# SUPPLEMENTARY MATERIALS

## Contents

# Meta-analyses with r = .30

## Dataset

Effect sizes (Hedge's $g$) and varinaces for each of the included studies, with $r = .30$

| ID | Authors | Hedge's g | Var |
|---|---|---|---|
| 1 | Brezis et al., 2017 | 0.66 | 0.03 |
| 2 | Fitzpatrick et al., 2013 | 0.21 | 0.25 |
| 3 | Fitzpatrick et al., 2017 | 1.00 | 0.04 |
| 4 | Fitzpatrick et al., 2016 | 0.34 | 0.09 |
| 5 | Fulceri et al., 2018 | 0.88 | 0.08 |
| 6 | Georgescu et al., 2020 | 0.83 | 0.08 |
| 7 | Kawasaki et al., 2017 | 0.83 | 0.09 |
| 8 | Kruppa et al., 2021 | 0.62 | 0.05 |
| 9 | Lampi et al., 2020 | 0.83 | 0.03 |
| 10 | Liu et al., 2021 | 3.78 | 0.10 |
| 11 | Marsh et al., 2013 | 0.21 | 0.31 |
| 12 | Noel et al., 2018 | 0.24 | 0.09 |
| 13 | Yoo et al., 2018 | 0.44 | 0.05 |

## Descriptive statistics

| | | | TD Group | | | | | ASD Group | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Age | | | | | Age | | | | | |
| ID | Authors | Country | N | M/F ratio | range | mean | sd | N | M/F ratio | range | mean | sd | Type of Synchrony | Hedge's g | var |
| 1 | Brezis et al., 2017 | Israel | 35 | 28:7 | 19 - 45 | 25.90 | 6.37 | 34 | 31:3 | 20 - 45 | 28.60 | 6.26 | instructed | 0.66 | 0.03 |
| 2 | Fitzpatrick et al., 2013 | USA | 3 | 1:2 | 4 - 5.6 | 4.80 | 0.75 | 5 | 4:1 | 5 - 7.4 | 6.21 | 1.17 | instructed | 0.21 | 0.25 |
| 3 | Fitzpatrick et al., 2017 | USA | 27 | 21:6 | 6.33 - 10.8 | 8.24 | 1.46 | 23 | 20:3 | 6.08 - 10.75 | 8.08 | 1.44 | instructed | 1.00 | 0.04 |
| 4 | Fitzpatrick et al., 2016 | USA | 9 | 7:2 | 12 - 16 | 14.44 | 1.13 | 9 | 8:1 | 12 - 17 | 13.67 | 1.94 | instructed | 0.34 | 0.09 |
| 5 | Fulceri et al., 2018 | Italy | 11 | 9:2 | 6.3 - 9.8 | 7.57 | 0.71 | 11 | 10:1 | 5.11 - 10.3 | 7.82 | 1.32 | spontaneous | 0.88 | 0.08 |
| 6 | Georgescu et al., 2020 | Germany | 10 | 6:4 | 33 - 51 | 41.80 | 8.86 | 9 | 5:4 | 30 - 50 | 40.72 | 10.45 | spontaneous | 0.83 | 0.08 |
| 7 | Kawasaki et al., 2017 | USA | 24 | 12:12 | 18.9 - 32.1 | 25.60 | 6.60 | 24 | 14:10 | 22 - 36.4 | 29.20 | 7.20 | instructed | 0.83 | 0.09 |
| 8 | Kruppa et al., 2021 | Germany | 41 | 18:23 | 8 - 18 | 12.66 | 2.79 | 18 | 18:0 | 8 - 18 | 13.54 | 2.96 | instructed | 0.62 | 0.05 |
| 9 | Lampi et al., 2020 | USA | 47 | 34:13 | 6 - 10 | 7.85 | 1.49 | 50 | 34:7 | 6 - 10 | 8.02 | 1.44 | spontaneous | 0.83 | 0.03 |
| 10 | Liu et al., 2021 | USA | 16 | 10:6 | 1.66 - 4.33 | 2.99 | 0.70 | 13 | 10:3 | 1.75 - 5.75 | 3.88 | 0.85 | spontaneous | 3.78 | 0.10 |
| 11 | Marsh et al., 2013 | USA | 7 | 4:3 | 2.8 - 4.6 | 3.75 | 0.12 | 7 | 5:2 | 3.8 - 4.1 | 3.94 | 0.74 | spontaneous | 0.21 | 0.31 |
| 12 | Noel et al., 2018 | USA | 15 | 11:4 | 8.9 - 14.5 | 10.94 | 2.13 | 12 | 8:4 | 7.9 - 16.5 | 12.20 | 3.75 | spontaneous | 0.24 | 0.09 |
| 13 | Yoo et al., 2018 | Korea | 42 | 23:19 | 11 - 16 | 13.50 | 0.80 | 10 | 10:0 | 11 - 16 | 13.40 | 1.40 | spontaneous | 0.44 | 0.05 |

## Random-effects meta-analysis

### Models

```
m.random <- rma(yi=es, vi=var, data=df_agg, method="REML")
RE.results <- summary(m.random)
print(RE.results)
```

```
##
## Random-Effects Model (k = 13; tau^2 estimator: REML)
##
##   logLik  deviance       AIC       BIC      AICc
## -16.0619   32.1238   36.1238   37.0936   37.4571
##
```

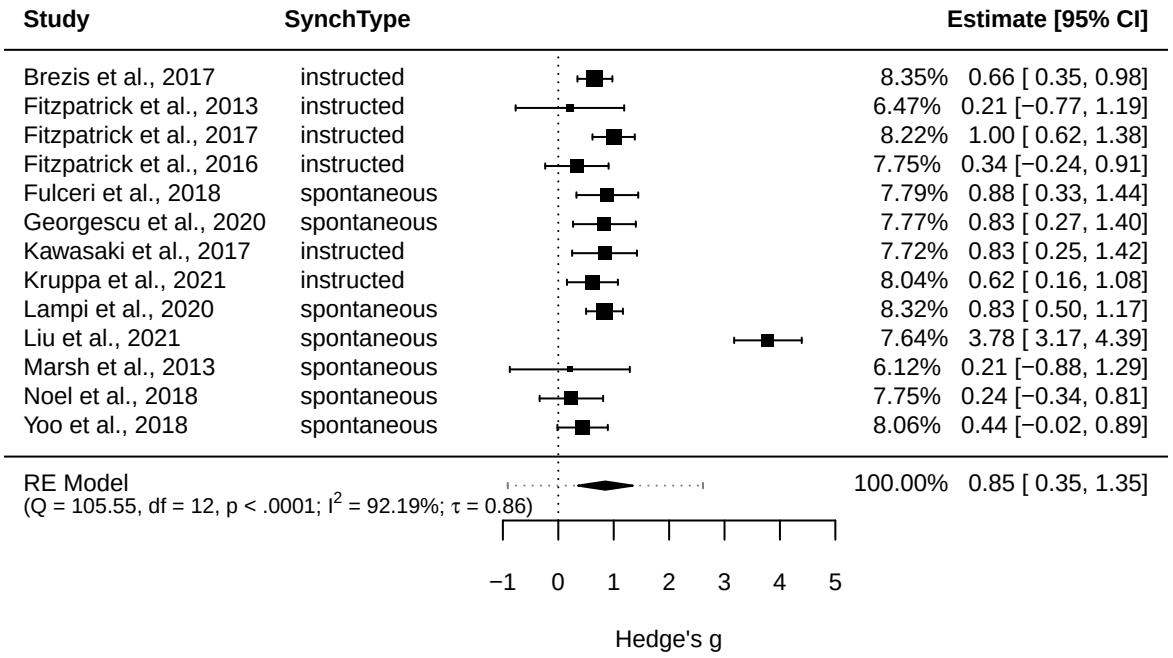
```
## tau^2 (estimated amount of total heterogeneity): 0.7439 (SE = 0.3402)
## tau (square root of estimated tau^2 value):      0.8625
## I^2 (total heterogeneity / total variability):   92.19%
## H^2 (total variability / sampling variability):  12.80
##
## Test for Heterogeneity:
## Q(df = 12) = 105.5515, p-val < .0001
##
## Model Results:
##
## estimate      se    zval    pval   ci.lb   ci.ub
##   0.8494  0.2535  3.3505  0.0008  0.3525  1.3462  ***
##
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
#fit moderation model (type of synchrony)
moderation.random <- rma(yi=es, vi=var, mods = ~ synch_type, data=df_agg, method="REML")
summary(moderation.random)
```

```
##
## Mixed-Effects Model (k = 13; tau^2 estimator: REML)
##
##   logLik  deviance       AIC       BIC      AICc
## -14.8883   29.7765   35.7765   36.9702   39.2051
##
## tau^2 (estimated amount of residual heterogeneity):     0.7701 (SE = 0.3669)
## tau (square root of estimated tau^2 value):             0.8776
## I^2 (residual heterogeneity / unaccounted variability): 92.14%
## H^2 (unaccounted variability / sampling variability):   12.73
## R^2 (amount of heterogeneity accounted for):            0.00%
##
## Test for Residual Heterogeneity:
## QE(df = 11) = 101.4966, p-val < .0001
##
## Test of Moderators (coefficient 2):
## QM(df = 1) = 0.6647, p-val = 0.4149
##
## Model Results:
##
##                        estimate      se    zval    pval    ci.lb   ci.ub
## intrcpt                  0.6241  0.3774  1.6535  0.0982  -0.1157  1.3638  .
## synch_typespontaneous    0.4208  0.5162  0.8153  0.4149  -0.5909  1.4326
##
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

**Forest plot**

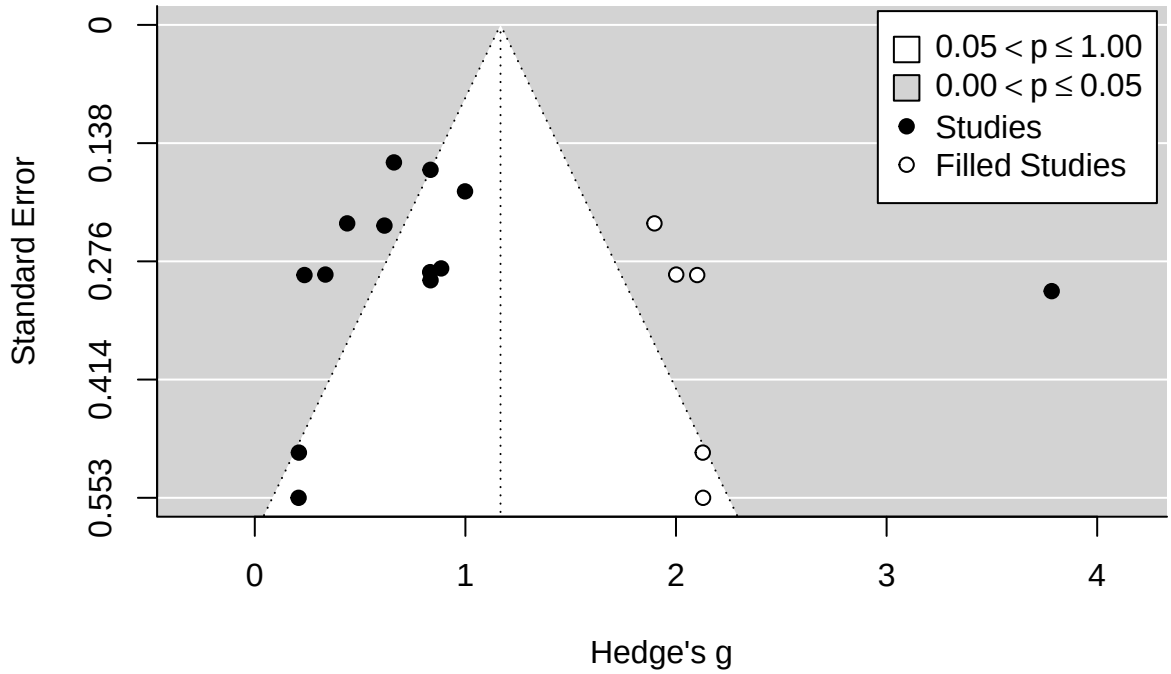
Dotted line is the prediction interval




### Prediction interval

```
##
##    pred     se  ci.lb  ci.ub   pi.lb  pi.ub
##  0.8494 0.2535 0.3525 1.3462 -0.9126 2.6113
```

### Funnel plot (trim-and-fill method)



**Model corrected for publication bias (trim-and-fill method)**

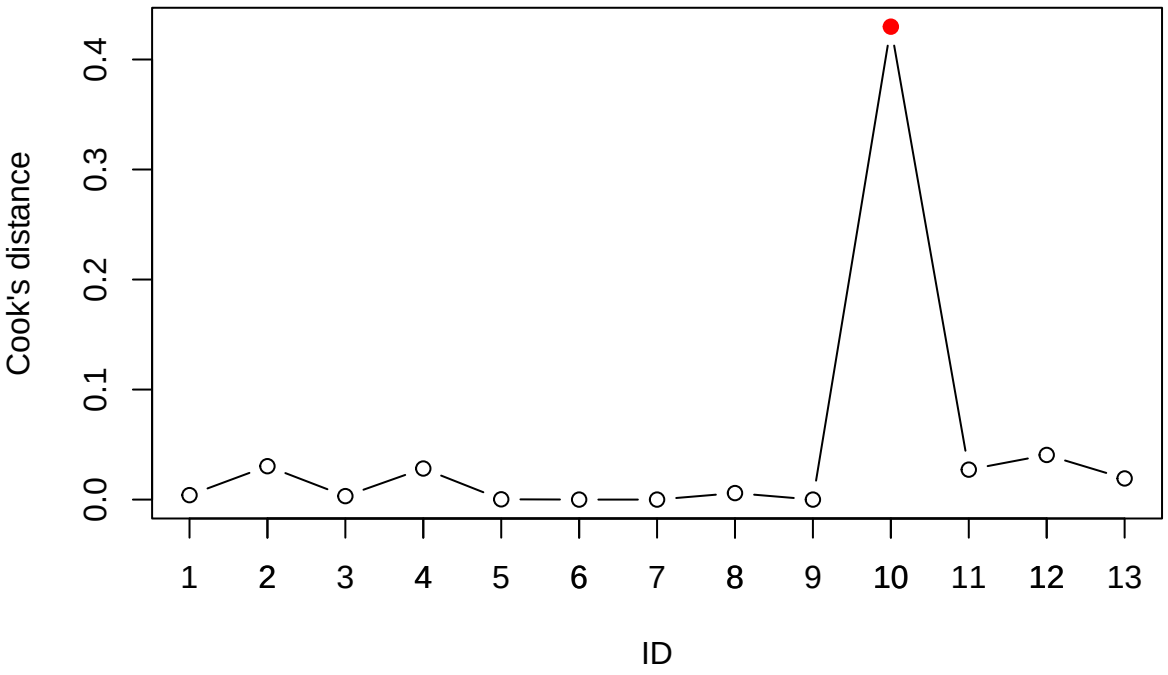
```
##
## Estimated number of missing studies on the right side: 5 (SE = 2.2785)
##
## Random-Effects Model (k = 18; tau^2 estimator: REML)
##
##   logLik  deviance       AIC       BIC      AICc
## -23.3268   46.6537   50.6537   52.3201   51.5108
##
## tau^2 (estimated amount of total heterogeneity): 0.7886 (SE = 0.3059)
## tau (square root of estimated tau^2 value):      0.8881
## I^2 (total heterogeneity / total variability):   91.81%
## H^2 (total variability / sampling variability):  12.21
##
## Test for Heterogeneity:
## Q(df = 17) = 160.8662, p-val < .0001
##
## Model Results:
##
## estimate      se    zval    pval   ci.lb   ci.ub
##   1.1668  0.2230  5.2335  <.0001  0.7299  1.6038  ***
##
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

**Sensitivity analyses**

| Authors | Estimate | I2 | tau | CI | PI |
|---|---|---|---|---|---|
| Brezis et al., 2017 | 0.87 | 92.08 | 0.91 | [0.32;1.41] | [-0.99;2.73] |
| Fitzpatrick et al., 2013 | 0.89 | 92.96 | 0.88 | [0.37;1.42] | [-0.92;2.7] |
| Fitzpatrick et al., 2016 | 0.89 | 92.79 | 0.89 | [0.36;1.42] | [-0.93;2.72] |
| Fitzpatrick et al., 2017 | 0.84 | 92.50 | 0.91 | [0.29;1.38] | [-1.03;2.7] |
| Fulceri et al., 2018 | 0.85 | 93.00 | 0.91 | [0.30;1.39] | [-1.01;2.7] |
| Georgescu et al., 2020 | 0.85 | 93.01 | 0.91 | [0.31;1.39] | [-1.01;2.71] |
| Kawasaki et al., 2017 | 0.85 | 93.03 | 0.91 | [0.31;1.39] | [-1.01;2.71] |
| Kruppa et al., 2021 | 0.87 | 92.75 | 0.91 | [0.33;1.41] | [-0.99;2.72] |
| Lampi et al., 2020 | 0.85 | 92.24 | 0.91 | [0.31;1.39] | [-1.02;2.71] |
| Liu et al., 2021 | 0.68 | 1.36 | 0.00 | [0.54;0.82] | [0.53;0.83] |
| Marsh et al., 2013 | 0.89 | 92.98 | 0.88 | [0.37;1.42] | [-0.92;2.7] |
| Noel et al., 2018 | 0.90 | 92.69 | 0.88 | [0.37;1.43] | [-0.91;2.71] |
| Yoo et al., 2018 | 0.88 | 92.63 | 0.90 | [0.35;1.42] | [-0.96;2.72] |

**Leave-One-Out**

**Cook's distance**




Note that study IDs follow alphabetical order of included studies and their specifications reported in the descriptive statistic's table

# Meta-analyses with r = .50

## Dataset

Effect sizes (Hedge's $g$) and varinaces for each of the included studies, with $r = .50$

| ID | Authors | Hedge's g | Var |
|---|---|---|---|
| 1 | Brezis et al., 2017 | 0.66 | 0.04 |
| 2 | Fitzpatrick et al., 2013 | 0.21 | 0.34 |
| 3 | Fitzpatrick et al., 2017 | 1.00 | 0.05 |
| 4 | Fitzpatrick et al., 2016 | 0.34 | 0.13 |
| 5 | Fulceri et al., 2018 | 0.88 | 0.11 |
| 6 | Georgescu et al., 2020 | 0.83 | 0.12 |
| 7 | Kawasaki et al., 2017 | 0.83 | 0.09 |
| 8 | Kruppa et al., 2021 | 0.62 | 0.06 |
| 9 | Lampi et al., 2020 | 0.83 | 0.03 |
| 10 | Liu et al., 2021 | 3.78 | 0.11 |
| 11 | Marsh et al., 2013 | 0.21 | 0.31 |
| 12 | Noel et al., 2018 | 0.24 | 0.11 |
| 13 | Yoo et al., 2018 | 0.44 | 0.08 |

## Descriptive statistics

| | | | TD Group | | | | | ASD Group | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Age | | | | | Age | | | | | |
| ID | Authors | Country | N | M/F ratio | range | mean | sd | N | M/F ratio | range | mean | sd | Type of Synchrony | Hedge's g | var |
| 1 | Brezis et al., 2017 | Israel | 35 | 28:7 | 19 - 45 | 25.90 | 6.37 | 34 | 31:3 | 20 - 45 | 28.60 | 6.26 | instructed | 0.66 | 0.04 |
| 2 | Fitzpatrick et al., 2013 | USA | 3 | 1:2 | 4 - 5.6 | 4.80 | 0.75 | 5 | 4:1 | 5 - 7.4 | 6.21 | 1.17 | instructed | 0.21 | 0.34 |
| 3 | Fitzpatrick et al., 2017 | USA | 27 | 21:6 | 6.33 - 10.8 | 8.24 | 1.46 | 23 | 20:3 | 6.08 - 10.75 | 8.08 | 1.44 | instructed | 1.00 | 0.05 |
| 4 | Fitzpatrick et al., 2016 | USA | 9 | 7:2 | 12 - 16 | 14.44 | 1.13 | 9 | 8:1 | 12 - 17 | 13.67 | 1.94 | instructed | 0.34 | 0.13 |
| 5 | Fulceri et al., 2018 | Italy | 11 | 9:2 | 6.3 - 9.8 | 7.57 | 0.71 | 11 | 10:1 | 5.11 - 10.3 | 7.82 | 1.32 | spontaneous | 0.88 | 0.11 |
| 6 | Georgescu et al., 2020 | Germany | 10 | 6:4 | 33 - 51 | 41.80 | 8.86 | 9 | 5:4 | 30 - 50 | 40.72 | 10.45 | spontaneous | 0.83 | 0.12 |
| 7 | Kawasaki et al., 2017 | USA | 24 | 12:12 | 18.9 - 32.1 | 25.60 | 6.60 | 24 | 14:10 | 22 - 36.4 | 29.20 | 7.20 | instructed | 0.83 | 0.09 |
| 8 | Kruppa et al., 2021 | Germany | 41 | 18:23 | 8 - 18 | 12.66 | 2.79 | 18 | 18:0 | 8 - 18 | 13.54 | 2.96 | instructed | 0.62 | 0.06 |
| 9 | Lampi et al., 2020 | USA | 47 | 34:13 | 6 - 10 | 7.85 | 1.49 | 50 | 34:7 | 6 - 10 | 8.02 | 1.44 | spontaneous | 0.83 | 0.03 |
| 10 | Liu et al., 2021 | USA | 16 | 10:6 | 1.66 - 4.33 | 2.99 | 0.70 | 13 | 10:3 | 1.75 - 5.75 | 3.88 | 0.85 | spontaneous | 3.78 | 0.11 |
| 11 | Marsh et al., 2013 | USA | 7 | 4:3 | 2.8 - 4.6 | 3.75 | 0.12 | 7 | 5:2 | 3.8 - 4.1 | 3.94 | 0.74 | spontaneous | 0.21 | 0.31 |
| 12 | Noel et al., 2018 | USA | 15 | 11:4 | 8.9 - 14.5 | 10.94 | 2.13 | 12 | 8:4 | 7.9 - 16.5 | 12.20 | 3.75 | spontaneous | 0.24 | 0.11 |
| 13 | Yoo et al., 2018 | Korea | 42 | 23:19 | 11 - 16 | 13.50 | 0.80 | 10 | 10:0 | 11 - 16 | 13.40 | 1.40 | spontaneous | 0.44 | 0.08 |

## Random-effects meta-analysis

### Models

```
m.random <- rma(yi=es, vi=var, data=df_agg, method="REML")
RE.results <- summary(m.random)
print(RE.results)
```

```
##
## Random-Effects Model (k = 13; tau^2 estimator: REML)
##
##   logLik  deviance       AIC       BIC      AICc
## -16.0955   32.1909   36.1909   37.1607   37.5242
##
```

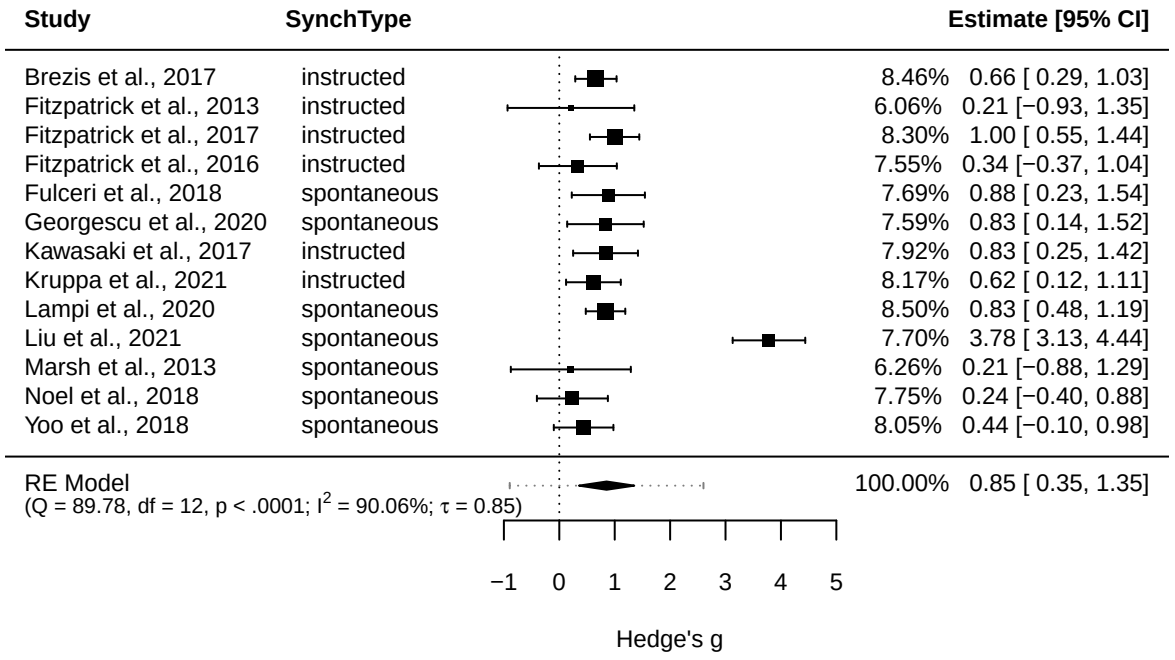
```
## tau^2 (estimated amount of total heterogeneity): 0.7307 (SE = 0.3433)
## tau (square root of estimated tau^2 value):      0.8548
## I^2 (total heterogeneity / total variability):   90.06%
## H^2 (total variability / sampling variability):  10.06
##
## Test for Heterogeneity:
## Q(df = 12) = 89.7806, p-val < .0001
##
## Model Results:
##
## estimate      se    zval    pval   ci.lb   ci.ub
##   0.8534  0.2547  3.3500  0.0008  0.3541  1.3527  ***
##
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
#fit moderation model (type of synchrony)
moderation.random <- rma(yi=es, vi=var, mods = ~ synch_type, data=df_agg, method="REML")
summary(moderation.random)
```

```
##
## Mixed-Effects Model (k = 13; tau^2 estimator: REML)
##
##   logLik  deviance       AIC       BIC      AICc
## -14.9281   29.8562   35.8562   37.0499   39.2848
##
## tau^2 (estimated amount of residual heterogeneity):     0.7596 (SE = 0.3714)
## tau (square root of estimated tau^2 value):             0.8716
## I^2 (residual heterogeneity / unaccounted variability): 90.03%
## H^2 (unaccounted variability / sampling variability):   10.03
## R^2 (amount of heterogeneity accounted for):            0.00%
##
## Test for Residual Heterogeneity:
## QE(df = 11) = 86.0983, p-val < .0001
##
## Test of Moderators (coefficient 2):
## QM(df = 1) = 0.6403, p-val = 0.4236
##
## Model Results:
##
##                        estimate      se    zval    pval    ci.lb   ci.ub
## intrcpt                  0.6303  0.3802  1.6579  0.0973  -0.1149  1.3756  .
## synch_typespontaneous    0.4157  0.5195  0.8002  0.4236  -0.6026  1.4340
##
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

### Forest plot

Dotted line is the prediction interval

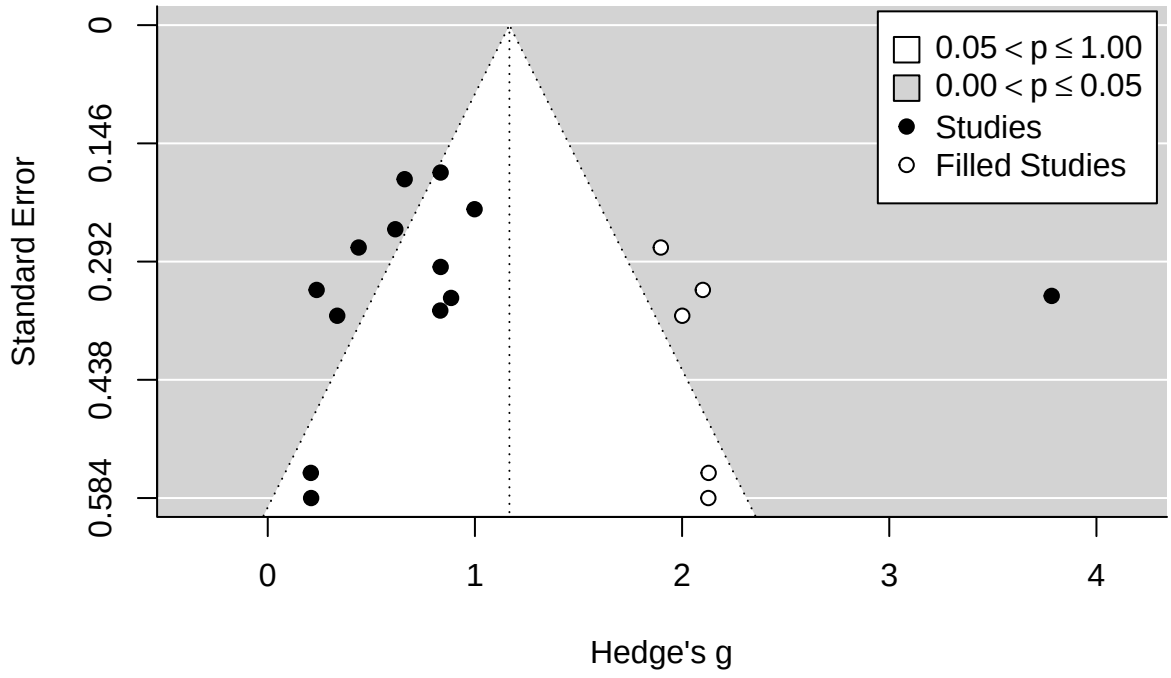



###

Prediction interval

```
##
##    pred     se  ci.lb  ci.ub   pi.lb  pi.ub
##  0.8534 0.2547 0.3541 1.3527 -0.8948 2.6017
```

**Funnel plot (trim-and-fill method)**



**Model corrected for publication bias (trim-and-fill method)**

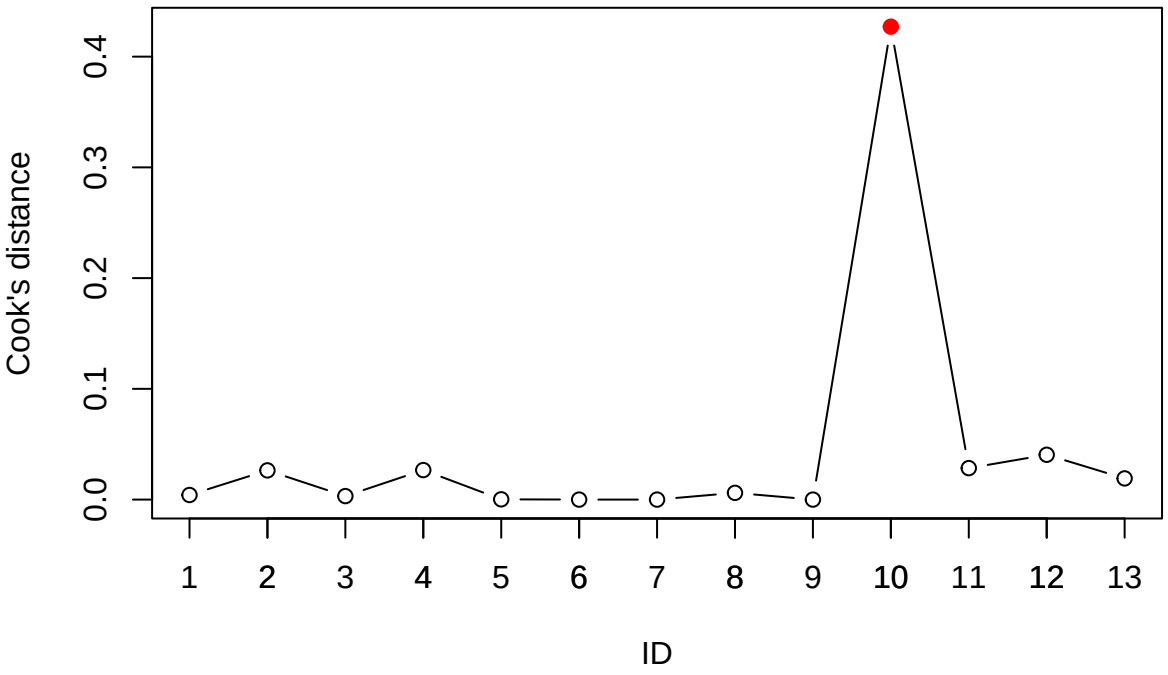
```
##
## Estimated number of missing studies on the right side: 5 (SE = 2.2785)
##
## Random-Effects Model (k = 18; tau^2 estimator: REML)
##
##   logLik  deviance       AIC       BIC      AICc
## -23.3410   46.6819   50.6819   52.3483   51.5390
##
## tau^2 (estimated amount of total heterogeneity): 0.7668 (SE = 0.3065)
## tau (square root of estimated tau^2 value):      0.8757
## I^2 (total heterogeneity / total variability):   89.40%
## H^2 (total variability / sampling variability):  9.43
##
## Test for Heterogeneity:
## Q(df = 17) = 130.3017, p-val < .0001
##
## Model Results:
##
## estimate      se    zval    pval   ci.lb   ci.ub
##   1.1665  0.2233  5.2240  <.0001  0.7288  1.6041  ***
##
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

**Sensitivity analyses**

| Authors | Estimate | I2 | tau | CI | PI |
|---|---|---|---|---|---|
| Brezis et al., 2017 | 0.87 | 90.08 | 0.90 | [0.32;1.42] | [-0.98;2.72] |
| Fitzpatrick et al., 2013 | 0.89 | 91.03 | 0.88 | [0.37;1.42] | [-0.9;2.69] |
| Fitzpatrick et al., 2016 | 0.90 | 90.89 | 0.88 | [0.36;1.43] | [-0.92;2.71] |
| Fitzpatrick et al., 2017 | 0.84 | 90.54 | 0.90 | [0.29;1.39] | [-1.01;2.69] |
| Fulceri et al., 2018 | 0.85 | 91.12 | 0.90 | [0.31;1.39] | [-1;2.69] |
| Georgescu et al., 2020 | 0.85 | 91.15 | 0.90 | [0.31;1.40] | [-0.99;2.7] |
| Kawasaki et al., 2017 | 0.85 | 91.00 | 0.90 | [0.31;1.40] | [-0.99;2.7] |
| Kruppa et al., 2021 | 0.87 | 90.69 | 0.90 | [0.33;1.42] | [-0.97;2.72] |
| Lampi et al., 2020 | 0.85 | 90.00 | 0.91 | [0.31;1.40] | [-1;2.71] |
| Liu et al., 2021 | 0.69 | 0.00 | 0.00 | [0.53;0.84] | [0.53;0.84] |
| Marsh et al., 2013 | 0.90 | 91.01 | 0.88 | [0.37;1.42] | [-0.9;2.69] |
| Noel et al., 2018 | 0.90 | 90.67 | 0.88 | [0.37;1.44] | [-0.89;2.7] |
| Yoo et al., 2018 | 0.89 | 90.68 | 0.89 | [0.35;1.43] | [-0.94;2.72] |

**Leave-One-Out**

**Cook's distance**




Note that study IDs follow alphabetical order of included studies and their specifications reported in the descriptive statistic's table

# Meta-analyses with r = .70

## Dataset

Effect sizes (Hedge's $g$) and varinaces for each of the included studies, with $r = .70$

| ID | Authors | Hedge's g | Var |
|---|---|---|---|
| 1 | Brezis et al., 2017 | 0.66 | 0.05 |
| 2 | Fitzpatrick et al., 2013 | 0.21 | 0.43 |
| 3 | Fitzpatrick et al., 2017 | 1.00 | 0.07 |
| 4 | Fitzpatrick et al., 2016 | 0.34 | 0.17 |
| 5 | Fulceri et al., 2018 | 0.88 | 0.15 |
| 6 | Georgescu et al., 2020 | 0.83 | 0.16 |
| 7 | Kawasaki et al., 2017 | 0.83 | 0.09 |
| 8 | Kruppa et al., 2021 | 0.62 | 0.07 |
| 9 | Lampi et al., 2020 | 0.83 | 0.04 |
| 10 | Liu et al., 2021 | 3.78 | 0.13 |
| 11 | Marsh et al., 2013 | 0.21 | 0.31 |
| 12 | Noel et al., 2018 | 0.24 | 0.13 |
| 13 | Yoo et al., 2018 | 0.44 | 0.10 |

## Descriptive statistics

| | | | TD Group | | | | | ASD Group | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Age | | | | | Age | | | | | |
| ID | Authors | Country | N | M/F ratio | range | mean | sd | N | M/F ratio | range | mean | sd | Type of Synchrony | Hedge's g | var |
| 1 | Brezis et al., 2017 | Israel | 35 | 28:7 | 19 - 45 | 25.90 | 6.37 | 34 | 31:3 | 20 - 45 | 28.60 | 6.26 | instructed | 0.66 | 0.05 |
| 2 | Fitzpatrick et al., 2013 | USA | 3 | 1:2 | 4 - 5.6 | 4.80 | 0.75 | 5 | 4:1 | 5 - 7.4 | 6.21 | 1.17 | instructed | 0.21 | 0.43 |
| 3 | Fitzpatrick et al., 2017 | USA | 27 | 21:6 | 6.33 - 10.8 | 8.24 | 1.46 | 23 | 20:3 | 6.08 - 10.75 | 8.08 | 1.44 | instructed | 1.00 | 0.07 |
| 4 | Fitzpatrick et al., 2016 | USA | 9 | 7:2 | 12 - 16 | 14.44 | 1.13 | 9 | 8:1 | 12 - 17 | 13.67 | 1.94 | instructed | 0.34 | 0.17 |
| 5 | Fulceri et al., 2018 | Italy | 11 | 9:2 | 6.3 - 9.8 | 7.57 | 0.71 | 11 | 10:1 | 5.11 - 10.3 | 7.82 | 1.32 | spontaneous | 0.88 | 0.15 |
| 6 | Georgescu et al., 2020 | Germany | 10 | 6:4 | 33 - 51 | 41.80 | 8.86 | 9 | 5:4 | 30 - 50 | 40.72 | 10.45 | spontaneous | 0.83 | 0.16 |
| 7 | Kawasaki et al., 2017 | USA | 24 | 12:12 | 18.9 - 32.1 | 25.60 | 6.60 | 24 | 14:10 | 22 - 36.4 | 29.20 | 7.20 | instructed | 0.83 | 0.09 |
| 8 | Kruppa et al., 2021 | Germany | 41 | 18:23 | 8 - 18 | 12.66 | 2.79 | 18 | 18:0 | 8 - 18 | 13.54 | 2.96 | instructed | 0.62 | 0.07 |
| 9 | Lampi et al., 2020 | USA | 47 | 34:13 | 6 - 10 | 7.85 | 1.49 | 50 | 34:7 | 6 - 10 | 8.02 | 1.44 | spontaneous | 0.83 | 0.04 |
| 10 | Liu et al., 2021 | USA | 16 | 10:6 | 1.66 - 4.33 | 2.99 | 0.70 | 13 | 10:3 | 1.75 - 5.75 | 3.88 | 0.85 | spontaneous | 3.78 | 0.13 |
| 11 | Marsh et al., 2013 | USA | 7 | 4:3 | 2.8 - 4.6 | 3.75 | 0.12 | 7 | 5:2 | 3.8 - 4.1 | 3.94 | 0.74 | spontaneous | 0.21 | 0.31 |
| 12 | Noel et al., 2018 | USA | 15 | 11:4 | 8.9 - 14.5 | 10.94 | 2.13 | 12 | 8:4 | 7.9 - 16.5 | 12.20 | 3.75 | spontaneous | 0.24 | 0.13 |
| 13 | Yoo et al., 2018 | Korea | 42 | 23:19 | 11 - 16 | 13.50 | 0.80 | 10 | 10:0 | 11 - 16 | 13.40 | 1.40 | spontaneous | 0.44 | 0.10 |

## Random-effects meta-analysis

### Models

```
m.random <- rma(yi=es, vi=var, data=df_agg, method="REML")
RE.results <- summary(m.random)
print(RE.results)
```

```
##
## Random-Effects Model (k = 13; tau^2 estimator: REML)
##
##   logLik  deviance       AIC       BIC      AICc
## -16.1275   32.2550   36.2550   37.2248   37.5883
##
```

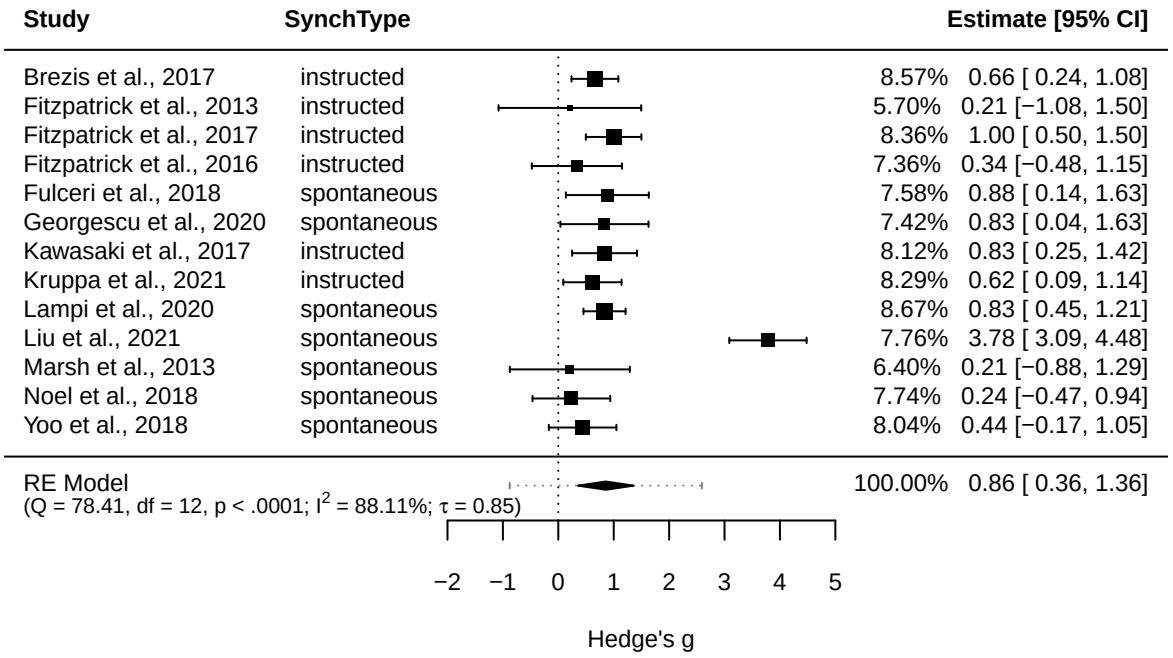
```
## tau^2 (estimated amount of total heterogeneity): 0.7175 (SE = 0.3459)
## tau (square root of estimated tau^2 value):      0.8470
## I^2 (total heterogeneity / total variability):   88.11%
## H^2 (total variability / sampling variability):  8.41
##
## Test for Heterogeneity:
## Q(df = 12) = 78.4058, p-val < .0001
##
## Model Results:
##
## estimate      se    zval    pval   ci.lb   ci.ub
##   0.8570  0.2558  3.3498  0.0008  0.3556  1.3585  ***
##
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
#fit moderation model (type of synchrony)
moderation.random <- rma(yi=es, vi=var, mods = ~ synch_type, data=df_agg, method="REML")
summary(moderation.random)
```

```
##
## Mixed-Effects Model (k = 13; tau^2 estimator: REML)
##
##   logLik  deviance       AIC       BIC      AICc
## -14.9658   29.9316   35.9316   37.1253   39.3602
##
## tau^2 (estimated amount of residual heterogeneity):     0.7487 (SE = 0.3754)
## tau (square root of estimated tau^2 value):             0.8653
## I^2 (residual heterogeneity / unaccounted variability): 88.11%
## H^2 (unaccounted variability / sampling variability):   8.41
## R^2 (amount of heterogeneity accounted for):            0.00%
##
## Test for Residual Heterogeneity:
## QE(df = 11) = 75.0846, p-val < .0001
##
## Test of Moderators (coefficient 2):
## QM(df = 1) = 0.6188, p-val = 0.4315
##
## Model Results:
##
##                        estimate      se    zval    pval    ci.lb   ci.ub
## intrcpt                  0.6361  0.3826  1.6625  0.0964  -0.1138  1.3860  .
## synch_typespontaneous    0.4110  0.5225  0.7866  0.4315  -0.6130  1.4350
##
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

### Forest plot

Dotted line is the prediction interval




**Prediction interval**

```
##
##    pred     se  ci.lb  ci.ub   pi.lb  pi.ub
##  0.8570 0.2558 0.3556 1.3585 -0.8772 2.5913
```

**Funnel plot (trim-and-fill method)**

**Model corrected for publication bias (trim-and-fill method)**

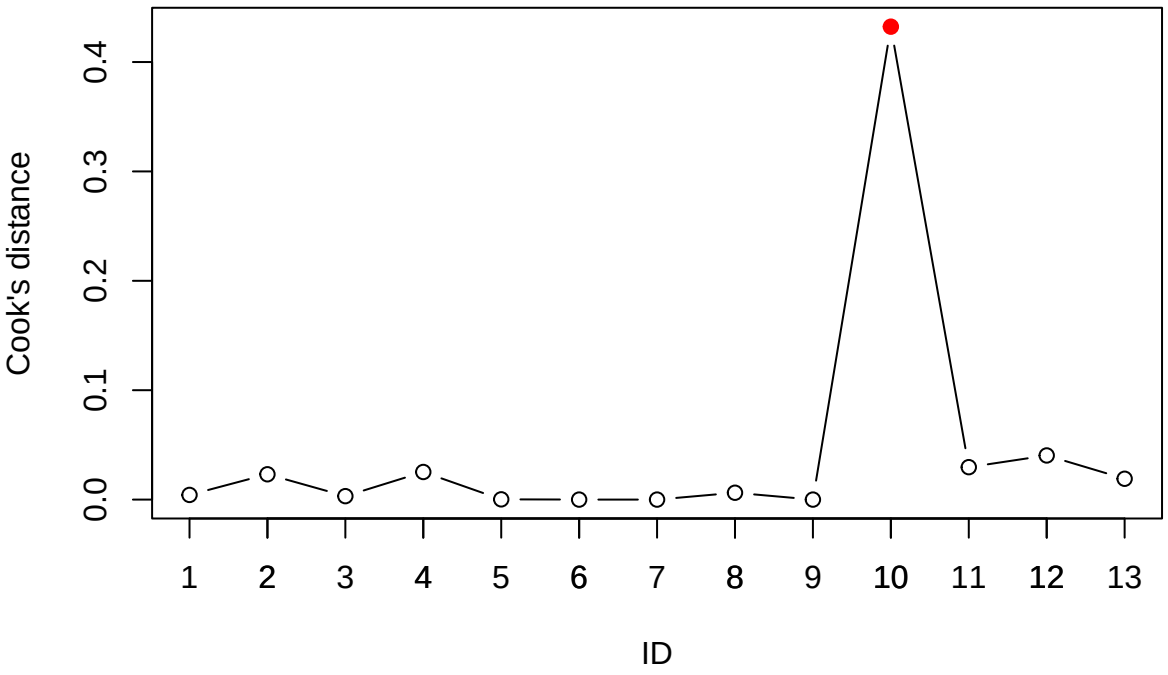
```
##
## Estimated number of missing studies on the right side: 5 (SE = 2.2785)
##
## Random-Effects Model (k = 18; tau^2 estimator: REML)
##
##   logLik  deviance       AIC       BIC      AICc
## -23.3577   46.7154   50.7154   52.3819   51.5726
##
## tau^2 (estimated amount of total heterogeneity): 0.7463 (SE = 0.3072)
## tau (square root of estimated tau^2 value):      0.8639
## I^2 (total heterogeneity / total variability):   87.17%
## H^2 (total variability / sampling variability):  7.80
##
## Test for Heterogeneity:
## Q(df = 17) = 110.8582, p-val < .0001
##
## Model Results:
##
## estimate      se    zval    pval   ci.lb   ci.ub
##   1.1660  0.2237  5.2132  <.0001  0.7276  1.6044  ***
##
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

**Sensitivity analyses**

| Authors | Estimate | I2 | tau | CI | PI |
|---|---|---|---|---|---|
| Brezis et al., 2017 | 0.87 | 88.27 | 0.89 | [0.32;1.42] | [-0.96;2.71] |
| Fitzpatrick et al., 2013 | 0.90 | 89.26 | 0.87 | [0.37;1.42] | [-0.88;2.68] |
| Fitzpatrick et al., 2016 | 0.90 | 89.14 | 0.88 | [0.36;1.43] | [-0.9;2.7] |
| Fitzpatrick et al., 2017 | 0.84 | 88.77 | 0.89 | [0.29;1.39] | [-0.99;2.68] |
| Fulceri et al., 2018 | 0.85 | 89.40 | 0.89 | [0.31;1.40] | [-0.98;2.68] |
| Georgescu et al., 2020 | 0.86 | 89.44 | 0.89 | [0.31;1.40] | [-0.97;2.69] |
| Kawasaki et al., 2017 | 0.86 | 89.10 | 0.89 | [0.31;1.41] | [-0.98;2.69] |
| Kruppa et al., 2021 | 0.88 | 88.81 | 0.89 | [0.33;1.42] | [-0.95;2.71] |
| Lampi et al., 2020 | 0.86 | 87.98 | 0.90 | [0.31;1.41] | [-0.99;2.7] |
| Liu et al., 2021 | 0.69 | 0.00 | 0.00 | [0.52;0.86] | [0.52;0.86] |
| Marsh et al., 2013 | 0.90 | 89.18 | 0.87 | [0.37;1.43] | [-0.88;2.68] |
| Noel et al., 2018 | 0.91 | 88.83 | 0.87 | [0.37;1.44] | [-0.88;2.69] |
| Yoo et al., 2018 | 0.89 | 88.91 | 0.88 | [0.35;1.43] | [-0.92;2.71] |

**Leave-One-Out**

**Cook's distance**




Note that study IDs follow alphabetical order of included studies and their specifications reported in the descriptive statistic's table

## Comparing results

Table 1: Results of the three meta-analyses with different hypothesized correlations

| Correlation | ES | I2 | tau | CI | PI |
|---|---|---|---|---|---|
| r = .30 | 0.85 | 92.19 | 0.86 | [0.35;1.35] | [-0.91;2.61] |
| r = .50 | 0.85 | 90.06 | 0.85 | [0.35;1.35] | [-0.89;2.6] |
| r = .70 | 0.86 | 88.11 | 0.85 | [0.36;1.36] | [-0.88;2.59] |