

Study 1

$$d = (M1 - M2) / SD_{\text{pooled}}$$

where M1 and M2 are the means of the two groups being compared, and SD_pooled is the pooled standard deviation.

In the text, we are provided with the paired t-test values (t), degrees of freedom (df), and p-values. We can use these values to calculate Cohen's d.

Changes from right to wrong vs. wrong to right:

$$t(50) = 1.80, p = .08$$

Changes from right to wrong vs. wrong to wrong:

$$t(50) = 4.56, p = .001$$

To calculate Cohen's d from the paired t-test:

$$d = t / \sqrt{df}$$

Changes from right to wrong vs. wrong to right:

$$d = 1.80 / \sqrt{50} = 1.80 / 7.07 \approx 0.25$$

Changes from right to wrong vs. wrong to wrong:

$$d = 4.56 / \sqrt{50} = 4.56 / 7.07 \approx 0.64$$

The effect sizes for Study 1 are as follows:

Comparing changes from right to wrong and wrong to right: $d \approx 0.25$

Comparing changes from right to wrong and wrong to wrong: $d \approx 0.64$