CONTENTS

Series Editor's Introduction v

1. Introduction 1

2. Spearman's Rho and Kendall's Tau as Descriptive Measures of Association 3

Example 2.1 5

Solution to Example 2.1: Spearman's Rho 6

Example 2.2 9

Solution to Example 2.2: Spearman's Rho 10

Solution to Example 2.1: Kendall's Tau 14

Solution to Example 2.2: Kendall's Tau 15

3. Inferences Based on Rho and Tau 16

Example 3.1 18

Solution to Example 3.1: Rho and Tau 19

Example 3.2 25

Solution to Example 3.2: Rho and Tau 26

4. Kendall's Coefficient of Concordance 29

Example 4.1 32

Solution to Example 4.1: Kendall's Coefficient of Concordance 32

Example 4.2 36

Solution to Example 4.2(a): Kendall's Coefficient of Concordance 37

Solution to Example 4.2(b): Kendall's Tau and Spearman's Rho 40

Example 4.3 44

Solution to Example 4.3: Kendall's Coefficient of Concordance 44

5. Partial Correlation 48

Example 5.1 50

Solution to Example 5.1: Partial Tau 51
Example 5.2 56
Solution to Example 5.2: Partial Tau 56

6. Measures of Association in Ordered Contingency Tables 60
Example 6.1 62
Solution to Example 6.1: Spearman's Rho 63
Example 6.2 64
Solution to Example 6.2: Kendall's Tau 66
Example 6.3 76
Solution to Example 6.3: Kendall's Tau 77

7. Summary 81

Appendix A: Tables 82
Table A. Normal Distribution 82
Table B. Spearman's Rank Correlation Distribution 84
Table C. Kendall's Tau Distribution 87
Table D. Kendall's Coefficient of Concordance Distribution 89
Table E. Chi-Square Distribution 91
Table F. Critical Values of $\tau_{XY.Z}$ (for Kendall's Partial Rank Correlation Coefficient) 93

Appendix B: Further Reading 94

References 95

About the Author 97