

Answers

Article: Customer Weight and Salesperson Response

Topics: Effect Size; Power

Practice Items:

1. What are the independent and dependent variables in this study?

IV = weight category; DV = time to greet customer

2. Why do you think the authors noted the difference in mean time was statistically significant?

Tested at $\alpha = .05$, $p \text{ value} < \alpha = .05$

3. Assume the standard deviation for time was 20 seconds. Compute an effect size and explain what it means.

$$29.67 - 16.61 / 20 = .65$$

4. Power for this independent t-test was .99. To achieve power of .80, could fewer subjects have been used? Explain.

Yes. Using software, 38 in each group are needed for a total of 76 if you keep effect size at .65 and alpha at .05.