# Session Info

#### Ivan Jacob Agaloos Pesigan

### Session

```
sessionInfo()
#> R version 4.4.1 (2024-06-14)
#> Platform: x86_64-pc-linux-gnu
#> Running under: Ubuntu 22.04.4 LTS
#>
#> Matrix products: default
          / usr/lib/x86\_64-linux-gnu/openblas-pthread/libblas.so.3
#> LAPACK: /usr/lib/x86_64-linux-gnu/openblas-pthread/libopenblasp-r0.3.20.so; LAPACK version 3.10
#>
#> locale:
#> [1] LC_CTYPE=en_US.UTF-8
                             LC_NUMERIC=C
   [3] LC_TIME=en_US.UTF-8
                              LC_COLLATE=en_US.UTF-8
#> [5] LC_MONETARY=en_US.UTF-8 LC_MESSAGES=en_US.UTF-8
   [7] LC_PAPER=en_US.UTF-8
                                 LC_NAME=C
#> [9] LC_ADDRESS=C
                                  LC_TELEPHONE=C
#> [11] LC_MEASUREMENT=en_US.UTF-8 LC_IDENTIFICATION=C
#>
#> time zone: Etc/UTC
```

```
#> tzcode source: system (glibc)
#> attached base packages:
#> [1] stats
                graphics grDevices utils datasets methods
                                                                base
#> other attached packages:
#> [1] rProject_0.0.14
#>
#> loaded via a namespace (and not attached):
#> [1] backports_1.5.0 R6_2.5.1
                                        lubridate_1.9.3 xfun_0.46
#> [5] magrittr_2.0.3 glue_1.7.0
                                        stringr_1.5.1 knitr_1.48
#> [9] timechange_0.3.0 generics_0.1.3
                                       lifecycle_1.0.4 xml2_1.3.6
#> [13] cli_3.6.3.9000 bibtex_0.5.1
                                        compiler_4.4.1
                                                        highr_0.11
#> [17] rprojroot_2.0.4 plyr_1.8.9
                                        httr_1.4.7
                                                        tools_4.4.1
#> [21] evaluate_0.24.0 Rcpp_1.0.13
                                        RefManageR_1.4.0 rlang_1.1.4
#> [25] jsonlite_1.8.8 stringi_1.8.4
```

## **Packages**

```
unname(installed.packages()[, 1])
     [1] "betaSandwich"
                            "bslib"
                                               "cffr"
                                                                  "cli"
#>
     [5] "devtools"
                            "gert"
                                               "httr2"
                                                                  "quarto"
     [9] "Rcpp"
                            "rProject"
                                               "shiny"
                                                                  "tinytex"
#>
    [13] "usethis"
                            "withr"
                                                                  "yaml"
                                               "xfun"
                            "arrow"
                                               "ash"
    [17] "abind"
                                                                  "AsioHeaders"
    [21] "askpass"
                            "assertthat"
                                               "backports"
                                                                  "base64enc"
```

#	:>	[25]	"betaDelta"	"betaMC"	"betaNB"	"betaSandwich"
#	:>	[29]	"BH"	"bibtex"	"BiocManager"	"bit"
#	:>	[33]	"bit64"	"bitops"	"blob"	"brew"
#	:>	[37]	"brio"	"broom"	"bslib"	"cachem"
#	:>	[41]	"callr"	"car"	"caracas"	"carData"
#	:>	[45]	"cellranger"	"cffr"	"checkmate"	"cli"
#	:>	[49]	"clipr"	"clock"	"coda"	"cOde"
#	:>	[53]	"collections"	"colorspace"	"commonmark"	"conflicted"
#	:>	[57]	"corpcor"	"covr"	"cowplot"	"cpp11"
#	:>	[61]	"crayon"	"credentials"	"crosstalk"	"cTMed"
#	:>	[65]	"ctsem"	"curl"	"cyclocomp"	"data.table"
#	:>	[69]	"DBI"	"dbplyr"	"Deriv"	"desc"
#	:>	[73]	"deSolve"	"devtools"	"diagram"	"dials"
#	:>	[77]	"DiceDesign"	"diffobj"	"digest"	"distributional"
#	:>	[81]	"distro"	"doBy"	"docopt"	"doFuture"
#	:>	[85]	"downlit"	"dplyr"	"DT"	"dtplyr"
#	:>	[89]	"duckdb"	"dynr"	"dynUtils"	"ellipse"
#	:>	[93]	"ellipsis"	"evaluate"	"expm"	"fansi"
#	:>	[97]	"farver"	"fastDummies"	"fastmap"	"fclust"
#	:>	[101]	"fda"	"fdrtool"	"fds"	"fitCTVARMx"
#	:>	[105]	"fitDTVARMx"	"FNN"	"fontawesome"	"forcats"
#	:>	[109]	"foreach"	"Formula"	"fs"	"fst"
#	:>	[113]	"fstcore"	"furrr"	"future"	"future.apply"
#	:>	[117]	"gargle"	"generics"	"gert"	"ggplot2"
#	:>	[121]	"ggrepel"	"gh"	"gitcreds"	"glasso"
#	:>	[125]	"glmnet"	"globals"	"glue"	"googledrive"
#	:>	[129]	"googlesheets4"	"gower"	"GPArotation"	"GPfit"

#>	[133]	"gridExtra"	"gsubfn"	"gtable"	"gtools"
#>	[137]	"hardhat"	"haven"	"hdrcde"	"here"
#>	[141]	"highr"	"Hmisc"	"hms"	"htmlTable"
#>	[145]	"htmltools"	"htmlwidgets"	"httpgd"	"httpuv"
#>	[149]	"httr"	"httr2"	"ids"	"ifaTools"
#>	[153]	"igraph"	"infer"	"ini"	"inline"
#>	[157]	"ipred"	"isoband"	"iterators"	"jomo"
#>	[161]	"jpeg"	"jquerylib"	"jsonlite"	"jsonvalidate"
#>	[165]	"kernlab"	"knitr"	"ks"	"labeling"
#>	[169]	"Lahman"	"languageserver"	"later"	"latex2exp"
#>	[173]	"lava"	"lavaan"	"lazyeval"	"lhs"
#>	[177]	"lifecycle"	"lintr"	"listenv"	"littler"
#>	[181]	"lme4"	"locfit"	"longMI"	"loo"
#>	Г185 <b>]</b>	"lubridate"	"magick"	"magrittr"	"markdown"
11 -			0	0	
		"MatrixModels"	"matrixStats"	"mclust"	"memoise"
#>	[189]				
#> #>	[189] [193]	"MatrixModels"	"matrixStats"	"mclust"	"memoise"
#> #> #>	[189] [193] [197]	"MatrixModels" "metaSEM"	"matrixStats" "metaVAR"	"mclust" "mice"	"memoise" "microbenchmark"
#> #> #>	[189] [193] [197] [201]	"MatrixModels" "metaSEM" "mime"	"matrixStats" "metaVAR" "miniUI"	"mclust"  "mice"  "minqa"  "modeldata"	"memoise"  "microbenchmark"  "mitml"
#> #> #> #>	[189] [193] [197] [201] [205]	"MatrixModels" "metaSEM" "mime" "mize"	"matrixStats"  "metaVAR"  "miniUI"  "mnormt"	"mclust"  "mice"  "minqa"  "modeldata"	"memoise"  "microbenchmark"  "mitml"  "modelenv"
#> #> #> #> #>	[189] [193] [197] [201] [205] [209]	"MatrixModels"  "metaSEM"  "mime"  "mize"  "modelr"	"matrixStats"  "metaVAR"  "miniUI"  "mnormt"  "MplusAutomation"	"mclust"  "mice"  "minqa"  "modeldata"  "multicool"	"memoise"  "microbenchmark"  "mitml"  "modelenv"  "munsell"
#> #> #> #> #>	[189] [193] [197] [201] [205] [209] [213]	"MatrixModels"  "metaSEM"  "mime"  "mize"  "modelr"  "mvtnorm"	"matrixStats"  "metaVAR"  "miniUI"  "mnormt"  "MplusAutomation"  "nloptr"	"mclust"  "mice"  "minqa"  "modeldata"  "multicool"  "numDeriv"	"memoise"  "microbenchmark"  "mitml"  "modelenv"  "munsell"  "nycflights13"
#> #> #> #> #> #>	[189] [193] [197] [201] [205] [209] [213] [217]	"MatrixModels"  "metaSEM"  "mime"  "mize"  "modelr"  "mvtnorm"  "OpenMx"	"matrixStats"  "metaVAR"  "miniUI"  "mnormt"  "MplusAutomation"  "nloptr"  "openss1"	"mclust"  "mice"  "minqa"  "modeldata"  "multicool"  "numDeriv"  "ordinal"	"memoise"  "microbenchmark"  "mitml"  "modelenv"  "munsell"  "nycflights13"  "pan"
#> #> #> #> #> #>	[189] [193] [197] [201] [205] [209] [213] [217] [221]	"MatrixModels"  "metaSEM"  "mime"  "mize"  "modelr"  "mvtnorm"  "OpenMx"  "pander"	"matrixStats"  "metaVAR"  "miniUI"  "mnormt"  "MplusAutomation"  "nloptr"  "openss1"  "parallelly"	"mclust"  "mice"  "minqa"  "modeldata"  "multicool"  "numDeriv"  "ordinal"  "parsnip"	"memoise"  "microbenchmark"  "mitml"  "modelenv"  "munsell"  "nycflights13"  "pan"  "patchwork"
#> #> #> #> #> #> #> #> #> #> #> #> #>	[189] [193] [197] [201] [205] [209] [213] [217] [221] [225]	"MatrixModels"  "metaSEM"  "mime"  "mize"  "modelr"  "mvtnorm"  "OpenMx"  "pander"  "pbapply"	"matrixStats"  "metaVAR"  "miniUI"  "mnormt"  "MplusAutomation"  "nloptr"  "openss1"  "parallelly"  "pbivnorm"	"mclust"  "mice"  "minqa"  "modeldata"  "multicool"  "numDeriv"  "ordinal"  "parsnip"  "pbkrtest"	"memoise"  "microbenchmark"  "mitml"  "modelenv"  "munsell"  "nycflights13"  "pan"  "patchwork"  "pcaPP"
#> #> #> #> #> #> #> #> #> #> #> #> #> #	[189] [193] [197] [201] [205] [209] [213] [217] [221] [225] [229]	"MatrixModels"  "metaSEM"  "mime"  "mize"  "modelr"  "mvtnorm"  "OpenMx"  "pander"  "pbapply"  "pdftools"	"matrixStats"  "metaVAR"  "miniUI"  "mnormt"  "MplusAutomation"  "nloptr"  "openss1"  "parallelly"  "pbivnorm"  "pillar"	"mclust"  "mice"  "minqa"  "modeldata"  "multicool"  "numDeriv"  "ordinal"  "parsnip"  "pbkrtest"  "pkgbuild"	"memoise"  "microbenchmark"  "mitml"  "modelenv"  "munsell"  "nycflights13"  "pan"  "patchwork"  "pcaPP"  "pkgconfig"
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#>	[241]	"profvis"	"progress"	"progressr"	"promises"
#>	[245]	"proto"	"ps"	"psych"	"purrr"
#>	[249]	"qgraph"	"qpdf"	"quadprog"	"quantreg"
#>	[253]	"quarto"	"QuickJSR"	"R.cache"	"R.methodsS3"
#>	[257]	"R.oo"	"R.utils"	"R6"	"ragg"
#>	[261]	"rainbow"	"rappdirs"	"rbibutils"	"rcmdcheck"
#>	[265]	"RColorBrewer"	"Rcpp"	"RcppArmadillo"	"RcppEigen"
#>	[269]	"RcppGSL"	"RcppParallel"	"RcppTOML"	"RCurl"
#>	[273]	"Rdpack"	"readr"	"readxl"	"recipes"
#>	[277]	"RefManageR"	"rematch"	"rematch2"	"remotes"
#>	[281]	"reprex"	"reshape2"	"reticulate"	"rex"
#>	[285]	"rhub"	"rlang"	"RMariaDB"	"rmarkdown"
#>	[289]	"roxygen2"	"rpf"	"RPostgres"	"rProject"
#>	[293]	"rprojroot"	"rsample"	"RSQLite"	"rstan"
#>	[297]	"rstantools"	"rstudioapi"	"rversions"	"rvest"
#>	[301]	"Ryacas"	"sass"	"scales"	"selectr"
#>	[305]	"semlbci"	"semmcci"	"sessioninfo"	"shape"
#>	[309]	"shiny"	"simStateSpace"	"slider"	"snow"
#>	[313]	"snowfall"	"sourcetools"	"SparseM"	"SQUAREM"
#>	[317]	"StanHeaders"	"statmod"	"stringi"	"stringr"
#>	[321]	"styler"	"symSEM"	"sys"	"systemfonts"
#>	[325]	"tensorA"	"testthat"	"texreg"	"textshaping"
#>	[329]	"tibble"	"tidymodels"	"tidyr"	"tidyselect"
#>	[333]	"tidyverse"	"timechange"	"timeDate"	"tinytex"
#>	[337]	"tune"	"tzdb"	"ucminf"	"unigd"
#>	[341]	"urlchecker"	"usethis"	"utf8"	"uuid"
#>	[345]	"V8"	"vctrs"	"viridis"	"viridisLite"

#>	[349]	"vroom"	"waldo"	"warp"	"whisker"
#>	[353]	"whoami"	"withr"	"workflows"	"workflowsets"
#>	[357]	"xfun"	"xm12"	"xmlparsedata"	"xopen"
#>	[361]	"xtable"	"yaml"	"yardstick"	"zip"
#>	[365]	"base"	"boot"	"class"	"cluster"
#>	[369]	"codetools"	"compiler"	"datasets"	"foreign"
#>	[373]	"graphics"	"grDevices"	"grid"	"KernSmooth"
#>	[377]	"lattice"	"MASS"	"Matrix"	"methods"
#>	[381]	"mgcv"	"nlme"	"nnet"	"parallel"
#>	[385]	"rpart"	"spatial"	"splines"	"stats"
#>	[389]	"stats4"	"survival"	"tcltk"	"tools"
#>	[393]	"utils"			

### References

Pesigan, I. J. A., & Cheung, S. F. (2023). Monte Carlo confidence intervals for the indirect effect with missing data. *Behavior Research Methods*, 56(3), 1678–1696. https://doi.org/10.3758/s13428-023-02114-4

R Core Team. (2024). R: A language and environment for statistical computing. R Foundation for Statistical Computing. Vienna, Austria. https://www.R-project.org/