

# cTMed: Continuous-Time Mediation

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## Description

Implements the methods introduced in Pesigan et al. (2025) to compute standard errors, confidence intervals, and effect sizes for total, direct, and indirect effects in continuous-time mediation models.

## Installation

You can install the development version of `cTMed` from [GitHub](#) with:

```
if (!require("remotes")) install.packages("remotes")
remotes::install_github("jeksterslab/cTMed")
```

## More Information

See [GitHub Pages](#) for package documentation.

## Citation

To cite `cTMed` in publications, please cite Pesigan et al. (2025).

## References

- Bollen, K. A. (1987). Total, direct, and indirect effects in structural equation models. *Sociological Methodology*, 17, 37. <https://doi.org/10.2307/271028>
- Deboeck, P. R., & Preacher, K. J. (2015). No need to be discrete: A method for continuous time mediation analysis. *Structural Equation Modeling: A Multidisciplinary Journal*, 23(1), 61–75. <https://doi.org/10.1080/10705511.2014.973960>
- 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>
- R Core Team. (2025). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing. Vienna, Austria. <https://www.R-project.org/>
- Ryan, O., & Hamaker, E. L. (2021). Time to intervene: A continuous-time approach to network analysis and centrality. *Psychometrika*, 87(1), 214–252. <https://doi.org/10.1007/s11336-021-09767-0>
- Wang, L., & Zhang, Q. (2020). Investigating the impact of the time interval selection on autoregressive mediation modeling: Result interpretations, effect reporting, and temporal designs. *Psychological Methods*, 25(3), 271–291. <https://doi.org/10.1037/met0000235>