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# Measurement and Research Methods in International Marketing

Marko Sarstedt Manfred Schwaiger Charles R. Taylor Editors



## ADVANCES IN INTERNATIONAL MARKETING VOLUME 22

# MEASUREMENT AND RESEARCH METHODS IN INTERNATIONAL MARKETING

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# **SECTION I**

SECTION 1

# INTRODUCTION: MEASUREMENT AND RESEARCH METHODS IN INTERNATIONAL MARKETING

"Garbage in, garbage out" is a common expression that academics and practitioners use to emphasize that empirical analysis is only as good as the basis on which it relies. Although the importance of sound data and valid measures has long been acknowledged, it is nevertheless often problematic to follow required quality standards in concrete research situations. Potential sources of error are usually unknown, methods to ensure data quality are unavailable, and existing methods for scale development, index construction, data collection, and data analysis are insufficient or erroneously applied. This is especially true of international marketing research, which often makes great demands on the data and measures used, as well as on the research methodology applied. Against this background, this volume addresses issues pertaining to measurement and research methodology in an international marketing context. Thanks to the efforts of authors and reviewers, we are pleased to present nine articles that deal with cutting-edge topics such as formative measurement, response-bias in crosscultural research, marketing efficiency measurement, and segmentation methods.

We feel confident this selection of research papers will help researchers and practitioners alike address quality issues related to measurement and data analysis in international marketing correctly.

The first part of the volume deals with measurement in international marketing research.

This part's first chapter, titled "Using Formative Measures in International Marketing Models: A Cautionary Tale Using Consumer Animosity as an Example," by Adamantios Diamantopoulos and Petra Riefler deals with formative measurement which, after years of neglect, is finally receiving more attention in various social and behavioral science disciplines (e.g., Bagozzi 2011; Bollen 2011; Diamantopoulos, 2011; Diamantopoulos, Riefler, & Roth, 2008). However, despite the increasing number of formative measurement models found in the literature, little is known about the potential consequences of their use for substantive theory testing.

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Against this background, the authors highlight some problems that may arise when formative instead of reflective measures are used to test even simple theoretical models. They also illustrate approaches that help overcome these problems, and pinpoint the results' potential interpretation difficulties with regard to re-specified measurement models. Thus, the chapter stimulates discussion on the implications for theory development when models with formative measures are established and tested.

The second chapter in this part by George R. Franke, John S. Hill, Jase Ramsey, and R. Glenn Richey titled "Difference Scores, Analysis Levels, and the (Mis)interpretation of Cultural Distance" demonstrates previously unrecognized problems with the conceptualization, analysis, and interpretation of cultural distance measures. The authors' analytical and empirical analyses show that the difference scores that are implicit in measures of cultural distance usually imply unrealistic constraints on relationships between variables. Furthermore, analyzing cultural distance at the level of organizations rather than countries exaggerates the available sample size and may result in inaccurate statistical tests. On the basis of their findings, the authors suggest methods for improvements in cultural distance research.

The third chapter, titled "The Role of Response Formats on Extreme Response Style: A Case of Likert-Type vs. Semantic Differential Scales," by Joseph F. Rocereto, Marina Puzakova, Rolph E. Anderson, and Hyokjin Kwak deals with response bias in cross-cultural research, which may systematically differ from one culture to another, violating the assumption of measurement equivalence. Specifically, the authors investigate the role of response format type on extreme response style in different cultures, showing that differences occur with regard to Likert-type scales, whereas no significant differences arise when utilizing the semantic differential format.

Lastly, in their study "A Multicountry Advertising Research Framework: Lessons Learned From Testing Global Consumer Culture Positioning," Shintaro Okazaki, Barbara Mueller, and Sandra Diehl propose a framework that is useful for conducting multicountry marketing and advertising research. To illustrate the series of steps involved in conducting such investigations, the authors present a six-country study examining global consumer culture positioning. The suggested steps are relevant for the exploration of a wide variety of marketing and advertising-related topics.

Chapters in the second part deal with methods to measure marketing efficiency in an international marketing context. The first chapter by Matthew E. Sarkees and Ryan Luchs, titled "Stochastic Frontier Estimation in International Marketing Research: Exploring Untapped Opportunities," describes the basic characteristics of stochastic frontier estimation, which

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allows researchers to model efficiency issues using combinations of inputs and outputs. The method has been commonly applied in economics, but despite its relevance for international marketing research, its application is comparatively scarce in this field. By discussing the method's advantages, providing an application on data from the pharmaceutical industry, and discussing further potential applications in international marketing, the authors make a strong case for the method's suitability for tackling a broad range of research questions.

One of these research questions is the subject of the second chapter in this part titled "Marketing Accountability: Applying Data Envelopment Analysis to Assess the Impact of Advertising Efficiency on Shareholder Value," by Sascha Raithel, Sebastian Scharf, Charles R. Taylor, Manfred Schwaiger, and Lorenz Zimmermann. Specifically, the authors pick up the ongoing discussion on the accountability of marketing (e.g., Jacobson & Mizik, 2009; Luo & Homburg, 2008; Raithel, Sarstedt, Scharf, & Schwaiger, 2011) and examine advertising efficiency's effect on a firm's stock market performance. The authors illustrate how data envelopment analysis can be used to measure marketing expenditures' efficiency and combine the method with a stock return response modeling technique to evaluate marketing performance effects over time. Their results imply that managers should not limit their tactics to increasing market-based assets at any cost and raising budgets if they wish to send a positive signal to investors.

The third part deals with methodological advances in international marketing.

The first chapter, titled "The State of Methodological Practice in International Marketing Research," is by Charles R. Taylor, C. Luke Bowen, and Hae-Kyong Bang. The authors conduct a content analysis of papers published in leading marketing and advertising journals from 2005–2010 to examine whether accepted principles for conducting cross-national research are being followed. To this end, the chapter begins by outlining several guidelines that should be followed, including issues such as providing a compelling rationale for the countries being studied, conducting backtranslations, measuring cultural factors, and conducting post hoc equivalence tests. The chapter also examines the theoretical bases, primary methodologies, and analytical techniques applied that have evolved over the years. The analysis also compares the degree to which general marketing, advertising, and international marketing/business journals follow the guidelines.

The second chapter in this part by Edward E. Rigdon, Christian M. Ringle, Marko Sarstedt, and Siegfried P. Gudergan, titled "Assessing Heterogeneity in Customer Satisfaction Studies: Across Industry Similarities

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and within Industry Differences," broaches the issue of heterogeneity in the context of partial least squares (PLS) path modeling (e.g., Hair, Ringle, & Sarstedt, 2011), which has recently attracted considerable research interest in different fields (e.g., Hair, Sarstedt, Ringle, & Mena, 2012; Navarro, Acedo, Losada, & Ruzo, 2011; Rigdon, Ringle, & Sarstedt, 2010; Sarstedt, Becker, Ringle, & Schwaiger, 2011). Specifically, the authors look at evidence for observed and unobserved heterogeneity within data underlying the American Customer Satisfaction Index (ACSI) model. Using the finite mixture PLS path modeling (FIMIX-PLS; Hahn, Johnson, Herrmann, & Huber, 2002: Sarstedt et al., 2011) method, the authors uncover three latent segments of customers within each industry which differ significantly in terms of the impact of customer loyalty's anteceding constructs. As such, the chapter underlines the need to be open to differences across different populations, rather than attempting to impose one rigid model across distinct groups or cultures.

Regardless of whether researchers partition their data based on observable characteristics or derive latent segments by means of responsebased segmentation techniques, both procedures share the final step of analysis: A comparison of parameter estimates across the identified segments, using PLS path modeling-based approaches to multi-group analysis. The second chapter, titled "Multigroup Analysis in Partial Least Squares (PLS) Path Modeling: Alternative Methods and Empirical Results," by Marko Sarstedt, Jörg Henseler, and Christian M. Ringle deals with this topic by critically reviewing available approaches to multigroup analysis within a PLS path modeling framework. The authors also illustrate their characteristics by means of empirical data and propose two novel approaches to compare two and more groups of data.

There are a few people whom we would like to thank for their contribution to this project. First, we thank Shaoming Zou for encouraging us to edit an issue on this topic and for his advice along the way. It is his vision for Advances in International Marketing that allows these volumes to consistently contain high-quality work by leading scholars. We also thank Emerald, and particularly Mary Miskin and Stephanie Hull for their help in editing the manuscript. Finally, we appreciate the patience and support of

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Marko Sarstedt Manfred Schwaiger Charles R. Taylor Guest Editors

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