

Social Robotics

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Exercise Sheet 10

Due: February 6, 2018, 10:00

Exercise 10.1

In this exercise, we want you to design and simulate some experiments for the social robots you conceived for Exercise Sheet 1. The scenario is that you have built a first prototype of your product and you want to find out whether or not the prototype fulfills the requirements.

- (a) Formulate three research questions that are of interest. Provide a rationale for your hypotheses.
- (b) Describe how you plan to investigate the hypotheses using the statistical methods you know from the lecture.
- (c) Invent some experimental data for the purpose of simulating the statistical analysis. (Never do this in practice!)
- (d) Perform the analysis in R on your invented data. Proceed exactly as described in (b).
- (e) Formulate reports for your simulated experiments. Your reports should adhere to the APA guidelines (check the internet).

Exercise 10.2

Prepare a short presentation (5 to 10 minutes) describing your simulated research conducted in Exercise 8.1, and be prepared to present them in the exercise session on next Thursday, February 8th.