

CHAPTER OVERVIEW

13: Correlations

A common theme throughout statistics is the notion that individuals will differ on different characteristics and traits, which we call variance. In inferential statistics and hypothesis testing, our goal is to find systematic reasons for differences and rule out random chance as the cause. By doing this, we are using information on a different variable – which so far has been group membership like in ANOVA – to explain this variance. In correlations, we will instead use a continuous variable to account for the variance.

[13.1: Variability and Covariance](#)

[13.2: Visualizing Relations](#)

[13.3: Three Characteristics](#)

[13.4: Pearson's \$r\$](#)

[13.5: Anxiety and Depression](#)

[13.6: Effect Size](#)

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[13.8: Final Considerations](#)

[13.E: Correlations \(Exercises\)](#)

Thumbnail: Correlation shown when the two variables' ranges are unrestricted, and when the range of is restricted to the interval (0,1). (CC BY 3.0 Unported; [Skbkek](#) via [Wikipedia](#))

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