

## **Navigating to Publication: Best Practices in Research Methods**

Panel Proposal submitted to the Strategic Management Society Annual Conference  
TRACK D: Integrating Strategies at the Crossroad: General Track

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## ABSTRACT

Research methodology has been identified as a critical area of emphasis as the strategic management field moves forward. This session contributes to the conference theme by discussing best practices for a number of prominent methods topics, including structural modeling, construct measurement, interaction effects, limited dependent variables, and longitudinal designs. Our goal is to help prospective authors better prepare the empirical component of their manuscripts for journal submission. The panel is comprised of both micro and macro scholars who have served, variously, as reviewer, Editorial Board member, Associate Editor, and Editor-in-Chief, for journals in management, economics, psychology, and international business. The panel includes all three Editors of *Organizational Research Methods* since its founding in 1998.

### Background

The theme for this year's conference is 'Strategic management at the crossroads'. As noted in the call for papers, the domain of strategic management has changed considerably since the launch of the SMS conference three decades ago. As a result, researchers are required to ask increasingly sophisticated and nuanced questions that encompass multiple levels, theories, and specialties.

Strategic management has been characterized as an adolescent field (Hambrick, 1990), echoing an assessment that the entire domain of management is at an early stage of development, vis-à-vis areas such as psychology, economics, and much of the physical and social sciences (Pfeffer, 1993). Given the youth of strategic management, it is not surprising that empirical studies in this area have come under attack for a lack of rigor and sophistication in their methodology (Hitt, Gimeno & Hoskisson, 1998). More recently, there has been an emerging stream of research on the state of the art for different methodological tools used in strategic management (See Hitt, Boyd & Li, 2004, for a review). Additionally, a recent special issue of *Organizational Research Methods* (Ketchen, Boyd & Bergh, 2008) focused specifically on methodology topics in strategic management.

This panel session helps to advance the conversation on methodology in strategic management by addressing common methodological problems and their solutions. The panel will cover a number of topics, including structural modeling, construct measurement, interaction effects, limited dependent variables, and longitudinal designs. Through a discussion of best practices in each area, the panelists will help prospective authors proactively address methodological issues. Our panel has deep expertise in both methodology and the journal review process. Consequently, the presentations will be application oriented, emphasizing common pitfalls and methodological traps that authors often experience.

One goal stated in the call for papers was for sessions that bridge with other specialties. This panel supports that goal by bridging into the research methods community, as well as economics, psychology, and organizational behavior. *Organizational Research Methods* is sponsored by the Research Methods Division of the Academy of Management. Despite being a young journal, it was the sixth ranked management journal in 2008. Our panel includes all three of the ORM Editors-in-Chief since its inception, as well as other board members. The panel also includes current and past officers of the Academy of Management's Research Methods Division. Additionally, one of our panelists is the founder of the Center for the Advancement of Research Methods and Analysis. The CARMA center offers a number of short courses on methodology topics, and also produces a series

of methodology webcasts. If it is acceptable to the SMS, CARMA would like to create a webcast of this panel discussion.

## **Presentation Summaries**

### *Best-practice Recommendations for Estimating Interaction Effects in Strategy Research*

Herman Aguinis  
Kelley School of Business  
Indiana University

Interaction, also labeled moderating, effects provide information on whether the relationship between two variables is contingent upon the value of a third variable. In other words, an interaction effect hypothesis states that the relationship between two variables, or the effect of one variable on a second one, depends on the value of a third (moderator) variable. Our knowledge of interaction effects is an indicator of a theory's maturity and usefulness because the more we know about interactions, the more we understand a theory's boundary conditions. This presentation will discuss best-practice recommendations for estimating interaction effects in strategy research using two very popular techniques: Multiple regression and meta-analysis. Recommendations will include actions researchers can take regarding design, measurement, and analysis issues. Also, recommendations will include actions researchers can take before and after data are collected.

### *Best-Practice Recommendations on the Use of Limited Dependent Variable Models*

Harry P. Bowen  
McColl School of Business  
Queens University of Charlotte

Strategic and organizational outcomes are often modeled using a discrete dependent variable, calling for the use of methods involving models that are nonlinear in model parameters and that are often estimated by non least-squares methods such as maximum likelihood. This presentation will discuss best-practice recommendations regarding the estimation, interpretation, and presentation of the results from limited dependent variable models commonly used in strategy research. The presentation will in particular include discussion of the appropriateness of hierarchical modeling methods and the testing of interaction/moderating effects in such models.

### *Best Practice Recommendations for Measuring and Establishing the Construct Validity of Latent Variables*

Lisa Schurer Lambert  
J. Mack Robinson College of Business  
Georgia State University

The conclusions we can legitimately draw regarding the relationships among variables in a study rest on the definitions of our variables and the construct validity of measures of those variables. This presentation will offer best practices for ensuring construct validity in two ways; first by offering advice for what to do prior to collecting your data to ensure that your measures demonstrate construct validity. This discussion will include understanding the implications of formative and reflective models, multidimensional constructs and multi-level models, and provide guidelines for survey and archival data collection strategies. Second, this presentation addresses best practice strategies and

current standards for establishing the construct validity of latent variables including the role of reliability, interrater agreement and reliability, and exploratory and confirmatory factor analyses.

*Best-practice Recommendations for Undertaking Longitudinal Research*

Robert Vandenberg  
Terry College of Business  
University of Georgia

“Longitudinal” is frequently used in some manner to describe some aspect of published research studies. Yet, close examination of those studies reveals that they were anything but longitudinal. Most flagrant among the misuses occurs when authors describe their study as longitudinal when they used a so-called Time 1 measure of the independent variable and a Time 2 measure of the dependent variable. In reality, this is not longitudinal at all but rather cross-sectional. The term longitudinal actually implies that the study should be examining the dynamic (changing) properties of the constructs across time within the conceptual framework of interest. Mere separation of the independent and dependent variables by time is not an operationalization of change. This presentation will discuss first the conceptual basis underlying the term longitudinal and why understanding this basis is at the crux as to why we engage in research in the first place (i.e., to study change). Three means for evaluating change, and thus, truly making the study longitudinal, will be presented. Finally, recommendations will include actions researchers can take regarding design, measurement, and analysis issues. Also, recommendations will include actions researchers can take before and after data are collected to make sure that they are engaging in true longitudinal research.

*Best Practices for Reporting SEM Results in Organizational Research*

Dr. Larry J. Williams  
Center for the Advancement of Research Methods and Analysis (CARMA)  
Wayne State University  
School of Business Administration

Structural equation modeling (SEM) has become very popular in strategic management research. Authors who want to report the results of their SEM analyses face numerous questions as to what types of information they should include in their write up. Software programs used by these authors present a wide variety of model diagnostics, and a variety of model testing strategies may be used. This presentation will emphasize goodness of fit and other model evaluation results that should be included in papers reporting SEM results, and recommendations will be made based on a review of recent management research and current SEM literature. The goal will be to enable authors to increase their publication success by their presentation of key results from their analyses in an effective and efficient manner. The role that the Center for the Advancement of Research Methods and Analysis (CARMA) might play in helping authors achieve such success will also be discussed.

## **Participant Bios**

**Dr. Herman Aguinis** (<http://mypage.iu.edu/~haguinis>) is the Dean’s Research Professor and a Professor of Organizational Behavior and Human Resources at Indiana University’s Kelley School of Business. His research is interdisciplinary and addresses the general themes of corporate responsibility, diversity (both domestic and international), and ethics. He served as Editor-in-Chief of

*Organizational Research Methods* (2005-2007), currently serves as special issue co-editor for the *Journal of Management*, and has served or serves on the editorial board of fourteen journals. He has written more than 70 articles in refereed journals and the following three books: *Performance Management* (2009), *Applied Psychology in Human Resource Management* (2011, with W.F. Cascio), and *Regression Analysis for Categorical Moderators* (2004). In addition, he has edited the following two books: *Opening the Black Box of Editorship* (2008, with Y. Baruch, A.M. Konrad, & W.H. Starbuck) and *Test-Score Banding in Human Resource Selection* (2004).

**Dr. Harry P. Bowen** is W.R. Holland Chair of International Business and Finance and Associate Professor of Management at Queens University of Charlotte's McColl School of Business. Dr. Bowen's research spans a number of topic areas including corporate strategy, entrepreneurship, international competitiveness, international trade and trade policy, and applied statistical method. He is internationally recognized for his seminal research on the methodology and implementation of tests of international trade theory. A former Olin Fellow in Empirical Economics at the National Bureau of Economic Research, Dr. Bowen has been designated an *Expert* to the European Community. Over the years, he has served as an ad hoc reviewer for leading management and economics journals including *Academy of Management Review*, *American Economic Review*, *Economic Journal*, *Journal of International Business Studies*, *Journal of International Economics*, *Journal of Management Studies*, *Journal of Political Economy* and *Review of Economics and Statistics*.

**Dr. Brian Boyd** has over forty years of editorial board experience, including fifteen years on the *SMJ* board, and multiple terms at *AMJ*, *JOM*, *MOR*, and *ORM*. He has served as Associate Editor for *CGIR*, and is incoming Associate Editor for *ORM*. He has also served as Co-Editor for special issues at *CGIR*, *JOM*, and *ORM*. He has received multiple Editorial Board awards for his reviewing, including *SMJ* (2008 and 2009) and *AMJ*. He writes mainly in *SMJ*, and has also published in *AMJ*, *AMR*, *CGIR*, *JOM*, *JMS*, and *ORM*. He serves on the SMS Taskforce on Teaching, and is an officer of the SMS Strategy and Governance Interest Group, and the Academy of Management's Research Methods Division. He is a Fellow and on the advisory board of the CARMA Center, and has contributed to multiple volumes of the series *Research Methodology in Strategy and Management*. His main research interests include boards and management teams, strategy execution, and international strategy.

**Dr. Lisa Lambert** is an Assistant Professor in the Robinson College of Business at Georgia State University. She received her Ph.D. from the University of North Carolina at Chapel Hill and her MBA and undergraduate degrees from Northwestern University. Dr. Lambert's research focuses on the psychological contract and leadership, and extends to person-environment fit theory, and research methods. She has published in the *Journal of Applied Psychology*, *Personnel Psychology*, *Psychological Methods*, *Organizational Behavior and Human Decision Processes*, *Organizational Research Methods*, and *Business Strategy and the Environment*. She is serving on the Editorial Board for *Organizational Behavior and Human Decision Processes* and the *Journal of Business and Psychology*, is currently serving as the Program Chair Elect for the Research Methods Division of the Academy of Management and has served as Treasurer, Member at Large, and Student Representative. She has consulted for Nu Skin Enterprises, Chick-fil-A, The Network, Inc., and in medical and manufacturing industries, and in employment training programs.

**Dr. Robert Vandenberg** is a Professor of Management at the University of Georgia's Terry College of Business. His research addresses the general themes of organizational commitment, high involvement work practices, and workplace safety and health practices and the implications the latter

have for organizational effectiveness. Over the past 10 years, he and his colleagues have received nearly \$10 million U.S. in grant money from the National Institutes of Health, National Institute of Occupational Safety and Health, and CDC. Robert is the current Editor-in-Chief of *Organizational Research Methods* (2007-2010), currently serves on the editorial board of the *Journal of Management*, and has served on the editorial board of several other journals. He has written more than 50 articles in refereed journals, several chapters for edited volumes (i.e., *Annals of the Academy of Management*), and co-edited a 2009 book on statistical myths and urban legends. His 2000 *Organizational Research Methods* article co-authored with Charles Lance on measurement invariance received the prestigious Robert MacDonald award from the Research Methods Division of the Academy of Management for the best contribution to the research methods literature in 2005.

**Dr. Larry J. Williams** joined the faculty of Wayne State University in January, 2010. Previously he was on the faculty at Virginia Commonwealth University, the University of Tennessee, and Purdue University. His research interests include structural equation modeling, method variance, and organizational citizenship behavior. Dr. Williams served as the Founding Editor of *Organizational Research Methods (ORM)*, and he also has served as Chairperson for the Research Methods Division (RMD) of the Academy of Management. Professor Williams established and currently serves as Director of the Center for the Advancement of Research Methods and Analysis (CARMA), an interdisciplinary center devoted to helping faculty and students advance their knowledge of organizational and social science research methods and data analysis techniques. In 2005, Dr. Williams was selected to be the recipient of the 2005 Distinguished Career Contributions Award by the Academy of Management's Research Methods Division.

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