

## Introduction to R

---

Eren Halil ÖZBERK & Elif Bengi ÜNSAL ÖZBERK

R is a powerful, flexible and open-source software package for statistical programming, data analysis and graphical data representation. In many research domains, such as bioinformatics, biostatistics R is the most often used program for statistical analysis. Increasingly, in psychometrics, R has been using basic data analysis, graphical representation, simulation studies, test and item parameter estimations. This workshop will focus how to apply psychometrics theory analysis in R language. The workshop involves a mix of slides, collaborative hands-on material and in-class exercises mostly related with psychometrics.

### Content

Workshop has been designed as two parts. Morning section includes data import, data manipulation, data management, and producing publication quality graphics. Noon section includes designing basic simulation studies, highlighting psychometric-related R packages, classical test theory analysis (item and distractor analysis, reliability), item response theory analysis (item and ability parameter estimation, differential item functioning, test equating).

### Target

This workshop is designed for entry and mid-level R users. Workshop will mainly focus on how to perform statistical techniques in R, but the theory behind the techniques is assumed to be known. Participants use their own laptops and setup instructions will be provided by instructors.

For further details, please contact: [epod2016akdeniz@gmail.com](mailto:epod2016akdeniz@gmail.com)