

An Overview of Functions in the metafor Package

(not all functions documented)

given the required data (e.g., means, SDs, and group sizes; counts for 2x2 tables; correlations and sample sizes), calculate the desired effect size or outcome measure for the meta-analysis (e.g., raw or standardized mean differences, log odds or risk ratios, risk differences, r-to-z transformed correlations)

**read.table()
read.csv()
read.delim()**

- read in data from ASCII file
- see also 'foreign' package for reading in other data formats

escalc()

- yi = observed outcomes or effect size estimates
- vi = corresponding sampling variances

**rma.uni()
rma.mh()
rma.peto()
rma.glmm()
rma.mv()**

- rma.uni() = fixed- and random/mixed-effects models ("inverse-variance" method; normal-normal models)
- rma.mh() = Mantel-Haenszel method (fixed-effects model)
- rma.peto() = Peto's method (fixed-effects model)
- rma.glmm() = fixed- and random/mixed-effects models (binomial-normal and Poisson-normal models)
- rma.mv() = fixed- and random/mixed-effects multivariate/multilevel models (normal-normal models)

**print()
summary()**

note: rma.uni() takes either 'yi' and 'vi' as input or one can supply the required data to calculate the desired effect size or outcome measure for the meta-analysis directly; rma.mh(), rma.peto(), and rma.glmm() require that the raw counts are supplied; rma.mv() takes 'yi' and 'V' as input

print functions

fitted and predicted values

residuals and influential case diagnostics

funnel plot asymmetry (publication bias)

confidence intervals and inference

plotting functions

various extractor functions

**print()
summary()**

**fitted()
predict()
blup()**

note: blup() only for 'rma.uni' objects

**residuals()
rstandard()
rstudent()
hatvalues()
weights()
influence()
leave1out()**

note: most functions only implemented for 'rma.uni' objects

**ranktest()
regtest()
trimfill()
hc()**

note: regtest() not for 'rma.glmm' or 'rma.mv' objects; trimfill() and hc() only for 'rma.uni' objects

**confint()
anova()
pemutest()**

note: anova() and pemutest() only for 'rma.uni' objects; confint() not for 'rma.glmm' objects

**forest()
funnel()
labbe()
radial()
qqnorm()
baujat()
plot()**

note: forest() can also take 'yi' and 'vi' directly as input; qqnorm(), baujat(), and plot() not for 'rma.glmm' or 'rma.mv' objects

**logLik()
deviance()
fitstats()
AIC(), BIC()
coef()
vcov()**

note: coef() also for 'permutest.rma.uni' and 'summary.rma' objects