London South Bank University

Module Guide

Exploring British Attitudes: Quantitative Methods in Social Research

DSS_5_EBA

School of Law and Social Sciences

Level 5

Table of Contents

1. MODULE DETAILS

Module Title:	Quantitative Methods in Social Research
Module Level:	Level 5
Module Reference Number:	DSS_5_QM1
Credit Value:	20 Credits
Student Study Hours:	150
Contact Hours:	40
Private Study Hours:	110
Pre-requisite Learning (If applicable):	Researching London Life
Course(s):	Politics, International Relations and Sociology
Year and Semester	Year 2 Semester 1
Module Coordinator:	Matthew Bond
MC Contact Details (Tel, Email, Room)	Tel: 020 7815 5730 BR243
Teaching Team & Contact Details	Matthew Bond
Office Hours:	Fridays 11-12
Summary of Assessment Method:	Literature review and Statistics assignment
External Examiner appointed for module:	Dr Gary Hazeldine, Birmingham City University
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Teaching plan

Week 1	Introduction to quantitative research
Week 2	Generating a research question
Week 3	Experimental design
Week 4	Measurement and developing indicators
Week 5	Study week
Week 6	Social surveys: Sampling and questionnaire design
Week 7	Introduction to data analysis
Week 8	Statistical inference and estimation
Week 9	Analysis of Variance and Chi-squared test of independence
Week 10	Correlation and regression 1
Week 11	Correlation and regression 2
Week 12	Module wrap-up and review

2. SHORT DESCRIPTION

The social sciences are centrally a problem-solving endeavour: asking and answering question to better understand social life. Research methods are the tools we use to search for solutions and deepen our understanding of social processes. In this module, we will explore methods for collecting and analysing quantitative data. The module has four main goals:

1) To develop your understanding of the nature of social science explanations, especially quantitative explanations;

2) To develop your ability to generate a research question and answer it.

3) To develop your understanding of how quantitative data are generated; and

4) To develop your quantitative data analysis skills.

The module will also specify key features of quantitative research design. It will provide you with hands-on experience of using SPSS computer software specifically designed to analyse quantitative data.

3.   AIMS OF THE MODULE

- To provide students with the ability to search the literature.

- To provide students with awareness of the main considerations when developing their own studies.

- To provide students with the necessary skills to evaluate the strengths and weaknesses in the use of quantitative research methods;

- To offer students the relevant skills to identify diverse research strategies and methods and illustrate their use in gaining social scientific knowledge;

- To develop students' ability to generate quantitative data;

- To develop students' ability to interpret statistical findings; and

- To encourage students to use statistical software packages to analyse quantitative data.

4.   LEARNING OUTCOMES

At the end of the module, you should be able:

To generate a suitable research question

To identify and review the literature on a topic

To apply appropriate techniques to the collection and analysis of quantitative data;

To provide an understanding of the relationship between measurement, theory construction and testing;

To outline the principal methods of data collection, their applications and limitations;

Use SPSS to analyse data;

To demonstrate greater proficiency in IT skills (word processing and data analysis skills); and

To have the ability to critically employ quantitative data in oral and written communication.

5.   ASSESSMENT OF THE MODULE

[Click This module is assessed by two pieces of work:
Assignment 1 is a literature review based on a research question of your choice. The literature review should be 1,500 words in length. We will discuss Assignment 1 in detail during Session 2. This assignment will comprise 30 % of your final marks. The DEADLINE for submitting Assignment 1 is 25th November 2019.
Assignment 2 is data analysis. This takes the form of a series of questions you must answer by carrying out appropriate analytical procedures using SPSS and writing a short report of your findings, illustrated by graphs and charts. What is required of you will become clear during the computer lab sessions. This assignment will comprise 70% of your final marks. This DEADLINE for submitting Assignment 2 is 10th January 2019.

6.   FEEDBACK
Feedback will normally be given to students 15 working days after the final submission of an assignment or as advised by their module leader.

General feedback, applying to all students, will also be placed on the module VLE site within 15 working days.

7.   INTRODUCTION TO STUDYING THE MODULE

7.1   Importance of Student Self-Managed Learning Time
Student responsibility in the learning and development process will be emphasised. Students are required to undertake directed self-study and prepare solutions/discussions to questions relative to various topic areas. Students will be encouraged to identify for themselves particular problems of difficulty and to use seminar discussions, where appropriate, for the resolution of these. Students must regularly access the Moodle site for this module. They should download the class/lecture material from the Moodle site, and do the recommended reading, before each lecture/class.
Where appropriate, students are also expected to download the relevant seminar questions and study them in advance of each seminar, in order to derive maximum benefit from seminar time. The programme of teaching, learning and assessment gives guidance on the textbook reading required for each week, the purpose of which is to encourage further reading both on and around the topic.

8.   THE PROGRAMME OF TEACHING

Week	Topic
1	**Lecture: Introduction to quantitative social research** What is it? How does it differ from other research? Outline of basic concepts and processes.

	Seminar: Introduction to the module
2	**Lecture:** **Thinking quantitatively and developing a research question** First stages in carrying out a quantitative research project. Developing a research question. Discussion of the literature review **Seminar:** Developing a research question
3	**Lecture:** **Causal inference** Causality. Random assignment. Experimental design and its alternatives **Seminar:** Using the logic of experimental design to investigate social scientific questions.
4	**Lecture:** **Measurement** Measurement – moving from an abstract idea to a concrete measurement. Creating variables. Operationalising concepts. **Seminar:** Developing measurement strategies
5	**Self directed Study Week:** There are no lectures or seminars this week. You should use this week to catch up on reading and to contact us if you have any questions about what has been covered so far.
6	**Lecture:** **Social surveys: sampling and questionnaire design** Why are social surveys important? What is sampling? Pros and cons of competing approaches postal, telephone, face-to-face, online. Designing a questionnaire. Interviewing techniques. **Seminar:** Sampling and questionnaire design
7	**Lecture:** **Introduction to data analysis and univariate analysis** In the second half of this module we work with quantitative data. Lectures provide an overview and explanation of the techniques you'll use in your computer lab sessions **Computer lab:** SPSS – inputting, cleaning and saving data
8	**Lecture:** **Principles of statistical inference** Inference, sampling distributions confidence intervals **Computer lab:** *Exercise* – generating descriptive statistics, graphs and charts
9	**Lecture:** **Tests of statistical significance** Analysing the relationship between two variables. Measures of association. Parametric and non-parametric analysis. **Computer lab:** *Exercise* – t tests, ANoVA, Mann Whitney and other tests
10	**Lecture:** **Correlation and regression** Correlation coefficient, linear regression, multivariate analysis **Computer lab:** *Exercise- correlation and regression*
11	**Lecture:** **Correlation and regression (continued)** Correlation coefficient, linear regression, multivariate analysis **Computer lab:** *Exercise- correlation and regression*
12	**Course wrap-up –** the module reviewed and revisited

	Computer lab: *SPSS clinic* – bring your queries, questions and problems along

LECTURE AND SEMINAR TOPICS AND READINGS

Readings from the core texts are always listed first. I have listed three sets of core reading. You do not need to read all three but you should read at least one. The Bryman reading is at the lowest level. It is accessible but basic. The Bernard reading is more sophisticated but accessible. The Maruyama and Ryan reading is more challenging. It goes into greater detail but beginning students might find it difficult at a first read.

Week 1:   **Introduction to social research**

Core

Bryman, A   *Social Research Methods (2016 ed)* (Chapters 1 & 2)
Or
Bernard, HR   *Social Research Methods: Qualitative and Quantitative Approaches* (2012 ed) (Chapters 1 and 2)

Or
Maruyama, G and Ryan, C   *Research Methods in Social Relations* (2014 ed Chapter 1)

Optional
Creswell, J W   *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (Chapter 1)

Gilbert, N (ed.)   *Researching Social Life* (Chapters 1 & 2)

Robson, C   *Real World Research* (Chapter 1)

Week 2:   **Getting started: Research question**
Required

Bryman, A   *Social Research Methods (2016 ed)* (Chapter 4 & 5)
Or
Bernard, HR   *Social Research Methods: Qualitative and Quantitative Approaches* (2012 ed) (Chapter 3)

Or
Maruyama, G and Ryan, C   *Research Methods in Social Relations* (2014 ed Chapters 2&4)

Optional

Allan, G & Skinner, C   *Handbook for Research Students in the Social Sciences*

Babbie, E   *The Practice of Social Research*

Bulmer, M   *Sociological Research Methods: An Introduction*

Creswell, J W   *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*

Robson, C   *Real World Research*

Week 3:   **Experimental design**
Required

Bryman, A   *Social Research Methods(2016 ed)* (Chapter 3)
Or
Bernard, HR   *Social Research Methods: Qualitative and Quantitative Approaches* (2012 ed) (Chapter 4)

Or
Maruyama, G and Ryan, C   *Research Methods in Social Relations* (2014 ed Chapter 10)

Optional

Babbie, E   *The Practice of Social Research*

Blalock H.   *Causal Inferences in Nonexperimental Research*

Morgan, S and Winship C. *Counterfactuals and Causal Inference: Methods and Principles for Social Research*

Week 4:   **Measurement and Developing indicators**

Required
Bryman, A   *Social Research Methods(2012 ed)* (Chapter 7)
Or
Bernard, HR   *Social Research Methods: Qualitative and Quantitative Approaches* (2012 ed) (Chapters 11)

Or
Maruyama, G and Ryan, C   *Research Methods in Social Relations* (2014 ed Chapter 7)

Optional
Gilbert, N (ed.)   *Researching Social Life*

Robson, C   *Real World Research*
Babbie, E   Th*e Practice of Social Research* (Wadsworth, Multiple Editions).

Bulmer, M   *Sociological Research Methods: An Introduction* (Macmillan, 1986)

Burgess, R (Ed)   *Key Variables in Social Investigation* (Introduction and chapters 5 & 12)

Judd, C M, et al.   *Research Methods in Social Relations* (HJB, 1991)

May, T   *Social Research: Issues, Methods, and Process* (Open University Press, 1993)

Week 6:   **Social surveys: sampling, questionnaires, interviewing**
Required
Bryman, A   *Social Research Methods(2012 ed)* (Chapters 8, 9 & 10)
Or
Bernard, HR   *Social Research Methods: Qualitative and Quantitative Approaches* (2012 ed) (Chapters 5 and 9)

Or
Maruyama, G and Ryan, C   *Research Methods in Social Relations* (2014 ed Chapters 9 &14)

Optional

Blair, J & R Czaja   *Designing Surveys*

Gilbert, N (ed.)   *Researching Social Life*
Frankel, M R & Frankle, L R   "Fifty Years of Survey Sampling in the United States." <u>Public Opinion Quarterly</u> Vol. 51, No. 2(Supplement), 1987, pp S127-38.

Gilbert, N   *Sampling of Populations: Methods and Applications* (Sage, 1993 & 2001)

Marsh, C   *The Survey Method: The Contribution of Surveys to Sociological Explanation* (Allen & Unwin, 1982).

Robson, C   *Real World Research* (Chapter 8)

American Statistical Assn   "What is a Survey", available online at http://amstat.org/sections

Sudman, S   *Applied Sampling* (Academic Press, 1976)

Sudman, S & Bradburm, N M *Asking Questions: A Practical Guide to Questionnaire Design*. (Josey Bass, 1982)

Yates, F   *Sampling Methods for Censuses and Surveys* (Griffin, 1981)

Week 7:   **Introduction to data analysis**

Required

Fielding, J & Gilbert, N   *Understanding Social Statistics* (Sage, 2006) Chapters 1,3 and 5

Optional

Bryman, A   *Social Research Methods* (Chapter 14 + 15)

Healey, J F, E R Babbie &   *Exploring social issues: Using SPSS for Windows (*Pine
Forge Press, 1997)

Miller, R, et al.   *SPSS for Social Scientists (*Palgrave MacMillan, 2002)

Week 8:   **Statistical inference**

Required

Fielding, J & Gilbert, N   *Understanding Social Statistics* (Sage, 2006) Chapters 7
+ 10

Optional

Bryman, A   *Social Research Methods* (Chapter 14)

Healey, J F, Babbie, ER   *Exploring social issues: Using SPSS for*
& Halley, F   *Windows (*Pine Forge Press, 1997)

Miller, R, et al.   *SPSS for Social Scientists (*Palgrave MacMillan, 2002)

Week 9:   **Statistical Significance**

Required
Fielding, J & Gilbert, N   *Understanding Social Statistics* (Sage, 2006) Chapters 11
+ 9
Optional

Bryman, A   *Social Research Methods* (Chapter 11)

Robson, C   *Real World Research*

Babbie, E   The *Practice of Social Research* (Wadsworth, Multiple
Editions)

Healey, J F, Babbie, ER   *Exploring social issues: Using SPSS for   Windows
(*Pine Forge & Halley, F   Press, 1997)

Miller, R, et al.   *SPSS for Social Scientists (*Palgrave MacMillan, 2002)

Weeks 10 +11:   **Correlation and Regression**
Required

Fielding, J & Gilbert, N   *Understanding Social Statistics* (Sage, 2006) Chapter 8

Optional

Bryman, A   *Social Research Methods* (Chapter 8 + 12)

Robson, C   *Real World Research*

Babbie, E   Th*e Practice of Social Research* (Wadsworth, Multiple
Editions)

Fielding, J & Gilbert, N   *Understanding Social Statistics* (Sage, 2000)

Healey, J F, Babbie ER   *Exploring social issues: Using SPSS forWindows (*Pine
Forge & Halley, F   Press, 1997)

Miller, R, et al.   *SPSS for Social Scientists (*Palgrave MacMillan, 2002)

Computer lab*Demonstration* – analysis of variance

Week 12:   **Course wrap-up**

Computer lab*SPSS clinic* – bring your queries, questions and problems along

SEMINAR EXERCISES WEEKS 1-6

Week 1: In this week's seminar we talk about the organisation of the module and we introduce you to some findings from the British Social Attitudes Survey.

Week 2: In this week you should break into groups and come up with a topic you would like to research. You should be able to describe the academic value and social relevance of the topic. You then need to come up with keywords that can be used to search the library catalogue on your topic.

Week 3 In this week you should break into groups and think about a causal relationship between two variables. You should think about what you would need to observe to say that one variable caused another. Think about variables that could confound the causal relationship.

Week 4: In this week break into groups and think of an abstract concept used in the social sciences. You might want to use the concepts of alienation, status, anomie, social exclusion or any other abstract concept you can think of. Think of five different observable indicators of that topic. Evaluate your indicators according to whether they cover all dimensions of the concept and whether they would give reliable and valid results.

Week 6: In this week break into groups and think of a topic you would like to research. Develop a sampling plan that would permit you to obtain a representative sample. Think about

whether there is a sampling frame you could use? If there isn't how would you go about obtaining a representative sample? You will also be given a questionnaire that has a number of flaws that you need to identify and correct.