betaDelta: Confidence Intervals for Standardized Regression Coefficients

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Description

Generates confidence intervals for standardized regression coefficients using delta method standard errors for models fitted by `lm()` as described in Yuan and Chan (2011) and Jones and Waller (2013). The package can also be used to generate confidence intervals for differences of standardized regression coefficients and as a general approach to performing the delta method. A description of the package and code examples are presented in Pesigan et al. (2023).

Installation

You can install the CRAN release of `betaDelta` with:

```
install.packages("betaDelta")
```

You can install the development version of `betaDelta` from GitHub with:

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

More Information

See GitHub Pages for package documentation.

References

Jones, J. A., & Waller, N. G. (2013). *The normal-theory and asymptotic distribution-free (ADF) covariance matrix of standardized regression coefficients: Theoretical extensions and finite sample behavior* (tech. rep.). University of Minnesota-Twin Cities. Retrieved July 22, 2022, from http://users.cla.umn.edu/~nwaller/downloads/techreports/TR052913.pdf

Pesigan, I. J. A., Sun, R. W., & Cheung, S. F. (2023). betaDelta and betaSandwich: Confidence intervals for standardized regression coefficients in R. *Multivariate Behavioral Research*, *58*(6), 1183–1186. https://doi.org/10.1080/00273171.2023.2201277

R Core Team. (2025). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing. Vienna, Austria. https://www.R-project.org/

Yuan, K.-H., & Chan, W. (2011). Biases and standard errors of standardized regression coefficients. *Psychometrika*, *76*(4), 670–690. https://doi.org/10.1007/s11336-011-9224-6