

# Contents

---

List of Tables	<i>page xi</i>
List of Figures	xiii
Foreword by James A. Davis	xv
Editor's Preface	xix
Author's Preface	xxi
1 Introduction	1
1.1 Quantitative Analysis, or What Difference Does a Difference Make?	1
1.2 Crosstabulations and Differences in Proportions	3
1.3 Causal Analysis by Means of Contingency Tables	9
1.4 A Note on Terminology	16
Summary	17
Glossary	18
Exercises	19
2 The Meaning and Measurement of Causal Effect	25
2.1 Theoretical Definitions of Causal Effect	25
2.2 Measuring Causal Effect: the Control Problem	27
Summary	33
Glossary	34
Exercises	35
3 Developing Causal Models	37
3.1 The Choice of Variables	37
3.2 Relations between Variables	39
3.3 Types of Models	42
3.4 Models as Tools for Text Interpretation	47
Summary	51
Glossary	52
Exercises	52
4 Deductions from Causal Models	55
4.1 The Sign of Spurious or Indirect Effects	55
4.2 The Sign of Gross Associations	58
4.3 The Size of Spurious or Indirect Effects and Gross Associations	59
4.4 Exploiting the Potentials of Deductive Reasoning: an Illustration	60
4.5 A Digression on Axiomatic Theory	64
Summary	67

Glossary	68
Exercises	68
5 Designs for Causal Analyses	70
5.1 The Effect Change Design	70
5.2 The Effect Transmittance Design	81
5.3 The Choice of Design	85
Summary	87
Glossary	87
Exercises	88
6 Special Problems of Design	89
6.1 Bloc Recursive Models	89
6.2 Polytomous Variables	90
6.3 The Asymmetry of the Difference in Proportions	97
Summary	104
Glossary	104
Exercises	105
7 Interpreting the Results	107
7.1 Methodological and Substantive Interpretations	107
7.2 Sampling Errors	108
7.3 Measurement Errors	110
7.4 Categorisation Effects	114
7.5 Alternative Substantive Interpretations	115
Summary	119
Glossary	119
Exercises	120
8 The Analysis of Interaction-Ridden Data	122
8.1 Decomposing Proportions: Prediction Analysis	123
8.2 A Survey of Schemes for Causal Analysis	134
8.3 When, Why and How to Weight	141
8.4 Objections to Averaging Significantly Dissimilar Partial Effects	146
8.5 Implications of Interaction for Causal Analyses	148
Summary	152
Glossary	152
Exercises	153
9 Regression Analysis	155
9.1 Binary Regression Analysis	156
9.2 Prediction Analysis by Means of Binary Regression	159
9.3 Causal Analysis by Means of Binary Regression	163
9.4 Unsaturated Regression Coefficients and Weighted Differences in Proportions	168
Summary	170
Glossary	170
Exercises	171

10	Loglinear Analysis	172
10.1	The Effect Measures of Loglinear Analysis	173
10.2	Partial Effects, Overall Effect and Interaction	177
10.3	Unsaturated Models and Model-Testing	182
10.4	The Choice of Approach to the Analysis of Contingency Tables	187
	Summary	189
	Glossary	189
	Exercises	190
	Answers to Selected Exercises	191
	Appendix: The Computer Program NONCAN	203
	Further Reading	205
	References and Author Index	206
	Subject Index	209