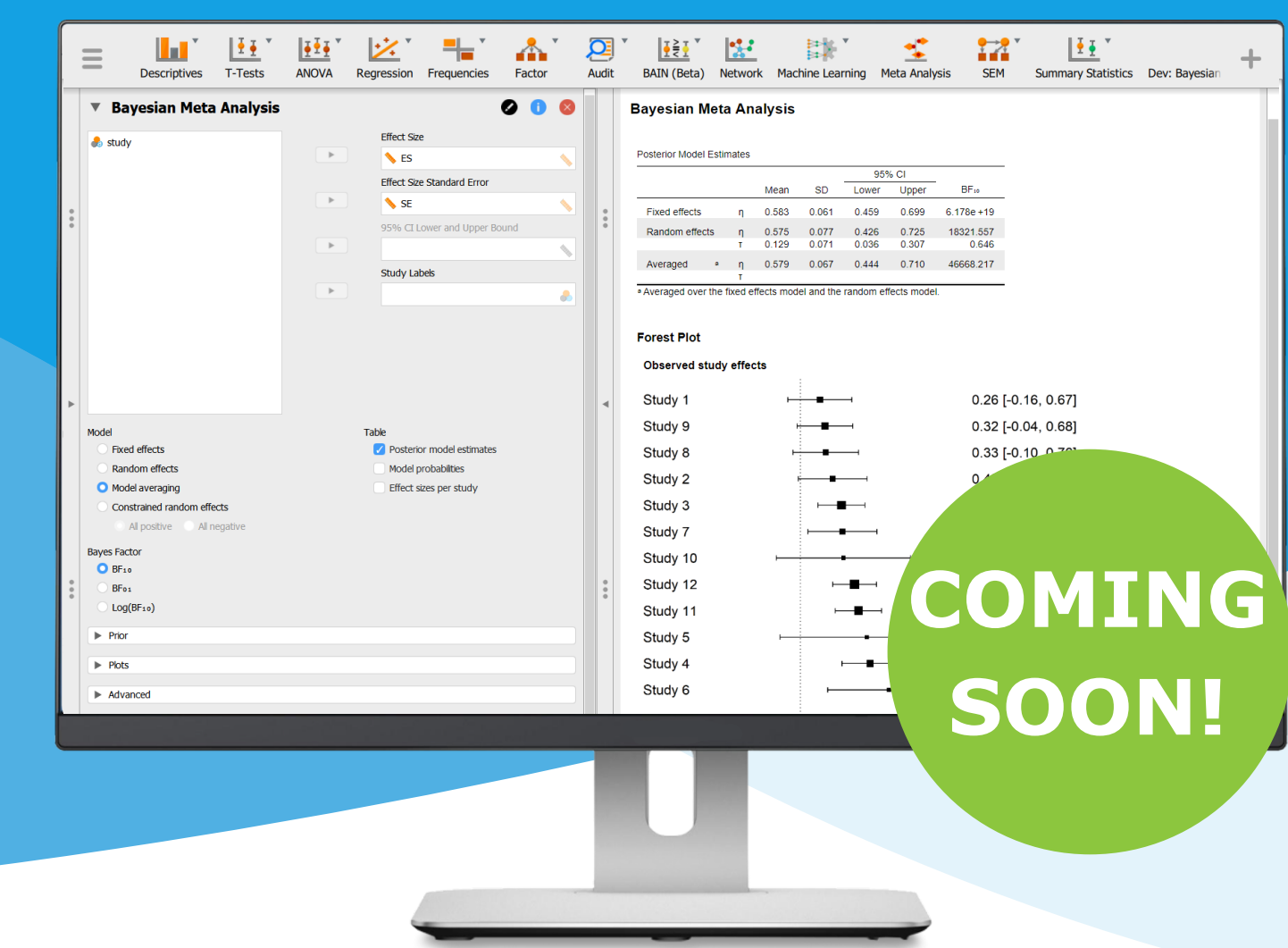


A Tutorial to Do Bayesian Meta-Analysis

Sophie W. Berkhout



Example:

Does pointing contribute to language development?

First, pick your priors

Prior

Effect size

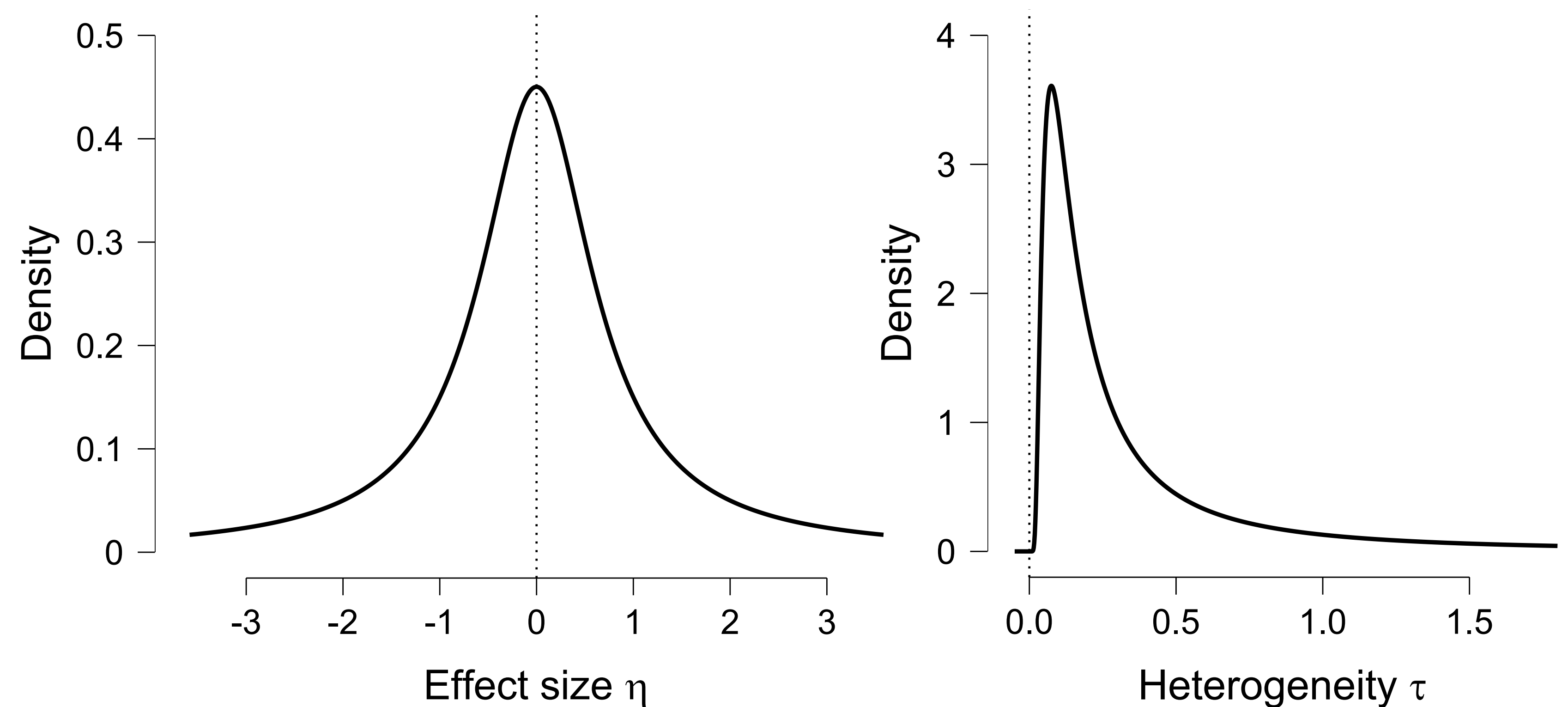
☒ Cauchy location: 0 scale: .707 ☐ Lower bound: 0 ☐ Upper bound: 0

☐ Normal

☐ t

Heterogeneity (Between study SD)

☒ Inverse gamma shape: 1 scale: 0.15 ☐ Half t



Then, plug in data and select model

- ☐ Fixed effects
- ☐ Random effects
- ☒ Model averaged
- ☐ Ordered effects

Study

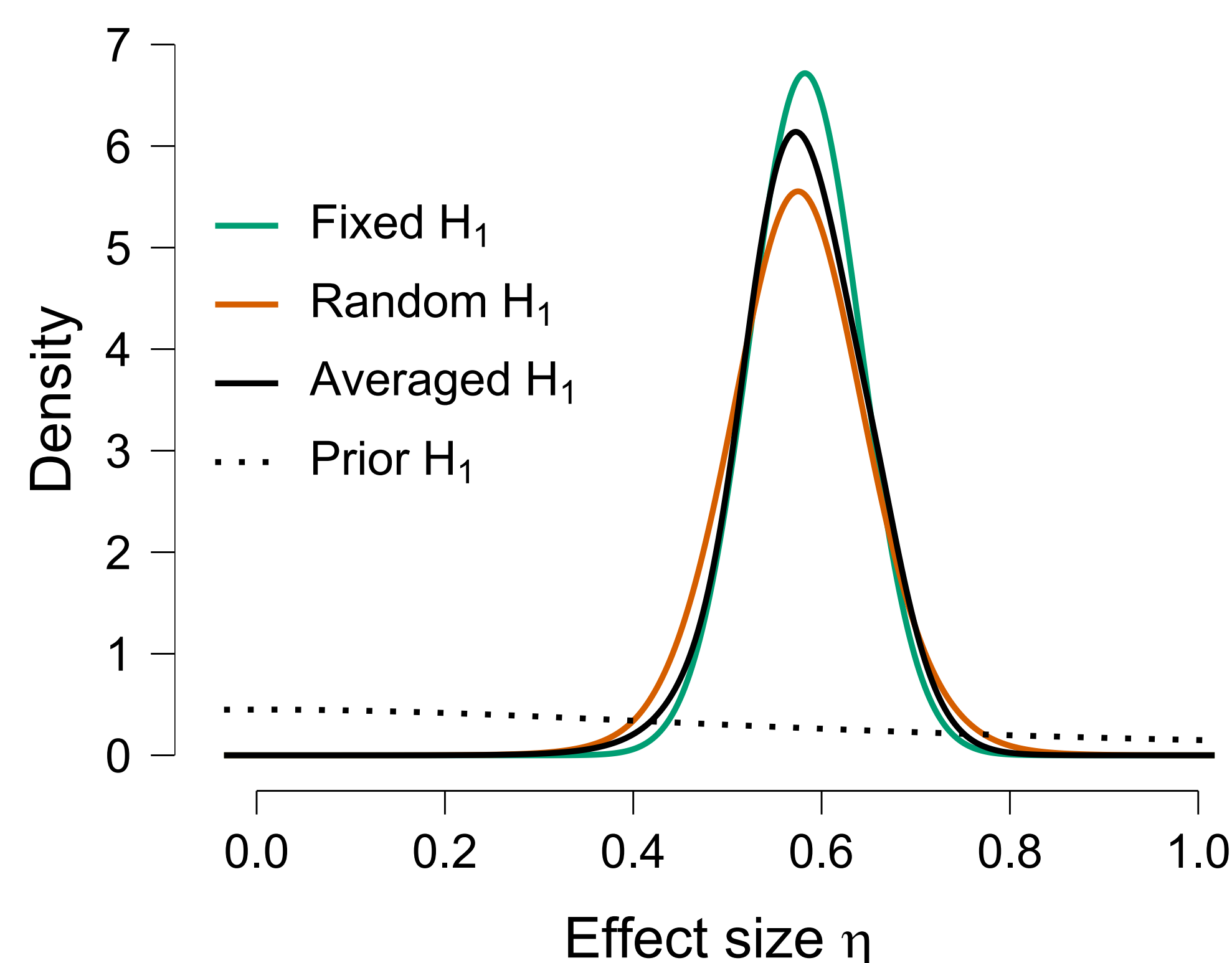
☒ SE

Effect Size

☒ ES

Effect Size Standard Error

Finally, admire results

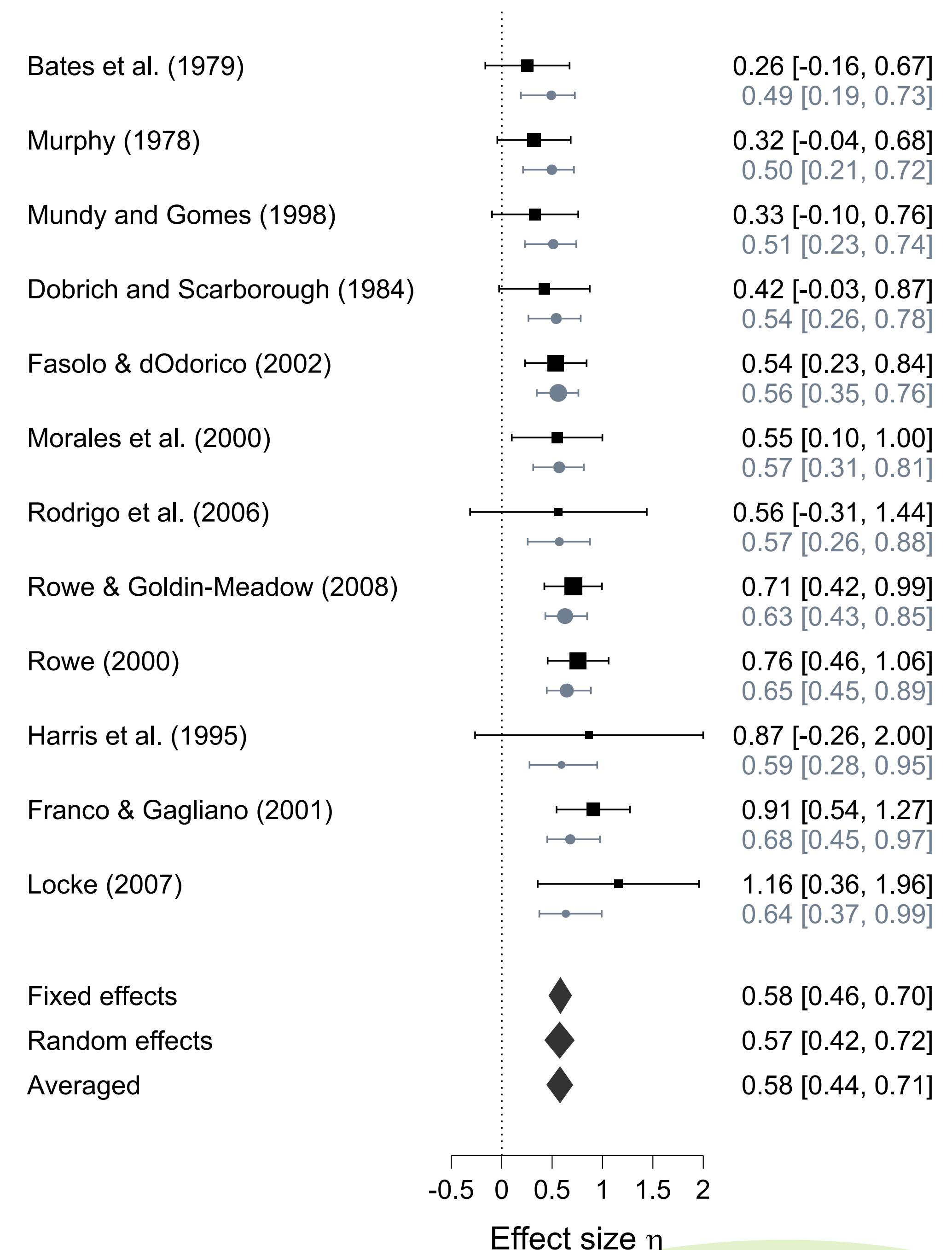


& explore the Bayesian advantages!

See which model/
← hypothesis is supported by the data

Get Bayesian shrunk
→ estimates for each individual study

Examine how the
← evidence develops as more studies are included



Conclusion:

Pointing appears to have a positive effect on learning language.

