

Social Psychology Experimental Design

1. Research Question

Every study starts with a clear, testable question that identifies what you want to understand or measure.

Example: “Does peer pressure increase conformity in decision-making?”

2. Hypothesis

The hypothesis is an educated prediction about what you expect to find — a statement you can test.

It usually connects the **independent variable (cause)** and **dependent variable (effect)**.

Example: “Participants surrounded by confederates giving wrong answers will conform more often than those answering alone.”

3. Operational Definitions

Operational definitions explain **how variables will be measured or manipulated** in specific, observable terms.

This ensures that someone else could replicate the study using your same definitions.

Example: “Conformity will be measured by the percentage of participants who give the same incorrect answer as the group.”

4. Independent Variable (IV)

The independent variable is what the researcher **changes or manipulates** to test its effect.

It’s the “cause” in the cause-and-effect relationship.

Example: The number of people giving incorrect answers in a group setting.

5. Dependent Variable (DV)

The dependent variable is what the researcher **measures** — the outcome or effect that may change as a result of the IV.

Example: The number of times the participant conforms to the incorrect group answer.

6. Participants / Volunteer Selection

Researchers describe **who** will be in the study and **how** they’ll be chosen (random selection, convenience sample, etc.).

In real experiments, ethical recruitment and informed consent are required — but in this classroom exercise, focus on the logic of who you’d study and why.

7. Experimental and Control Groups

The **experimental group** experiences the independent variable, while the **control group** does not. Comparing results between these groups helps determine whether the IV caused any effect.

Example: One group sees false answers from peers; another answers alone.

8. Procedures

This is the **step-by-step plan** for conducting the study.

It should be detailed enough that another researcher could repeat it exactly.

Include how participants are treated, what tasks they perform, and how data are recorded.

9. Data Collection Methods

Explain **how** you'll gather data — surveys, observation, reaction times, etc.

The method should match your hypothesis and allow for objective measurement of your dependent variable.

Example: Counting conformity responses during a line-judging task.

10. Data Analysis

Describe how the data will be summarized or tested — using averages, percentages, or statistical comparisons.

Even in simplified student projects, you should identify what result would support or reject your hypothesis.

11. Potential Confounding Variables

Confounds are **uncontrolled factors** that might affect your results.

Identifying and minimizing them strengthens the reliability of your experiment.

Example: Participant age, prior knowledge, or stress level.

12. Ethical Considerations

Social psychology has a long history of controversial studies.

Even though your class designs may include “unethical” ideas for discussion, real researchers must ensure informed consent, protect participants from harm, and debrief them afterward.

Reflect on which ethical principles their experiment might violate.

13. Predicted Results & Implications

Finally, describe what they **expect to find** and what it might **mean** for understanding human behavior.

Connecting the results back to broader psychological theories shows the purpose behind the study.