An Overview of Functions in the metafor Package

(not all functions documented)

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

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

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 difference, log odds or risk ratio, risk difference, r-to-z transformed correlation)

escalc()

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

rma.uni()
rma.mh()
rna.peto()
rma.glmm()

- rma.uni() = fixed- and random/mixed-effects models ("inverse-variance" method; normal-normal model)
- 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 model)

note: rma.uni() takes either 'yi' and 'vi' as input or 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

print()
summary()

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()

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

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

confint()
anova()
pemutest()

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

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

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

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

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

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

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

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

last updated: 6/21/2013

note: restrictions may change with future updates