

# PS906-15 Experimental Design and Data Collection

**21/22**

**Department**

Psychology

**Level**

Taught Postgraduate Level

**Module leader**

Michaela Gummerum

**Credit value**

15

**Module duration**

10 weeks

**Assessment**

100% coursework

**Study location**

University of Warwick main campus, Coventry

---

## Description

### Introductory description

This module will familiarize students with the principles of good experimental design

[Module web page](#)

### Module aims

- To familiarize students with the principles of good experimental design, and the various ways in which empirical data is collected
- To deepen students' understanding of the best ways to address different kinds of research problems
- To teach students how to critically assess research articles

### Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

1: Validity

- 2: Randomized designs
- 3: Reliability
- 4: Non-randomised designs
- 5: Meta-analysis
- 6: Observational methods
- 7: Sampling
- 8: Ethical considerations
- 9: Survey and questionnaire studies
- 10: Case studies and longitudinal research

## **Learning outcomes**

By the end of the module, students should be able to:

- Assess the advantages and uses of alternative experimental and non-experimental designs
- Design a logically sound experiment to test a hypothesis
- Identify common errors in poorly designed experiments
- Outline the key techniques for collecting qualitative data
- Design a protocol for collecting non-experimental data to address a research question

## **Indicative reading list**

Rosenthal, R., & Rosnow, R.L. (2008). Essentials of behavioral research (3rd Ed). McGraw-Hill: New York.

Howell, D. C. (2017). Statistical methods for psychology (9th ed.). Belmont, CA: Duxbury Press.

Todman, J. B., & Dugard, P. (2001). Single-case and small-N experimental designs. Mahwah, NJ: Erlbaum.

Tourangeau, R., Rips, L. J., & Rasinski, K. (2000). The psychology of survey response. Cambridge, England: Cambridge University Press.

[View reading list on Talis Aspire](#)

## **Subject specific skills**

- Familiarity with the principles of good experimental design and identification of errors in poor experimental design
- Employment of evidence-based and critical reasoning
- Examination of practical, theoretical, and ethical issues associated with a range of methodologies

## **Transferable skills**

- effective personal planning skills
- effective communication skills to develop a cogent argument supported by relevant evidence

---

## **Study**

## Study time

Type	Required
Lectures	10 sessions of 1 hour (7%)
Seminars	10 sessions of 1 hour (7%)
Private study	130 hours (87%)
Total	150 hours

## Private study description

130 hours guided private study

## Costs

No further costs have been identified for this module.

---

## Assessment

You do not need to pass all assessment components to pass the module.

Students can register for this module without taking any assessment.

## Assessment group A3

	Weighting	Study time
Research proposal 1	16%	
Between 1000 and 2000 words. 16.5%		
Research proposal 2	17%	
Between 1000 and 2000 words. 16.5%		
Class test - online	67%	

## Feedback on assessment

Formative feedback on class presentations during seminars, and during seminar discussions of papers. Summative feedback through comments on Research Proposal manuscripts and general summary of performance on the Class Test.

---

## Availability

## **Courses**

This module is Core for:

- Year 1 of TPSS-C8P5 Postgraduate Taught Clinical Applications of Psychology

This module is Optional for:

- Year 1 of TPSS-C8P9 Postgraduate Taught Psychological Research