

EQ925-30 Research Methods in Psychology and Education

21/22

Department

Education Studies

Level

Taught Postgraduate Level

Module leader

Dimitra Hartas

Credit value

30

Module duration

35 weeks

Assessment

100% coursework

Study location

University of Warwick main campus, Coventry

Description

Introductory description

This module will run through the Autumn and Spring terms. The aim of this module is to provide students with a foundation training in research methods in psychology and education. It is designed to meet the needs of home and international students who seek to enhance their learning experience with research methods. The module has two main ambitions. The first is concerned with enabling students to engage in understanding, designing and implementing research projects (ie, dissertation). The second is concerned with equipping students with basic skills in a range of established research strategies and techniques. This is intended to enable students to frame and refine research questions, to design a research appropriate to their own research interests.

Module aims

- to introduce students to methods commonly used in applied research across the disciplines of psychology and education.
- to increase student knowledge of methodologies used to develop the evidence-base for interventions that aim to inform educational policy and practice.
- to encourage students to critically approach and review research evidence.

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.

Research Methods in Psychology and Education Time (and session source)

1. Advanced Library Sources and Library Methods (1 hr) Wk 2 autumn (IE909)
2. The use of case studies in educational research (6 hrs) Wk3 autumn (IE909)
3. Ethical issues in conducting educational research (2hrs) Wk5 autumn (IE909)
4. Survey research and Questionnaire Development (2 hrs) Wk 6 autumn (IE909)
5. SPSS workshop –IT services (4 hrs) Wk7 autumn (IE909)
6. Quantitative Data analysis (6 hrs) Wk 8 autumn (IE909)
7. Evidence-based practice in education: methodology I overview implementation science; experimental design in group and single case studies (4 hrs) Wk 9 autumn (new)
8. Evidence-based practice in education: methodology II: systematic review and meta-analysis (4 hrs) Wk 10 autumn (new)
9. Secondary data analysis and advanced quantitative methods (6 hrs) Wk 7 spring (new)
10. Analysis and interpretation of qualitative data (5 hrs) April- (ARM)
11. Bringing it all together: overview and revision (2 hrs) May (New)

Learning outcomes

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

- By the end of the module, students should be able to:- Identify appropriate research methods to address research questions in the field of psychology and education
- - Discuss the different assumptions behind different methodological paradigms
- - Describe methodologies for developing the evidence-base of interventions.
- - Critically evaluate evidence on efficacy and effectiveness

Indicative reading list

Coe, R. (2002). 'It's the effect size, stupid'. What effect size is and why it is important. Paper presented at the Annual Conference of the British Educational Research Association. Available from <https://www.leeds.ac.uk/educol/documents/00002182.htm>

Cohen, J. (1994). The earth is round ($p < .05$). *American Psychologist*, 49, 997-1003.

Cohen, J. (1990). Things I have learnt (so far). *American Psychologist*, 45, 1304-1312.

Cohen, L., et al. (2011). *Research Methods in Education*. Oxon: Routledge.

Goldacre, B (2013). *Building Evidence Into Education*. Available from:
<http://media.education.gov.uk/assets/files/pdf/b/ben%20goldacre%20paper.pdf>

Gottfredson, D. C., Cook, T. D., Gardner, F. E. M., Gorman-Smith, D., Howe, G. W., Sandler, I. N., & Zafft, K. M. (2015). Standards of Evidence for Efficacy, Effectiveness, and Scale-up Research in Prevention Science: Next Generation. *Prevention Science*, 16(7), 893-926.

- Gough, D. & Thomas, J. (2016). Systematic reviews of research in education: Aims, myths and multiple methods. *Review of Education*, 4, 84-102.
- Hartas, D. (2010) *Educational research and inquiry: qualitative and quantitative approaches*. London: Continuum International Publishing Group.
- Hutchinson, D., & Styles, B. (2010). *A guide to running randomised controlled trials for educational research*. NFER.
- Kratochwill, T. R., Hitchcock, J., Horner, R. H., Levin, J. R., Odom, S. L., Rindskopf, D. M & Shadish, W. R. (2010). *Single-case designs technical documentation*. Available from What Works Clearinghouse website: http://ies.ed.gov/ncee/wwc/pdf/wwc_scd.pdf.
- Newby, P. (2014). *Research Methods for Education*. (2nd ed.) Oxon: Routledge.
- Robson, C., & McCartan, K. (2016). *Real-world research: A resource for users of Social research Methods in Applied Settings*. Chichester: Wiley.
- Thomas, D.R. (2006). A general inductive approach for analysing qualitative evaluation data. *American Journal of Evaluation*, 27, 227-246.
- Torgerson, C., Hall, J. & Light, K. (2012). Systematic reviews. In J. Arthur et al. (Eds), *Research Methods and Methodologies in Education*. London: Sage.
- Torgerson, C.J., Torgerson, D.J. & Brown, C.A. (2015). Randomized controlled trials. In K. Newcomer, H. Hatry, & J. Wholey (Eds.), *Handbook of Practical Program Evaluation* (4th Ed.), pp 158-176. San Francisco: Jossey-Bass Wiley.
- Also:
- British Educational Research Association (2011). *Revised ethical guidelines for educational research*. Southwell: BERA. <http://www.bera.ac.uk/researchers-resources>
- British Psychological Society (2010). *Code of Human Research Ethics*. Available from http://www.bps.org.uk/sites/default/files/documents/code_of_human_research_ethics.pdf
- [View reading list on Talis Aspire](#)

Subject specific skills

Students should demonstrate a critical understanding of -

- constructively critique research in the area of education.
- generate and explore hypotheses and research questions
- carry out empirical studies ethically involving a variety of methods of data collection
- analyse data and present and evaluate research findings

Transferable skills

- Analysis and decision making
- Communication skills
- Critical thinking

- Data handling
 - Interpersonal and communication
 - Problem solving
 - Using IT effectively
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Study

Study time

Type	Required	Optional
Lectures	4 sessions of 1 hour (1%)	
Seminars	11 sessions of 2 hours (7%)	4 sessions of 2 hours
Practical classes	10 sessions of 1 hour (3%)	
Private study	264 hours (88%)	
Total	300 hours	

Private study description

Independent study hours include background reading, completing reading/other tasks in preparation for timetabled teaching sessions, undertaking research using the library resources, follow-up reading work, working on individual and group projects, the completion of formative and summative assignments, revision.

Costs

No further costs have been identified for this module.

Assessment

You must pass all assessment components to pass the module.

Assessment group A1

	Weighting	Study time
Critical Review of a Research Paper and answering 2 questions via a review of relevant studies.	100%	120 hours

There are two parts in this assignment:

Part 1

Students are offered 4 research papers to choose one to critique for Part 1. Its aim is to

Weighting

Study time

determine students' skills in understanding and critiquing research. They are asked to critically evaluate theoretical and methodological aspects of the research. Their paper should broadly follow this structure:

- Introduction/background to the study: what is the general area of this research, what has been done before this study, why is this study important, i.e., what is the gap in our knowledge that the study is addressing? Spell out the research question the authors sought to address.
- Methods: what was the design of the study; was it quantitative or qualitative or mixed? What was the type of the methodology / research design? What does this methodology do? In summary, who were the participants – main characteristics, selection criteria- what are the implications of sample selection criteria in terms of the validity and generalisability of the study? What were the outcomes measured (and, if relevant, how did they measure them)? ;
- Results/Study findings: what were the analyses done and what did the results say?;
- Discussion of the findings in relation to the research questions and methodology: What is the take home message from this study in your view?;
- Study strengths and limitations: with hindsight, what did the researchers do well, what not so well? In what ways the limitations are likely to affect the conclusions drawn;
- Conclusions on the merit of the research method and how well it addressed the research question: did the methods used allow the researchers to successfully address the research question? If not, why not? Did the study leave any gaps in our knowledge – was it not able to address all it set out to address? In your and authors' view, what are the future research directions?

Part 2

Part 2 (2500 words in total) involves answering two questions on general topics in Research Methods. The aim of part 2 is to determine their level of understanding of key research methods topics covered during the year. Both questions have an equal weighting in the final mark.

Question 1 (1250 words): What are the ethical considerations and implications of conducting research in the field of psychology and education? How can we ensure that participants are not harmed by the research conduct? [In answering this question, you may consider issues of informed consent, anonymity and confidentiality, decisions about inclusion / exclusion of participants and benefits or potential harms for the research participants.]

Question 2 (1250 words): What are the advantages and limitations of doing secondary data analyses? In considering advantages and limitations of secondary data analyses, think about the theoretical, methodological, ethical and practical aspects of doing secondary data analyses and their implications on interpreting the results.

To answer the above questions, you are expected to read on these topics and to use a relevant bibliography. There are research methods textbooks and papers on 1) research ethics and 2) secondary data analyses on Moodle pages for you to access.

Feedback on assessment

Assessment feedback as standard for a written assignment. Copies would be provided to the students.

Availability

Courses

This module is Core for:

- Year 3 of TEQA-C8X3 Postgraduate Taught Psychology and Education

This module is Core optional for:

- TEQA-C8X3 Postgraduate Taught Psychology and Education
 - Year 1 of C8X3 Psychology and Education
 - Year 2 of C8X3 Psychology and Education
- TEQA-C8X4 Postgraduate Taught Psychology and Education
 - Year 1 of C8X4 Psychology and Education
 - Year 2 of C8X4 Psychology and Education