

Session Info

Ivan Jacob Agaloos Pesigan

Session

```
sessionInfo()

#> R version 4.4.2 (2024-10-31)
#> Platform: x86_64-pc-linux-gnu
#> Running under: Ubuntu 24.04.1 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-p0.3.26.so; LAPACK version 3.12.0
#>
#> 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_0.0.17
#>
#> loaded via a namespace (and not attached):
#> [1] backports_1.5.0  R6_2.5.1          lubridate_1.9.4  xfun_0.50
#> [5] magrittr_2.0.3   glue_1.8.0        stringr_1.5.1    knitr_1.49
#> [9] timechange_0.3.0 generics_0.1.3    lifecycle_1.0.4  xml2_1.3.6
#> [13] cli_3.6.3.9002  bibtex_0.5.1      compiler_4.4.2   highr_0.11
#> [17] rprojroot_2.0.4  plyr_1.8.9        httr_1.4.7       tools_4.4.2
#> [21] evaluate_1.0.3   Rcpp_1.0.13-1     RefManageR_1.4.0 rlang_1.1.4
#> [25] jsonlite_1.8.9   stringi_1.8.4

```

Packages

```

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

#> [1] "betaSandwich"      "abind"           "arm"
#> [4] "arrow"             "ash"             "AsioHeaders"
#> [7] "askpass"           "assertthat"      "backports"
#> [10] "base64enc"         "betaDelta"       "betaMC"
#> [13] "betaNB"            "betaSandwich"    "BH"
#> [16] "bibtex"            "BiocManager"     "bit"

```

```

#> [19] "bit64"          "bitops"         "blob"
#> [22] "brew"           "brio"           "broom"
#> [25] "bslib"          "cachem"         "callr"
#> [28] "car"            "caracas"        "carData"
#> [31] "cellranger"     "cfr"            "checkmate"
#> [34] "cli"            "clipr"          "clock"
#> [37] "clusterGeneration" "coda"          "c0de"
#> [40] "collections"    "colorspace"     "commonmark"
#> [43] "conflicted"     "corpcor"        "covr"
#> [46] "cowplot"        "cpp11"          "crayon"
#> [49] "credentials"    "crosstalk"      "cTMed"
#> [52] "ctsem"          "curl"           "cyclocomp"
#> [55] "data.table"     "DBI"            "dbplyr"
#> [58] "Deriv"          "desc"           "deSolve"
#> [61] "devtools"       "diagram"        "dials"
#> [64] "DiceDesign"     "diffobj"        "digest"
#> [67] "distributional" "distro"         "doBy"
#> [70] "docopt"         "doFuture"       "downlit"
#> [73] "dplyr"          "DT"             "dtplyr"
#> [76] "dynr"           "dynUtils"       "ellipse"
#> [79] "ellipsis"       "evaluate"       "expm"
#> [82] "fansi"          "farver"         "fastDummies"
#> [85] "fastmap"        "fclust"         "fda"
#> [88] "fdrtool"        "fds"            "fitCTVARMx"
#> [91] "fitDTVARMx"     "FNN"            "fontawesome"
#> [94] "forcats"        "foreach"        "Formula"
#> [97] "fs"             "fst"            "fstcore"

```

```

#> [100] "furrr"           "future"           "future.apply"
#> [103] "gargle"          "generics"         "gert"
#> [106] "ggplot2"         "ggrepel"          "gh"
#> [109] "gitcreds"        "glasso"           "glmnet"
#> [112] "globals"         "glue"             "googledrive"
#> [115] "googlesheets4"   "gower"            "GPArotation"
#> [118] "GPfit"           "graphicalVAR"     "gridExtra"
#> [121] "gsubfn"          "gtable"           "gtools"
#> [124] "hardhat"         "haven"            "hdcrcde"
#> [127] "here"            "highr"            "Hmisc"
#> [130] "hms"             "htmlTable"        "htmltools"
#> [133] "htmlwidgets"     "httpgd"           "httpuv"
#> [136] "httr"            "httr2"            "ids"
#> [139] "ifaTools"        "igraph"           "infer"
#> [142] "ini"             "inline"           "ipred"
#> [145] "isoband"         "iterators"        "jomo"
#> [148] "jpeg"           "jquerylib"         "jsonlite"
#> [151] "jsonvalidate"    "kernlab"          "knitr"
#> [154] "ks"             "labeling"         "Lahman"
#> [157] "languageserver"  "later"            "latex2exp"
#> [160] "lava"           "lavaan"           "lazyeval"
#> [163] "lhs"            "lifecycle"        "lintr"
#> [166] "listenv"         "littler"          "lme4"
#> [169] "locfit"          "longMI"           "loo"
#> [172] "lubridate"       "magick"           "magrittr"
#> [175] "markdown"        "MatrixModels"     "matrixStats"
#> [178] "mclust"          "memoise"          "metaSEM"

```

```

#> [181] "metaVAR"          "mice"              "microbenchmark"
#> [184] "mime"             "miniUI"            "minqa"
#> [187] "mitml"            "mize"              "mlVAR"
#> [190] "mnormt"           "modeldata"         "modelenv"
#> [193] "modelr"           "MplusAutomation"  "multicool"
#> [196] "munsell"          "mvtnorm"           "nloptr"
#> [199] "numDeriv"         "nycflights13"      "OpenMx"
#> [202] "openssl"          "ordinal"           "pan"
#> [205] "pander"           "parallelly"        "parsnip"
#> [208] "patchwork"        "pbapply"           "pbivnorm"
#> [211] "pbkrtest"         "pcaPP"             "pdftools"
#> [214] "pillar"           "pkgbuild"          "pkgconfig"
#> [217] "pkgdown"          "pkgload"           "plogr"
#> [220] "plyr"             "png"               "posterior"
#> [223] "pracma"           "praise"            "prettyunits"
#> [226] "printr"           "processx"          "prodlim"
#> [229] "profvis"          "progress"          "progressr"
#> [232] "promises"         "proto"             "ps"
#> [235] "psych"            "purrr"             "qgraph"
#> [238] "qpdf"             "quadprog"          "quantreg"
#> [241] "quarto"           "QuickJSR"          "R.cache"
#> [244] "R.methodsS3"      "R.oo"              "R.utils"
#> [247] "R6"               "ragg"              "rainbow"
#> [250] "rappdirs"         "rbibutils"         "rcmdcheck"
#> [253] "RColorBrewer"     "Rcpp"              "RcppArmadillo"
#> [256] "RcppEigen"        "RcppGSL"           "RcppParallel"
#> [259] "RcppTOML"         "RCurl"             "Rdpack"

```

```

#> [262] "readr"          "readxl"         "recipes"
#> [265] "RefManager"     "reformulas"     "rematch"
#> [268] "rematch2"       "remotes"        "reprex"
#> [271] "reshape2"       "reticulate"     "rex"
#> [274] "rhub"           "rjags"          "rlang"
#> [277] "RMariaDB"       "rmarkdown"      "roxygen2"
#> [280] "rpf"            "RPostgres"      "rProject"
#> [283] "rprojroot"      "rsample"        "RSQLite"
#> [286] "rstan"          "rstantools"     "rstudioapi"
#> [289] "rversions"     "rvest"          "Ryacas"
#> [292] "sass"          "scales"         "selectr"
#> [295] "semlbci"       "semmcci"        "sessioninfo"
#> [298] "sfd"           "shape"          "shiny"
#> [301] "simStateSpace" "slider"         "snow"
#> [304] "snowfall"      "sourcetools"    "SparseM"
#> [307] "SQUAREM"       "StanHeaders"    "statmod"
#> [310] "stringi"       "stringr"        "styler"
#> [313] "symSEM"        "sys"            "systemfonts"
#> [316] "tensorA"       "testthat"       "texreg"
#> [319] "textshaping"   "tibble"         "tidymodels"
#> [322] "tidyr"         "tidyselect"     "tidyverse"
#> [325] "timechange"    "timeDate"       "tinytex"
#> [328] "tune"          "tzdb"           "ucminf"
#> [331] "unigd"         "urlchecker"     "usethis"
#> [334] "utf8"          "uuid"           "V8"
#> [337] "vctrs"         "viridis"        "viridisLite"
#> [340] "vroom"         "waldo"          "warp"

```

```

#> [343] "whisker"      "whoami"      "withr"
#> [346] "workflows"    "workflowsets" "xfun"
#> [349] "xml2"         "xmlparsedata" "xopen"
#> [352] "xtable"       "yaml"        "yardstick"
#> [355] "zip"          "base"        "boot"
#> [358] "class"        "cluster"     "codetools"
#> [361] "compiler"     "datasets"    "foreign"
#> [364] "graphics"     "grDevices"   "grid"
#> [367] "KernSmooth"   "lattice"     "MASS"
#> [370] "Matrix"       "methods"     "mgcv"
#> [373] "nlme"         "nnet"        "parallel"
#> [376] "rpart"        "spatial"     "splines"
#> [379] "stats"        "stats4"      "survival"
#> [382] "tcltk"        "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/>