# SO2G7-15 Multivariate Secondary Analysis of Social Data

### 21/22

Department Sociology Level Undergraduate Level 2 Module leader Richard Lampard Credit value 15 Module duration 9 weeks Assessment 100% coursework Study location University of Warwick main campus, Coventry

# Description

### Introductory description

N/A

Module web page

### Module aims

The main aims of this module are: (i) to give students an understanding of, and practical experience of applying, various key multivariate analysis approaches relevant to the analysis of sociologically-relevant data from social surveys, and (ii) to give them experience of carrying out a secondary-analysis based piece of work on a substantive topic in that context.

### **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.

Week 1: Introduction to multivariate analysis Week 2: Multiple regression I: Linear regression Week 3: Multiple regression II: Logistic regression
Week 4: Multiple regression III: Interaction effects
Week 5: Issues in the secondary analysis of large and complex surveys/ Interpreting published articles based on multivariate analyses
Week 6: (Reading week)
Week 7: Concept operationalisation and index construction
Week 8: Hierarchical log-linear models I
Week 9: Hierarchical log-linear models II/
Links to logistic regression
Week 10: Event history modelling: Cox's proportional hazard model

### Learning outcomes

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

- Understand the value of, and apply, a number of key multivariate statistical analysis techniques.
- Carry out a competent secondary analysis of survey data on a substantive topic, and demonstrate an enhanced ability to evaluate the merits, limitations and specificities of existing surveys as sources of data.
- Demonstrate a heightened awareness of both the technical and theoretical/conceptual dimensions of quantitative data analysis.
- Apply statistical software to manipulate survey data and analyse it using multivariate techniques.
- Present and interpret the results of multivariate statistical analyses appropriately

### Indicative reading list

Dale, A., Fieldhouse, E. and Holdsworth, C. 2000. Analyzing Census Microdata. London: Arnold. Dale, A., Wathan, J. and Higgins, V. 2008. 'Secondary Analysis of Quantitative Data Sources'. In Alasuutari, P., Bickman, L. and Brannen, J. (eds) The SAGE Handbook of Social Research Methods. London: Sage. [Chapter 31: pp.520-535]

DeVellis, R.F. 2003. Scale Development: Theory and Applications. (2nd edition). London: Sage. Field, A. 2013. Discovering Statistics Using SPSS (4th edition). London: Sage.

Fielding, J. and Gilbert, N. 2006. Understanding Social Statistics (2" edition) London: Sage.

Foster, J. 2006. `Log-linear Analysis'. In Foster, J. Barkus, E. and Yavorsky, C. Understanding and Using Advanced Statistics. London: SAGE. [Chapter 4, pp47-56].

Garner, R. 2005. The Joy of Stats: A Short Guide to Introductory Statistics in the Social Sciences. London: Broadview Press.

Jaccard, J. 2001. Interaction Effects in Logistic Regression. London: Sage.

Linneman, T.J. 2014. Social Statistics: Managing Data, Conducting Analyses, Presenting Results (Second Edition). London: Routledge.

Marsh, C. and Elliott, J. 2009. Exploring Data: An Introduction to Data Analysis for Social Scientists (2nd edition). Cambridge: Polity Press.

Menard, S. 2001. Applied Logistic Regression Analysis (2nd Edition). London: Sage. (QASS). Pampel, F.C. 2000. Logistic Regression: A Primer. London: Sage.

Roberts, K. 2011. 'Class Schemes and Scales'. In Class in Contemporary Britain (2nd edition).

Basingstoke: Palgrave Macmillan. [Chapter 2: pp18-47].
Sturgis, P. 2008. 'Designing Samples'. In Gilbert, N. Researching Social Life (3rd edition). London: SAGE. [Chapter 9, pp165-181].
Tarling, R. 2008. Statistical Modelling for Social Researchers: Principles and Practice. London: Routledge.

View reading list on Talis Aspire

#### **Research element**

This is a quantitative research methods module!

#### Interdisciplinary

The material taught is applicable across various social studies disciplines.

#### International

The material taught is relevant across different international contexts.

#### Subject specific skills

Ability to analyse multivariate data to establish mediation and/or moderation.

Practical skills in the secondary analysis of social survey data sources.

### **Transferable skills**

Ability to bring together literature, concepts and data analysis in a research-based project report.

Ability to work independently to generate findings and handle their unpredictability and complexity in relating them to a research question.

### Study

### Study time

# **Type** Lectures

Practical classes Private study Total

#### Required

9 sessions of 1 hour (6%) 9 sessions of 2 hours (12%) 123 hours (82%) 150 hours

### Private study description

Preparation and writing of formative work Preparation and writing of summative work Data analyses for formative work Data analyses for summative work

### Costs

No further costs have been identified for this module.

### Assessment

You must pass all assessment components to pass the module.

### Assessment group A

	Weighting	Study time
Project Report	100%	
A 5,000-word data analysis-based p	roject report.	

### Feedback on assessment

Written online feedback

# Availability

### Courses

This module is Core optional for:

• Year 3 of ULAA-ML33 Undergraduate Law and Sociology

This module is Optional for:

- USOA-L301 BA in Sociology
  - Year 2 of L301 Sociology
  - Year 2 of L301 Sociology
  - Year 2 of L301 Sociology
- Year 2 of USOA-L314 Undergraduate Sociology and Criminology

This module is Option list A for:

- ULAA-ML34 BA in Law and Sociology (Qualifying Degree)
  - Year 3 of ML34 Law and Sociology (Qualifying Degree)

- Year 4 of ML34 Law and Sociology (Qualifying Degree)
- Year 4 of ML34 Law and Sociology (Qualifying Degree)
- Year 4 of ULAA-ML33 Undergraduate Law and Sociology

This module is Option list D for:

• Year 2 of UHIA-VL13 Undergraduate History and Sociology