

PS906-10 Experimental Design and Data Collection (ESRC DTP version)

21/22

Department

Psychology

Level

Taught Postgraduate Level

Module leader

Michaela Gummerum

Credit value

10

Module duration

10 weeks

Assessment

100% coursework

Study location

University of Warwick main campus, Coventry

Description

Introductory description

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

[Module web page](#)

Module aims

- To familiarise 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 non-experimental 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 (10%)
Seminars	10 sessions of 1 hour (10%)
Private study	80 hours (80%)
Total	100 hours

Private study description

80 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.

Assessment group A

	Weighting	Study time
Class Test	67%	
In-class test - Short answer		
Research Proposal	33%	
2000-word research proposal		

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 TIMA-L981 Postgraduate Social Science Research