## Hierarchical analysis of experiments involving complex ANOVA

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## Abstract

In experimental psychology researchers often resort to 3 factors (and more) ANOVA, and the reported research may include more than just one ANOVA. The abstract and discussion often highlight the very limited set of results selected from all levels. We explain the use of the hierarchical FDR testing to address such problems. We then demonstrate the impact of using FDR control to reduce the replicability problem reported in Psychology Reproducibility Project.