Implementation of

*Introduction to R for Social Scientists*

as a Preparatory Course in IPSDS

Florian Keusch

University of Mannheim

International Program in Survey and Data Science
International Program in Survey and Data Science (IPSDS)

• Started in 2016 as collaboration between University of Mannheim and University of Maryland
  • Funded by German Federal Ministry of Education and Research
• International faculty from academia and industry
• Currently 58 students in 4 cohort
  • 21 countries (5 continents) of residence; median age = 31; 100% working professionals
• Fully taught online
  • Asynchronous
  • Synchronous
Learning objectives / Modules

- Data Generating Process
- Data Curation/Storage
- Data Analysis
- Data Output/Access
- Research Question

Learn how to communicate results and distribute and store your data

Learn a variety of analysis methods suited for different data types

Learn how to curate and manage data

Understand how to collect data yourself, and how data are generated through administrative and other processes.

Learn how to formulate your research goal and which data are best suited to achieve it.

Source: Usher in Japec et al 2015
International Program in Survey and Data Science (IPSDS)

Admission requirements

• Academic degree (min. Bachelor’s degree)
• At least 12 ECTS in mathematical/applied statistics
• At least one year of work experience in a position working with data
• English proficiency

Need for Intro to \( R \) Course

• \( R \) used in many IPSDS courses, but no intro course taught in the program
• Assumption so far was that students would either know it already or catch up on their own using other sources (e.g., free online tutorials, DataCamp, etc.)
Technical Implementation

• Course implemented on Canvas by IT assistant

• Documentation was very helpful

• No technical issues
Course Goals and Implementation into existing IPSDS Program

• Course intended to help students who had no prior experience with R
• Participation was voluntary and completely self-paced
  • Only minimal oversight by instructors and IT assistant
• All existing and incoming IPSDS students invited to take course
• 23 students enrolled
  • 15 finished entire course – will receive certificate
  • 2 finished (almost) all modules but did not do Final Project
  • 6 just started but did not do more than one module
What was the Experience?

• Overall, very positive feedback from students
  • Both in evaluations and on Canvas

• True impact of course will be determined based on students success in other courses where students without experience struggled in the past
  • e.g., Introduction to Real World Data Management

• If experience is positive, we will consider this as a long term solution for incoming students
Thank You!

Florian Keusch
University of Mannheim
School of Social Sciences
International Program in Survey and Data Science

✉️ f.keusch@uni-mannheim.de
🌐 https://survey-data-science.net/