

Appendix

Torfinn and Carolina

November 25, 2014

1 Introduction

We created an appendix of meta-analysis paper. To be able to visualize the output, we used an example dataset taken from Gibson et al. 2011.

?? How can a an automised table be created for rows from e.g. different rma objects? In our case, we just have one rma object so one row is produced. If the people conduct different rmas for different data subsets, it would be nice to have this in the same table as well!

Table 1: Results of the meta-analysis. ES = Effect Size, Q = Test for residual heterogeneity, I^2 = residual heterogeneity, Egger's test and the fails-safe number for publication bias testing.

	ES	SE of ES	CI (lb)	CI (ub)	P(ES)	Q	P(Q)	I^2	Egger	P(Egger)	FSN
Meta-Analysis	-0.28	0.12	-0.52	-0.04	0.02	47.05	0.12	27.22	-0.44	0.66	77.00

Table 2: Results of the meta-regression (mixed-effects model). The model results are shown taking a moderator into account and displaying the coefficients. Results for the whole model are displayed as Q = Test for residual heterogeneity, I^2 = residual heterogeneity and QM = Test of Moderators.

	ES	SE of ES	CI (lb)	CI (ub)	P(ES)	Q	P(Q)	I^2	QM	P(QM)
intrcpt	-0.353	0.766	-1.85	1.15	0.645	22.7	0.54	0.000493	24.4	0.0278
continentAS	-0.377	0.423	-1.21	0.452	0.373					
continentCA	-0.0485	0.61	-1.24	1.15	0.937					
continentSA	-0.627	0.375	-1.36	0.108	0.0945					
metricric	0.119	0.254	-0.38	0.617	0.641					
disturbanceagf	0.331	0.745	-1.13	1.79	0.657					
disturbanceagr	0.701	0.936	-1.13	2.54	0.454					
disturbancebur	0.723	0.731	-0.709	2.15	0.322					
disturbanceoth	0.728	0.903	-1.04	2.5	0.42					
disturbancepas	-0.0589	0.979	-1.98	1.86	0.952					
disturbancepla	-0.203	0.868	-1.9	1.5	0.815					
disturbancesec	0.399	0.723	-1.02	1.82	0.581					
disturbancesel	0.796	0.691	-0.559	2.15	0.25					
disturbanceshd	-0.908	0.783	-2.44	0.626	0.246					

To do: A table for the sensitivity analysis.

Notes:

Are we going to make two scripts? One for meta and one for metafor or are we going to do a combination? Till now it would only work with one rma.RE object with one row and not many. Is is possible to combine specific single values of various rma objects? Can we do this?

To assess possible publication bias, funnel plots can be used for visualization purposes.

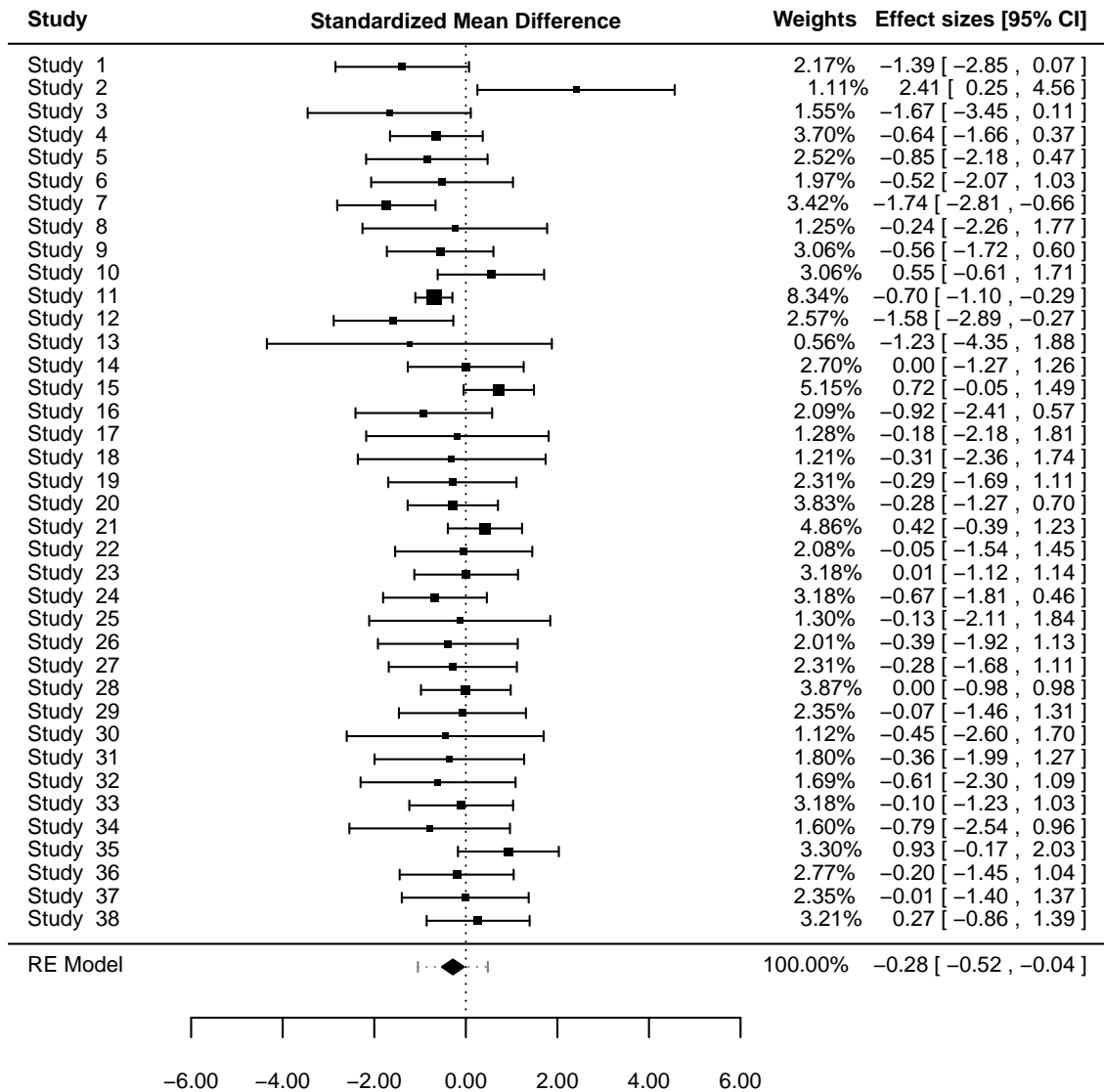


Figure 1: Forest plot of a random effects model. The column on the left represents the study. The weighted percentage is shown as well as the effect size (ES) [+ 95% CI]

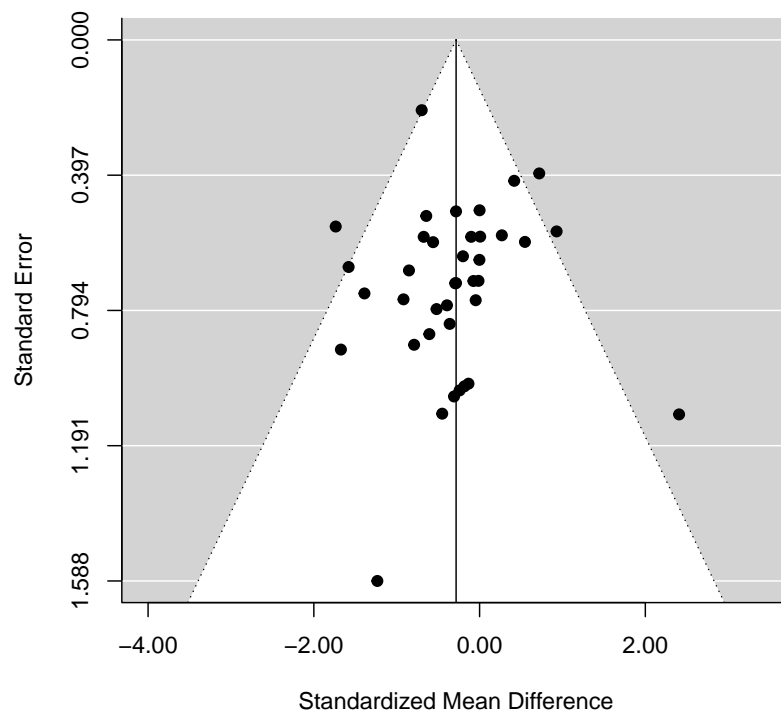


Figure 2: Funnel plot of random effects model displaying possible publication bias. The true ES is displayed by the solid vertical line.

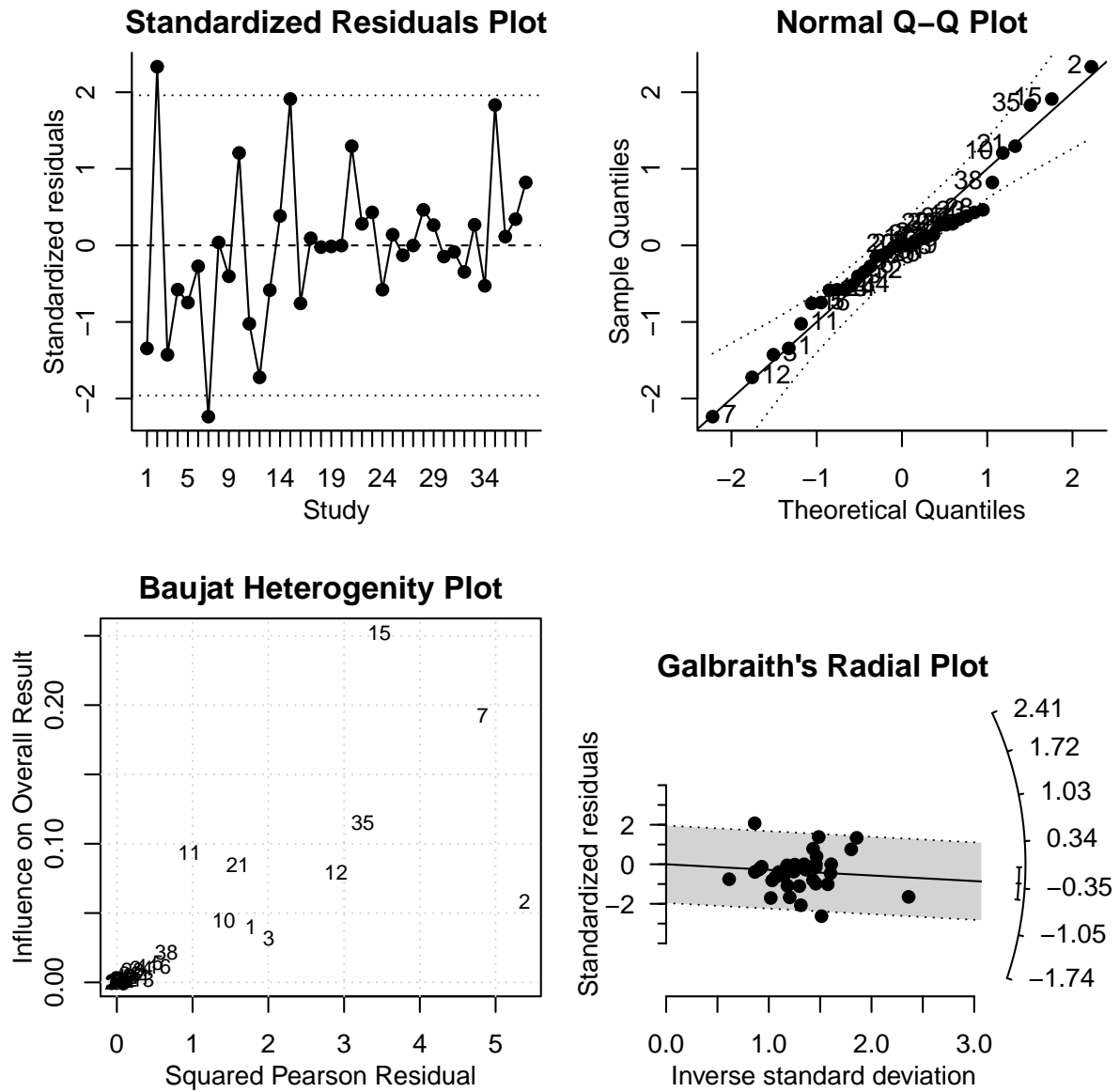


Figure 3: Diagnostic plots for diagnostics of meta analysis. Standardized residual plot, normal Q-Q plot, Baujat heterogeneity plot and Galbraith's radial plot are shown.

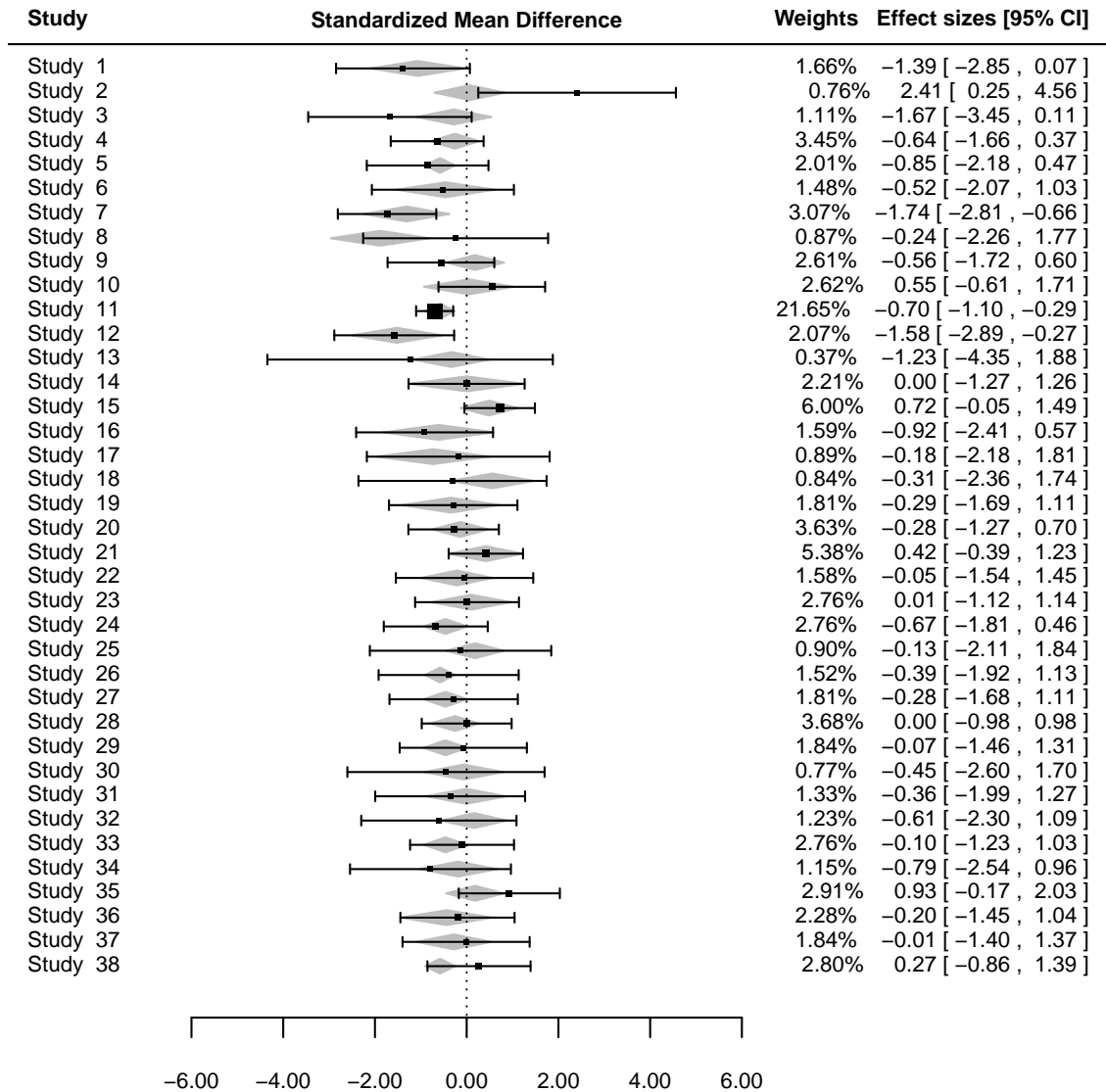


Figure 4: Forest plot of a random effects regression model. The column on the left represents the study. The weighted percentage is shown as well as the effect size (ES) [\pm 95% CI]