Session Info

Ivan Jacob Agaloos Pesigan

Session

```r
sessionInfo()

#> R version 4.5.1 (2025-06-13)
#> Platform: x86_64-pc-linux-gnu
#> Running under: Ubuntu 24.04.2 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/libopenblasp-r0.3.26.so;  LAPACK version 3.12.
#>
#> 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_0.6-19   semmcci_1.1.5   rProject_0.0.21
#>
#> loaded via a namespace (and not attached):
#>  [1] httr_1.4.7      cli_3.6.5.9000  knitr_1.50      rlang_1.1.6
#>  [5] xfun_0.52       stringi_1.8.7   highr_0.11      generics_0.1.4
#>  [9] jsonlite_2.0.0  glue_1.8.0      backports_1.5.0 pbivnorm_0.6.0
#> [13] plyr_1.8.9      rprojroot_2.1.0 stats4_4.5.1    RefManageR_1.4.0
#> [17] quadprog_1.5-8  evaluate_1.0.4  lifecycle_1.0.4 stringr_1.5.1
#> [21] compiler_4.5.1  Rcpp_1.1.0      timechange_0.3.0 bibtex_0.5.1
#> [25] R6_2.6.1        parallel_4.5.1  mnormt_2.1.1    magrittr_2.0.3
#> [29] tools_4.5.1     lubridate_1.9.4 xml2_1.3.8
```

Packages

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

#>  [1] "bmemLavaan"    "mi"            "rsem"
#>  [4] "sem"           "semmcci"       "abind"
#>  [7] "Amelia"        "arm"           "arrow"
#> [10] "ash"           "askpass"       "assertthat"
#> [13] "backports"     "base64enc"     "betaDelta"
```

```
#>  [16] "betaMC"        "betaNB"           "betaSandwich"
#>  [19] "BH"            "bibtex"           "BiocManager"
#>  [22] "bit"           "bit64"            "bitops"
#>  [25] "blob"          "bootStateSpace"   "brew"
#>  [28] "brio"          "broom"            "bslib"
#>  [31] "cachem"        "callr"            "car"
#>  [34] "caracas"       "carData"          "cellranger"
#>  [37] "cffr"          "checkmate"        "cli"
#>  [40] "clipr"         "clock"            "clusterGeneration"
#>  [43] "coda"          "cOde"             "collections"
#>  [46] "colorspace"    "commonmark"       "conflicted"
#>  [49] "corpcor"       "covr"             "cowplot"
#>  [52] "cpp11"         "crayon"           "credentials"
#>  [55] "crosstalk"     "cTMed"            "ctsem"
#>  [58] "curl"          "data.table"       "DBI"
#>  [61] "dbplyr"        "Deriv"            "desc"
#>  [64] "deSolve"       "devtools"         "diagram"
#>  [67] "dials"         "DiceDesign"       "diffobj"
#>  [70] "digest"        "distributional"   "distro"
#>  [73] "doBy"          "docopt"           "doFuture"
#>  [76] "downlit"       "dplyr"            "DT"
#>  [79] "dtplyr"        "duckdb"           "dynr"
#>  [82] "dynUtils"      "ellipse"          "ellipsis"
#>  [85] "evaluate"      "expm"             "fansi"
#>  [88] "farver"        "fastDummies"      "fastmap"
#>  [91] "fclust"        "fda"              "fdrtool"
#>  [94] "fds"           "fitDTVARMx"       "FNN"
```

```
#>  [97] "fontawesome"       "forcats"           "foreach"
#> [100] "Formula"           "fs"                "fst"
#> [103] "fstcore"           "furrr"             "future"
#> [106] "future.apply"      "gargle"            "generics"
#> [109] "gert"              "ggplot2"           "ggrepel"
#> [112] "gh"                "gitcreds"          "glasso"
#> [115] "glmnet"            "globals"           "glue"
#> [118] "googledrive"       "googlesheets4"     "gower"
#> [121] "GPArotation"       "GPfit"             "graphicalVAR"
#> [124] "gridExtra"         "gsubfn"            "gtable"
#> [127] "gtools"            "hardhat"           "haven"
#> [130] "hdrcde"            "here"              "highr"
#> [133] "Hmisc"             "hms"               "htmlTable"
#> [136] "htmltools"         "htmlwidgets"       "httpuv"
#> [139] "httr"              "httr2"             "ids"
#> [142] "ifaTools"          "igraph"            "infer"
#> [145] "ini"               "inline"            "ipred"
#> [148] "isoband"           "iterators"         "jomo"
#> [151] "jpeg"              "jquerylib"         "jsonlite"
#> [154] "jsonvalidate"      "kernlab"           "knitr"
#> [157] "ks"                "labeling"          "Lahman"
#> [160] "languageserver"    "later"             "latex2exp"
#> [163] "lava"              "lavaan"            "lazyeval"
#> [166] "lhs"               "lifecycle"         "lintr"
#> [169] "listenv"           "litedown"          "littler"
#> [172] "lme4"              "locfit"            "longMI"
#> [175] "loo"               "lubridate"         "magick"
```

```
#> [178] "magrittr"        "markdown"       "MatrixModels"
#> [181] "matrixStats"     "mclust"         "memoise"
#> [184] "metaSEM"         "metaVAR"        "mice"
#> [187] "microbenchmark"  "mime"           "miniUI"
#> [190] "minqa"           "mitml"          "mize"
#> [193] "mlVAR"           "mnormt"         "modeldata"
#> [196] "modelenv"        "modelr"         "MplusAutomation"
#> [199] "multicool"       "mvtnorm"        "nloptr"
#> [202] "numDeriv"        "nycflights13"   "OpenMx"
#> [205] "openssl"         "ordinal"        "pan"
#> [208] "pander"          "parallelly"     "parsnip"
#> [211] "patchwork"       "pbapply"        "pbivnorm"
#> [214] "pbkrtest"        "pcaPP"          "pdftools"
#> [217] "pillar"          "pkgbuild"       "pkgconfig"
#> [220] "pkgdown"         "pkgload"        "plogr"
#> [223] "plyr"            "png"            "posterior"
#> [226] "pracma"          "praise"         "prettyunits"
#> [229] "printr"          "processx"       "prodlim"
#> [232] "profvis"         "progress"       "progressr"
#> [235] "promises"        "proto"          "ps"
#> [238] "psych"           "purrr"          "qgraph"
#> [241] "qpdf"            "quadprog"       "quantreg"
#> [244] "quarto"          "QuickJSR"       "R.cache"
#> [247] "R.methodsS3"     "R.oo"           "R.utils"
#> [250] "R6"              "ragg"           "rainbow"
#> [253] "rappdirs"        "rbibutils"      "rcmdcheck"
#> [256] "RColorBrewer"    "Rcpp"           "RcppArmadillo"
```

```
#> [259] "RcppEigen"      "RcppGSL"        "RcppParallel"
#> [262] "RcppTOML"       "RCurl"          "Rdpack"
#> [265] "readr"          "readxl"         "recipes"
#> [268] "RefManageR"     "reformulas"     "rematch"
#> [271] "rematch2"       "remotes"        "reprex"
#> [274] "reshape2"       "reticulate"     "rex"
#> [277] "rhub"           "rjags"          "rlang"
#> [280] "RMariaDB"       "rmarkdown"      "roxygen2"
#> [283] "rpf"            "RPostgres"      "rProject"
#> [286] "rprojroot"      "rsample"        "RSQLite"
#> [289] "rstan"          "rstantools"     "rstudioapi"
#> [292] "rversions"      "rvest"          "Ryacas"
#> [295] "sass"           "scales"         "selectr"
#> [298] "semlbci"        "semmcci"        "sessioninfo"
#> [301] "sfd"            "shape"          "shiny"
#> [304] "simStateSpace"  "slider"         "snow"
#> [307] "snowfall"       "sourcetools"    "SparseM"
#> [310] "sparsevctrs"    "SQUAREM"        "StanHeaders"
#> [313] "stringi"        "stringr"        "styler"
#> [316] "symSEM"         "sys"            "systemfonts"
#> [319] "tensorA"        "testthat"       "texreg"
#> [322] "textshaping"    "tibble"         "tidymodels"
#> [325] "tidyr"          "tidyselect"     "tidyverse"
#> [328] "timechange"     "timeDate"       "tinytex"
#> [331] "tune"           "tzdb"           "ucminf"
#> [334] "urlchecker"     "usethis"        "utf8"
#> [337] "uuid"           "V8"             "vctrs"
```

```
#> [340] "viridis"        "viridisLite"    "vroom"
#> [343] "waldo"          "warp"           "whisker"
#> [346] "whoami"         "withr"          "workflows"
#> [349] "workflowsets"   "xfun"           "xml2"
#> [352] "xmlparsedata"   "xopen"          "xtable"
#> [355] "yaml"           "yardstick"      "zip"
#> [358] "base"           "boot"           "class"
#> [361] "cluster"        "codetools"      "compiler"
#> [364] "datasets"       "foreign"        "graphics"
#> [367] "grDevices"      "grid"           "KernSmooth"
#> [370] "lattice"        "MASS"           "Matrix"
#> [373] "methods"        "mgcv"           "nlme"
#> [376] "nnet"           "parallel"       "rpart"
#> [379] "spatial"        "splines"        "stats"
#> [382] "stats4"         "survival"       "tcltk"
#> [385] "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/