

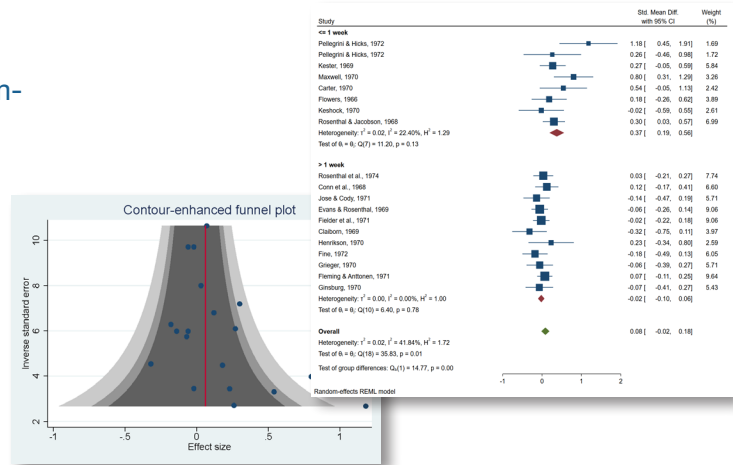
New in



META-ANALYSIS

Stata's new suite of commands for meta-analysis is broad, yet easy to use.

- Effect sizes: Hedges' g , Cohen's d , odds ratios, risk ratios, and more
- Common-effect, fixed-effects, and random-effects models
- Forest, funnel, bubble, and more plots
- Subgroup analysis
- Meta-regression
- Tests of small-study effects
- Trim-and-fill analysis of publication bias
- Cumulative meta-analysis
- More



Prepare your data

Continuous summary data

Compute Hedges' g effect sizes (default)

```
. meta esize n1 m1 sd1 n2 m2 sd2
```

Compute Cohen's d effect sizes

```
. meta esize n1 m1 sd1 n2 m2 sd2, esize(cohend)
```

Specify precomputed effect sizes and their SEs (and label effect sizes)

```
. meta set es se, esize(Log hazard-ratio)
```

Binary summary data

Compute log odds-ratios (default)

```
. meta esize n11 n12 n21 n22
```

Compute log risk-ratios

```
. meta esize n11 n12 n21 n22, esize(lnrratio)
```

Generic effect sizes

Or specify effect sizes and their CIs (and label studies)

```
. meta set cil ciu, studylabel(studylbl)
```

Summarize meta-analysis data

Compute basic summaries and display in a table

```
. meta summarize
```

Or produce a forest plot

```
. meta forestplot
```

Explore heterogeneity

Perform subgroup analysis for levels of **group**

```
. meta forestplot, subgroup(group)
```

Perform meta-regression and also account for continuous **x**

```
. meta regress i.group x
```

Explore small-study effects

Produce a funnel plot

```
. meta funnelplot
```

Produce a funnel plot by group

```
. meta funnelplot, subgroup(group)
```

Perform Egger test for funnel-plot asymmetry

```
. meta bias, egger
```

Adjust for heterogeneity due to group during testing

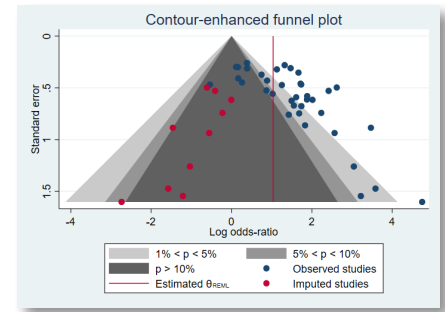
```
. meta bias i.group, egger
```

Assess publication bias

Assess publication bias using the trim-and-fill method;

produce contour-enhanced funnel plot including omitted studies

```
. meta trimfill, funnel(contours(1 5 10))
```



Use commands or GUI

Stata/MP 16.0 - https://www.stata-press.com/data/r16/pupiliqset.dta

```
. meta summarize
```

Meta-analysis summary
Random-effects model
Method: REML

Number of studies = 19
Heterogeneity:
tau2 = 0.0188
I2 (%) = 41.84
H2 = 1.72

Effect Size: Std. Mean Diff.

Study	Effect Size	[95% Conf. Interval]	% Weight
Rosenthal et al., 1974	0.030	-0.215 0.275	7.74
Conn et al., 1968	0.120	-0.168 0.408	6.60
Jose & Cody, 1971	-0.140	-0.467 0.187	5.71
Pellegrini & Hicks, 1972	1.180	0.449 1.911	1.69
Pellegrini & Hicks, 1972	0.260	-0.463 0.983	1.72
Evans & Rosenthal, 1969	-0.060	-0.262 0.142	9.06
Fielder et al., 1971	-0.020	-0.222 0.182	9.06
Claiborn, 1969	-0.320	-0.751 0.111	3.97
Kester, 1969	0.270	-0.051 0.591	5.84
Maxwell, 1970	0.800	0.308 1.292	3.26
Carter, 1970	0.540	-0.052 1.132	
Flowers, 1966	0.180	-0.257 0.617	
Keshock, 1970	-0.020	-0.586 0.546	
Henrikson, 1970	0.230	-0.338 0.798	
Fine, 1972	-0.180	-0.492 0.132	
Grieger, 1970	-0.060	-0.387 0.267	
Rosenthal & Jacobson, 1968	0.300	0.028 0.572	
Fleming & Anttonen, 1971	0.070	-0.114 0.254	
Ginsburg, 1970	-0.070	-0.411 0.271	
theta	0.084	-0.018 0.185	

Test of theta = 0: z = 1.62 Prob > |z| = 0.106
Test of homogeneity: Q = chi2(18) = 35.83 Prob > Q = 0.000

```
. meta forestplot, subgroup(week1)
```

Command

meta - Meta-Analysis Control Panel

Setup

Summary

Forest plot

Heterogeneity

Regression

Publication bias

Meta-analysis model

Options

Maximization

Forest plot

Meta-analysis model

Declared model

Random-effects

Common-effect

Fixed effects

Subgroup meta-analysis

Variables: week1

Cumulative meta-analysis

Order variable: Sort order: Ascending Stratify on variable:

No. of studies: 19 Model: Random-effects Effect size: stdmdiff, Std. Mean Diff.
CI level: 95% Method: REML Std. Error: se

Submit

Close