages that `devtools` includes in the `session_info()`, see the html-reports of the Rmd-scripts.

data_processing.Rmd:

```
install_version("dplyr", version = "1.0.5",
                repos = "http://cran.us.r-project.org")
install_version("rio", version = "0.5.26",
                repos = "http://cran.us.r-project.org")
install_version("tidyr", version = "1.1.2",
                repos = "http://cran.us.r-project.org")
```

data_analysis.Rmd

```
install_version("dplyr", version = "1.0.5",
                repos = "http://cran.us.r-project.org")
install_version("formattable", version = "0.2.0.1",
                repos = "http://cran.us.r-project.org")
install_version("ggplot2", version = "3.3.2", # 3.3.3 works too
                repos = "http://cran.us.r-project.org")
```

```
install_version("lfe", version = "2.8-6",
                repos = "http://cran.us.r-project.org")
install_version("sjPlot", version = "2.8.7",
                repos = "http://cran.us.r-project.org")
install_version("texreg", version = "1.37.5",
                repos = "http://cran.us.r-project.org")
install_version("xtable", version = "1.8-4",
                repos = "http://cran.us.r-project.org")
```

data_appendix.Rmd

```
install_version("dplyr", version = "1.0.5",
                repos = "http://cran.us.r-project.org")
install_version("formattable", version = "0.2.0.1",
                repos = "http://cran.us.r-project.org")
install_version("ggplot2", version = "3.3.2", # 3.3.3 works too
                repos = "http://cran.us.r-project.org")
```

data_paper.Rmd

```
install_version("dplyr", version = "1.0.5",
                repos = "http://cran.us.r-project.org")
install_version("formattable", version = "0.2.0.1",
                repos = "http://cran.us.r-project.org")
install_version("ggplot2", version = "3.3.2",  # 3.3.3 works too
                repos = "http://cran.us.r-project.org")
install_version("knitr", version = "1.30",
                repos = "http://cran.us.r-project.org")
install_version("lfe", version = "2.8-6",
                repos = "http://cran.us.r-project.org")
install_version("sjPlot", version = "2.8.7",
                repos = "http://cran.us.r-project.org")
install_version("texreg", version = "1.37.5",
                repos = "http://cran.us.r-project.org")
```

All session parameters from last execution of script.

```
## - Session info
---------------------------------------------------------------------
-------------------------
##  setting  value
##  version  R version 4.0.3 (2020-10-10)
##  os       Windows 10 x64
##  system   x86_64, mingw32
##  ui       RStudio
##  language (EN)
##  collate  German_Germany.1252
##  ctype    German_Germany.1252
##  tz       Europe/Berlin
```

```
##   date       2021-07-02
##
## - Packages
--------------------------------------------------------------
------------------------------
##   package      * version date       lib source
##   assertthat     0.2.1   2019-03-21 [1] CRAN (R 4.0.0)
##   backports      1.1.10  2020-09-15 [1] CRAN (R 4.0.2)
##   bayestestR     0.8.0   2020-12-05 [1] CRAN (R 4.0.3)
##   boot           1.3-25  2020-04-26 [2] CRAN (R 4.0.3)
##   broom          0.7.6   2021-04-05 [1] CRAN (R 4.0.5)
##   callr          3.6.0   2021-03-28 [1] CRAN (R 4.0.4)
##   cli            2.3.1   2021-02-23 [1] CRAN (R 4.0.4)
##   coda           0.19-4  2020-09-30 [1] CRAN (R 4.0.2)
##   colorspace     1.4-1   2019-03-18 [1] CRAN (R 4.0.0)
##   crayon         1.4.1   2021-02-08 [1] CRAN (R 4.0.4)
##   DBI            1.1.0   2019-12-15 [1] CRAN (R 4.0.0)
##   desc           1.2.0   2018-05-01 [1] CRAN (R 4.0.0)
##   devtools     * 2.3.2   2020-09-18 [1] CRAN (R 4.0.2)
##   digest         0.6.27  2020-10-24 [1] CRAN (R 4.0.4)
##   dplyr        * 1.0.5   2021-03-05 [1] CRAN (R 4.0.5)
##   effectsize     0.4.3   2021-01-18 [1] CRAN (R 4.0.3)
##   ellipsis       0.3.1   2020-05-15 [1] CRAN (R 4.0.0)
##   emmeans        1.5.3   2020-12-09 [1] CRAN (R 4.0.3)
##   estimability   1.3     2018-02-11 [1] CRAN (R 4.0.3)
##   evaluate       0.14    2019-05-28 [1] CRAN (R 4.0.0)
##   fansi          0.4.1   2020-01-08 [1] CRAN (R 4.0.0)
##   farver         2.0.3   2020-01-16 [1] CRAN (R 4.0.0)
##   formattable  * 0.2.0.1 2016-08-05 [1] CRAN (R 4.0.0)
##   Formula        1.2-3   2018-05-03 [1] CRAN (R 4.0.0)
##   fs             1.4.2   2020-06-30 [1] CRAN (R 4.0.2)
##   generics       0.0.2   2018-11-29 [1] CRAN (R 4.0.0)
##   ggeffects      1.0.1   2020-12-14 [1] CRAN (R 4.0.3)
##   ggplot2      * 3.3.3   2020-12-30 [1] CRAN (R 4.0.5)
##   glue           1.4.2   2020-08-27 [1] CRAN (R 4.0.2)
##   gtable         0.3.0   2019-03-25 [1] CRAN (R 4.0.0)
##   highr          0.8     2019-03-20 [1] CRAN (R 4.0.0)
##   htmltools      0.5.0   2020-06-16 [1] CRAN (R 4.0.2)
##   htmlwidgets    1.5.3   2020-12-10 [1] CRAN (R 4.0.4)
##   httr           1.4.2   2020-07-20 [1] CRAN (R 4.0.2)
##   insight        0.12.0  2021-01-14 [1] CRAN (R 4.0.3)
##   jsonlite       1.7.2   2020-12-09 [1] CRAN (R 4.0.5)
##   knitr          1.30    2020-09-22 [1] CRAN (R 4.0.2)
##   labeling       0.3     2014-08-23 [1] CRAN (R 4.0.0)
##   lattice        0.20-41 2020-04-02 [2] CRAN (R 4.0.3)
##   lfe          * 2.8-6   2021-01-11 [1] CRAN (R 4.0.3)
##   lifecycle      1.0.0   2021-02-15 [1] CRAN (R 4.0.5)
```

```
##    lme4           1.1-23   2020-04-07 [1] CRAN (R 4.0.2)
##    magrittr       2.0.1    2020-11-17 [1] CRAN (R 4.0.5)
##    MASS           7.3-53   2020-09-09 [2] CRAN (R 4.0.3)
##    Matrix       * 1.2-18   2019-11-27 [2] CRAN (R 4.0.3)
##    memoise        1.1.0    2017-04-21 [1] CRAN (R 4.0.0)
##    minqa          1.2.4    2014-10-09 [1] CRAN (R 4.0.2)
##    modelr         0.1.8    2020-05-19 [1] CRAN (R 4.0.3)
##    munsell        0.5.0    2018-06-12 [1] CRAN (R 4.0.0)
##    mvtnorm        1.1-1    2020-06-09 [1] CRAN (R 4.0.0)
##    nlme           3.1-149  2020-08-23 [2] CRAN (R 4.0.3)
##    nloptr         1.2.2.2  2020-07-02 [1] CRAN (R 4.0.2)
##    parameters     0.11.0   2021-01-15 [1] CRAN (R 4.0.3)
##    performance    0.6.1    2020-12-09 [1] CRAN (R 4.0.3)
##    pillar         1.4.6    2020-07-10 [1] CRAN (R 4.0.2)
##    pkgbuild       1.1.0    2020-07-13 [1] CRAN (R 4.0.2)
##    pkgconfig      2.0.3    2019-09-22 [1] CRAN (R 4.0.0)
##    pkgload        1.1.0    2020-05-29 [1] CRAN (R 4.0.0)
##    prettyunits    1.1.1    2020-01-24 [1] CRAN (R 4.0.0)
##    processx       3.5.1    2021-04-04 [1] CRAN (R 4.0.5)
##    ps             1.6.0    2021-02-28 [1] CRAN (R 4.0.5)
##    purrr          0.3.4    2020-04-17 [1] CRAN (R 4.0.0)
##    R6             2.4.1    2019-11-12 [1] CRAN (R 4.0.0)
##    Rcpp           1.0.4.6  2020-04-09 [1] CRAN (R 4.0.0)
##    remotes        2.3.0    2021-04-01 [1] CRAN (R 4.0.5)
##    rlang          0.4.10   2020-12-30 [1] CRAN (R 4.0.4)
##    rmarkdown      2.7      2021-02-19 [1] CRAN (R 4.0.3)
##    rprojroot      1.3-2    2018-01-03 [1] CRAN (R 4.0.0)
##    rsconnect      0.8.16   2019-12-13 [1] CRAN (R 4.0.2)
##    rstudioapi     0.11     2020-02-07 [1] CRAN (R 4.0.0)
##    sandwich       2.5-1    2019-04-06 [1] CRAN (R 4.0.0)
##    scales         1.1.1    2020-05-11 [1] CRAN (R 4.0.0)
##    sessioninfo    1.1.1    2018-11-05 [1] CRAN (R 4.0.0)
##    sjlabelled     1.1.7    2020-09-24 [1] CRAN (R 4.0.2)
##    sjmisc         2.8.5    2020-05-28 [1] CRAN (R 4.0.2)
##    sjPlot       * 2.8.7    2021-01-10 [1] CRAN (R 4.0.3)
##    sjstats        0.18.1   2021-01-09 [1] CRAN (R 4.0.3)
##    statmod        1.4.35   2020-10-19 [1] CRAN (R 4.0.3)
##    stringi        1.5.3    2020-09-09 [1] CRAN (R 4.0.3)
##    stringr        1.4.0    2019-02-10 [1] CRAN (R 4.0.0)
##    testthat       3.0.2    2021-02-14 [1] CRAN (R 4.0.5)
##    texreg       * 1.37.5   2020-06-18 [1] CRAN (R 4.0.2)
##    tibble         3.0.4    2020-10-12 [1] CRAN (R 4.0.3)
##    tidyr          1.1.2    2020-08-27 [1] CRAN (R 4.0.3)
##    tidyselect     1.1.0    2020-05-11 [1] CRAN (R 4.0.0)
##    usethis      * 1.6.3    2020-09-17 [1] CRAN (R 4.0.2)
##    utf8           1.1.4    2018-05-24 [1] CRAN (R 4.0.0)
##    vctrs          0.3.6    2020-12-17 [1] CRAN (R 4.0.4)
```

```
##   withr          2.3.0   2020-09-22 [1] CRAN (R 4.0.2)
##   xfun           0.22    2021-03-11 [1] CRAN (R 4.0.5)
##   xtable       * 1.8-4   2019-04-21 [1] CRAN (R 4.0.0)
##   yaml           2.2.1   2020-02-01 [1] CRAN (R 4.0.2)
##   zoo            1.8-8   2020-05-02 [1] CRAN (R 4.0.0)
##
## [1] C:/Users/Ingo R/Documents/R/win-library/4.0
## [2] C:/Program Files/R/R-4.0.3/library
```