**Description**

This function implements the upsilon effect size statistic as described in Lachowicz, Preacher, & Kelley (in press).

**Usage**

upsilon(x, mediator, dv, conf.level = 0.95, bootstrap.lavaan = TRUE, bootstrap.lavaan.type = "ordinary", bootstrap.boot = FALSE, bootstrap.boot.type = "perc", B = 1000, boot.data.out = FALSE)

**Arguments**

x x is the independent variable.

mediator mediator is the mediator variable.

dv dv is the outcome or dependent variable.

conf.level conf.level is the desired confidence coefficient (i.e., the complement of the Type I error rate).

bootstrap.lavaan TRUE or FALSE regarding if a bootstrap confidence interval should be performed using bootstrapLavaan function.

bootstrap.lavaan.type The type of bootstrap confidence interval, either “ordinary” or “bollen.stine” (default is “ordinary”).

bootstrap.boot TRUE or FALSE regarding if a bootstrap confidence interval should be performed using package boot.

bootstrap.boot.type The type of bootstrap confidence interval using the boot.ci function form the boot package, which includes “normal”, “basic”, “student”, “perc”, and ”bca” CIs (default is “perc” CIs).

B The number of bootstrap replications.

boot.data.out TRUE or FALSE regarding if bootstrap data is returned with function output (only available if bootstrap.boot = TRUE).

**Value**

Returns the value of the effect size upsilon for a simple mediation model.

**Note**

Note that this function overcomes some limitations of other effects for mediation models, such as those discussed in Preacher and Kelley (2012) and Wen and Fan (2015). This function can only be used for simple mediation models at this time.

**Author(s)**

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**References**

Lachowicz, M. J., Preacher, K. J., & Kelley, K. (in press). A novel measure of effect size for mediation analysis. Psychological Methods, X, X–X.

Preacher, K. J., & Kelley, K. (2011). Effect size measures for mediation models: quantitative strategies for communicating indirect effects. Psychological Methods, 16, 93–115.

Wen, Z., & Fan, X. (2015). Monotonicity of effect sizes: Questioning kappa-squared as mediation effect size measure. Psychological Methods, 20, 193–203.

**See Also**

mediation, lavaan, bootstrapLavaan, boot, boot.ci