SUPPLEMENTARY MATERIALS

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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 | | | | | |
|-----|--------------------------|---------|----|-----------|-------------|-------|------|----|-----------|--------------|-------|-------|-------------------|-----------|------|
| | | | | | I | 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)</pre>
```

```
##
## 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):
## H^2 (total variability / sampling variability):
## Test for Heterogeneity:
## Q(df = 12) = 105.5515, p-val < .0001
##
## Model Results:
##
## estimate
                      zval
                              pval
                                     ci.lb
                                             ci.ub
                se
    0.8494 0.2535 3.3505 0.0008 0.3525 1.3462
##
## ---
## Signif. codes: 0 '***' 0.001 '**' 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 \text{ (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:
##
##
                                                             ci.lb
                                                                    ci.ub
                         estimate
                                       se
                                             zval
                                                    pval
## intrcpt
                           0.6241
                                   0.3774
                                          1.6535
                                                   0.0982
                                                          -0.1157
                                                                   1.3638
## synch_typespontaneous
                           ##
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Forest plot

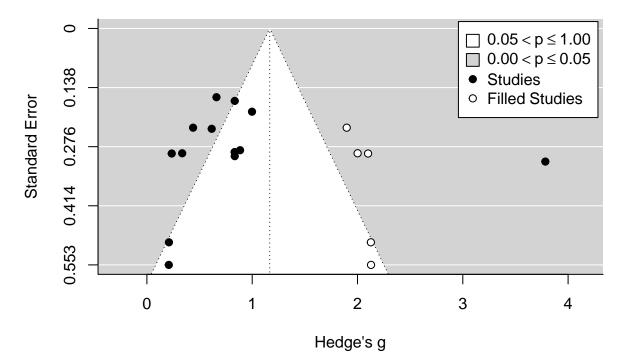
Dotted line is the prediction interval

| Study | SynchType | | | | | | | | I | Estimate [95% CI] |
|---------------------------------------|--------------------------------|---------|-------------|----|-------|-----|---|---|---------|--------------------|
| Brezis et al., 2017 | instructed | | : + | H | | | | | 8.35% | 0.66 [0.35, 0.98] |
| Fitzpatrick et al., 2013 | instructed | - | | _ | | | | | 6.47% | - |
| Fitzpatrick et al., 2017 | instructed | | ⊢ | - | | | | | 8.22% | 1.00 [0.62, 1.38] |
| Fitzpatrick et al., 2016 | instructed | | | → | | | | | 7.75% | 0.34 [-0.24, 0.91] |
| Fulceri et al., 2018 | spontaneous | | ∷ ⊢ | _ | | | | | 7.79% | 0.88 [0.33, 1.44] |
| Georgescu et al., 2020 | spontaneous | | | | | | | | 7.77% | |
| Kawasaki et al., 2017 | instructed | | : ⊢ | | | | | | 7.72% | |
| Kruppa et al., 2021 | instructed | | - | _ | | | | | 8.04% | |
| Lampi et al., 2020 | spontaneous | | : ⊢ | - | | | | | 8.32% | |
| Liu et al., 2021 | spontaneous | | | | | _ | _ | | 7.64% | 3.78 [3.17, 4.39] |
| Marsh et al., 2013 | spontaneous | - | <u>:-</u> | | | | | | 6.12% | 0.21 [-0.88, 1.29] |
| Noel et al., 2018 | spontaneous | | - | | | | | | 7.75% | 0.24 [-0.34, 0.81] |
| Yoo et al., 2018 | spontaneous | | - | - | | | | | 8.06% | |
| , , , , , , , , , , , , , , , , , , , | <u>'</u> | | | | | | | | | |
| RE Model | | 1 | | _ | | -1 | | | 100.00% | 0.85 [0.35, 1.35] |
| (Q = 105.55, df = 12, p < . | 0001; $I^2 = 92.19\%$; τ | = 0.86) | | | | | | | | |
| | | | ı | ı | I | ı | | ı | | |
| | | _1 | 0 | 1 | 2 | 3 | 4 | 5 | | |
| | | -1 | U | 1 | 2 | 3 | 4 | 3 | | |
| | | | | He | dae's | s a | | | | |

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)

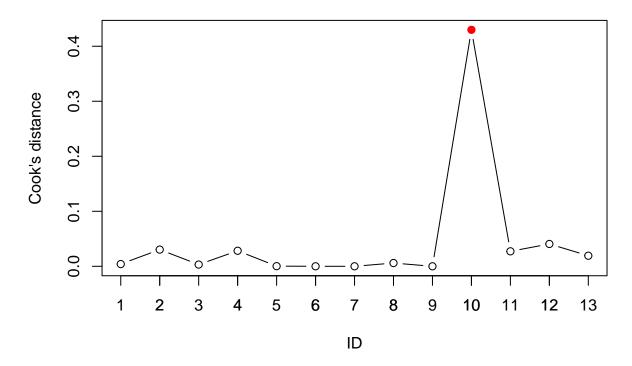
```
## Estimated number of missing studies on the right side: 5 (SE = 2.2785)
## Random-Effects Model (k = 18; tau^2 estimator: REML)
##
##
     logLik deviance
                            AIC
                                     BIC
                                               AICc
## -23.3268
              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
                               pval
                                      ci.lb
                                             ci.ub
                 se
                       zval
     1.1668 0.2230 5.2335 <.0001 0.7299 1.6038
##
## Signif. codes: 0 '***' 0.001 '**' 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 | | | | | |
|-----|--------------------------|---------|----|-----------|-------------|-------|------|----|-----------|--------------|-------|-------|-------------------|-----------|------|
| | | | | | I | 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)</pre>
```

```
##
## 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
                                                    90.06%
## I^2 (total heterogeneity / total variability):
## H^2 (total variability / sampling variability):
## Test for Heterogeneity:
## Q(df = 12) = 89.7806, p-val < .0001
##
## Model Results:
##
## estimate
                       zval
                               pval
                                      ci.lb
                                              ci.ub
                 se
    0.8534 0.2547 3.3500 0.0008 0.3541 1.3527
##
## ---
## Signif. codes: 0 '***' 0.001 '**' 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 \text{ (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:
##
##
                                                              ci.lb
                                                                       ci.ub
                          estimate
                                        se
                                              zval
                                                      pval
## 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

| Study | SynchType | | | | | | | | l | Estimate [95% CI] |
|-------------------------------|------------------------------|-----------------|--|----|--------|-----|---|---|---------|--------------------|
| Brezis et al., 2017 | instructed | | | - | | | | | 8.46% | 0.66 [0.29, 1.03] |
| Fitzpatrick et al., 2013 | instructed | - | - | | | | | | 6.06% | 0.21 [-0.93, 1.35] |
| Fitzpatrick et al., 2017 | instructed | | : | - | | | | | 8.30% | 1.00 [0.55, 1.44] |
| Fitzpatrick et al., 2016 | instructed | | <u> </u> | | | | | | 7.55% | 0.34 [-0.37, 1.04] |
| Fulceri et al., 2018 | spontaneous | | | | - | | | | 7.69% | 0.88 [0.23, 1.54] |
| Georgescu et al., 2020 | spontaneous | | - | - | 4 | | | | 7.59% | 0.83 [0.14, 1.52] |
| Kawasaki et al., 2017 | instructed | | - | - | | | | | 7.92% | 0.83 [0.25, 1.42] |
| Kruppa et al., 2021 | instructed | | į- | | | | | | 8.17% | 0.62 [0.12, 1.11] |
| Lampi et al., 2020 | spontaneous | | : | - | | | | | 8.50% | . , . |
| Liu et al., 2021 | spontaneous | | : | | | - | - | | | 3.78 [3.13, 4.44] |
| Marsh et al., 2013 | spontaneous | - | - ; - | | | | | | 6.26% | 0.21 [-0.88, 1.29] |
| Noel et al., 2018 | spontaneous | | | — | | | | | 7.75% | 0.24 [-0.40, 0.88] |
| Yoo et al., 2018 | spontaneous | | \vdash | - | | | | | 8.05% | 0.44 [-0.10, 0.98] |
| RE Model | 0 | 1 | | _ | | -1 | | | 100.00% | 0.85 [0.35, 1.35] |
| (Q = 89.78, df = 12, p < .00) | $001; I^2 = 90.06\%; \tau =$ | = 0.8 <u>5)</u> | | | | | | _ | | |
| | | ı | ı | ı | ı | ı | ı | ١ | | |
| | | -1 | 0 | 1 | 2 | 3 | 4 | 5 | | |
| | | | | Не | edge's | s g | | | | |

###

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)

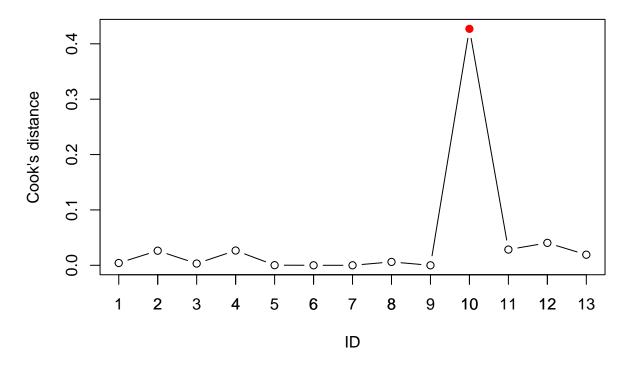
```
## Estimated number of missing studies on the right side: 5 (SE = 2.2785)
## Random-Effects Model (k = 18; tau^2 estimator: REML)
##
##
     logLik deviance
                            AIC
                                     BIC
                                               AICc
## -23.3410
              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
                               pval
                                      ci.lb
                                             ci.ub
                 se
                       zval
     1.1665 0.2233 5.2240 <.0001 0.7288 1.6041
##
## Signif. codes: 0 '***' 0.001 '**' 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

| | | | Ι | TD Group | | | | | | ASD Group | | | | | |
|-----|--------------------------|---------|----|-----------|-------------|-------|------|----|-----------|--------------|-------|-------|-------------------|-----------|------|
| | | | | | I | 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)</pre>
```

```
##
## 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):
## H^2 (total variability / sampling variability): 8.41
## Test for Heterogeneity:
## Q(df = 12) = 78.4058, p-val < .0001
##
## Model Results:
##
## estimate
                       zval
                               pval
                                      ci.lb
                                              ci.ub
                 se
    0.8570 0.2558 3.3498 0.0008 0.3556 1.3585
##
## ---
## Signif. codes: 0 '***' 0.001 '**' 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 \text{ (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:
##
##
                                                              ci.lb
                                                                       ci.ub
                          estimate
                                        se
                                              zval
                                                      pval
## 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

| Study | SynchType | | Estimate [95% CI] | | | |
|---|---------------|----------------|--------------------------|--|--|--|
| Brezis et al., 2017 | instructed | : ⊢∎→ | 8.57% 0.66 [0.24, 1.08] | | | |
| Fitzpatrick et al., 2013 | instructed ⊢ | : = | 5.70% 0.21 [-1.08, 1.50] | | | |
| Fitzpatrick et al., 2017 | instructed | . ⊢₽ → | 8.36% 1.00 [0.50, 1.50] | | | |
| Fitzpatrick et al., 2016 | instructed | <u> </u> | 7.36% 0.34 [-0.48, 1.15] | | | |
| Fulceri et al., 2018 | spontaneous | | 7.58% 0.88 [0.14, 1.63] | | | |
| Georgescu et al., 2020 | spontaneous | | 7.42% 0.83 [0.04, 1.63] | | | |
| Kawasaki et al., 2017 | instructed | : ⊢= | 8.12% 0.83 [0.25, 1.42] | | | |
| Kruppa et al., 2021 | instructed | ⊢ ■→ | 8.29% 0.62 [0.09, 1.14] | | | |
| Lampi et al., 2020 | spontaneous | : ⊢■ → | 8.67% 0.83 [0.45, 1.21] | | | |
| Liu et al., 2021 | spontaneous | | 7.76% 3.78 [3.09, 4.48] | | | |
| Marsh et al., 2013 | spontaneous - | : = | 6.40% 0.21 [-0.88, 1.29] | | | |
| Noel et al., 2018 | spontaneous | ⊢ | 7.74% 0.24 [-0.47, 0.94] | | | |
| Yoo et al., 2018 | spontaneous | · · | 8.04% 0.44 [-0.17, 1.05] | | | |
| RE Model (Q = 78.41, df = 12, p < .0001; I ² = 88.11%; τ = 0.85) | | | | | | |
| | | | 1 | | | |
| | | | _ | | | |
| | -2 -1 | 0 1 2 3 4 | 5 | | | |
| Hedge's g | | | | | | |

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)

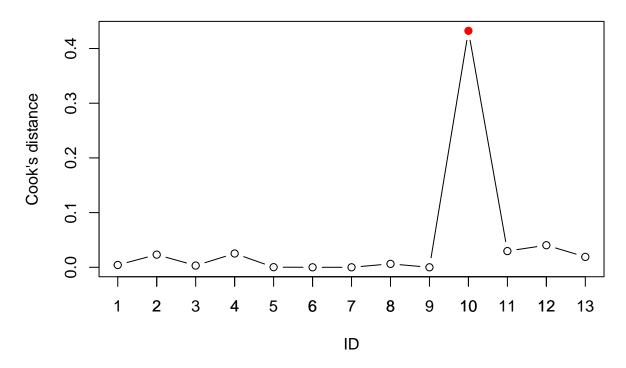
```
## Estimated number of missing studies on the right side: 5 (SE = 2.2785)
## Random-Effects Model (k = 18; tau^2 estimator: REML)
##
##
     logLik deviance
                            AIC
                                     BIC
                                               AICc
              46.7154
## -23.3577
                        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
                               pval
                                      ci.lb
                                             ci.ub
                 se
                       zval
     1.1660 0.2237 5.2132 <.0001 0.7276 1.6044
##
## Signif. codes: 0 '***' 0.001 '**' 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] |