

1. Record Nr.	UNINA9910828254203321
Autore	Meullenet J.-F (Jean-Francois), <1968->
Titolo	Multivariate and probabilistic analyses of sensory science problems // Jean-Francois Meullenet, Rui Xiong, and Christopher J. Findlay
Pubbl/distr/stampa	[Chicago, Ill.], : IFT Press Ames, Iowa, : Blackwell Pub., 2007
ISBN	9786612365553 9781282365551 128236555X 9780470277539 047027753X 9781615832057 161583205X 9780470276310 0470276312
Edizione	[1st ed.]
Descrizione fisica	1 online resource (258 p.)
Collana	IFT Press
Altri autori (Persone)	XiongRui FindlayChristopher J
Disciplina	664/07
Soggetti	Food - Sensory evaluation - Statistical methods Multivariate analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Multivariate and Probabilistic Analyses of Sensory Science Problems; Table of Contents; Introduction; Chapter 1. A Description of Sample Data Sets Used in Further Chapters; 1.1. A Description of Example Data Sets; References; Chapter 2. Panelist and Panel Performance: A Multivariate Experience; 2.1. The Multivariate Nature of Sensory Evaluation; 2.2. Univariate Approaches to Panelist Assessment; 2.3. Multivariate Techniques for Panelist Performance; 2.4. Panel Evaluation through Multivariate Techniques; 2.5. Conclusions; References; Chapter 3. A Nontechnical Description of Preference Mapping 3.1. Introduction 3.2. Internal Preference Mapping; 3.3. External Preference Mapping; 3.4. Conclusions; References; Chapter 4.

Deterministic Extensions to Preference Mapping Techniques; 4.1. Introduction; 4.2. Application and Models Available; 4.3. Conclusions; References; Chapter 5. Multidimensional Scaling and Unfolding and the Application of Probabilistic Unfolding to Model Preference Data; 5.1. Introduction; 5.2. Multidimensional Scaling (MDS) and Unfolding; 5.3. Probabilistic Approach to Unfolding and Identifying the Drivers of Liking; 5.4. Examples; References

Chapter 6. Consumer Segmentation Techniques 6.1. Introduction; 6.2. Methods Available; 6.3. Segmentation Methods Using Hierarchical Cluster Analysis; References; Chapter 7. Ordinal Logistic Regression Models in Consumer Research; 7.1. Introduction; 7.2. Limitations of Ordinary Least Squares Regression; 7.3. Odds, Odds Ratio, and Logit; 7.4. Binary Logistic Regression; 7.5. Ordinal Logistic Regression Models; 7.6. Proportional Odds Model (POM); 7.7. Conclusions; References; Chapter 8. Risk Assessment in Sensory and Consumer Science; 8.1. Introduction

8.2. Concepts of Quantitative Risk Assessment 8.3. A Case Study: Cheese Sticks Appetizers; 8.4. Conclusions; References; Chapter 9. Application of MARS to Preference Mapping; 9.1. Introduction; 9.2. MARS Basics; 9.3. Setting Control Parameters and Refining Models; 9.4. Example of Application of MARS; 9.5. A Comparison with PLS Regression; References; Chapter 10. Analysis of Just About Right Data; 10.1. Introduction; 10.2. Basics of Penalty Analysis; 10.3. Bootstrapping Penalty Analysis; 10.4. Use of MARS to Model JAR Data; 10.5. A Proportional Odds/Hazards Approach to Diagnostic Data Analysis

10.6. Use of Dummy Variables to Model JAR Data References; Index

Sommario/riassunto

Sensory scientists are often faced with making business decisions based on the results of complex sensory tests involving a multitude of variables. Multivariate and Probabilistic Analyses of Sensory Science Problems explains the multivariate and probabilistic methods available to sensory scientists involved in product development or maintenance. The techniques discussed address sensory problems such as panel performance, product profiling, and exploration of consumer data, including segmentation and identifying drivers of liking. Applied in approach and written for
