

WESTERN UNIVERSITY
LONDON CANADA

Department of Psychology
Psychology 9631b

Winter 2020

Research Methods in I/O Psychology

TENATIVE COURSE OUTLINE

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Course Objectives:

The purpose of this course is to familiarize students with the research methods used in the science and practice of industrial and organizational psychology. We will begin with a discussion of how to develop research questions and to select the research methodology best suited to answering these questions. We will then discuss specific research methods and data analytic strategies use by I/O psychologists. Discussion will focus on assumptions underlying the use of these methods and strategies, and on their strengths and limitations. Upon completion of the course, students should be in a better position to critically evaluate research in which these methods have been applied and to assess whether, and how, they can be applied in their own research.

Grading:

Grades will be based on participation in classroom discussion (20%), short written reports and student-led discussion of special issues (20%), a written research proposal (50%), and an in-class presentation of the proposal (10%).

Participation. Students are required to complete assigned readings *prior to* the class in which they are discussed, and to participate actively in discussion. Discussion questions or exercises (e.g., critiques of research articles) may be assigned one week in advance and students will be called upon to share their thoughts on these questions.

Written Reports and Student-led Discussion. Students will be required to write *two* short (2 double-spaced pages) reports. For one of these reports, the student will also be required to lead an in-class discussion of the issue (i.e., provide a brief overview of the issue and facilitate discussion). The discussion should last approximately 20 minutes. The first written report is due on **Monday, January 14, 2017 by 12pm** – more detail on the assignment will be provided in class.

The second report will address one of the special issues to be discussed between January 21 and March 10. The special issues will be assigned in advance and students will be required to submit a short written report and lead the in-class discussion. **All reports must be submitted by 12pm on the Monday before class.** All reports should be submitted by email to the instructor at meyer@uwo.ca. Late reports will be penalized 10%; reports will not be accepted after the class in which the issue is discussed.

The special issue reports and discussion should focus on the following questions: 1) what is the problem being addressed, 2) why is it important, what difficulties can it cause, and 3) what are the

potential solutions? For purposes of the written report, students may be required to focus on a specific aspect of the problem to meet the space restrictions.

Research Proposal: Students will be required to develop a research proposal in an area of their choosing. The proposal can be related to the student's thesis research but should extend that research in some way. The written proposal should not exceed 12 double-spaced typed pages (excluding references). Although the report should include a brief summary of the theoretical background and/or applied context for the research, the emphasis should be placed on describing the research question(s) and the rationale for the strategy proposed to answer the question(s) (and possibly why other strategies were not selected). The proposal can focus on a single study, but students are encouraged to consider outlining a program of research that might include the application of more than one of the methods discussed in this course. **Proposals are due by 12pm on Tuesday, April 7, 2018. Late papers will be penalized at a rate of 5% per day.** Students are strongly encouraged to meet with the instructor at least once to discuss the nature and scope of the project before preparing their written proposal (and in-class presentation).

In-class Presentation. Students will be required to make a 45-minute presentation of their research proposal during the last three weeks of class (specific dates to be determined within the first few weeks of class). Again, the report should include a brief summary of the theoretical background and/or applied context for the research, but the emphasis should be placed on describing the research question(s) and the rationale for the strategy proposed to answer the question(s). Students should view this presentation as an occasion to elaborate on, and provide an illustration of, methodological issues discussed in class. It is also an opportunity to get feedback to be incorporated into the written proposal.

Course Schedule:

Date **Topic / Reading (additional readings may be assigned as part of course exercises)**

* Readings available in electronic format on the OWL website

** Readings available in the DNJ library (8420 SSC)

Jan. 7 **Organizational Meeting**

Jan. 14 **Getting Started: Research Questions, Objectives, Standards, & Ethics**

*Sackett, P.R. & Larson, J.R. (1990). Research strategies and tactics in industrial and organizational psychology. In M.D. Dunnette and L.M. Hough (Eds.), *Handbook of Industrial and Organizational Psychology* (2nd Edition, Volume 1, pp. 419-490). Palo Alto, CA: Consulting Psychologists Press, Inc. **(Read pp. 422-428)**

*Stone-Romero, E.F. (2011). Research strategies in industrial and organizational psychology: nonexperimental, quasi-experimental, and randomized experimental research in special purpose and nonspecial purpose setting. In S. Zedeck (Ed.) *APA Handbook of industrial and organizational psychology* (Vol. 1, pp. 37-72). Washington, DC: APA. **(Read pp. 37-48)**

*Aquinas, H., & Henle, C.A. (2002). Ethics in research. In S.G. Rogelberg, *Handbook of research methods in industrial and organizational psychology* (pp. 34-52). Malden, MA: Blackwell Publishers Inc.

*Hambrick, D.C. (2007). The field of management's devotion to theory: Too much of a good thing? *Academy of Management Journal*, 50(6), 1346-1352.

Jan. 21 **Concept Development and Measurement**

*Guion, R.M. (2002). Validity and reliability. In S.G. Rogelberg (Ed.), *Handbook of research methods in industrial and organizational psychology* (pp. 57-76). Malden, MA: Blackwell Publishers Inc.

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

*Podsakoff, P.M., MacKenzie, S.B., & Podsakoff, N.P. (2016). Recommendations for creating better concept definitions in the organizational, behavioral, and social sciences. *Organizational Research Methods*, 19, 159-203. **(Focus on pp. 159-169; Skim pp. 169-188).**

Special Issues & Reading TBA

Jan. 28 **Experimental and Quasi-Experimental Designs**

*Stone-Romero, E.F. (2011). Research strategies in industrial and organizational psychology: nonexperimental, quasi-experimental, and randomized experimental research in special purpose and nonspecial purpose setting. In S. Zedeck (Ed.) *APA Handbook of industrial and organizational psychology* (Vol. 1, pp. 37-72). Washington, DC: APA. **(Read pp. 48-64)**

*Highhouse, S. (2009). Designing experiments that generalize. *Organizational Research Methods*, 12(3), 554-566.

*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(4), 653-686. **(Read pp. 653-672).**

Special Issues & Reading TBA

Feb. 4 **Multivariate Analytic Techniques**

*Bobko, P. (1990). Multivariate correlational analysis. In M. D. Dunnette and L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (Vol 1, pp. 637-686). Palo Alto, CA: Consulting Psychologists Press. **(Read pp. 655-669 – intended as a primer for those less familiar with factor analysis.)**

*Williams, L.J., Vandenberg, R.J., & Edwards, J.R. (2009). Structural equation modelling in management research. *The Academy of Management Annals*, 3, 543-604. **(Read pp. 543-573)**

Special Issues & Reading TBA

Feb. 11 Testing for Mediation and Moderation

- *Mathieu, J.E., DeShon, J.E., & Bergh, D.D. (2008). Mediation influences in organizational research: Then, now, beyond. *Organizational Research Methods, 11*, 203-223.
- **Hayes, A.F. (2018). Introduction to mediation, moderation, and conditional process analysis (Volume 2). New York: The Guildford Press. **(Read pp. 77-112 and 219-267)**

Special Issues & Reading TBA

Feb. 28 Advanced Multivariate Analytic Strategies

- *Hoffman, D.A. (2002). Issues in multilevel research: Theory development, measurement, and analysis. In S.G. Rogelberg (Ed.), *Handbook of research methods in industrial and organizational psychology* (pp. 247-274). Malden, MA: Blackwell Publishers Inc.
- *Williams, L.J., Vandenberg, R.J., & Edwards, J.R. (2009). Structural equation modelling in management research. *The Academy of Management Annals, 3*, 543-604. **(Read pp. 573-588)**
- * Woo, S.E., Jebb, A.T., Tay, L., & Parrigon, S. (2018). Putting the “person” in the center: Review and synthesis of person-centered approaches and methods in organizational science. *Organizational Research Methods, 21(4)*, 814-845.

Mar. 3 Meta-analysis

- *Bobko, P., & Stone-Romero, E. F. (1998). Meta-analysis may be another useful research tool, but it is not a panacea. In G.R. Ferris (Ed.), *Research in personnel and human resources management* (Vol. 16, pp.359-397). Stamford, CT: JAI Press.
- *Schmidt, F. L. (1992). What do data really mean? Research findings, meta-analysis, and cumulative knowledge in psychology. *American Psychologist, 47*, 1173-1181.
- *Cheung, M.-L. (2018). Some reflections on combining meta-analysis and structural equation modeling. *Research Synthesis Methods, 10*, 15-22.

Special Issues & Reading TBA

Mar. 10 Qualitative and Mixed-methods Research

- *Lee, T.W., Mitchell, T.R., & Harman, W.S. (2011). Qualitative research strategies in industrial and organizational psychology. In S. Zedeck (Ed.) *APA handbook of industrial and organizational psychology* (Vol. 1, pp. 73-83). Washington, DC: APA.

*Molina-Azorin, J.F., Bergh, D.D., Corley, K.G., & Ketchen, D.J. (2017). Mixed methods in the organizational sciences: Taking stock and moving forward. *Organizational Research Methods*, , 20(2), 179-192.

Special Issues & Reading TBA

Mar. 17 New Developments in Research Methodology

Readings TBA

Mar. 24-31 Student Presentations