

DATA COLLECTION AND ANALYSIS

Second edition

edited by

Roger Sapsford and Victor Jupp

 **SAGE Publications**
London • Thousand Oaks • New Delhi



in association with
The Open University

Contents

List of Figures	xi
List of Tables	xii
List of Boxes	xiii
Preface	xiv
Acknowledgements	xvi
List of Contributors	xviii
PART I DESIGN ISSUES	1
1 Validating Evidence	1
<i>Roger Sapsford and Victor Jupp</i>	
Counting Cases: Measurement and Case Selection	2
Examples from UK Government Statistics	3
Three Kinds of Crime Survey	4
A Study of Mothers	9
Comparing Groups: the Logic of Design	13
Quasi-experimental Analysis: Road Traffic Fatalities	13
Experiments in HIV Counselling	16
Establishing Boundaries in Qualitative Studies	20
Conclusion	22
Key Terms	22
Further Introductory Reading	23
Summary Activity: Preparing Your Research Proposal	23
2 Survey Sampling	26
<i>William Schofield</i>	
Sampling	26
Defining the Population to be Sampled	27
Sampling Units	28
The Sampling Frame	28
Selecting a Sample	29
Simple Random Sampling	30
Stratified Random Sampling	32
Cluster Sampling	34
Quota Sampling	36
Estimation of Population Parameters	38

Means, Variance and Standard Deviations	39
How Sample Means are Distributed	43
Error, Sample Size and Non-response	47
Sample Size	48
Non-response	49
Conclusion	51
Key Terms	52
Further Reading	53
Answers to Activities	53
Research Proposal Activity 2	54
PART II DATA COLLECTION	57
3 Observational Research	57
<i>Peter Foster</i>	
Using Observation	57
Advantages and Limitations	59
Structure in Observation	60
Relationships and Roles	64
Negotiating Access	64
Developing Relationships	69
The Researcher's Role	73
Managing Marginality	77
What to Observe	77
Focusing Research	77
Representative Sampling	78
Recording Observations	80
More-structured Observation	80
Less-structured Observation	82
Using Technology	85
Assessing the Validity of Observations	86
Threats to Validity	87
Ways of Assessing Validity	88
Conclusion	90
Key Terms	91
Further Reading	92
Research Proposal Activity 3	92
4 Asking Questions	93
<i>Michael Wilson and Roger Sapsford</i>	
Comparison of Methods	93
Interview and Questionnaire Methods	93
Procedural/Structural Factors	94
Contextual Factors	95
Choosing Between Methods	97

Highly Structured Methods	97
Interview Schedules	99
Open-ended Questions in Standardized Interview Schedules	101
Self-administered Questionnaires	102
Piloting	103
Asking More Complex Questions	107
Factual Questions	108
Retrospective Questions	108
Composite Measurement	109
Less Structured Methods	112
Observing and Interviewing	113
An Example of Less Structured Interviewing	114
Interviewer Control in Less Structured Interviews	116
Reactivity and Validity in Research Asking Questions	118
Conclusion	120
Key Terms	120
Further Reading	122
Research Proposal Activity 4	122
5 Research and Information on the Net	124
<i>Roger Sapsford</i>	
Searching the Literature	124
Information on the Net	127
Sampling on the Net	129
Questionnaires on the Net	130
Qualitative Interviewing on the Net	132
Participating and Observing	133
Conclusion	134
Key Terms	135
Further Reading	136
Research Proposal Activity 5	136
6 Using Documents	138
<i>Ruth Finnegan</i>	
Documentary Sources	139
Some Initial Distinctions	142
Primary Versus Secondary Sources	142
'Direct' and 'Indirect' Uses	143
How Documentary Sources Come into Being	144
Further Questions to Ask	146
Conclusion	149
Key Terms	150
Further Reading	150
Research Proposal Activity 6	151

PART III DATA ANALYSIS	153
7 Preparing Numerical Data <i>Betty Swift</i>	153
Establishing the Nature of the Problem	154
Prior Structure, Method of Recording and Sample Size	157
Prior Structure	157
Method of Recording	160
Sample Size	161
Getting the Data into Shape for Analysis	162
Getting the Pre-coding Right	165
Coding Open-ended Questions	165
Coding Data from Unstructured Interviews	168
Three Approaches to Coding	170
Correcting Errors	173
Data Manipulation During Analysis	174
Coping with Missing Values	174
Re-coding Variables	175
Conclusion	177
Key Terms	178
Further Reading	179
Answers to Activities	179
Appendix	181
Research Proposal Activity 7	182
8 Extracting and Presenting Statistics <i>Roger Sapsford</i>	184
The Right Figure for the Job	184
Frequencies	185
Two-way Distributions	192
Introducing a Third Variable	196
Postscript: the Element of Chance	202
Key Terms	203
Further Reading	205
Answers to Activities	205
Research Proposal Activity 8	206
Appendix: Data-set	207
9 Statistical Techniques <i>Judith Calder and Roger Sapsford</i>	208
Different Kinds of Data	208
Approaches to Analysis	209
Looking at Variables	209
Two Types of Statistics	211

Descriptive Measures	211
Measures of Central Tendency	212
Measures of Spread	212
Measures of Location	213
Inferential Statistics	214
Types of Error	214
Chi-square	217
z and t tests	220
Analysis of Variance	221
Measuring Association	225
Correlation Coefficients	225
Simple Linear Regression	226
Multivariate Statistics	227
Analysis of Variance and Related Techniques	230
Regression Techniques	234
Further Multivariate Approaches	237
Key Terms	238
Further Reading	241
Answer to Activity 9.4	241
Research Proposal Activity 9	242
10 Analysis of Unstructured Data	243
<i>David Boulton and Martyn Hammersley</i>	
Complementary Perspectives of Reader and Researcher	244
Types of Qualitative Data	245
The Process of Analysis	246
Data Preparation	246
Starting the Analysis	250
Reflexivity and the Assessment of Validity	256
Conclusion	257
Key Terms	257
Further Reading	258
Research Proposal Activity 10	258
11 Discourse Research	260
<i>Roger Sapsford</i>	
Ideology and Discourse	260
Ideology	260
Discourse	262
Discursive Structures	264
Discourse Processes	266
Conclusion	268
Key Terms	269
Further Reading	270
Research Proposal Activity 11	271

12 Documents and Critical Research	272
<i>Victor Jupp</i>	
Documents, Texts and Discourse	273
Types of Document	274
A Typology of Documents	277
Critical Social Research	277
Critical Analysis of Documents	279
Case Study 1: A Proposal for Critical Analysis	281
Case Study 2: Critical Analysis of a Public Document	284
Case Study 3: Critical Analysis of Decision-making	285
Case Study 4: Critical Analysis of a Research Report	286
Conclusion	289
Key Terms	289
Further Reading	289
Research Proposal Activity 12	290
PART IV CONCLUSION	291
13 Ethics, Politics and Research	291
<i>Pamela Abbott and Roger Sapsford</i>	
Ethics and Research	293
Politics and Research	298
Intelligence and the Politics of ‘Race’	298
Intelligence, Achievement and the Politics of Class	302
Politics, Ideology and ‘Research Style’	305
Overview of Issues	309
Conclusion	310
Further Reading	311
Research Proposal Activity 13	311
References	313
Index	323