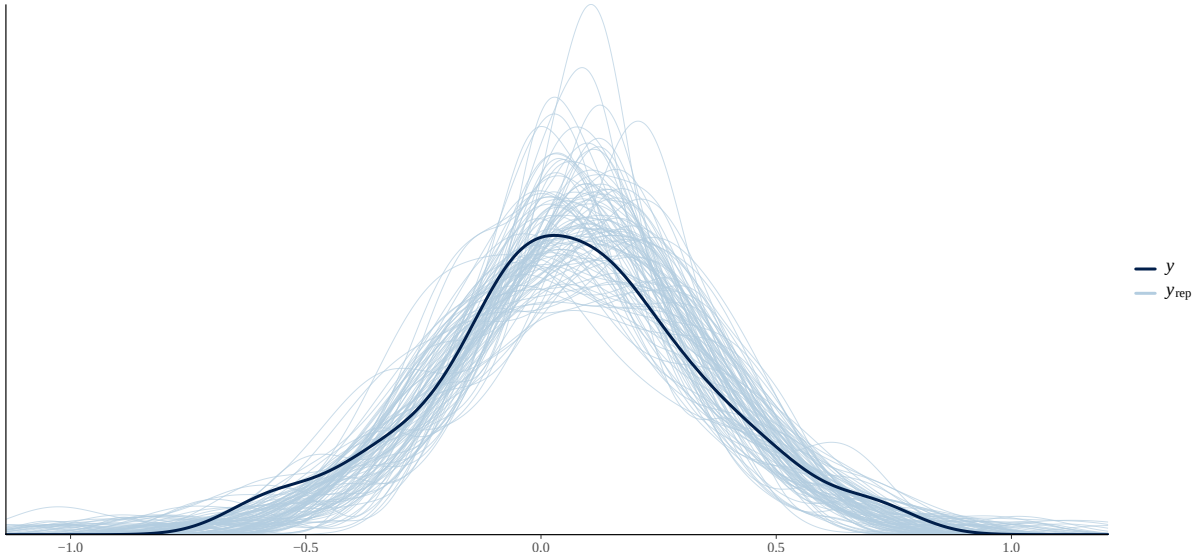
Coupling Strength Main Analysis

Preprocessing

Main Model

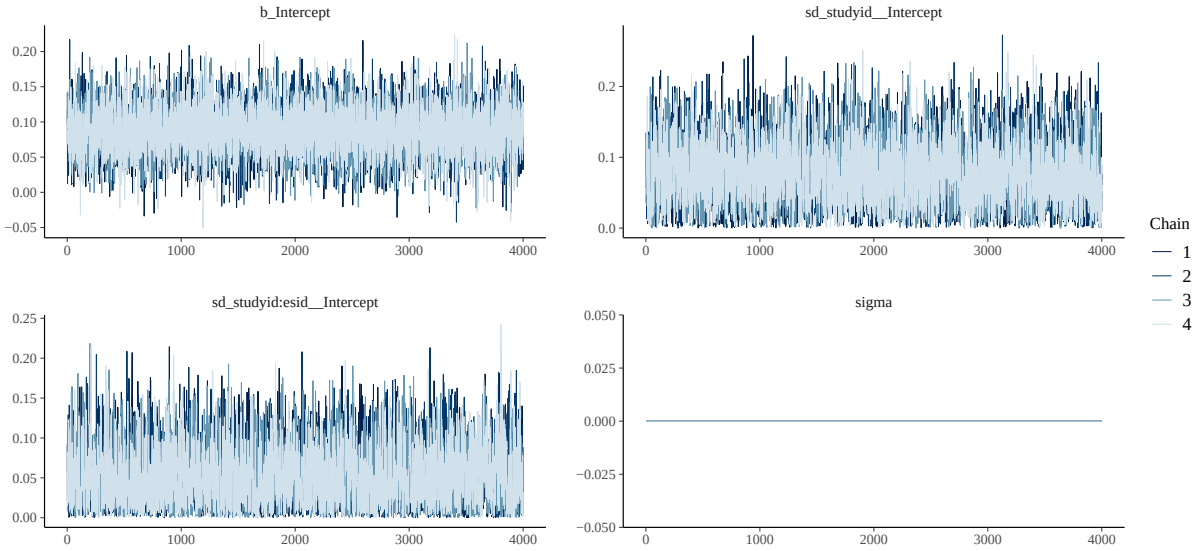
```
Compiling Stan program...


Trying to compile a simple C file


Running /Library/Frameworks/R.framework/Resources/bin/R CMD SHLIB foo.c
clang -arch arm64 -I"/Library/Frameworks/R.framework/Resources/include" -DNDEBUG   -I"/Libra
In file included from <built-in>:1:
In file included from /Library/Frameworks/R.framework/Versions/4.2-arm64/Resources/library/St
In file included from /Library/Frameworks/R.framework/Versions/4.2-arm64/Resources/library/Rc
In file included from /Library/Frameworks/R.framework/Versions/4.2-arm64/Resources/library/Rc
/Library/Frameworks/R.framework/Versions/4.2-arm64/Resources/library/RcppEigen/include/Eigen/
namespace Eigen {
^
/Library/Frameworks/R.framework/Versions/4.2-arm64/Resources/library/RcppEigen/include/Eigen/
namespace Eigen {
              ^
              ;
In file included from <built-in>:1:
In file included from /Library/Frameworks/R.framework/Versions/4.2-arm64/Resources/library/St
In file included from /Library/Frameworks/R.framework/Versions/4.2-arm64/Resources/library/Rc
/Library/Frameworks/R.framework/Versions/4.2-arm64/Resources/library/RcppEigen/include/Eigen/
#include <complex>
         ^~~~~~~~~
3 errors generated.
make: *** [foo.o] Error 1
```

```
Start sampling
```




```
 Family: gaussian
  Links: mu = identity; sigma = identity
Formula: esz | se(se) ~ 1 + (1 | studyid/esid)
   Data: str_final (Number of observations: 86)
  Draws: 4 chains, each with iter = 5000; warmup = 1000; thin = 1;
         total post-warmup draws = 16000

Group-Level Effects:
~studyid (Number of levels: 20)
              Estimate Est.Error l-95% CI u-95% CI Rhat Bulk_ESS Tail_ESS
sd(Intercept)     0.07      0.04     0.01     0.17 1.00     3825     4461

~studyid:esid (Number of levels: 86)
              Estimate Est.Error l-95% CI u-95% CI Rhat Bulk_ESS Tail_ESS
sd(Intercept)     0.05      0.04     0.00     0.13 1.00     3922     6329

Population-Level Effects:
          Estimate Est.Error l-95% CI u-95% CI Rhat Bulk_ESS Tail_ESS
Intercept     0.09      0.03     0.02     0.15 1.00    11341     9963

Family Specific Parameters:
      Estimate Est.Error l-95% CI u-95% CI Rhat Bulk_ESS Tail_ESS
sigma     0.00      0.00     0.00     0.00   NA       NA       NA
```

Draws were sampled using sampling(NUTS). For each parameter, Bulk_ESS and Tail_ESS are effective sample size measures, and Rhat is the potential scale reduction factor on split chains (at convergence, Rhat = 1).

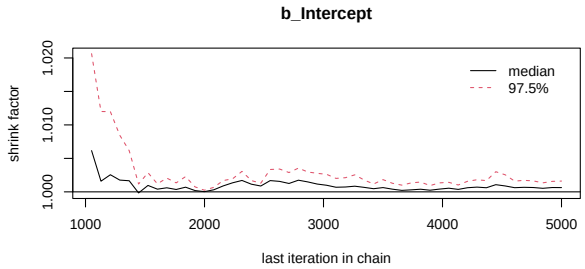


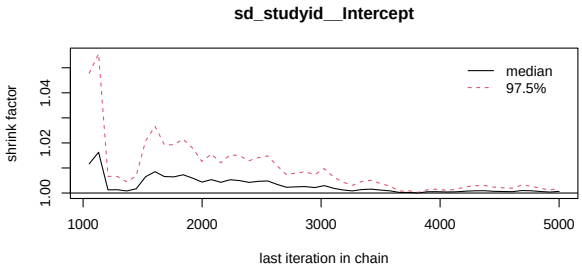
Potential scale reduction factors:

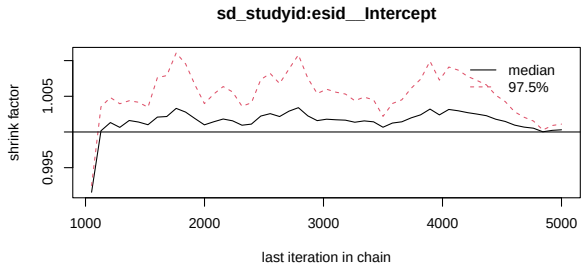
	Point est.	Upper C.I.
b_Intercept	1	1
sd_studyid__Intercept	1	1
sd_studyid:esid__Intercept	1	1

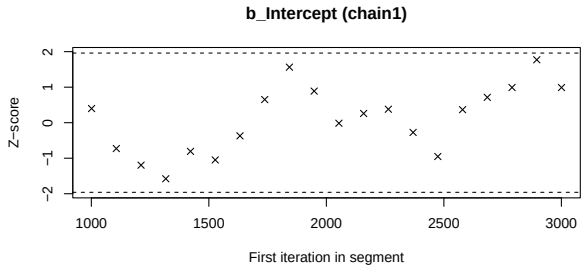
Multivariate psrf

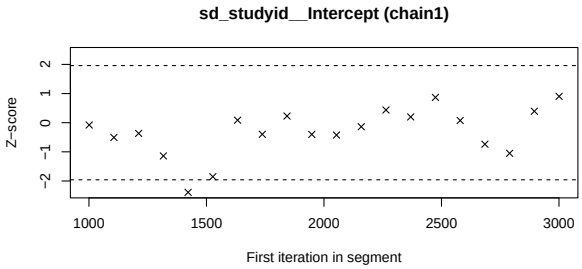
1

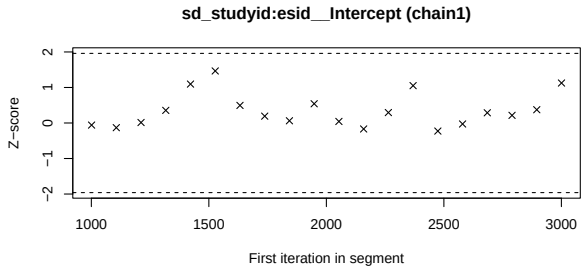

b_Intercept
shrink factor
median
97.5%
last iteration in chain

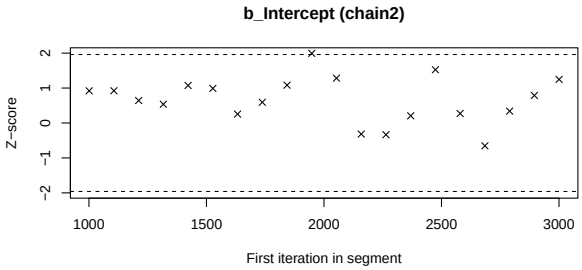

sd_studyid__Intercept
shrink factor
median
97.5%
last iteration in chain

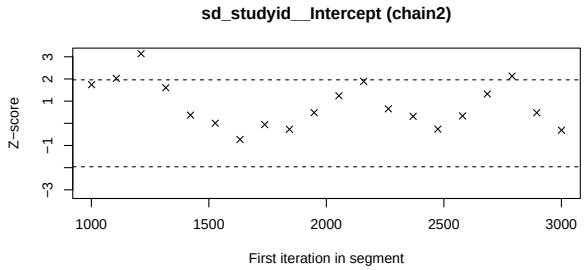

sd_studyid:esid__Intercept
shrink factor
median
97.5%
last iteration in chain

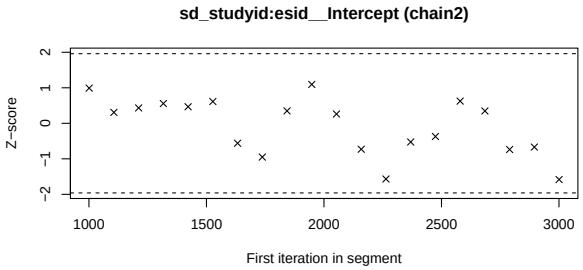

b_Intercept (chain1)
Z−score
First iteration in segment

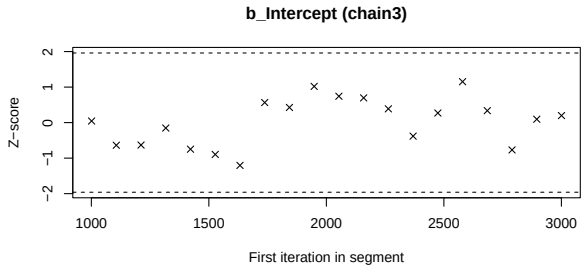

sd_studyid__Intercept (chain1)
Z−score
First iteration in segment

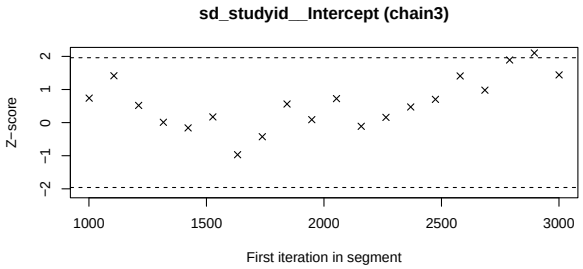

sd_studyid:esid__Intercept (chain1)
Z−score
First iteration in segment

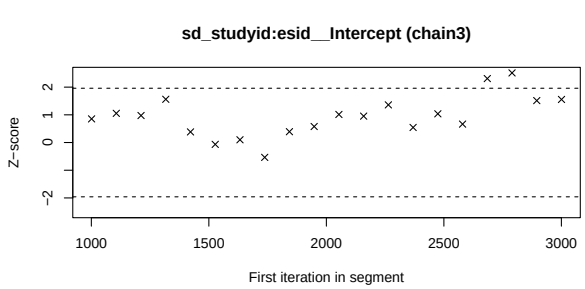

b_Intercept (chain2)
Z−score
First iteration in segment

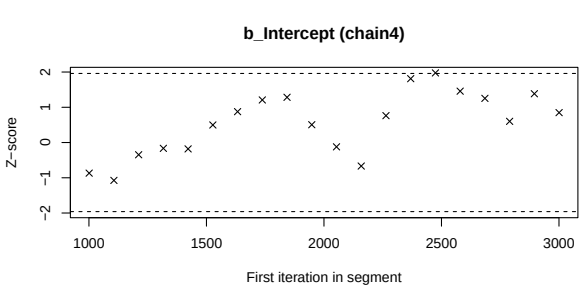

sd_studyid__Intercept (chain2)
Z−score
First iteration in segment

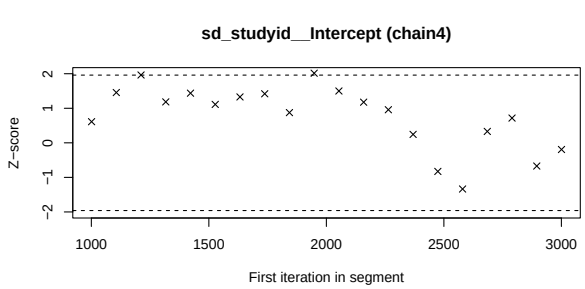

sd_studyid:esid__Intercept (chain2)
Z−score
First iteration in segment

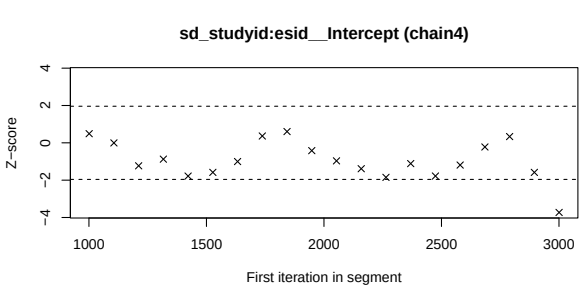

b_Intercept (chain3)
Z−score
First iteration in segment

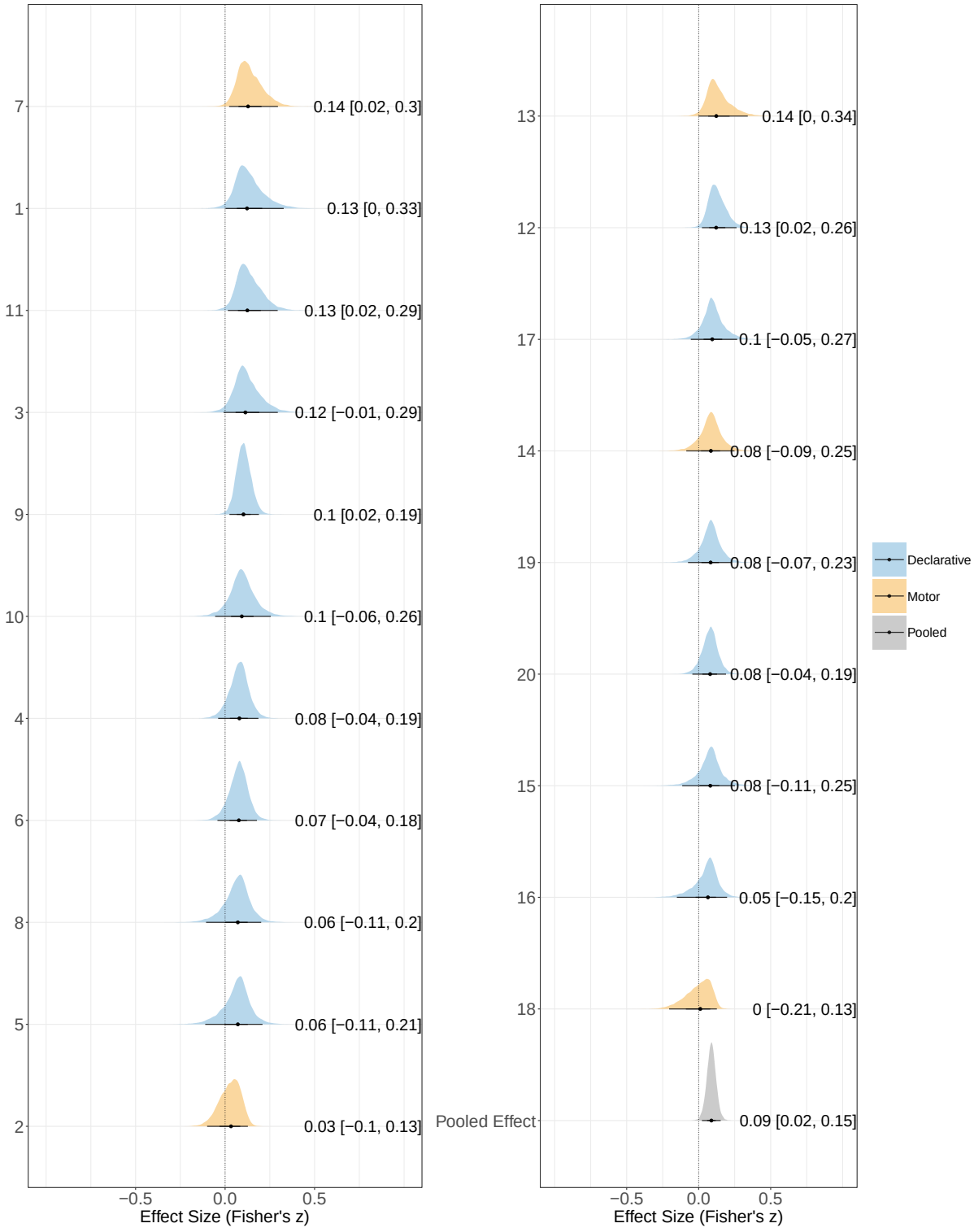

sd_studyid__Intercept (chain3)
Z−score
First iteration in segment

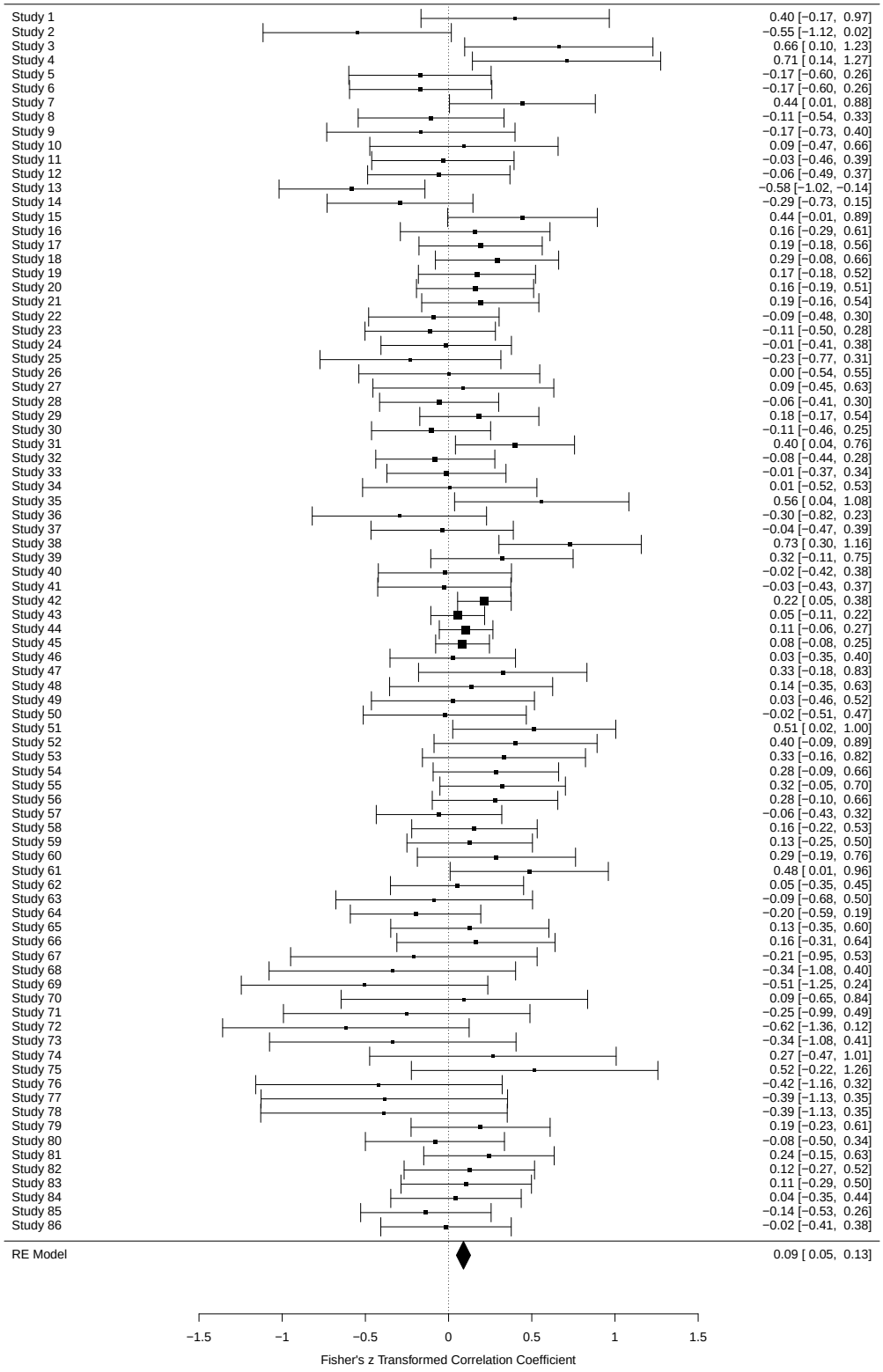

sd_studyid:esid__Intercept (chain3)
Z−score
First iteration in segment

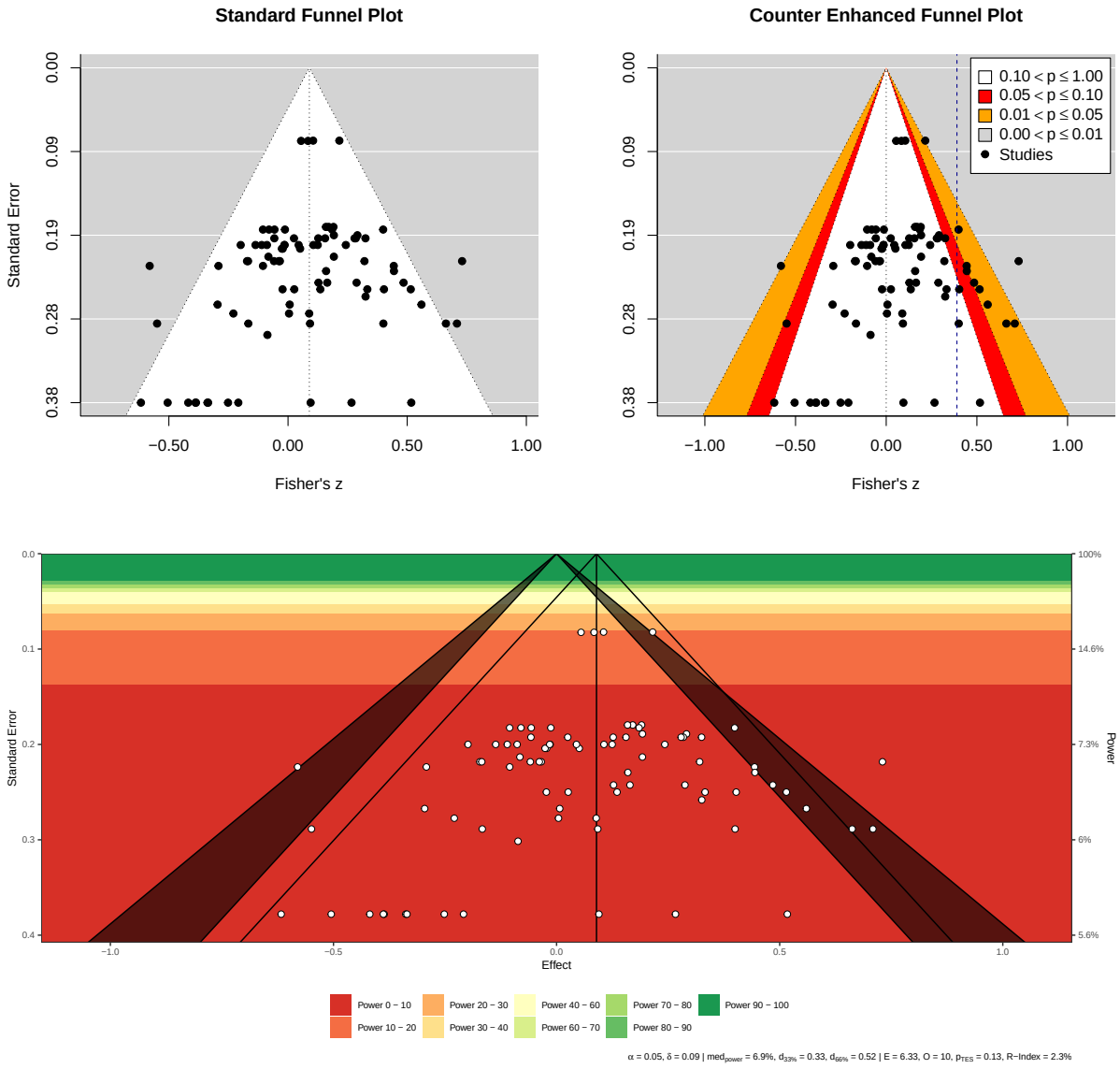

b_Intercept (chain4)
Z−score
First iteration in segment


sd_studyid__Intercept (chain4)
Z−score
First iteration in segment


sd_studyid:esid__Intercept (chain4)
Z−score
First iteration in segment


7
0.14 [0.02, 0.3]
1
0.13 [0, 0.33]
11
0.13 [0.02, 0.29]
3
0.12 [−0.01, 0.29]
9
0.1 [0.02, 0.19]
10
0.1 [−0.06, 0.26]
4
0.08 [−0.04, 0.19]
6
0.07 [−0.04, 0.18]
8
0.06 [−0.11, 0.2]
5
0.06 [−0.11, 0.21]
2
0.03 [−0.1, 0.13]
−0.5
0.0
0.5
Effect Size (Fisher's z)
13
0.14 [0, 0.34]
12
0.13 [0.02, 0.26]
17
0.1 [−0.05, 0.27]
14
0.08 [−0.09, 0.25]
19
0.08 [−0.07, 0.23]
20
0.08 [−0.04, 0.19]
15
0.08 [−0.11, 0.25]
16
0.05 [−0.15, 0.2]
18
0 [−0.21, 0.13]
Pooled Effect
0.09 [0.02, 0.15]
−0.5
0.0
0.5
Effect Size (Fisher's z)
Declarative
Motor
Pooled


Study 1 0.40 [−0.17, 0.97]
Study 2 −0.55 [−1.12, 0.02]
Study 3 0.66 [0.10, 1.23]
Study 4 0.71 [0.14, 1.27]
Study 5 −0.17 [−0.60, 0.26]
Study 6 −0.17 [−0.60, 0.26]
Study 7 0.44 [0.01, 0.88]
Study 8 −0.11 [−0.54, 0.33]
Study 9 −0.17 [−0.73, 0.40]
Study 10 0.09 [−0.47, 0.66]
Study 11 −0.03 [−0.46, 0.39]
Study 12 −0.06 [−0.49, 0.37]
Study 13 −0.58 [−1.02, −0.14]
Study 14 −0.29 [−0.73, 0.15]
Study 15 0.44 [−0.01, 0.89]
Study 16 0.16 [−0.29, 0.61]
Study 17 0.19 [−0.18, 0.56]
Study 18 0.29 [−0.08, 0.66]
Study 19 0.17 [−0.18, 0.52]
Study 20 0.16 [−0.19, 0.51]
Study 21 0.19 [−0.16, 0.54]
Study 22 −0.09 [−0.48, 0.30]
Study 23 −0.11 [−0.50, 0.28]
Study 24 −0.01 [−0.41, 0.38]
Study 25 −0.23 [−0.77, 0.31]
Study 26 0.00 [−0.54, 0.55]
Study 27 0.09 [−0.45, 0.63]
Study 28 −0.06 [−0.41, 0.30]
Study 29 0.18 [−0.17, 0.54]
Study 30 −0.11 [−0.46, 0.25]
Study 31 0.40 [0.04, 0.76]
Study 32 −0.08 [−0.44, 0.28]
Study 33 −0.01 [−0.37, 0.34]
Study 34 0.01 [−0.52, 0.53]
Study 35 0.56 [0.04, 1.08]
Study 36 −0.30 [−0.82, 0.23]
Study 37 −0.04 [−0.47, 0.39]
Study 38 0.73 [0.30, 1.16]
Study 39 0.32 [−0.11, 0.75]
Study 40 −0.02 [−0.42, 0.38]
Study 41 −0.03 [−0.43, 0.37]
Study 42 0.22 [0.05, 0.38]
Study 43 0.05 [−0.11, 0.22]
Study 44 0.11 [−0.06, 0.27]
Study 45 0.08 [−0.08, 0.25]
Study 46 0.03 [−0.35, 0.40]
Study 47 0.33 [−0.18, 0.83]
Study 48 0.14 [−0.35, 0.63]
Study 49 0.03 [−0.46, 0.52]
Study 50 −0.02 [−0.51, 0.47]
Study 51 0.51 [0.02, 1.00]
Study 52 0.40 [−0.09, 0.89]
Study 53 0.33 [−0.16, 0.82]
Study 54 0.28 [−0.09, 0.66]
Study 55 0.32 [−0.05, 0.70]
Study 56 0.28 [−0.10, 0.66]
Study 57 −0.06 [−0.43, 0.32]
Study 58 0.16 [−0.22, 0.53]
Study 59 0.13 [−0.25, 0.50]
Study 60 0.29 [−0.19, 0.76]
Study 61 0.48 [0.01, 0.96]
Study 62 0.05 [−0.35, 0.45]
Study 63 −0.09 [−0.68, 0.50]
Study 64 −0.20 [−0.59, 0.19]
Study 65 0.13 [−0.35, 0.60]
Study 66 0.16 [−0.31, 0.64]
Study 67 −0.21 [−0.95, 0.53]
Study 68 −0.34 [−1.08, 0.40]
Study 69 −0.51 [−1.25, 0.24]
Study 70 0.09 [−0.65, 0.84]
Study 71 −0.25 [−0.99, 0.49]
Study 72 −0.62 [−1.36, 0.12]
Study 73 −0.34 [−1.08, 0.41]
Study 74 0.27 [−0.47, 1.01]
Study 75 0.52 [−0.22, 1.26]
Study 76 −0.42 [−1.16, 0.32]
Study 77 −0.39 [−1.13, 0.35]
Study 78 −0.39 [−1.13, 0.35]
Study 79 0.19 [−0.23, 0.61]
Study 80 −0.08 [−0.50, 0.34]
Study 81 0.24 [−0.15, 0.63]
Study 82 0.12 [−0.27, 0.52]
Study 83 0.11 [−0.29, 0.50]
Study 84 0.04 [−0.35, 0.44]
Study 85 −0.14 [−0.53, 0.26]
Study 86 −0.02 [−0.41, 0.38]
RE Model 0.09 [0.05, 0.13]
−1.5
−1
−0.5
0
0.5
1
1.5
Fisher's z Transformed Correlation Coefficient




```
Regression Test for Funnel Plot Asymmetry

Model:     mixed-effects meta-regression model
Predictor: standard error

Test for Funnel Plot Asymmetry: z =  0.3479, p = 0.7279
Limit Estimate (as sei -> 0):   b = -0.0868 (CI: -1.0081, 0.8345)
```

```
Rank Correlation Test for Funnel Plot Asymmetry

Kendall's tau = 0.0344, p = 0.8416
```