

## CONDUCTING ANOVAS WITHOUT DATA

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### ABSTRACT

We present a simple method for conducting factorial ANOVAs in the absence of data. The method relies on descriptive statistics, namely the mean, variance, and sample size for each cell in the design. We briefly describe how this method can easily be generalized to any number of factors, allowing us to analyze n-way factorial ANOVAs with any number of interactions. We then introduce the idea that this method allows us to (a) perform ANOVAs from existing studies that did not themselves perform ANOVAs and (b) combine descriptives from multiple studies in order to cumulate them into a sort of meta-analytic ANOVA.

Keywords: *Analysis of Variance, Factorial ANOVA, Meta-Analysis*