**Power Analysis with R (pwr and simr)**

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**Description**

This workshop focuses on statistical power. In this workshop, we will learn what statistical power is, why power analyses are performed, and what you need to pay attention to. Furthermore, we will calculate the power of for several statistical procedures with a focus on mixed-effects models using pwr and simr in R.

**Aims**

By the end of this seminar, you will:

• Understand the basic principles behind power analysis

• Have a practical sense for what you need to pay attention to and why some power analyses may provide misleading/inaccurate results

• Know how to perform power analyses in R using pwr and ggplot2

• Know how to refine power analyses to find minimum number of participants in experiments

**Prerequisites**

The course requires that you have basic working knowledge of R and how to work in/with RStudio. In preparation of the workshop, please carefully read this tutorial: <https://slcladal.github.io/intror.html>

The workshop will build on but substantively expand this tutorial on power analysis: <https://slcladal.github.io/pwr.html>

**Materials**

Materials and links to documents will be made available later down the line.