

MGMT 8921 – SEMINAR IN RESEARCH METHODS SPRING SEMESTER 2010

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Section (001): Thursday 1:00-4:00; FCB361
Office Hours: Thursday 12:00-1:00, and by appointment
Course Materials: eCourseware

Course Overview and Objectives

This course is designed for doctoral students who intend to conduct empirical research publishable in scholarly journals. It is focused on understanding, evaluating, conducting, and reporting research in the behavioral sciences. This is not a statistics course, although we will be discussing statistics as tools, and all students should have successfully completed graduate courses in statistics and research methodology.

In essence, research consists of asking important questions and using scientific methods to design and implement ways of answering these questions. There is generally no one right way to approach these issues (although there are definitely wrong ways!); instead, research consists of numerous choices that involve trade-offs. We will begin the semester by addressing the research process (including identifying research questions, philosophy of science, and the scientific method), trade-offs among research designs (e.g. field versus laboratory studies), and the nature and meaning of correlation and causality. We will then turn to measurement and validity issues, which are especially critical in the behavioral sciences. We will also cover several special topics that warrant consideration, such as the accumulation of research results, moderation and mediation, factor analysis, structural equation modeling, and qualitative methods. Throughout, we will spend some time learning about our scholarly profession in terms of the publication process and reviewing research.

For each topic, a set of readings will be assigned. Please note that neither the topics nor the readings covered should be considered to be exhaustive. We simply cannot cover everything in the time allotted. The purpose is to provide a solid foundation in the important issues related to each topic and the field as a whole. The overall goal of the course is to help prepare each of you to scientifically pursue answers to important questions in your field.

Objectives:

- to develop an understanding of research design, methods, and strategies necessary to create new knowledge and publish empirical research in your areas of interest
- to be able to design research studies that appropriately test hypotheses, control for likely sources of error, and contribute to knowledge in a content area, and to recognize how design trade-offs affect research conclusions
- to clearly communicate scientific ideas and questions with colleagues, in both verbal and written form
- to develop skills in interpreting and constructively critiquing existing and new research

Academic Honesty

Students are expected to recognize and uphold standards of intellectual and academic integrity as set forth in the General Catalog, Faculty Handbook, and Undergraduate Co-Curricular Affairs Handbook. Students should refrain from any and all forms of dishonorable or unethical conduct related to their academic work, including but not limited to: plagiarism, cheating on examinations, unauthorized collaboration, falsification, and multiple submissions.

Readings

Required Text: Pedhazur, E.J. & Schmelkin, L.P. (1991). *Measurement, Design, and Analysis: An Integrated Approach*. Hillsdale, NJ: Lawrence Erlbaum. ISBN 0-8058-1063-3.

Required Readings: A list of required readings will be provided for each topic. These readings should be thoroughly read and considered prior to the class period in which they will be addressed, and each student should be prepared to discuss them in class. It is suggested that you prepare a one page summary of the important points gleaned from each reading.

Recommended Texts:

Cohen & Cohen. (1983). *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences*.

Kerlinger & Lee. (1999). *Foundations of Behavioral Research*.

Nunnally & Bernstein. (1994). *Psychometric Theory*.

Runkle & McGrath (1972). *Research on Human Behavior: A Systematic Guide to Method*

Shadish, Cook, & Campbell. (2002). *Experimental and Quasi-Experimental Designs for Generalized Causal Inference*.

Course Requirements

Grades will be determined by the instructor. One-half of the course grade will be determined by participation and one-half by performance on a final exam.

Participation

Class Participation: This is a *seminar*: every student is expected to contribute to the class discussion every week, in terms of asking/answering questions, offering opinions on the strengths/weaknesses of different readings, etc. I realize that individuals differ in terms of their natural tendencies to be expressive in these kinds of situations; however, it is vital in our profession to be able to critically exchange ideas and information with colleagues. Thus, it is the responsibility of those who tend to be less expressive to push themselves to participate, and the responsibility of those who tend to be more expressive to actively include others in the discussion. *Important Note: You can't participate if you're not here!*

On-line Discussion: Each week during the semester, I will post at least one topic/question/issue for asynchronous electronic discussion on eCourseware. Each student is expected to provide their thoughtful input on the topic at least one time each week. You are of course welcome to provide as much input as you like, and to post your own questions/topics for discussion.

CARMA Webcasts: One of the best ways to learn something is to have to teach it to someone else. Once during the semester, each student is required to watch one CARMA Webcast, and prepare and present a 30 minute lesson to the class about the topic and content of the Webcast. Instead of focusing on the technical details, please focus on the big picture: when would you use it (e.g. for which types of research questions; with what types of data); what are the primary research design considerations (e.g. data collection, measurement, and sample characteristics); and what are the primary strategies for carrying out and presenting publishable research with the approach?

To register with CARMA: <http://www.carma.vcu.edu/AddPerson.asp> (must use a memphis.edu address)

To download the slides and watch the Webcast: <http://www.carma.vcu.edu/VideoLibrary.asp>

Final Exam

A final exam will be given near the end of the semester. The exam will consist of questions similar to those found on comprehensive exams, and will be completed in class. The exam is intended to assess knowledge and understanding of course topics, the ability to apply that knowledge to research problems, and the ability to integrate, compare and contrast, and constructively critique. The exam should also provide a preview of what to expect on your Comprehensive Exams.

Class Schedule

<u>Date</u>	<u>Topic</u>
Thursday January 14	Introduction to Course
Thursday January 21	Research Process
Thursday January 28	Research Design
Thursday February 4	Correlation and Causality
Thursday February 11	Sampling, Power, Significance Testing, and Effect Size
Thursday February 18	Measurement
Thursday February 25	Measurement Validity
Thursday March 4	Factor Analysis, Structural Equation Modeling
Thursday March 11	<i>Spring Break – no class</i>
Thursday March 18	Moderation and Mediation
Thursday March 25	Accumulation of Results
Thursday April 1	Studying Organizational Performance
<i>Thursday April 8</i>	Qualitative Methods
Thursday April 15	Multi-Level Research
Thursday April 22	Final Exam

NOTE THAT THIS COURSE SYLLABUS PROVIDES A GENERAL PLAN FOR THE COURSE. DEVIATIONS MAY BE NECESSARY.

The Research Process

Pedhazur & Schmelkin, chapters 7 and 9

Platt, J.R. 1964. Strong inference. Science, 146, 347-353.

Lundberg, C.C. 1976. Hypothesis creation in organizational behavior research. Academy of Management Review, 1, 5-12.

Behling, O. 1980. The case for the natural science model for research in organizational behavior and organization theory. Academy of Management Review, 5, 483-490.

Daft, R.L. 1983. Learning the craft of organizational research. Academy of Management Review, 8, 539-546.

Daft, R.L., Griffin, R.W., & Yates, V. 1987. Retrospective accounts of research factors associated with significant and not-so-significant research outcomes. Academy of Management Journal, 30, 763-785.

Guba, E.G. & Lincoln, Y.S. 2005. Paradigmatic controversies, contradictions, and emerging confluences. In N.K. Denzin and Y.S. Lincoln (Eds.) *The Sage Handbook of Qualitative Research* (3rd Edition) (pp. 191-215). Thousand Oaks, CA: Sage.

Buchanan, D.A. & Bryman, A. 2007. Contextualizing methods choice in organizational research. Organizational Research Methods, 10, 483-501.

Professional Development Corner

Research Projects that Made an Impact: interview results

Research Design

Pedhazur & Schmelkin, chapter 10

Runkle, P.J. & McGrath, J.E. 1972. Research on Human Behavior: A Systematic Guide to Method. Chapter 4, pages 81-118.

Scandura, T.A. & Williams, E.A. 2000. Research methodology in management: Current practices, trends, and implications for future research. Academy of Management Journal, 43, 1248-1264.

Chatman, J.A. & Flynn, F.J. 2005. Full-cycle micro-organizational behavior research. Organization Science, 16, 434-447.

Edmondson, A.C. & McManus, S.E. 2007. Methodological fit in management field research. Academy of Management Review, 32, 1155-1179.

Aguinis, H., Pierce, C.A., Bosco, F.A., & Muslin, I.S. 2009. First decade of *Organizational Research Methods*: Trends in design, measurement, and data-analysis topics. Organizational Research Methods, 12, 69-112.

Zyphur, M.J. 2009. When mindsets collide: Switching analytical mindsets to advance organization science. Academy of Management Review, 34, 677-688.

Professional Development Corner

The Publication Process

Feldman, D.C. (2003). Sense and sensibility: Balancing the interests of authors, reviewers, and editors. Journal of Management, 29, 1-4.

Varadarajan, P.R. (1996). From the editor: Reflections on research and publishing. Journal of Marketing, 60, 3-6.

Correlation and Causality

Pedhazur & Schmelkin, chapters 12, 13, and 14

Cook, T.D., Campbell, D.T., & Peracchio, L. 1990. Quasi experimentation. In M. D. Dunnette & L. M. Hough (Eds.) Handbook of Industrial and Organizational Psychology (2nd ed.), 1, 491-576.

Mitchell, T.R. 1985. An evaluation of the validity of correlational research conducted in organizations. Academy of Management Review, 10, 192-205.

Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y., & Podsakoff, N.P. 2003. Common method biases in behavioral research: A critical review of the literature and recommended remedies. Journal of Applied Psychology, 88, 879-903.

Grant, A.M. & Wall, T.D. 2009. The neglected science and art of quasi-experimentation: Why-to, when-to, and how-to advice for organizational researchers. Organizational Research Methods, 12, 653-686.

Highhouse, S. 2009. Designing experiments that generalize. Organizational Research Methods, 12, 554-566.

Professional Development Corner The Publication Process

Feldman, D.C. (2004a). The Devil is in the details: Converting good research into publishable articles. Journal of Management, 30, 1-6.

Stewart, D.W. (2002). Getting published: Reflections of an old editor. Journal of Marketing, 66, 1-6.

Sampling, Power, Significance Testing, and Effect Sizes

Pedhazur & Schmelkin, chapter 15

Cohen, J. 1992. A power primer. Psychological Bulletin, 112, 155-159.

Cohen, J. 1994. The Earth is round ($p < .05$). American Psychologist, 49, 997-1003.

Cortina, J.M. & Dunlap, W.P. 1997. On the logic and purpose of significance testing. Psychological Methods, 2, 161-172.

Austin, J.T., Boyle, K.A., & Lualhati, J.C. 1998. Statistical conclusion validity for organizational science researchers: A review. Organizational Research Methods, 1, 164-208.

Cortina, J.M. & Folger, R.G. 1998. When is it acceptable to accept a null hypothesis: No way, Jose? Organizational Research Methods, 1, 334-350.

Cashen, L.H. & Geiger, S.W. 2004. Statistical power and the testing of null hypotheses: A review of contemporary management research and recommendations for future studies. Organizational Research Methods, 7, 151-167.

Breaugh, J.A. 2003. Effect size estimation: Factors to consider and mistakes to avoid. Journal of Management, 29, 79-97.

Professional Development Corner

The Publication Process

Feldman, D.C. (2004b). Negotiating the revision process. Journal of Management, 30, 305-308.

Smith, D.C. (2003). The importance and challenges of being interesting. Journal of the Academy of Marketing Science, 31, 319-322.

Measurement

Pedhazur & Schmelkin, chapters 2 and 5

Nunnally, J.C. & Bernstein, I.H. 1994. Psychometric Theory (3rd edition), chapters 6 and 7.

Cortina, J.M. 1993. What is coefficient alpha? An examination of theory and applications. Journal of Applied Psychology, 78, 98-104.

Churchill, G.A. 1979. A paradigm for developing better measures of marketing constructs. Journal of Marketing Research, 16, 64-73.

Hinkin, T.R. 1998. A brief tutorial on the development of measures for use in survey questionnaires. Organizational Research Methods, 1, 104-121.

Professional Development Corner

Getting an Article Published in a Top Journal: interview results

Measurement Validity

Pedhazur & Schmelkin, chapters 3 and 4

Cronbach, L.J. & Meehl, P.E. 1955. Construct validity in psychological tests. *Psychological Bulletin*, 52, 281-301.

Campbell, D.T. & Fiske, D.W. 1959. Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*, 56, 81-105.

Guion, R.M. 1977. Content validity – the source of my discontent. *Applied Psychological Measurement*, 1, 1-10.

Tenopyr, M.L. 1977. Content-construct confusion. *Personnel Psychology*, 30, 47-54.

Lawshe, C.H. 1985. Inferences from personnel tests and their validity. *Journal of Applied Psychology*, 70, 237-238.

Binning, J.F. & Barrett, G.V. 1989. Validity of personnel decisions: A conceptual analysis of the inferential and evidential bases. *Journal of Applied Psychology*, 74, 478-494.

Van Iddekinge, C.H. & Ployhart, R.E. 2008. Developments in the criterion-related validation of selection procedures: A critical review and recommendations for practice. *Personnel Psychology*, 61, 871-925.

Professional Development Corner

From original submission to publication

Allen, D.G., Mahto, R.V., & Otondo, R.F. 2007. Web-based recruitment: Effects of information, organizational brand, and attitudes toward a Web site on applicant attraction. *Journal of Applied Psychology*, 92, 1696-1708.

Factor Analysis and Structural Equation Modeling

Pedhazur & Schmelkin, chapters 22, 23, and 24

Preacher, K.J. & MacCallum, R.C. 2003. Repairing Tom Swift's electric factor analysis machine. Understanding Statistics, 2, 13-43.

Conway, J.M. & Huffcutt, A.I. 2003. A review and evaluation of exploratory factor analysis practices in organizational research. Organizational Research Methods, 6, 147-168.

Hurley, A.E., Scandura, T.A., Schriesheim, C.A., Brannick, M.T., Seers, A., Vandenberg, R.J., et al. 1997. Exploratory and confirmatory factor analysis: Guidelines, issues, and alternatives. Journal of Organizational Behavior, 18, 667-683.

Anderson, J.C. & Gerbing, D.W. 1988. Structural equation modeling in practice: A review and recommended two-step approach. Psychological Bulletin, 103, 411-423.

Williams, L.J., Edwards, J.R., & Vandenberg, R.J. 2003. Recent advances in causal modeling methods for organizational and management research. Journal of Management, 29, 903-936.

***Williams, Larry J., Vandenberg, Robert J. and Edwards, Jeffrey R.(2009)'12 Structural Equation Modeling in Management Research: A Guide for Improved Analysis',The Academy of Management Annals,3:1,543 — 604

Professional Development Corner The Craft of Reviewing

Feldman, D.C. (2004c). Being a developmental reviewer: Easier said than done. Journal of Management, 30, 161-164.

MacInnis, D. (2003). Responsibilities of a good reviewer: Lessons learned from Kindergarten. Journal of the Academy of Marketing Science, 31, 344-345.

Campion, M.A. 1993. Article review checklist: A criterion checklist for reviewing research articles in applied psychology. Personnel Psychology, 46, 705-718.

Sullivan, S.E., Crocitto, M., & Carraher, S.M. 2006. The fundamentals of reviewing. In, Baruch, Y., Sullivan, S.E., & Schepmyer, H.N. (Eds.), Winning reviews: A guide for evaluating scholarly writing. Palgrave.

Moderation and Mediation

Baron, R.M. & Kenny, D.A. 1986. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology, 31, 1173-82.

Aguinis, H. 1995. Statistical power problems with moderated multiple regression in management research. Journal of Management, 21, 1141-1158.

Stone-Romero, E.F., & Liakhovitski, D. 2002. Strategies for detecting moderator variables: A review of conceptual and empirical issues. Research in Personnel and Human Resources Management, 21, 333-372.

Aguinis, H., Beaty, J.C., Boik, R.J., & Pierce, C.A. 2005. Effect size and power in assessing moderating effects of categorical variables using multiple regression: A 30-year review. Journal of Applied Psychology, 90, 94-107.

Shaver, J.M. 2005. Testing for mediating variables in management research: Concerns, implications, and alternative strategies. Journal of Management, 31, 330-353.

Mathieu, J.E. & Taylor, S.R. 2006. Clarifying conditions and decision points for mediational type inferences in Organizational Behavior. Journal of Organizational Behavior, 27, 1031-1056.

MacKinnon, D.P., Fairchild, A.J., & Fritz, M.S. 2007. Mediation analysis. Annual Review of Psychology, 58, 593-614.

Edwards, J.R. & Lambert, L.S. 2007. Methods for integrating moderation and mediation: A general analytical framework using moderated path analysis. Psychological Methods, 12, 1-22.

Accumulation of Results

Schmidt, F.L. & Hunter, J.E. 1977. Development of a general solution to the problem of validity generalization. Journal of Applied Psychology, 62, 529-540.

Rosenthal, R. 1979. The 'file drawer problem' and tolerance for null results. Psychological Bulletin, 86, 638-641.

Wanous, J.P., Sullivan, S.E., & Malinak, J. 1989. The role of judgment calls in meta-analysis. Journal of Applied Psychology, 74, 259-264.

Schmidt, F.L., Law, K. Hunter, J.E., Rothstein, H.R., Pearlman, K., & McDaniel, M. 1993. Refinements in validity generalization methods: Implications for the situational specificity hypothesis. Journal of Applied Psychology, 78, 3-12.

Rosenthal, R. 1995. Writing meta-analytic reviews. Psychological Bulletin, 118, 183-192.

Cortina, J.M. 2003. Apples and oranges (and pears, oh my!): The search for moderators in meta-analysis. Organizational Research Methods, 6, 415-439.

Geyskens, I., Krishnan, R., Steenkamp, J-B.E.M., & Cunha, P.V. 2009. A review and evaluation of meta-analysis practices in management research. Journal of Management, 35, 393-420.

Short, J. 2009. The art of writing a review article. Journal of Management, 35, 1312-1317.

***Rousseau, Denise M., Manning, Joshua and Denyer, David(2008)'Chapter 11: Evidence in Management and Organizational Science: Assembling the Field's Full Weight of Scientific Knowledge Through Syntheses',The Academy of Management Annals,2:1,475 — 515

Professional Development Corner
Writing a Review

Research on Organizational Performance

Hitt, M.A., Gimeno, J., & Hoskisson, R.E. 1998. Current and future research methods in strategic management. Organizational Research Methods, 1, 6-44.

March, J.G. & Sutton, R.I. 1997. Organizational performance as a dependent variable. Organization Science, 8, 698-706.

McWilliams, A. & Siegel, D. 1997. Event studies in management research: Theoretical and empirical issues. Academy of Management Journal, 40, 626-657.

Hoskisson, R.E., Hitt, M.A., Wan, W.P., & Yiu, D. 1999. Theory and research in strategic management: Swings of a pendulum. Journal of Management, 25, 417-456.

Shook, C.L., Ketchen, D.J., Cycyota, C.S., & Crockett, D. 2003. Data analytic trends and training in strategic management. Strategic Management Journal, 24, 1231-1237.

Bromiley, P. & Johnson, S. 2005. Mechanisms and empirical research. In Research Methodology in Strategy and Management, 2, 15-29.

Certo, S.T. & Semadeni, M. 2006. Strategy research and panel data: Evidence and implications. Journal of Management, 32, 449-471.

Richard, P.J., Devinney, T.M., Yip, G.S., & Johnson, G. 2009. Measuring organizational performance: Towards methodological best practice. Journal of Management, 35, 718-804.

Professional Development Corner

Methodological Urban Legends

Cortina, J.M. 2002. Big things have small beginnings: An assortment of 'minor' methodological misunderstandings. Journal of Management, 28, 339-362.

Lance, C.E., Butts, M.M., & Michels, L.C. 2006. The sources of four commonly reported cutoff criteria: What did they really say? Organizational Research Methods, 9, 202-220.

Spector, P.E. 2006. Method variance in organizational research: Truth or urban legend? Organizational Research Methods, 9, 221-232.

Qualitative Methods

Amis, J. & Silk, M. The philosophy and politics of quality in qualitative organizational research. *Organizational Research Methods* (accepted, subject to revisions).

Corley, K.G. & Gioia, D.A. 2004. Identity ambiguity and change in the wake of a corporate spin-off. *Administrative Science Quarterly*, 49: 173-208.

Denis, J.L., Lamothe, L., & Langley, A. 2001. The dynamics of collective leadership and strategic change in pluralistic organizations. *Academy of Management Journal*, 44, 809-837.

Denzin, N.K. & Lincoln, Y.S. 2005. Introduction: The discipline and practice of qualitative research. In Denzin, N. & Lincoln, Y. (Eds). *The Sage Handbook of Qualitative Research* (third edition) (pp.1-28). Thousand Oaks, CA: Sage.

Guba, E.G. & Lincoln, Y.S. 2005. Paradigmatic controversies, contradictions, and emerging confluences. In N.K. Denzin and Y.S. Lincoln (Eds.) *The Sage Handbook of Qualitative Research* (3rd Edition) (pp. 191-215). Thousand Oaks, CA: Sage.

Lesser, L.I., Ebbeling, C.B., Goozner, M., Wypij, D., & Ludwig, D.S. 2007. Relationship between funding source and conclusion among nutrition-related scientific articles. *PLoS Medicine*, 4(1), 1-6.

Suddaby, R. 2006. From the editors: What grounded theory is not. *Academy of Management Journal*, 49: 633-642.