To the memory of my father,  
Mr. H. N. Malhotra  
and  
To my mother, Mrs. Satya Malhotra  
and  
To my wife Veena and children Ruth and Paul 

The love, encouragement, and support of my parents, wife, and children have been exemplary. 

“The greatest of these is love.”  
I Corinthians 13:13 

“But God showed how much He loved us by having Christ die for us, even though we were sinful.”  
Romans 5:8  
The Holy Bible
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## Frequency Distribution, Cross-Tabulation, and Hypothesis Testing

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The world of business is moving more rapidly than ever, meaning the intelligent and thoughtful use of research is critical to keeping pace. Undoubtedly, the most successful people will have a broad base of education, high levels of communication skills, and creative approaches to the opportunities racing toward us. It is a significant achievement when a textbook such as Dr. Malhotra’s allows the classroom to become a source of these skills and greatly enhance the employability of the students.

This text has already proven its worth as one of the most successful in the field, with well over 140 universities using it in the United States and eight foreign-language and several different English-language editions in print. It is unsurpassed in presenting the fundamentals that allow your students to become researchers and intelligent users of research. The real-life examples, titled Real Research, bring students closer to the world businesspeople face daily. At every step, they can relate to the ongoing Department Store Project, the HP running case, and the practical vignettes that bring the educational material to a realistic and practical level. These materials are complemented by Active Research, Experiential Research, and exercises that offer additional hands-on experience. There is pervasive emphasis on social media, mobile marketing research, ethics, and international marketing research. The text’s grasp of the leading edge of research is evident in its integration of modern tools of research such as the Internet, computer analytic software, and the latest management practices. The demonstration movies, screen captures, and step-by-step instructions for running SPSS and SAS programs provide the most extensive help available for learning these statistical packages.

We at Burke, Inc. are pleased to be asked to contribute again to a new edition. We have shared our experiences as well as our philosophies, technical skill, and thoughts about the future of research. This seventh edition of Marketing Research: An Applied Orientation provides the foundation we believe every student should have. We are confident you will find its combination of theory, practice, and sound advice to be of great value to both you and your students.

Jeff Miller, Ph.D.
President and CEO, Burke, Inc.
Helping Teach Students Marketing Research

I wrote this book to provide an applied and practical marketing research text with comprehensive, balanced coverage of both qualitative and quantitative material. It takes the perspective of a marketing research user and reflects current trends in international marketing research, social media, mobile marketing research, ethics, and the integration of the Internet and computers. All chapters focus on the practice of marketing research by featuring a variety of marketing companies and marketing research organizations. Several features make the book distinctive.

It has a unique applied and managerial orientation, illustrating the interaction between marketing research decisions and marketing management decisions. It also emphasizes a hands-on, do-it-yourself approach, affording students several opportunities to experience these interactions through pedagogical tools such as Real Research, Active Research, Experiential Research, Project Research, Live Research, cases, video cases, and extensive review questions, Internet and computer exercises, role playing, field work, and group discussions. The data analysis chapters tightly integrate SPSS and SAS, illustrating each step in running these programs in detail and providing three distinct ways that students can learn the programs on their own: (1) step-by-step instructions in the book (2) screen captures with notes for each step, and (3) demonstration movies illustrating each step. This book provides marketing research students the most extensive help available to learn SPSS and SAS.

The response to the first six editions has been truly gratifying, with more than 144 universities adopting the book in the United States. The book has been translated into eight languages: Chinese, Russian, Spanish, Portuguese, French, Hungarian, Bahasa Indonesia, and Japanese. English-language editions include North American, International, European, Arab, and Indian, as well as texts for Australia and New Zealand. I want to express my sincere thanks and appreciation to all the professors and students who have contributed to the success of the book as adopters, users, reviewers, and providers of valuable feedback and encouragement. The seventh edition attempts to build on this success to make the book even more current, contemporary, illustrative, and sensitive to user needs.

About the Seventh Edition

The book is organized into three parts, based on a six-step framework for conducting marketing research. Part I provides an introduction and discusses problem definition, the first and most important step. The second step in the marketing research process is understanding the nature and scope of research to develop an approach to the problem. Part II covers research design, the third step, and describes exploratory, descriptive, and causal research designs in detail. It identifies the types of information marketing research provides and the appropriate scales for obtaining it. We present several guidelines for designing questionnaires and explain the procedures, techniques, and statistical considerations in sampling.

Part III presents a practical and managerially oriented discussion of fieldwork, the fourth step in the marketing research process. It also covers data preparation and analysis, the fifth step. We discuss the basic and advanced statistical techniques in detail, with emphasis on procedures, interpretation of results, and managerial implications rather than on statistical elegance. We feature four statistical packages—SPSS, SAS, MINITAB, and Excel—but our focus is on SPSS and SAS.

Specifically, the seventh edition contains the following:

1. **Integration of Social Media.** The seventh edition features an innovative and pervasive integration of social media. There is a separate section entitled “Marketing Research and Social Media” in each chapter, except the data analysis chapters. In addition, the use of social media is discussed in several other sections of the chapter, including end of chapter questions, HP running case, cases, and video cases. We focus on social media both as an application of marketing research and as a domain in which to conduct marketing research. While we do not expect social media research to replace traditional marketing research, we
predict that social media will become an increasingly important domain that complements traditional marketing research.

2. **Integration of Mobile Marketing Research.** The seventh edition features a pioneering and pervasive integration of mobile marketing research (MMR). There is a separate section entitled “Mobile Marketing Research” in each chapter, except the data analysis chapters. In addition, MMR is discussed in several other sections of the chapter, including end of chapter questions.

3. **Added Emphasis on SPSS and SAS.** Relevant chapters contain a special section on SPSS Windows along with another on SAS Enterprise Guide, that illustrate the relevant programs and the steps required to run them. We have provided SPSS and SAS files for all input data sets featured in the data analysis chapters (Chapters 14 through 22), input data sets that appear in Internet and Computer Exercises, input data sets for cases (Cases 1.1, 3.1, 3.2, 3.3, 4.1, and 4.2), and the Wal-Mart project. The SAS steps that are illustrated apply to the SAS Enterprise Guide, the user interface for SAS OnDemand for Academics.

4. **Video Cases.** Each chapter of the book, except the data analysis chapters, is accompanied by a video and video case written from a marketing research perspective with marketing research questions. Videos are available in the Instructor Resource Center and solutions appear in the *Instructor’s Manual*.

**Instructor Teaching Resources**

*Marketing Research* comes with the following teaching resources:

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| Instructor’s Manual                                           | • Chapter-by-chapter summaries  
|                                                               | • Examples and activities not in the main book  
|                                                               | • Teaching outlines  
|                                                               | • Teaching tips  
|                                                               | • Solutions to all questions and problems in the book  |
| Test Bank                                                     | 2,200 multiple-choice, true/false, short-answer, and graphing questions with these annotations:  
|                                                               | • Difficulty level (1 for straight recall, 2 for some analysis, 3 for complex analysis)  
|                                                               | • Type (Multiple-choice, true/false, short-answer, essay)  
|                                                               | • Topic (The term or concept the question supports)  
|                                                               | • Learning outcome  
|                                                               | • AACSB learning standard (Written and Oral Communication; Ethical Understanding and Reasoning; Analytical Thinking; Information Technology; Interpersonal Relations and Teamwork; Diverse and Multicultural Work; Reflective Thinking; Application of Knowledge)  
|                                                               | • Page number in the text  |
| Computerized TestGen                                          | TestGen allows instructors to:  
|                                                               | • Customize, save, and generate classroom tests  
|                                                               | • Edit, add, or delete questions from the Test Item Files  
|                                                               | • Analyze test results  
|                                                               | • Organize a database of tests and student results  |
| PowerPoints                                                   | PowerPoints meet accessibility standards for students with disabilities. Features include, but not limited to:  
|                                                               | • Keyboard and Screen Reader access  
|                                                               | • Alternative text for images  
|                                                               | • High color contrast between background and foreground colors  |
### Supplements available to instructors at www.pearsonhighered.com

#### Data Set and Files
- Data for Case 1.1 HP; Case 3.1 AT&T; Case 3.2 IBM; Case 3.3 Kimberly-Clark; Case 4.1 JPMorgan Chase and Case 4.2 Wendy’s given in the book (SPSS and SAS). The output files containing the answers to the data analysis questions are also provided.
- Data files for Wal-Mart running project and output files containing the answers to data analysis in the associated project activities.
- Data files for all the Internet and Computer Exercises (SPSS and SAS). The output files containing the answers to the data analysis questions are also provided.
- Data file for the data set(s) used in each data analysis chapter (SPSS and SAS). The output files containing the analysis are also provided.
- SPSS and SAS computerized demonstration movies
- SPSS and SAS screen captures with notes

### Features of the Supplement

*Marketing Research, 7th Edition,* is available as an eBook and can be purchased at most eBook retailers.
ACKNOWLEDGMENTS

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Naresh K. Malhotra
Dr. Naresh K. Malhotra is Senior Fellow, Georgia Tech CIBER and Regents’ Professor Emeritus, Scheller College of Business, Georgia Institute of Technology. In 2010, he was selected as a Marketing Legend and his refereed journal articles were published in nine volumes by Sage with tributes by other leading scholars in the field. He is listed in Marquis Who’s Who in America continuously since 51st Edition 1997, and in Who’s Who in the World since 2000. In 2017, he received the Albert Nelson Marquis Lifetime Achievement Award from Marquis Who’s Who. In 2015, he received the Lifetime Achievement Award from the Prestige Institute of Management, Gwalior, India. He received the prestigious Academy of Marketing Science CUTCO/Vector Distinguished Marketing Educator Award in 2005. In 2011, he received the Best Professor in Marketing Management, Asia Best B-School Award.

In an article by Wheatley and Wilson (1987 AMA Educators’ Proceedings), Professor Malhotra was ranked number one in the country based on articles published in the Journal of Marketing Research (JMR) during 1980–1985. He holds the all-time record for the maximum number of publications in the Journal of Health Care Marketing. He is ranked number one based on publications in the Journal of the Academy of Marketing Science (JAMS) since its inception through volume 23 (1995). He is number one based on publications in JAMS during the ten-year period 1986–1995 (See Tables 6 and 7 of JAMS, 24(4) (Fall 1996):297). In an editorial by Schlegelmilch (JIM, 11(1), 2003), Malhotra was ranked number one based on publications in the International Marketing Review (IMR) from 1992 to 2002. He is ranked number one based on publications in the International Marketing Review since its inception (1983) to 2003 [Table V, IMR, 22(4) (2005); 396], and from 1983 to 2011 [Table VI, IMR, 30(1) (2013):14]. He is also ranked number one based on publications in the International Marketing Review from 1996 to 2006 based on a study by Xu et al. published in the Asia Pacific Journal of Management (2008) 25: 189–207. In a landmark study by Ford et al. (2010) examining publications in the top four marketing journals [Journal of Marketing, Journal of Marketing Research (JMR), Journal of Consumer Research, and the Journal of the Academy of Marketing Science (JAMS)] over a 25-year period from 1977 to 2002, Professor Malhotra has three top-three rankings: ranked number three based on publications in all the four journals combined, ranked number three based on publications in JMR, and ranked number one based on publications in JAMS. He has published ten papers in Journal of Marketing Research.

He has published more than 140 papers in major refereed journals, including the Journal of Marketing Research, Journal of Consumer Research, Marketing Science, Management Science, Journal of Marketing, Journal of Academy of Marketing Science, Organizational Research Methods, Journal of Retailing, Journal of Advertising, Journal of Health Care Marketing, and leading journals in statistics, management science, information systems, and psychology. In addition, he has published numerous refereed articles in the proceedings of major national and international conferences. Several articles have received best paper research awards.

He is Chairman of the Emerging Markets Conference Board, and the Lead Program co-chair of the annual conferences organized by the Board. He was chairman, Academy of Marketing Science Foundation, 1996–1998, and was president, Academy of Marketing Science, 1994–1996, and Chairman, Board of Governors, 1990–1992. He is a Distinguished Fellow of the Academy and Fellow, Decision Sciences Institute. He is the founding editor-in-chief of Review of Marketing Research, served as an associate editor of Decision Sciences for 18 years and has served as section editor, Health Care Marketing Abstracts, Journal of Health Care Marketing. He serves on the editorial board of eight (8) journals.

Dr. Malhotra has consulted for business, non-profit and government organizations in the United States and abroad and has served as an expert witness in legal and regulatory proceedings. He has special expertise in survey design, data analysis and statistical methods. He is the winner of numerous awards and honors for research, teaching, and service to the profession, including the Academy of Marketing Science, Outstanding Marketing Teaching Excellence Award, 2003.

Dr. Malhotra is an ordained minister of the Gospel, a member and Deacon, First Baptist Church, Atlanta, and President of Global Evangelistic Ministries, Inc. (www.globalevangelisticministries.net). This ministry has documented in independent reports more than 1.7 million people praying to receive Jesus Christ as personal Savior and Lord. He has been married to Veena for more than 37 years and they have two grown children Ruth and Paul.

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In a world awash with cheap behavioral data, it is tempting to believe that answers to questions concerning consumer behavior can all be answered through the application of analytics. Additionally, the advent of inexpensive, automated survey research platforms beckons not just researchers, but everyone, to put surveys up online at the drop of a hat without really understanding the science behind them. Combine these with a belief in “good enough” and you have a recipe for disastrous and expensive mistakes. It is this, above all, that makes Marketing Research: An Applied Orientation, Seventh Edition such an important and essential companion to the researcher and marketer alike. Marketing Research is both science and art and this edition provides a secure grounding in the application of both in the pursuit of accurate and impactful insights that can drive business decisions.

Simon Chadwick, Managing Partner, Cambiar Consulting
Chairman, Insights Association
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