

PSY 222 Research Methods

Price (v 3.0) Chapter 6: Experimental Research

Learn about each key term/concept so that you are able to:

Recall the definition and examples.

Perform it if it is a skill or procedure.

Identify and evaluate the accuracy of new examples.

Look for **relationships** between concepts.

Distinguish between similar concepts.

Create new examples of the concept, if applicable.

Study reminders

- Use spaced retrieval practice
- Study–wait–test all–repeat
- Avoid simple rereading and cramming
- Practice what you will do on the exam

Key terms. Define each term and give examples (additional terms not in the textbook)**

Experiment	Block randomization	Practice effect
Internal validity	Treatment	Fatigue effect
External validity	Treatment condition	Context effect
Field experiment	Control condition	Counterbalancing
Manipulate	Randomized clinical trial	Subject pool
Condition	No-treatment control condition	Experimenter expectancy effect
Manipulation check	Placebo	Double-blind design
Extraneous variable	Placebo effect	Pilot test
Control	Placebo control condition	** Clever Hans effect
Confounding variable	Waitlist control condition	** Ideomotor effect
Between-subjects experiment	Within-subjects experiment	
Random assignment	Carryover effect	

Practice writing answers to these questions as you would for an exam (≈ 80-100 words). When possible, illustrate abstract concepts with concrete examples.

1. Explain what internal validity is and why experiments are considered to be high in internal validity.
2. Explain the difference between between-subjects and within-subjects experiments, list some of the pros and cons of each approach, and decide which approach to use to answer a particular research question.
3. Define random assignment, distinguish it from random sampling, explain its purpose in experimental research, and use some simple strategies to implement it.
4. Define what a control condition is, explain its purpose in research on treatment effectiveness, and describe some alternative types of control conditions.
5. Define several types of carryover effects, give examples of each, and explain how counterbalancing helps to deal with them.
6. Describe several strategies for recruiting participants for an experiment.
7. Explain why it is important to standardize the procedure of an experiment and several ways to do this.
8. Explain what pilot testing is and why it is important.
9. Explain what it means to engage in open science practices when conducting an experiment.

Other required material

Readings: <https://skepdic.com/ideomotor.html> <https://skepdic.com/cleverhans.html>

PSY 222 Research Methods
Price (v 3.0) Chapter 7: Nonexperimental research

Learn about each key term/concept so that you are able to:

- Recall** the definition and examples.
- Perform** it if it is a skill or procedure.
- Identify and evaluate the accuracy** of new examples.
Look for **relationships** between concepts.
- Distinguish** between similar concepts.
- Create new examples** of the concept, if applicable.

Study reminders

- Use spaced retrieval practice
- Study–wait–test all–repeat
- Avoid simple rereading and cramming
- Practice what you will do on the exam

Key terms. Define each term and give examples (additional terms not in the textbook)**

Nonexperimental research	Content analysis	Interview
Single-variable research	Nonequivalent groups design	Focus group
Correlational research	Pretest-posttest design	Participant observation
Quasi-experimental research	History	Grounded theory
Qualitative research	Maturation	Theoretical narrative
Naturalistic observation	Regression to the mean	Mixed-methods research
Coding	Spontaneous remission	Triangulation
Archival data	Quantitative research	

Practice writing answers to these questions as you would for an exam (≈ 80-100 words). When possible, illustrate abstract concepts with concrete examples.

1. Explain when a researcher might choose to conduct nonexperimental research as opposed to experimental research.
2. Explain how the ideomotor effect is related to facilitated communication, dowsing, and the Clever Hans effect.
3. What type of research is most susceptible to the Clever Hans effect, and how can researchers minimize the Clever Hans effect?
4. Explain why a researcher might choose to conduct correlational research rather than experimental research or another type of nonexperimental research.
5. Explain quasi-experimental research and distinguish it clearly from both experimental and correlational research.
6. List several ways in which qualitative research differs from quantitative research in psychology.
7. Describe the strengths and weaknesses of qualitative research in psychology compared with quantitative research in psychology.

Other required material