

(Continued)

Extraversion Score	Facebook Intensity
6	4
3	2
3	5
2	3
4	1
4	6
5	2
5	7
1	3
7	2

Answer the following questions:

- a) What is the hypothesis that is being tested?

A: H_0 : There will be no relationship between extraversion and the number of times people check Facebook each day.

- b) What is the mean of each variable?

A:

$$M_{\text{extraversion}} = 4.0$$

$$M_{\text{Facebook}} = 3.5$$

- c) What is the r test statistic?

A: $r = .03$

- d) How many degrees of freedom are there in this analysis?

A: $df = 8$

- e) Use Appendix E to determine the critical value to compare the test statistic to.

A: When we use a two-tailed hypothesis test with an alpha of .05, we have a critical value of .6319.

- f) Do we reject or fail to reject the null hypothesis?

A: Because the test statistic is less than the critical value, the test statistic falls outside the region of null hypothesis rejection. We fail to reject the null hypothesis.

- g) Classify the strength of this relationship by using Cohen's (1988) guidelines.

A: $r = .03$ is a weak relationship.

- h) What does this result mean in plain English?

A: There is no relationship between extraversion levels and frequency of checking Facebook each day.