Inferences and Effect Sizes for Direct, Indirect, and Total Effects in Continuous-Time Mediation Models

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Description

Research compendium for the manuscript Pesigan, I. J. A., Russell, M. A., & Chow, S.-M. (2025). Inferences and Effect Sizes for Direct, Indirect, and Total Effects in Continuous-Time Mediation Models. *Psychological Methods*. https://doi.org/10.1037/met0000779

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Computations for this research were performed on the Pennsylvania State University's Institute for Computational and Data Sciences' Roar supercomputer using SLURM for job scheduling (Yoo et al., 2003), GNU Parallel to run the simulations in parallel (Tange, 2021), and Apptainer to ensure a reproducible software stack (Kurtzer et al., 2017, 2021). See `.sim/README.md` and the scripts in

the `.sim` folder in the GitHub repository for more details on how the simulations were performed.

Installation

You can install the released version of `manCTMed` from GitHub with:

```
install.packages("remotes")
remotes::install_github("jeksterslab/manCTMed")
```

See Containers for containerized versions of the package.

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See https://github.com/jeksterslab/manCTMed/blob/main/.setup/latex/manCTMed-manuscript.Rtex for the latex file of the manuscript. See https://github.com/jeksterslab/manCTMed/blob/latex/manCTMed-manuscript.pdf for the compiled PDF.

R Package

Effect sizes, standard errors and confidence intervals for the direct, indirect, and total effects for continuous-time mediation models as well as visualization tools are available in the `cTMed` package available on the Comprehensive R Archive Network (CRAN) (https://CRAN.R-project.org/package=cTMed). Documentation and examples can be found in the accompanying website (https://jeksterslab.github.io/cTMed).

More Information

See GitHub Pages for package documentation.

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