

# Contents



<b>1</b>	Using Research and Statistics in Health Care	1
<b>2</b>	Descriptive Statistics: Getting to Know the Data	20
<b>3</b>	Building Blocks for Using Inferential Statistics	59
<b>4</b>	Inferential Statistics: Finding Relationships in the Data	81
<b>5</b>	The Independent t-Test and the Mann-Whitney U-Test: Comparing the Means of Two Unrelated Groups	102
<b>6</b>	The Paired t-Test and the Wilcoxon Matched-Pairs Test: Comparing the Means of Two Related Groups	139
<b>7</b>	The One-Way ANOVA and the Kruskal-Wallis H-Test: Comparing the Means of Three or More Unrelated Groups	171
<b>8</b>	The Repeated-Measures ANOVA and the Friedman's ANOVA by Rank: Comparing the Means of Three or More Related Groups	213

<b>9</b>	The Pearson and Spearman Correlation Coefficients: Measuring the Association of Two Variables	260
<b>10</b>	The Chi-Square Statistic and the McNemar Test: Examining Relationships Between Categorical Variables	291
<b>11</b>	Model Building With Linear and Logistic Regression	328
<b>12</b>	Writing for Publication	375
Appendix A	Percent of Total Area of Normal Curve Between a z-Score and the Mean	385
Appendix B	Critical Values of the Student t-Statistic	387
Appendix C	Critical Values of “U” for the Mann-Whitney U-Test	389
Appendix D	Critical Values of “T,” the Wilcoxon Signed-Rank Statistic	391
Appendix E	Critical Values of “F” for Testing ANOVA Models	393
Appendix F	Critical Values of “H” for the Kruskal-Wallis ANOVA by Rank	397
Appendix G	Critical Values of Dunn’s Q for Nonparametric Multiple Comparison Testing	399
Appendix H	Exact Distribution of the Friedman’s $\chi_r^2$ for the Friedman’s ANOVA by Rank Comparing Three Related Groups	400
Appendix I	Significant Values of the Pearson Correlation Coefficient	402
Appendix J	Critical Values of the Spearman Correlation Coefficient	404
Appendix K	Significant Values of the Chi-Square Statistic	406
Glossary		408
Index		415