# Effect size calculations from book chapters

## Chapter 7: Independent t test

1. Here are the values from the chapter, entered into the equation.

$$d = \frac{7.6 - 5.0}{\sqrt{\frac{1.14^2 + 1.58^2}{2}}}$$

2. Square the two values on the lower part of the equation.

$$d = \frac{7.6 - 5.0}{\sqrt{\frac{1.2996 + 2.4964}{2}}}$$

3. Complete the subtraction on the top half, and the addition on the bottom part of the equation.

$$d = \frac{2.6}{\sqrt{\frac{3.796}{2}}}$$

4. Do the division on the lower part of the equation.

$$d = \frac{2.6}{\sqrt{1.898}}$$

5. Calculate the square root.

$$d = \frac{2.6}{1.3777}$$

6. Compute the division to calculate the *d* statistic.

$$d = 1.887$$



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### Chapter 8: Repeated t test

1. Here are the values from the chapter, entered into the equation.

$$d = \frac{9.4 - 6.9}{\sqrt{\frac{3.5^2 + 2.9^2}{2}}}$$

2. Square the two values on the lower part of the equation.

$$d = \frac{9.4 - 6.9}{\sqrt{\frac{12.25 + 8.41}{2}}}$$

3. Complete the subtraction on the top half, and the addition on the bottom part of the equation.

$$d = \frac{2.5}{\sqrt{\frac{20.66}{2}}}$$

4. Do the division on the lower part of the equation.

$$d = \frac{2.5}{\sqrt{10.33}}$$

5. Calculate the square root.

$$d = \frac{2.5}{3.2140}$$

6. Compute the division to calculate the  $\it d$  statistic.

$$d = 0.78$$



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## **Chapter 9: One-way ANOVA**

1. Here are the values from the chapter, entered into the equation.

$$\eta_p^2 = \frac{85.778}{85.778 + 65.833}$$

2. Add the two values together on the lower part of the equation.

$$\eta_p^2 = \frac{85.778}{151.611}$$

3. Calculate the division to compute the  $\eta_p^2$  effect size.

$$\eta_p^2 = 0.566$$

#### **Chapter 12: Linear regression**

1. Here are the values from the chapter, entered into the equation.

$$f^2 = \frac{.681}{1 - .681}$$

2. Do the subtraction on the lower part of the equation.

$$f^2 = \frac{.681}{.319}$$

3. Calculate the division to compute the  $f^2$  effect size.

$$f^2 = 2.135$$

