

M.Res. ANOVA assignment in R

In this assignment you need to analyse data from two separate experiments using ANOVA in R. You need to create a markdown document in .doc format using R Markdown. This document should contain all of your code, the output generated by R, and a write up of the results in APA format for each question. Remember to include comments so you can tell me what you are doing (and why). Remember to first build a data visualization before going on to analyse your data.

Question 1

These data are from a 2 x 2 mixed design where the first factor is repeated measures, while the second is between subjects. Participants had to read out words that were presented in either Large or Small print – this is our repeated measures factor. Participants belonged to either a Younger group of participants (Group 1) or an Older group (Group 2) – this was our between subjects factor. Speech onset to read out the words was measured – this is our DV and is labeled *Onset*. How do our two factors influence speech onset times? The data file is dataset1.csv

Question 2

These data are from a 1-way between subjects design. Speech duration (our DV which is labeled *Duration*) was measured as people read out words that either had an Easy or Hard pronunciation. We also measured people's Verbal IQ (our covariate). How does speech duration for Easy vs. Hard words vary when we don't account for Verbal IQ differences? How does speech duration vary when we do account for Verbal IQ? The data file is dataset2.csv