Week 6 Polling (~13 min)

A researcher conducts a one-sample t-test with a sample of 39 participants. What are the degrees of freedom for this hypothesis test?

37

38

$$df = n - 1 = 39 - 1$$

39

40

A researcher conducts a one-sample t-test. What are the critical values for a two-tailed test at a .05 significance level when df = 14?

-1.761, 1.761

-1.785, 1.785

-2.145, 2.145

-2.101, 2.101

Suppose a researcher found that the mean difference between a sample mean and a population mean was 3.2 points for 25 participants. If the sample standard deviation equals 6.4, then what is Cohen's d?

$$d = \frac{M - \mu}{S} = \frac{3.2}{6.4} = .5$$

0.50

2.50

3.20

Not possible to know because the level of significance is not given

A researcher obtains a test statistic of t=2.05 while conducting a one-sample t-test with a sample of 31 individuals. What would the decision be for a two-tailed test at an alpha level of .05?

$$df = 30 \qquad t_{cv} = 2.04$$

Reject the H0 hypothesis.

$$t > t_{cv} \therefore \text{Reject}$$

Fail to reject the H0 hypothesis.

There is not enough information given to make a decision.

What are the critical values for a one-sample two-tailed t test with a sample size of 12 and an alpha level of .05?

-1.36, 1.36

-1.80, 1.80

-1.78, 1.78

-2.20, 2.20

*NOTE: p. 279 in book – table 9.2 gives a great table comparing the z test and the t test