

Package ‘anomo’

September 13, 2024

Type Package

Title Analysis of Moderation with the Monte Carlo Confidence Interval Method

Version 0.5.2

Date 2024-9-10

Description Analysis of Moderation (anomo) uses the Monte Carlo confidence interval (MCCI) method to test the difference and equivalence of two effects with summary statistics from two studies.

Language en-US

Depends R (>= 4.0.0), graphics (>= 4.0.0), base(>= 4.0.0)

License GPL-3

Encoding UTF-8

Suggests rmarkdown, knitr, markdown

VignetteBuilder rmarkdown, knitr, markdown

RoxygenNote 7.3.2

NeedsCompilation no

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Repository CRAN

Date/Publication 2024-09-13 17:40:01 UTC

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mcci

*Compute Monte Carlo Confidence Intervals***Description**

Compute Monte Carlo confidence intervals (MCCI) of the difference in two effects from summary statistics. The MCCI can be used to test moderation effects (i.e., whether two effects are statistically different from each) and the equivalence of effects.

Usage

```
mcci(
  d1 = NULL,
  se1 = NULL,
  d2 = NULL,
  se2 = NULL,
  n.mcci = 10000,
  sig.level = 0.05,
  two.tailed = TRUE,
  bound.eq = NULL,
  xlim = NULL,
  xlab = NULL,
  ylab = NULL,
  dashed.lines = TRUE,
  verbose = TRUE
)
```

Arguments

d1	The estimated treatment effect for group 1.
se1	The estimated standard error of the treatment effect for group 1.
d2	The estimated treatment effect for group 2.
se2	The estimated standard error of the treatment effect for group 2.
n.mcci	The number of draws for the MCCI method. Default is 10,000.
sig.level	The significance level. Default is .05.
two.tailed	Logical of two tailed test. Default is TRUE.
bound.eq	The equivalence bounds for equivalence test. Default is the MCCI for the equivalence test. It can be specified in the arguments as bound.eq = c(lower bound #, upper bound #).
xlim	The limits set for the x-axis in the plot. Default is two times the MCCI for moderation. It can be specified in the arguments as xlim = c(lower #, higher #).
xlab	The label for the x-axis in the plot. Default is "Differences in Effects".
ylab	The label for the y-axis in the plot. Default is NULL.
dashed.lines	Logical of whether dashed lines of equivalence bounds and zero should be added in the plot. Default is TRUE.
verbose	Logical; print the process if TRUE, otherwise not; default value is TRUE.

Value

The results of moderation analysis and equivalence tests using the MCCI method. It will also provide a plot for the MCCIs.

Examples

```
library(anomo)
myci <- mcci(d1 = .1, se1 = .1, d2 = .2, se2 = .1)
```

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