# Funnel plot for Saucier et al. 2005 "Differences in Helping Whites and Blacks: A Meta-Analysis"

# Data

N <- c(604,50,50,91,400,200,200,56,665,96,40,40,1805,1884,40,40,60,60,89,60,60,468,20,20,569,32,32,80,80,22,21,1600,2340,960,800,99,80,102,38,65,28,28,127,80,72,64,64,88)

d <- c(-0.16,-0.16,-0.12,-0.42,-0.21,-0.02,-0.17,-0.58,-0.25,0.48,0.21,0,0.23,0.16,0.79,-0.4,-0.49,-0.52,-0.51,0.31,-0.27,-0.46,0,-1.48,-0.25,0.38,-0.8,-0.21,-0.31,-0.41,-1.33,-0.002,0.19,0.39,-0.32,0.39,-0.15,0.12,-0.42,0,-0.97,0.4,0.05,0.57,0,-0.5,-0.17,0.05)

# Calculate variance and standard errors based on formula 7.30 of Hunter and Schmidt (2004: 286)

var.fptable <- ((N-1)/(N-3))\*((4/N)\*(1+(d^2)/8))

se.fptable <- sqrt(var.fptable)

# Funnel plot

library(metafor)

res.table.re <- rma(d, var.fptable, method="REML")

funnel(res.table.re, yaxis="sei", level=95, main="Saucier et al. 2005 Differences in Helping Whites and Blacks: A Meta-Analysis", xlab="Effect Size (d)", ylab="Estimated Standard Error", pch=19, bg="white", xlim=c(-2,2), ylim=c(0.6,0), at=seq(from=-2, to=2, by=0.5), cex.lab=1, cex.axis=1, cex.main=1.25)

box()

text(-2,0.025, "< More help for whites", cex=1, pos=4)

text(2,0.025, "More help for blacks >", cex=1, pos=2)

# Begg's test

ranktest(res.table.re)

# Egger's test

regtest(res.table.re, model="lm", predictor = "sei")