

**PSYCHOLOGY 399:
RESEARCH IN INDUSTRIAL & ORGANIZATIONAL PSYCHOLOGY**

Department of Psychology
Fall 2006-07

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Class Schedule/Location: Tuesday & Thursday: 10:30 – 11:50, HH 344

Background Reading: Your Psychology 291 texts: Pelham & Blanton, *Measuring the weight of smoke*. Stanovich, *Critical thinking in psychology*.

Reference Source: American Psychological Association. (2001). *Publication Manual of the American Psychological Association* (5th ed.). Washington, DC: Author.

Content of Course and Objectives

This course aims to develop your ability to critically evaluate and conduct research in I/O psychology and in psychology in general. We will cover the methods most commonly used in the study of I/O psychology, and will discuss several design and statistical issues of particular importance in field research. Students will leave the course with (a) a comprehensive understanding of a variety of research methods applicable to the study of I/O psychology, and (b) a heightened ability to critically evaluate research in I/O psychology (and psychology more generally), as well as in related fields such as organizational behaviour.

Format of the Course

The course is structured as a series of discussions of prescribed readings. The readings are organized around a particular methodology or issue, and will provide a base from which relevant methodological, theoretical, and practical issues can be addressed. I have an extended reading list on hand, for those of you who are interested in pursuing specific topics in greater detail.

Note that this course is intended to build on earlier method courses you have taken, and as such we will generally discuss methodology in the context of empirical research. This has two advantages: it will allow us to discuss more complex methodological issues in the context of actual research; at the same time, it will expose you to a variety of research topics and theoretical issues in the field of I/O Psychology.

As noted below, one of the requirements for this course is a research proposal. You will formulate a research idea and design at least one study (and a maximum of two studies) to test your idea employing various methods discussed in class. The course TA and I will be happy to help you develop and refine your research proposal throughout the term.

Evaluation

1. In-class participation: 20% of your grade. This is an advanced undergraduate seminar, and I am keen to hear from you; therefore you have a rare opportunity to actively participate in discussions of the material, regardless of whether or not you are a discussion leader (see below) in any particular class. The seminar has the potential to be a valuable and rewarding learning experience, but that is largely determined by you. I would suggest that **in preparing for each meeting you do several things:** First, read the assigned article carefully and summarize (in writing) the major ideas, issues, and conclusions. Second, spend some time giving serious thought to the issues raised and to the implications of the material for future research and/or for the practical management of problems in the workplace. You should then find it is quite easy to come to each class with questions, observations, criticisms, praise, and so on. **Everyone is expected to bring forth his or her observations every class.** (Note: I will grade your participation each session immediately following our class, and later create a composite of these grades, so as to avoid potential rater biases.)

Note that your in-class participation **also includes a presentation** (in pairs) of your preliminary research proposal (see point 4 below) in the last few weeks of class.

2. Discussion Leader: 20% of your grade. In small groups (size will depend on class size), you will be responsible for leading discussion each session. Obviously, your written thoughts (from point 1 above) can serve as the basis for how you will lead the discussion. In leading discussion, you should assume that all of us have read the readings--in other words, your role is not merely to summarize the readings. Rather, you should have questions, comments, observations, critical evaluations, and so forth, to put to the class. *Note that students are expected to contribute in a meaningful way even when they are not the discussion leader.* Thus being discussion leader does not mean that you should dominate the discussion; instead, you will be responsible for guiding the discussion and keeping it going. **Note: When you are discussion leader, bring in two copies of your questions/comments.** One copy is for me to keep.

3. Test: 20% of your grade. Toward the end of the term (see topic list attached), you will write an exam that will test knowledge gained throughout the preceding weeks. The exam will test your abilities in formulating appropriate research designs, interpreting data, depicting data from results, and critiquing methodology.

4. Research Proposal: 40% of your grade. In this course, you will also develop a research proposal in pairs. The proposal is due on Tues., Dec. 12. The maximum length of the proposal will be 10 standard pages (12 point font, double spaced, 1 inch margins), excluding references and tables, etc. Anything beyond 10 pages will not be considered, and the penalty for late submissions is 5% per day.

In the last few weeks of class, you will present your initial proposal in pairs to the class (**20-30 minute presentation** depending on class size) and receive feedback from the instructor and other class members. You should present the theoretical background and rationale, your hypotheses, operationalizations, design and method, expected results, and implications.

You will develop the research proposal in pairs or small groups (size depends on class size), but ultimately you will each write up the proposal individually. You will need to meet with your group members throughout the term.

In brief, the goal of the research proposal is to develop a research question that you consider interesting and worthy of study, and to design a study (or at maximum two studies) to investigate it. You should develop an idea that you had as a direct result of discussions/readings (although other topics may be acceptable but you will need to approve them with me). You will need to locate, read, and report on additional relevant research that pertains to the rationale for your research question. The proposal should contain no less than 4 additional references. The objective for this course is not to conduct an exhaustive review; rather you need sufficient background to develop your idea.

Your proposal should be in APA format and include: a) an introduction section—in which your hypotheses are developed and proposed), b) a method section—in which the research design, procedure, and measures are described, c) a results section—in which the expected pattern of results is described, and d) a discussion section—in which the implications of the results for theory, practice and future research, as well as the limitations are discussed. In addition, you will include an appendix, containing all the measures, questionnaires, or other materials needed to conduct your study.

Some of the major relevant scientific journals to which you may wish to refer (all available in the Dana Porter Library or most via Psych Info):

Journal of Applied Psychology
Personnel Psychology
Organizational Behavior and Human Decision Processes
Journal of Organizational Behavior
Academy of Management Journal
Journal of Personality and Social Psychology
Personality and Social Psychology Bulletin
Psychological Bulletin

NOTE: Message from the Faculty of Arts Council

- *All students registered in the courses of the Faculty of Arts are expected to know what constitutes an academic offence, to avoid committing academic offences, and to take responsibility for their academic actions. When the commission of an offence is established, disciplinary penalties will be imposed in accord with Policy #71 (Student Academic Discipline). For information on categories of offences and types of penalties, students are directed to consult the summary of Policy #71 which is supplied in the Undergraduate Calendar (section 1; on the Web at http://www.adm.uwaterloo.ca/infoucal/UW/policy_71.html). If you need help in learning how to avoid offences such as plagiarism, cheating, and double submission, or if you need clarification of aspects of the discipline policy, ask your TA or course instructor for guidance or consult “How to Avoid Plagiarism and Other Written Offences: A Guide for Students and Instructors” (<http://watarts.uwaterloo.ca/~sager/plagiarism.html>). Other resources regarding the discipline policy are your academic advisor and the Undergraduate Associate Dean.*
- *Students who believe that they have been wrongfully or unjustly penalized have the right to grieve. Please refer to Policy #70 (Student Grievance) at <http://www.adm.uwaterloo.ca/infosec/Policies/policy70.html>.*

More Detail on Preparation for Class:

As stated above, you should all have a few questions/observations to bring to class each week. Below are some additional general points that might aid you in this regard. These questions should NOT limit or constraint your thinking. You will, undoubtedly, have other insights that you are encouraged to share with the class.

1. Are there any observations you make as you read the articles? For example, do you see inconsistencies/parallels to readings from a previous week? Are there aspects of the various theories that are competing, or can they be reconciled? Are there any consistencies/discrepancies to what you have observed in the organization?
2. Are you skeptical about the basis of any of ideas or the conclusions? Why? Any methodological concerns?
3. In what way did you feel heartened and/or disheartened by the readings, with respect to your understanding about theory and research on behavior in the workplace.
4. What did you learn that seemed counterintuitive to you? What seemed to be something “your grandmother could have told you”?
5. What did you want to most want to know--both as a scientist and a practitioner--after reading the work?
6. What applications did you take away from what you read? Or, alternatively, are there any problems (or limits) that you see to as far as application?
7. What’s the next study you see as necessary?

Suggestions for Effective Use of Readings in a Seminar

Here are some questions that you might find useful to consider when reading articles. Of course, depending on the nature/purpose of the article, some of these questions may apply more or less readily. These questions will not only help you prepare for class discussions, but also they underlie an effective research proposal.

1. Statement of the theory or key assumptions and tenets underlying the research (in empirical articles) or the conceptual framework provided (in review articles):

To understand the basic ideas, or principles, underlying the research, identify:

a) What are the major variables involved in explaining the phenomenon under investigation (e.g., commitment to the organization)? Note that some of the variables may be presumed to be antecedents, others may be moderators, and still others may be mediators. (If you are not clear on these terms, this is something to bring up in class!) You should thus not only identify the variables, but also indicate their presumed role.

b) Once you identify the major variables, indicate how they act to influence the phenomenon under investigation. That is, outline the process explaining why the effects are expected, according to the particular perspective.

Your answers for a) and b) may be brief, but what you should end up with is an outline of the particular theory or assumptions underlying the phenomenon of interest.

2. Also, you should indicate what the fundamental assumptions underlying the approach are. For example, what must we assume about the nature of humans to buy a particular theoretical framework? (You might indicate assumptions first, then follow with the tenets of the theory.)

WEEKLY TOPIC AND READING LIST

Sept 11-15

Introduction

- Tues: Overview of course
Thurs: Introduction to I/O Psychology, Scientific Process, & Methods

Sept 18-22

Theory, Constructs, and Hypothesis Generation

- Tues: Judd, C. M., Smith, E. R., & Kidder, L. H. (1991). *Research methods in social relations* (6th ed.) Holt, Rinehart and Winston, Inc. Chapter 2: Examining Social Relations Research
- Daft, R.L. (1984). Antecedents of significant and not-so-significant organizational research. In Bateman, J.S., & Ferris, G.R. (Eds.) *Methods and analysis in organizational research*. (pp. 3-14). Reston, VA: Prentice Hall.
- Lundberg (1984). Hypothesis creation in organizational behavior research, pp. 35-42. In Bateman & Ferris, pp. 35-42.
- Thurs: Bring your research ideas for discussion

Sept 25-29

Psychological Measurement and Construct Validity

- Tues: Allen, N.J. & Meyer, J.P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63, 1-18.
- Thurs: Judge, T., Erez, A., Bono, J. e., Thorensen, C. J. (2003). The core self-evaluations scale. Development of a measure. *Personnel Psychology*, 56, 303-331.

Oct 2-6

Survey Design and Analysis

- Tues: Visser, P. S., Krosnick, J. A., & Lavrakas, P. J. (2000). Survey Research. In H. T. Reis & C. M. Judd (Eds.), *Handbook of Research Methods in Social and Personality Psychology*, Chapter 9 (pp. 223-252). New York: Cambridge University Press.
- Folger, R. & Konovsky, M. A. (1989). Effects of procedural and distributive justice on reactions to pay raise decisions. *Academy of Management Journal*, 32, 115-130.
- Thurs: **Research Workshop: Bring ideas and preliminary methods for discussion**

Oct 9-13 Mediation & Moderation in Survey Design

- Tues: Judge, T. A., & Higgins, C. A. (1998). Affective disposition and the letter of reference. *Organizational Behavior and Human Decision Processes*, 75, 207-221.
- Thurs: Witt et al. (2002). The interactive effects of conscientiousness and agreeableness on job performance. *Journal of Applied Psychology*, 87, 164-169.

Oct 17-20 Longitudinal & Diary Design

- Tues: Heller, D. & Watson, D. (2005). The dynamic spillover of satisfaction between work and marriage: The role of time and mood. *Journal of Applied Psychology*, 6, 1273-1279.
- Thurs: Cheryl, T. et al. (2006). Personality, biographical characteristics, and job interview success: A longitudinal study of the mediating effects of interviewing self-efficacy and the moderating effects of internal locus of causality. *Journal of Applied Psychology*, 91, 446-454.

Oct 23-27 Experimental Design and Analysis I

- Tues: Aronson, E., Ellsworth, P. C., Carlsmith, J. M., Gonzales, M. H. (1990). *Methods of research in social psychology* (2nd ed.). McGraw-Hill, Inc. Chapter 7: The Independent Variable
- Howell, J. M. & Frost, P. J. (1989). A laboratory study of charismatic leadership. *Organizational Behavior and Human Decision Processes*, 43, 243-269.

**Thurs: Bring 1 pg (max) synopsis of research idea(s) and possible method
TA Discussion - Writing a Research Proposal
Research Workshop**

Oct 30-Nov 3 Experimental Design and Analysis II: Moderation & Mediation

- Tues: Greenberg, J. (1993). Stealing in the name of justice: Informational and interpersonal moderators of theft reactions to underpayment inequity. *Organizational Behavior and Human Decision Processes*, 54, 81-103.
- Thurs: Allen, T.D., & Rush, M.C. (1998). The effects of organizational citizenship behavior on performance judgments: A field study and a laboratory experiment. *Journal of Applied Psychology*, 83, 247-260.

Nov 6-10 Quasi-Experimental Design

Tues: Schmitt & Klimoski (1991), pp 386-391.

Eden, D., & Shani, A. B. (1982). Pygmalion goes to boot camp: Expectancy, leadership, and trainee performance. *Journal of Applied Psychology*, 67, 194-199.

Thurs: Greenberg, J. (2006). Losing sleep over organizational injustice: Attenuating insomniac reactions to underpayment inequity with supervisory training in interactional justice. *Journal of Applied Psychology*, 91, 58-69.

Nov 13-17

Tues: Q&A Review Session

Thurs: Test

Nov 20-24

Tues: Presentations

Thurs: Presentations

Nov 27-31

Tues: Presentations

Thurs: Presentations

Dec 5

Tues: Presentations

PROPOSALS DUE: December 12, 2006 (due by 4:00 p.m.)

Discussion Leaders

Tues, Sept 19	Theory, Constructs, Hypothesis Generation	
Tues, Sept 26	Measurement and Construct Validity	
Thurs, Sept 28	Measurement and Construct Validity	
Tues, Oct 3	Survey Design & Analysis	4
Thurs, Oct 5	none (Research Workshop)	
Tues, Oct 10	Mediation & Moderation in Survey Design	
Thurs, Oct 12	Mediation & Moderation in Survey Design	
Tues, Oct 18	Longitudinal & Diary Design	
Thurs, Oct 20	Longitudinal & Diary Design	
Tues, Oct 24	Experimental Design & Analysis I	4
Thurs, Oct 26	none (Writing; research workshop)	
Tues, Oct 31	Experimental Design & Analysis II: Mediation & Moderation	
Thurs, Nov 2	Experimental Design & Analysis II: Mediation & Moderation	4
Tues, Nov 7	Quasi-Experimental Design	
Thurs, Nov 9	Quasi-Experimental Design	
Tues, Nov 14	none	