

# betaMC: Monte Carlo for Regression Effect Sizes

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## Description

Generates Monte Carlo confidence intervals for standardized regression coefficients (beta) and other effect sizes, including multiple correlation, semipartial correlations, improvement in R-squared, squared partial correlations, and differences in standardized regression coefficients, for models fitted by `lm()`. **betaMC** combines ideas from Monte Carlo confidence intervals for the indirect effect (Pesigan & Cheung, 2023) and the sampling covariance matrix of regression coefficients (Dudgeon, 2017) to generate confidence intervals effect sizes in regression.

## Installation

You can install the CRAN release of **betaMC** with:

```
install.packages("betaMC")
```

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

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

## More Information

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

## References

- Dudgeon, P. (2017). Some improvements in confidence intervals for standardized regression coefficients. *Psychometrika*, 82(4), 928–951. <https://doi.org/10.1007/s11336-017-9563-z>
- Pesigan, I. J. A., & Cheung, S. F. (2023). Monte Carlo confidence intervals for the indirect effect with missing data. *Behavior Research Methods*. <https://doi.org/10.3758/s13428-023-02114-4>
- R Core Team. (2023). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing. Vienna, Austria. <https://www.R-project.org/>