

Making Better Forest Plots in Meta-Analysis

Based Upon Student Contributions

Andy Grogan-Kaylor

2024-11-14

Table of contents

1	Get Data	1
2	Set Up The Data	1
3	Set Up The Meta-Analysis With <code>differencefromrandom</code>	2
4	Run The Meta Analysis With <code>differencefromrandom</code>	2
5	Run The Meta Analysis With <code>differencefromrandom</code> And Better Options for Labels	3

1 Get Data

`use Ganzfeld.dta`

2 Set Up The Data

 generate the Difference From Random Chance

This section uses the creative idea to **generate** a variable called `differencefromrandom`: the difference in the proportion of correct guesses from random chance.

```

generate proportion = hits / trials // generate proportion

generate differencefromrandom = proportion - 0.2 // generate proportion different from random

generate standarderror = sqrt(p*(1-p)/trials) // generate standard error of proportion

drop if proportion == 0

```

3 Set Up The Meta-Analysis With differencefromrandom

```
meta set differencefromrandom standarderror // set up meta-analysis
```

Meta-analysis setting information

Study information

No. of studies: 30
 Study label: Generic
 Study size: N/A

Effect size

Type: <generic>
 Label: Effect size
 Variable: differencefromrandom

Precision

Std. err.: standarderror
 CI: [_meta_cil, _meta_ciu]
 CI level: 95%

Model and method

Model: Random effects
 Method: REML

4 Run The Meta Analysis With differencefromrandom

```
meta forestplot, random(reml) nullrefline // forestplot
```

```
graph export forestplot.png, replace
```

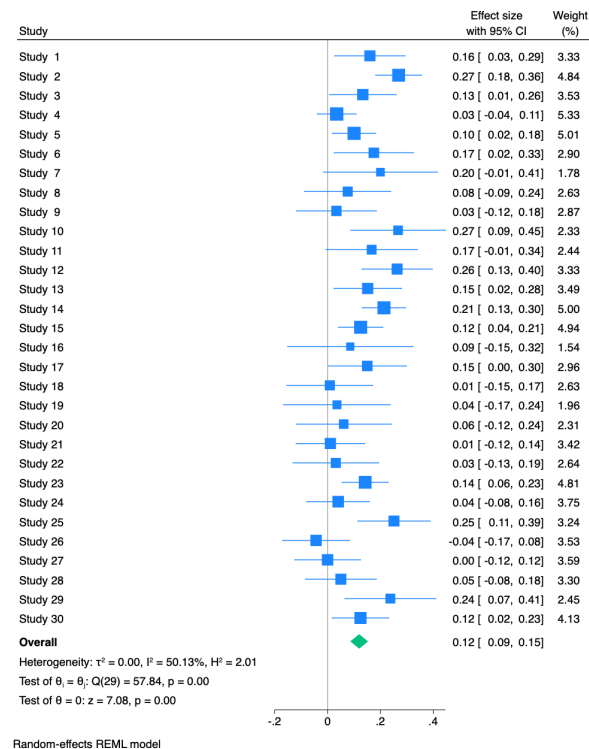


Figure 1: forest plot

5 Run The Meta Analysis With differencefromrandom And Better Options for Labels

```
meta forestplot, random(reml) ///
nullrefline(favorsleft("Favors No ESP", color(red)) favorsright("Favors ESP", color(green)))

graph export forestplot2.png, replace
```

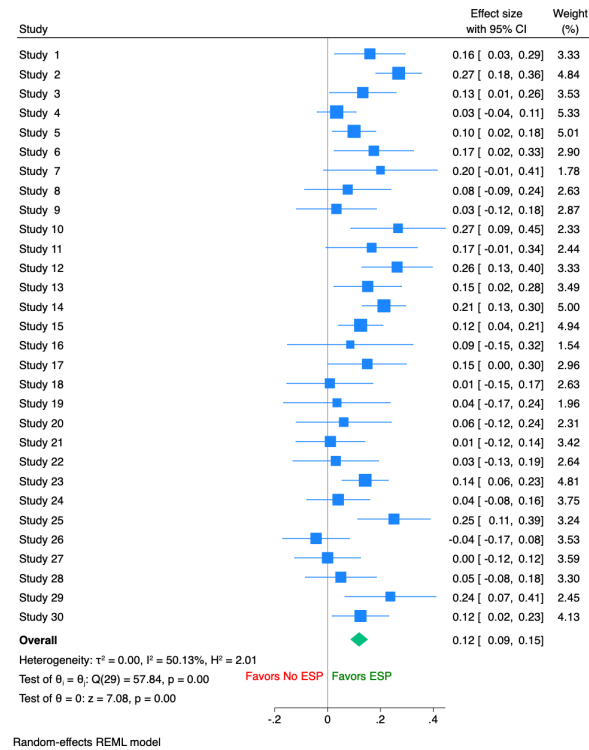


Figure 2: forest plot with better labels