

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
#> BLAS: /usr/lib/x86_64-linux-gnu/openblas-pthread/libblas.so.3
#> LAPACK: /usr/lib/x86_64-linux-gnu/openblas-pthread/libopenblas-p0.3.20.so; LAPACK version 3.10.3
#>
#> 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] lavaan_0.6-18      semmcci_1.1.4.9000 rProject_0.0.14
#>
#> loaded via a namespace (and not attached):
#> [1] httr_1.4.7      cli_3.6.3.9000   knitr_1.48      rlang_1.1.4
#> [5] xfun_0.48       stringi_1.8.4    highr_0.11      generics_0.1.3
#> [9] jsonlite_1.8.9  glue_1.8.0       backports_1.5.0 pbivnorm_0.6.0
#> [13] plyr_1.8.9      rprojroot_2.0.4  stats4_4.4.1    RefManageR_1.4.0
#> [17] quadprog_1.5-8  evaluate_1.0.1    lifecycle_1.0.4 stringr_1.5.1
#> [21] compiler_4.4.1  Rcpp_1.0.13      timechange_0.3.0 bibtex_0.5.1
#> [25] R6_2.5.1        parallel_4.4.1   mnormt_2.1.1    magrittr_2.0.3
#> [29] tools_4.4.1     lubridate_1.9.3  xml2_1.3.6

```

Packages

```

unname(installed.packages()[, 1])

#> [1] "Amelia"      "askpass"      "bmemLavaan"
#> [4] "cli"         "commonmark"   "credentials"
#> [7] "curl"        "devtools"     "evaluate"
#> [10] "gert"        "glue"         "httr2"
#> [13] "jsonlite"    "mi"           "openssl"

```

```

#> [16] "pkgdown"      "profvis"      "ps"
#> [19] "rProject"     "rsem"         "rstudioapi"
#> [22] "sem"          "semmcci"      "sys"
#> [25] "tinytex"      "V8"           "xfun"
#> [28] "abind"        "arm"          "arrow"
#> [31] "ash"          "AsioHeaders"  "askpass"
#> [34] "assertthat"   "backports"    "base64enc"
#> [37] "betaDelta"    "betaMC"       "betaNB"
#> [40] "betaSandwich" "BH"           "bibtex"
#> [43] "BiocManager"  "bit"          "bit64"
#> [46] "bitops"       "blob"         "brew"
#> [49] "brio"         "broom"        "bslib"
#> [52] "cachem"       "callr"        "car"
#> [55] "caracas"      "carData"      "cellranger"
#> [58] "cfr"          "checkmate"    "cli"
#> [61] "clipr"        "clock"        "clusterGeneration"
#> [64] "coda"         "cOde"         "collections"
#> [67] "colorspace"   "commonmark"   "conflicted"
#> [70] "corpcor"      "covr"         "cowplot"
#> [73] "cpp11"        "crayon"       "credentials"
#> [76] "crosstalk"    "cTMed"        "ctsem"
#> [79] "curl"         "cyclocomp"    "data.table"
#> [82] "DBI"          "dbplyr"       "Deriv"
#> [85] "desc"         "deSolve"      "devtools"
#> [88] "diagram"      "dials"        "DiceDesign"
#> [91] "diffobj"      "digest"       "distributional"
#> [94] "distro"       "doBy"         "docopt"

```

```

#> [97] "doFuture"      "downlit"      "dplyr"
#> [100] "DT"            "dtplyr"       "duckdb"
#> [103] "dynr"          "dynUtils"     "ellipse"
#> [106] "ellipsis"      "evaluate"     "expm"
#> [109] "fansI"         "farver"       "fastDummies"
#> [112] "fastmap"       "fclust"       "fda"
#> [115] "fdrtool"       "fds"          "fitCTVARMx"
#> [118] "fitDTVARMx"    "FNN"          "fontawesome"
#> [121] "forcats"       "foreach"      "Formula"
#> [124] "fs"            "fst"          "fstcore"
#> [127] "furrr"         "future"       "future.apply"
#> [130] "gargle"        "generics"     "gert"
#> [133] "ggplot2"       "ggrepel"      "gh"
#> [136] "gitcreds"      "glasso"       "glmnet"
#> [139] "globals"       "glue"         "googledrive"
#> [142] "googlesheets4" "gower"        "GPArotation"
#> [145] "GPfit"         "graphicalVAR" "gridExtra"
#> [148] "gsubfn"        "gtable"       "gtools"
#> [151] "hardhat"       "haven"        "hdrCde"
#> [154] "here"          "highr"        "Hmisc"
#> [157] "hms"           "htmlTable"    "htmltools"
#> [160] "htmlwidgets"   "httpgd"       "httpuv"
#> [163] "httr"          "httr2"        "ids"
#> [166] "ifaTools"      "igraph"       "infer"
#> [169] "ini"           "inline"       "ipred"
#> [172] "isoband"       "iterators"    "jomo"
#> [175] "jpeg"          "jquerylib"    "jsonlite"

```

```

#> [178] "jsonvalidate"      "kernlab"           "knitr"
#> [181] "ks"                "labeling"          "Lahman"
#> [184] "languageserver"    "later"              "latex2exp"
#> [187] "lava"              "lavaan"            "lazyeval"
#> [190] "lhs"               "lifecycle"         "lintr"
#> [193] "listenv"           "littler"           "lme4"
#> [196] "locfit"            "longMI"            "loo"
#> [199] "lubridate"         "magick"            "magrittr"
#> [202] "markdown"          "MatrixModels"      "matrixStats"
#> [205] "mclust"            "memoise"           "metaSEM"
#> [208] "metaVAR"           "mice"              "microbenchmark"
#> [211] "mime"              "miniUI"            "minqa"
#> [214] "mitml"             "mize"              "mlVAR"
#> [217] "mnormt"            "modeldata"         "modelenv"
#> [220] "modelr"            "MplusAutomation"  "multicool"
#> [223] "munsell"           "mvtnorm"           "nloptr"
#> [226] "numDeriv"          "nycflights13"      "OpenMx"
#> [229] "openssl"           "ordinal"           "pan"
#> [232] "pander"            "parallelly"        "parsnip"
#> [235] "patchwork"         "pbapply"           "pbivnorm"
#> [238] "pbkrtest"          "pcaPP"             "pdftools"
#> [241] "pillar"            "pkgbuild"          "pkgconfig"
#> [244] "pkgdown"           "pkgload"           "plogr"
#> [247] "plyr"              "png"               "posterior"
#> [250] "pracma"            "praise"            "prettyunits"
#> [253] "printr"            "processx"          "prodlim"
#> [256] "profvis"           "progress"          "progressr"

```

#> [259]	"promises"	"proto"	"ps"
#> [262]	"psych"	"purrr"	"qgraph"
#> [265]	"qpdf"	"quadprog"	"quantreg"
#> [268]	"quarto"	"QuickJSR"	"R.cache"
#> [271]	"R.methodsS3"	"R.oo"	"R.utils"
#> [274]	"R6"	"ragg"	"rainbow"
#> [277]	"rappdirs"	"rbibutils"	"rcmdcheck"
#> [280]	"RColorBrewer"	"Rcpp"	"RcppArmadillo"
#> [283]	"RcppEigen"	"RcppGSL"	"RcppParallel"
#> [286]	"RcppTOML"	"RCurl"	"Rdpack"
#> [289]	"readr"	"readxl"	"recipes"
#> [292]	"RefManager"	"rematch"	"rematch2"
#> [295]	"remotes"	"reprex"	"reshape2"
#> [298]	"reticulate"	"rex"	"rhub"
#> [301]	"rjags"	"rlang"	"RMariaDB"
#> [304]	"rmarkdown"	"roxygen2"	"rpf"
#> [307]	"RPostgres"	"rProject"	"rprojroot"
#> [310]	"rsample"	"RSQLite"	"rstan"
#> [313]	"rstantools"	"rstudioapi"	"rversions"
#> [316]	"rvest"	"Ryacas"	"sass"
#> [319]	"scales"	"selectr"	"semIbci"
#> [322]	"semmcci"	"sessioninfo"	"sfd"
#> [325]	"shape"	"shiny"	"simStateSpace"
#> [328]	"slider"	"snow"	"snowfall"
#> [331]	"sourcetools"	"SparseM"	"SQUAREM"
#> [334]	"StanHeaders"	"statmod"	"stringi"
#> [337]	"stringr"	"styler"	"symSEM"

```

#> [340] "sys" "systemfonts" "tensorA"
#> [343] "testthat" "texreg" "textshaping"
#> [346] "tibble" "tidymodels" "tidyr"
#> [349] "tidyselect" "tidyverse" "timechange"
#> [352] "timeDate" "tinytex" "tune"
#> [355] "tzdb" "ucminf" "unigd"
#> [358] "urlchecker" "usethis" "utf8"
#> [361] "uuid" "V8" "vctrs"
#> [364] "viridis" "viridisLite" "vroom"
#> [367] "waldo" "warp" "whisker"
#> [370] "whoami" "withr" "workflows"
#> [373] "workflowsets" "xfun" "xml2"
#> [376] "xmlparsedata" "xopen" "xtable"
#> [379] "yaml" "yardstick" "zip"
#> [382] "base" "boot" "class"
#> [385] "cluster" "codetools" "compiler"
#> [388] "datasets" "foreign" "graphics"
#> [391] "grDevices" "grid" "KernSmooth"
#> [394] "lattice" "MASS" "Matrix"
#> [397] "methods" "mgcv" "nlme"
#> [400] "nnet" "parallel" "rpart"
#> [403] "spatial" "splines" "stats"
#> [406] "stats4" "survival" "tcltk"
#> [409] "tools" "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/>