6060 Quiz 3: RMarkdown

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1 Comparing the correlation between A1,C1 to E1,O1

The correlation of the difference between A1 and C1 and E1 and O1 was Δr = -.0099, 95% CI [-.11, .09], p = .85, N = 777. The confidence interval is consistent with anywhere from a weak negative to a weak positive relationship.

2 Comparing the correlation between A1,C1 to A1,E1

The correlation of the difference between A1 and C1 and A1 and E1 was Δr = -.08, 95% CI [-.18, .02], p = .13, N = 777. The confidence interval is consistent with anywhere from a medium negative to a very weak positive relationship.

3 Comparing the A1,E1 correlations for men and women

The correlation of the difference for men (N = 252) and women (N = 525) on A1 and E1 was Δr = .02, 95% CI [-.13, .17], p = .82. The confidence interval is consistent with anywhere from a medium negative to a medium positive relationship.

4 Comparing rating-raises to rating-critical correlations

The correlation of the difference between ratings and raises and ratings and critical was Δr = .43, 95% CI [.07, .79], p = .02, N = 30. However, the confidence interval is quite wide, and is consistent with anywhere from a weak positive to a very strong positive relationship.

5 Comparing rating-raises to complaints-critical correlations

The correlation of the difference between ratings and raises and complaints and critical was Δr = .40, 95% CI [.01, .78], p = .05, N = 30. However, the confidence interval is quite wide, and is only sufficient to suggest that the relationship is likely not negative.

6 Comparing two correlations of rating-raises

The correlation of the difference between orginal (N = 30) and replication (N = 3000) studies on the correlation of ratings and raises was Δr = .56, 95% CI [.03, .76], p = .0008 . Statistically, this means that we cannot rule out that the two correlations came from the same population.

7 Strength of rating-raises correlation

The correlation between ratings and raisess obtained in Table 1 was $r = .59$, 95% CI [.29, .78]; however, this correlation came from a sample of 30. We could not rule out that a correlation of .03 from a sample of 3000 came from a different population. Because a sample size of 3000 is considerably larger than a sample size of 30, we should assume that the second correlation is much more informative than the first study. As such, we can infer that there is likely a very weak positive correlation between ratings and raises.