



MULTIVARIATE DATA ANALYSIS

Using SPSS and AMOS

R. Shanthi

Contents

Chapter - 1	Multivariate Data Analysis	1
Chapter - 2	Introduction to SPSS	15
	Outliers	25
	Normality	37
	Test of Linearity	43
	Data Transformation	50
	Bootstrapping	52
	Homoscedasticity	55
	Introduction to IBM SPSS – AMOS	57
Chapter - 3	Multivariate Analysis of Variance (MANOVA)	67
	One Way Manova in SPSS	81
Chapter - 4	Multiple Regression Analysis	97
Chapter - 5	Binary Logistic Regression	111
Chapter - 6	Factor Analysis	123
	Exploratory Factor Analysis	139
	Confirmatory Factor Analysis	154
Chapter - 7	Cluster Analysis	181
	K - Mean Cluster Analysis	201
	Hierarchical Cluster Analysis	216
Chapter - 8	Discriminant Analysis	233
Chapter - 9	Correspondence Analysis	277

x *Contents*

Chapter - 10	Multidimensional Scaling	311
	Example - Multidimensional Scaling (ALSCAL)	326
Chapter - 11	Neural Network	337
Chapter - 12	Decision Trees	387
Chapter - 13	Path Analysis	405
Chapter - 14	Structural Equation Modeling	413
Chapter - 15	Canonical Correlation	433

MULTIVARIATE DATA ANALYSIS

Using SPSS and AMOS

About the Author

Dr. R. Shanthi is Presently Assistant Professor, Department of Commerce University of Madras, Chennai. She has over 20 years of teaching and research experience in the realm of marketing and banking. She has published papers in Peer Reviewed Journals, News papers and Edited Books. She has authored a book on Customer Relationship Management and organised three International Conferences and four at the National Level. She has conducted training for corporate services on customer satisfaction and brand equity. She has undertaken UGC – Major Research Projects. She is acting as a doctoral committee member for various Universities and colleges. She is in the examination board for affiliated colleges and Universities and a recipient Award for “Meritorious Services, Outstanding Performance and Remarkable Role” rendered in the Academic field.

ISBN - 978-81-8094-412-3



8 7 8 8 1 8 0 9 4 4 1 2 3

ID 21 1000 5654
ISBN 9788180944123



4, Nallathambi Street,

Triplicane, Chennai - 600 005.

044-28441043, 28442381, 9444037757

Tirunelveli, New Delhi.

www.mjppublishers.com/

mjptnbh@rediffmail.com