

Reading An Effect Size

Education

How to interpret the number that decides which interventions get funded.

An effect size expresses a difference in standard deviations. It is comparable only between studies with similar designs, samples and outcome

$d = (\text{mean of group A} - \text{mean of group B}) / \text{pooled SD}$

$d = 0.1$

Often still useful

Small

$d = 0.4$

Rare at scale

Moderate

$d = 1.0$

Check the design

Suspect

THE COMMON MISTAKE

✗ **Ranking interventions by effect size across different studies**

✓ **Comparing only within similar designs**

Narrow samples, researcher-made tests and short trials all inflate effect sizes. Ranking across them compares measurement conditions, not interventions.

Educational reference. Hattie's rankings are widely used and widely criticised for exactly this pooling problem. Read the underlying studies.