

# Lab Quiz 6 Markdown

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*2016-11-01*

## Question 1

The difference between the A1C1 correlation and the E1O1 correlation was  $\Delta r = -.01$ , 95% CI  $[-.11, .09]$ ,  $p = .84$ ,  $N = 777$ . The CI suggests that the difference correlation could lie anywhere between  $-.11$  and  $.09$ , and is consistent with anywhere from a weak negative relationship to a weak positive relationship.

## Question 2

The difference between the A1C1 correlation and the A1E1 was  $\Delta r = -.08$ , 95% CI  $[-.18, .02]$ ,  $p = .13$ ,  $N = 777$ . The CI suggests that the relationship between the two variables could be one that ranges from weak negative to weak positive.

## Question 3

The correlation difference for men compared women on the A1E1 correlation was  $\Delta r = .02$ , 95% CI  $[-.13, .17]$ ,  $p = .82$ ,  $N = 777$ . The CI suggests that the relationship between the two variables could be one that ranges from weak negative to weak positive.

## Question 4

The rating-raises correlation differs from the rating-critical correlation by  $\Delta r = .43$ , 95% CI  $[.07, .80]$ ,  $p = .03$ ,  $N = 30$ . This implies that there is a moderately positive difference between rating-raises and rating-critical, and the narrow CI supports this.

## Question 5

The rating-raises correlation differs from the complaints-critical correlation by  $\Delta r = .4$ , 95% CI  $[.01, .80]$ ,  $p = .04$ ,  $N = 30$ . This is a small difference, and the long CI implies that the difference could be anywhere between  $.01$  and  $.80$ . We can infer that there is a weak positive relationship.

## Question 6

The difference between our rating-raises correlation and the new study is  $\Delta r = .56$ , 95% CI  $[.26, .76]$ ,  $p = .00$ . This is a moderate difference, but the long CI implies that the difference could range from a weak to a strong difference relationship between the two studies.

## Question 7

We can conclude that there is a positive relationship for the rating-raises correlation based on the two studies, but we cannot conclude the strength of that relationship. We would rely on the correlation from Study 2, because the bigger  $N$  will be a better indication of the correlation.