

PSYC 7720 Lab

Lab 10 Activity

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Directions:

- A. Download the `angle_noise_data.csv`. This is a two-factor within subjects design with two levels of the noise factor and three levels of the angle factor. In the data, `abs` represents the condition where noise is absent and `pres` represents where noise is present. The 0, 4, and 8 denote the three different angle conditions. The measurements in each cell are aggregated reaction times.
- B. Answer the following questions and save the code you used in an R script.
- C. You have until the end of lab to complete.

Questions:

1. Convert the `angle_noise_data` from wide format to long format. Name the first column *id*, the second column *noise*, the third column *angle*, the fourth column *rt*, and the dataframe *long_data*. Print the head and the dimensions of the long data.
2. Ensure that the within-subjects conditions are appropriately implemented as qualitative and/or quantitative factors. Print the appropriate structure of *long_data* using `str()`.
3. Run and interpret the results of the two-way factorial RM ANOVA using `aov`.
4. Run and interpret the results of the two-way factorial RM ANOVA using `ezANOVA`.