

Answers

Article: Summer Camp and Self-Esteem

Topic: Inferential Test: Dependent t-test

Practice Items:

1. How many dependent t-tests were conducted by the authors?

7

2. Why do you think the authors noted the total and popularity differences as statistically significant?

Because they tested an an alpha of .05 for each.

3. To keep the experimentwise alpha at .05, what alpha should each p value be compared to?

$.05/7 = .007$

4. Keeping the experimentwise alpha at .05, how many of the results from the dependent t-tests can be considered statistically significant?

None.

5. For each of the tests the authors identified as statistically significant determine the effect size and explain what your findings mean.

The change in the mean score on the popularity dimension of the self-esteem scale was of little practical significance. Effect size = $8.9-8.3/2.35 = .26$. The two means were .26 of a standard deviation apart from each other.

The change in the mean score on the scale overall was of little practical significance. Effect size = $63.4-61.8/11 = .15$. The two means were .15 of a standard deviation apart from each other.