

Answers

Article: Perception of Risky Driving Behaviors

Topic: Inferential Test: Independent t-test

Practice Items:

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

6

2. What is the level of measurement for the dependent variables?

Ordinal (should have used non parametric stats)

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

$.05/6 = .008$

4. Keeping the experimentwise alpha at .05, how many of the results from the dependent t-tests can be considered statistically significant? Explain the finding(s) in words.

Two. Speeding and drunk driving.

There was a statistically significant difference in mean scores on the risk of speeding item between the traffic violators and student drivers.

There was a statistically significant difference in mean scores on the risk of drunk driving item between the traffic violators and student drivers.

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

Speeding effect size = $3.85-3.47/1.165 = .33$

Little practical significance to the difference in means.

Drunk driving effect size = $4.79-4.66/.69 = .18$

Very little practical significance to the difference in means.