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# Multilevel Modelling for Public Health and Health Services Research

Health in Context



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# Contents

## Part I Theoretical, Conceptual and Methodological Background

<b>1</b>	<b>Introduction</b>	3
	Importance of MLA for Research in Health and Care	4
	The Scope of Public Health and Health Services Research	4
	Research and Policy	7
	Conclusion	11
	References	11
<b>2</b>	<b>Health in Context</b>	13
	Relationships Between the Macro and Micro Levels	14
	Micro Level: Behaviour of Patients and Providers	18
	The Behaviour of Healthcare Providers	19
	The Behaviour of Patients	19
	Patient–Provider Interaction	20
	From Macro to Micro Level	21
	What Contexts Are Relevant?	22
	From Micro to Macro Level	24
	The Use of “League Tables”	24
	Conclusion	25
	References	26
<b>3</b>	<b>What Is Multilevel Modelling?</b>	29
	Methodological Background	30
	Why Use Multilevel Modelling?	32
	Aggregate Analysis	32
	Individual Analysis	32
	Separate Individual Analyses Within Each Higher Level Unit	33
	Individual-Level Analysis with Dummy Variables	33

What Is a Multilevel Model? . . . . .	34
What Is a Level? . . . . .	36
How Many Units Do We Need at Each Level? . . . . .	38
Hypotheses That Can Be Tested with Multilevel Analysis . . . . .	39
Hypotheses About Variation . . . . .	40
Individual-Level Hypotheses . . . . .	43
Context Hypotheses . . . . .	43
Cross-Level Interactions . . . . .	45
Conclusion . . . . .	46
References . . . . .	46
<b>4 Multilevel Data Structures . . . . .</b>	49
Strict Hierarchies: The Basic Model . . . . .	50
Multistage Sampling Designs . . . . .	51
Evaluating Community Interventions and Cluster Randomised Trials . . . . .	52
Designs Including Time . . . . .	53
Multiple Responses . . . . .	54
Non-hierarchical Structures . . . . .	56
Cross-Classified Models . . . . .	56
Multiple Membership Model . . . . .	57
Correlated Cross-Classified Model . . . . .	58
Other Multilevel Models . . . . .	59
Pseudo-levels . . . . .	62
Incomplete Hierarchies . . . . .	63
Conclusion . . . . .	64
References . . . . .	65
<b>Part II Statistical Background</b>	
<b>5 Graphs and Equations . . . . .</b>	71
Ordinary Least Squares (Single-Level) Regression . . . . .	72
Random Intercept Model . . . . .	73
Random Slope Model . . . . .	77
Three-Level Model . . . . .	81
Heteroscedasticity . . . . .	82
Fixed Effects Model . . . . .	83
Rankings and Institutional Performance . . . . .	85
Conclusion . . . . .	86
References . . . . .	88
<b>6 Apportioning Variation in Multilevel Models . . . . .</b>	89
Variance Partitioning for Continuous Responses . . . . .	90
Variance Partitioning for Multilevel Logistic Regression . . . . .	90
Variance Partitioning for Models with Three or More Levels . . . . .	91

Interpretation of Variances . . . . .	92
Zero Variance . . . . .	94
Multilevel Power Calculations . . . . .	96
Software for Multilevel Power Calculations . . . . .	99
Population Average and Cluster-Specific Estimates . . . . .	100
Omitting a Level . . . . .	100
Conclusion . . . . .	102
References . . . . .	103

## **Part III The Modelling Process and Presentation of Research**

<b>7 Context, Composition and How Their Influences Vary . . . . .</b>	107
Context or Composition? . . . . .	108
Using Multilevel Modelling to Investigate Compositional and Contextual Effects . . . . .	109
Model M0: Null Model . . . . .	110
Model M1: Individual Social Capital . . . . .	111
Model M2: Neighbourhood Social Capital . . . . .	112
Model M3: Individual and Neighbourhood Social Capital . . . . .	113
Model M4: Individual and Neighbourhood Social Capital and Their Interaction . . . . .	114
Random Slopes and Cross-Level Interactions . . . . .	115
Impact of Compositional and Contextual Variables on the Variances . . . . .	116
Model Specification and Model Interpretation . . . . .	118
Sources of Error Affecting the Estimation of Contextual Effects . . . . .	119
Lack of Variation in the Contextual Variable . . . . .	119
Precision of Estimates and Study Design . . . . .	120
Selection Bias . . . . .	120
Confounding . . . . .	120
Information Bias . . . . .	121
Model Specification . . . . .	121
Conclusions . . . . .	121
References . . . . .	122
<b>8 Eometrics: Using MLA to Construct Contextual Variables from Individual Data . . . . .</b>	123
Problems with Simple Aggregation . . . . .	124
Single Variables . . . . .	125
Composite Variables: The Traditional Method . . . . .	126
Composite Variables: A Simple Multilevel Model . . . . .	127
Eometric Approach . . . . .	130
Application of the Eometric Approach . . . . .	132
Comparison of the Traditional and Eometric Approach . . . . .	134

Further Econometric Properties of the Scale . . . . .	135
Conclusions . . . . .	137
References . . . . .	137
<b>9 Modelling Strategies . . . . .</b>	<b>139</b>
Define the Data Structure . . . . .	140
Measurement Level and Distribution of the Dependent Variable . . . . .	142
The Baseline Model . . . . .	142
Exploratory Research and Hypothesis Testing . . . . .	143
Context and Composition . . . . .	145
Modelling the Effects of Higher Level Characteristics . . . . .	145
Random Effects at Higher Levels . . . . .	146
Interpreting the Results in the Light of Common Assumptions . . . . .	147
Conclusions . . . . .	149
References . . . . .	149
<b>10 Reading and Writing . . . . .</b>	<b>151</b>
Critical Reading . . . . .	151
What Is the Research Question? . . . . .	153
Which Levels Can Be Distinguished Theoretically? . . . . .	154
What Is the Structure of the Actual Data Used? . . . . .	155
What Statistical Model Was Used? . . . . .	157
What Was the Modelling Strategy? . . . . .	158
Does the Paper Report the Intercept Variation at Different Levels? . . . . .	159
Cross-Level Interactions . . . . .	160
What Are the Shortcomings and Strong Points of the Article? . . . . .	161
Writing Up Your Own Research . . . . .	161
The Introduction or Background Section . . . . .	161
The Methods Section . . . . .	162
The Results Section . . . . .	163
The Conclusion and Discussion Section . . . . .	165
Conclusions . . . . .	167
References . . . . .	167
<b>Part IV Tutorials with Example Datasets</b>	
<b>11 Multilevel Linear Regression Using MLwiN: Mortality in England and Wales, 1979–1992 . . . . .</b>	<b>173</b>
Introduction to the Dataset . . . . .	174
Research Questions . . . . .	174
Introduction to MLwiN . . . . .	174
Opening a Worksheet . . . . .	174
Names Window . . . . .	175

Data Window . . . . .	176
Graph Window . . . . .	177
Closing Windows . . . . .	179
Model Specification . . . . .	180
Creating New Variables . . . . .	180
Equations Window . . . . .	181
Fitting the Model . . . . .	185
Variance Components . . . . .	187
A 2-Level Variance Components Model . . . . .	187
Sorting the Data . . . . .	189
The Hierarchy Viewer . . . . .	192
Adding a Further Level . . . . .	193
Interpreting the Model . . . . .	197
Residuals . . . . .	197
Predictions Window . . . . .	202
Model Building . . . . .	211
Adding More Fixed Effects . . . . .	211
Intervals and Tests Window . . . . .	217
Random Coefficients . . . . .	221
Random Slopes . . . . .	221
Variance Function Window . . . . .	225
Higher-Level Residuals . . . . .	229
Complex Level 1 Variation . . . . .	230
A Poisson Model: Introduction . . . . .	235
Setting Up a Generalised Linear Model in MLwiN . . . . .	236
The Offset . . . . .	239
Non-linear Estimation . . . . .	240
Model Interpretation . . . . .	241
Predictions and Confidence Envelopes . . . . .	248
References . . . . .	254
<b>12 Multilevel Logistic Regression Using MLwiN:</b>	
<b>Referrals to Physiotherapy</b> . . . . .	255
Multilevel Logistic Regression Model . . . . .	256
Example: Variation in the GP Referral Rate to Physiotherapy . . . . .	256
The Data . . . . .	259
Model Set-Up . . . . .	260
Non-linear Settings . . . . .	262
Model Interpretation and Model Building . . . . .	263
A Note on Estimation . . . . .	267
Further Exercises . . . . .	268
References . . . . .	269

<b>13 Untangling Context and Composition . . . . .</b>	<b>271</b>
The Data . . . . .	272
Structure of the Analysis . . . . .	273
Estimating the Null Model . . . . .	273
Fixed Effects . . . . .	276
Additional Models . . . . .	280
References . . . . .	280
<b>Index . . . . .</b>	<b>283</b>

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# Multilevel Modelling for Public Health and Health Services Research

Health in Context

This open access book is a practical introduction to multilevel modelling or multilevel analysis (MLA) – a statistical technique being increasingly used in public health and health services research. The authors begin with a compelling argument for the importance of researchers in these fields having an understanding of MLA to be able to judge not only the growing body of research that uses it, but also to recognise the limitations of research that did not use it.

The volume guides the analysis of real-life data sets by introducing and discussing the use of the multilevel modelling software MLwiN, the statistical package that is used with the example data sets. Importantly, the book also makes the training material accessible for download – the datasets used within the book can be accessed along with a freeware version of MLwiN enabling readers to replicate the analyses.

The book's practical review of MLA comprises:

- Theoretical, conceptual, and methodological background
- Statistical background
- The modelling process and presentation of research
- Tutorials with example datasets

*Multilevel Modelling for Public Health and Health Services Research: Health in Context* is a practical and timely resource for public health and health services researchers, statisticians interested in the relationships between contexts and behaviour, graduate students across these disciplines, and anyone interested in utilising multilevel modelling.

*“Leyland and Groenewegen’s wealth of teaching experience makes this book and its accompanying tutorials especially useful for a practical introduction to multilevel analysis.”*

— Juan Merlo, Professor of Social Epidemiology, Lund University

*“Comprehensive and insightful. A must for anyone interested in the applications of multilevel modelling to population health”.*

— S. (Subu) V. Subramanian, Professor of Population Health and Geography, Harvard University

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