

6060 Practice: RMarkdown

Parco Sin

1 Comparing the correlation between (A1, C1) to the correlation between (E1, O1).

The comparison for the correlations between A1,C1 and E1,O1 was $\Delta r = -.001$, 95% CI $[-.11,.09]$, $n = 759$. The confidence interval is consistent with anywhere between a weak negative and weak positive relationship.

2 Comparing the correlation between (A1, C1) to the correlation between (A1, E1).

The comparison for the correlations between A1,C1 and A1,E1 was $\Delta r = -.080$, 95% CI $[-.18,.02]$, $n = 764$. The confidence interval is consistent with anywhere between a weak negative and weak positive relationship.

3 Comparing the (A1,E1) correlations for men and women.

The comparison for the correlations between A1,E1 between men and women was $\Delta r = .017$, 95% CI $[-.13,.16]$, $n = 251$ for men and $n = 518$ for women. The confidence interval is consistent with anywhere between a weak negative and weak positive relationship.

4 Comparing Rating-Raises correlation with Rating-Critical Correlation

The comparison for the correlations between ratings and raises and ratings and critical was $\Delta r = .43$, 95% CI $[.07,.79]$, $N = 30$. The confidence interval is consistent with anywhere between a weak positive and moderately strong positive relationship.

5 Comparing Rating-Raises correlation with complaints-Critical Correlation

The comparison for the correlations between ratings and raises and complaints and critical was $\Delta r = .40$, 95% CI $[.01,.78]$, $N = 30$. The confidence interval is consistent with anywhere between a weak positive and moderately strong positive relationship.

6 Rating-raises correlation differs with a rating-raises correlation with $r=.03$, $N = 3000$

The original correlation is 0.03 - with a prediction interval 95% PI $[-.34, .39]$ based a replication sample size of $N = 3000$. If the replication correlation differs from the original correlation only due to sampling error, there is a 95% chance the replication result will fall in this interval. If the replication correlation falls outside of this range, factors beyond sampling error are likely also responsible for the difference.

7 Conclusion from #6

The original correlation between ratings and raises was $r = .59$, 95% CI $[.29, .78]$, $N=30$. The correlation of the second study between ratings and raises was $r = .03$ $[-.34, .39]$, $N=3000$. The second study had a much larger N value, which suggests that researchers may want to value the results from the second study more heavily. In this case, we cannot say there is an effect between ratings and raises, since the confidence intervals for the second study are spread far above and beyond 0. Furthermore, the replication correlation does not fall out of the replication range. Therefore, we do not suspect that there are factors beyond sampling error.