

## Study Objectives

- Final Research Question:** Ensure the research question is clear, focused, and directly related to the study objectives. A well-defined question guides the entire experiment.
- Final Hypothesis:** A testable hypothesis that makes a prediction based on the research question. The hypothesis should be specific and measurable.

## Variables

- Independent Variables:** Identifying and defining the variables you will manipulate. These are the causes you're testing.
- Dependent Variables:** Identifying and defining the variables you will measure. These outcomes depend on the independent variables.
- Control Variables:** List variables that will be kept constant to prevent them from influencing the outcome. This ensures that any change in the dependent variable is due to the independent variable(s).

## Study Details

- Study Design:** An appropriate design (e.g., between-subjects, within-subjects) that fits the research question and hypothesis. The design should facilitate clear, interpretable results.
- Study Conditions:** Describe the specific conditions under which the experiment will take place, including any variations between conditions.
- Participants:** The selection criteria, recruitment methods, and size of the participant pool. Consider the sample is representative of the population being studied.
- Procedure:** Outline of the step-by-step process, including how participants are assigned to conditions and how data are collected. A clear procedure ensures replicability.

## Study Materials

- Consent Form:** A consent form that explains the study, its risks, and benefits, ensuring ethical standards are met.
- Designs:** Conditions or visuals of the experimental setups or interventions.
- Measurement Tools:** Specify and validate the tools or instruments used for data collection. Ensure they are reliable and valid for your variables.
- Data Collection Plan:** How and when data will be collected, ensuring consistency across conditions and participants. This plan prevents logistical oversights and ensures data integrity.
- Pilot Study:** Consider conducting a small-scale pilot study to test the feasibility of your experiment design, procedure, and materials. This can help identify any issues before the full-scale study.

## Preparation for the next workshops

- From Week 5 onwards, in the Workshops, we will show you how to analyze data with SPSS in a practical way. You will therefore need to install SPSS on your computers. Download and install the appropriate version for your device from this link: <https://www.tudelft.nl/studenten/ict/software>