

CPSY 450: Research in Counseling
Fall, 2015

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Office Hours
Wednesday 1:00 pm – 3:00 pm
Friday 4:00 – 5:00

COURSE DESCRIPTION

This is a doctoral-level course on research methods that is required of all students in the doctoral program in counseling psychology. It can also be taken by master's students in the community, clinical mental health, and school counseling programs to fulfill the research methods core requirement of these three programs. We will start by covering basic design and data analytic issues necessary to draw valid inferences from the findings of a study. We will then move on to somewhat more complex issues, including the meaning of moderation and mediation, how to test for each, and special issues involved in the design of outcome research on remedial and preventive interventions. We will also cover several contemporary and widely used multivariate strategies for data analysis and discuss for which types of research questions these are appropriate and inappropriate, keeping in mind that one should always opt for a minimally sufficient design for addressing a research question (see Wilkinson et al., 1999). Or as Cohen (1990) so eloquently put it—"simple is better." Students will also be exposed to both standard and alternative views of external validity, replication, and the relevance of research to practice and asked to consider how the alternate views may advance the science of counseling psychology and especially its application better than the received views. Finally, students will have an opportunity to apply what was learned in class to the design of a study addressing a question of the student's choice using one of the more methodologies presented in the course. Several exercises to be completed during the course will facilitate the completion of this research proposal.

COURSE OBJECTIVES

1. To help students gain the knowledge required to become a competent researcher in counseling psychology. These knowledge bases include: (a) generating ideas and developing research questions and hypotheses, (b) designing research to yield valid inferences, (c) the strengths and limitations of null hypothesis significance testing, (d) the importance of reporting effect sizes and confidence intervals, (e) distinguishing between mediators and moderators and learning how to test for each, (f) designing outcome research on treatment or preventive interventions, and (e) gaining an introductory familiarity with several widely used multivariate research methodologies, including factor analysis, structural equation modeling,

and meta-analyses. The latter multivariate strategies will require additional course work or independent study to acquire the necessary knowledge to use them in research.*

2. To learn to apply course material in the development of a research proposal.*

*These are the course objectives that you will be asked to evaluate at the end of the semester via the IDEA on-line course evaluation system. In the IDEA system these are labeled as (1) Gaining factual knowledge, and (2) Learning to apply course material.

REQUIREMENTS

1. Midterm and Final Exams (each is worth 25% of final grade).
2. Attendance and Participation (10 % of final grade). You are expected to participate actively in class discussions and demonstrate your knowledge of course materials. Assigned readings should be read in preparation for the class meeting for which they have been scheduled. The first part of the class will be used to discuss readings assigned for the class. The instructor will ask individual students questions about the readings. Thus, come to class fully prepared. Class participation obviously requires class attendance.
3. Research Proposal Exercises (15 % of final grade). Students will be assigned a series of exercises to complete between classes and turn in on the assigned date (see attached course schedule). The exercises include (a) presenting a tentative research idea/question, (b) preparing a reading list of literature relevant to your idea/question, (c) writing a proposal introduction and specifying a research question, and (d) presenting a preliminary draft of your proposal in class. These should culminate in the research proposal that is required in this course.
4. Research Proposal (worth 25% of the final grade). Students should prepare a research proposal on a question or questions of choice. The proposal should have an introduction and methods section. The introduction should make a case for the study and state the primary research question or questions, while the methods section should describe how the study will be conducted. The proposal should also be written in APA style.

READINGS

See **Reading Assignments** on the attached course schedule. All, except where otherwise noted, can be downloaded from the University Library electronic journals data base. Those that are unavailable electronically will be posted on Sakai.

SCHOOL OF EDUCATION CONCEPTUAL FRAMEWORK

Professionalism in the Service of Social Justice. As a counselor or counseling psychologist, you can be a vehicle of social justice in whatever setting you work and in whatever role you exercise in your career. This course will provide you with the

knowledge that you need to assure that your professional efforts to alleviate suffering and promote self-development and self-determination are as empirically-based as possible.

DIVERSITY

Your program is committed to issues of diversity, including, but not limited to, race, gender, sexual orientation, social class, ethnicity, and ability status. Readings were selected not only for the research methodology that they illustrated but also for the research questions that they addressed.

DISPOSITIONS

Each course in the School of Education focuses on one or more professional dispositions. Students are offered opportunities to receive feedback on their dispositional growth in the areas of professionalism, fairness, and/or the belief that all students can learn. The specific dispositions that student should develop in this class are professionalism, fairness/equity, and belief that all students can learn. The descriptions of the expected behaviors for the listed dispositions can be found on the rubric posted in LiveText for this course.

ACADEMIC HONESTY, ACCESSIBILITY, EthicsLine REPORTING HOTLINE, ELECTRONIC COMMUNICATION POLICIES AND GUIDELINES: See:

<http://luc.edu/education/syllabus-addendum/>

COURSE SCHEDULE

F, August 28	Introduction, Course Overview, and Administrative Matters
F, September 4	Review of Measurement and Statistical Concepts. Be Prepared to Discuss Your Research Interests and Questions that You Would Like to Address.
F, September 11	Statistical Significance, Effect Size, and Power
F, September 18	Understanding Causality: Conceptual and Design Issues Submit a reading list for your proposal.
F, September 25	External Validity, Replication, and Regression Basics
F, October 2	Moderators and Mediators
F, October 9	Catch-Up and Review for Midterm Exam
F, October 16	Midterm Exam
F, October 23	Exploratory and Confirmatory Factor Analysis Submit Proposal Introduction (Rationale) and Research Question
F, October 30	Structural Equation Modeling
F, November 6	Meta-Analysis
F, November 13	Outcome Research
F, November 20	Presentation of Proposals. Review for Final Exam.
F, November 27	No Class-Thanksgiving Break
F, December 4	Final Exam
Th, December 10	Proposals Due (to be submitted electronically by 5:00pm)

READING ASSIGNMENTS: Unless otherwise noted, students are expected to access these readings through that University Library's electronic journal data bases.

Review of Measurement and Statistical Concepts (9/4)

Wilkinson, L. & Task Force on Statistical Inference. (1999). Statistical methods

in psychology journals: Guidelines and explanations. *American Psychologist*, 54, 594-604. **Be Prepared to Discuss this Article**

Statistical Significance, Effect Size, and Power (9/11)

Schmidt, F. (2010). Detecting and correcting the lies that data tell. *Perspectives on psychological science*, 5, 233-242. **Be Prepared to Discuss This Article.**

Brown, S. D. (2015). On statistical wizardry, construct proliferation, and other challenges for our science. *The Counseling Psychologist*, 43, 614-628. **Be Prepared to Discuss This Article.**

Cohen, J. (1990). Things I have learned (so far). *American Psychologist*, 45, 1304-1312.

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

Henson, R. K. (2006). Effect sizes and meta-analytic thinking in counseling psychology. *The Counseling Psychologist*, 34, 601-630 (pp. 610-621).

Rosenow, R. L. & Rosenthal, R. (1988). Focused tests of significance and effect size estimation in counseling psychology. *Journal of Counseling Psychology*, 35, 203-208.

Understanding Causality: Conceptual and Design Issues (9/18)

Duffy, R. D. & Klingaman, E. A. (2009). Ethnic identity and career development among first year college students. *Journal of Career Assessment*, 17, 286-297. **Be Prepared to Discuss This Article.**

Heppner, P. P., Wampold, B. E., & Kivlighan, D. M. (2008). *Research design in Counseling* (3rd ed.). Belmont, CA: Thompson. **Read Chapter 8: Quasi-Experimental and Time Series Designs—available on BlackBoard.**

External Validity, Replication, and Regression Basics (9/27)

Fouad, N., Cotter, E. W., Kantamneni, N. (2009). The effectiveness of a career decision-making course. *Journal of Career Assessment*, 17, 338-347. **Be Prepared to Discuss This Article and Redesign the Study So That Causal Inferences Might Be Drawn from the Results.**

Mook, D. G. (1983). In defense of external invalidity. *American Psychologist*, 38, 379-387.

Anderson, C. A., Lindsay, J. J., & Bushman, B. J. (1999). Research in the psychological Laboratory: Truth or triviality? *Current Directions in Psychological Science*, 8, 3-9.

Moderators and Mediators (10/2)

Hardin, E. E. et al. (2014). The cultural lens approach to evaluating cultural validity of psychological theory. *American Psychologist*, 69, 656-668. **Be Prepared to Discuss This Article.**

Frasier, P. A., Tix, A. P., & Barron, K. E. (2004). Testing moderator and mediator effects in counseling psychology research. *Journal of Counseling Psychology*, 51, 115-134.

Catch-Up and Review (10/9)

Bettendorf, S. K. & Fischer, A. R. (2009). Cultural strengths as moderators of the relationship between acculturation to the mainstream U.S. society and eating- and body-related concerns among Mexican American women. *Journal of Counseling Psychology*, 56(3), 430-440. **Be Prepared to Discuss This Article.**

Rees, T. & Freeman, P. (2009). Social support moderates the relationship between stressors and task performance through self-efficacy. *Journal of Social and Clinical Psychology*, 28, 244-263. **Be Prepared to Discuss This Article.**

Exploratory and Confirmatory Factor Analysis (10/23)

Kahn, J. H. (2006). Factor analysis in counseling psychology research, training, and practice: Principles, advances, and applications. *The Counseling Psychologist*, 34, 684-718.

Structural Equation Modeling (10/30)

Brown, S. D. et al. (2012). Validation of a four factor model of career indecision. *Journal of Career Assessment*, 20, 3-21. **Be Prepared to Discuss This Article.**

Pinterits, E. J., Poteat, V. P., & Spanierman, L. B. (2009). The White Privilege Attitude Scale: Development and initial validation. *Journal of Counseling Psychology*, 56(3), 417-429. **Be Prepared to Discuss This Article.**

Weston, R. & Gore, P. A., Jr. (2006). A brief guide to structural equation modeling. *The Counseling Psychologist*, 34, 719-751.

Meta-Analysis (11/6)

Byars-Winston, A. M. & Fouad, N. A. (2008). Math and science social cognitive variables in college students: Contributions of contextual factors in predicting goals. *Journal of Career Assessment*, 16(4), 425-440. **Be Prepared to Discuss This Article**

Diemer, M. A. (2007). Parental and school influences upon the career development of poor youth of color. *Journal of Vocational Behavior*, 70, 502-524. **Be Prepared to Discuss This Article.**

Quintana, S. M. & Minami, T. (2006). Guidelines for meta-analyses of counseling psychology research. *The Counseling Psychologist*, 34, 839-877.

Outcome Research (11/13)

Pieterse, A. L., Todd, N. R., Neville, H. A. & Carter, R. T. (2012). Perceived racism and mental health among Black American adults. *Journal of Counseling Psychology*, 59, 1-9. **Be Prepared to Discuss This Article.**

Brown, S. D., Lent, R. W., Telander, K., & Tramayne, S. (2011). Social cognitive career theory, conscientiousness, and work performance. *Journal of Vocational Behavior*, 79, 81-90. **Be Prepared to Discuss This Article.**

Heppner, P. P. et al. (2008). *Research design in counseling* (3rd. ed.). Belmont, CA: Thompson. **Read chapter 18: Outcome research: Strategies and methodological issues—available on Black Board.**

Brown, S. D. & Roche, M. (2015). The outcomes of vocational interventions: Thirty (some) years later. *Journal of Career Assessment*.

Presentation of Proposals and Review (11/20)

Tavakoli, S. et al. (2009). Effectiveness of assertiveness training and expressive writing on acculturative stress in international students: A randomized trial. *Journal of Counseling Psychology*, 56, 590-596. **Be Prepared to Discuss This Article.**

Ogles, B. M., Lambert, M. J., & Sawyer, J. D. (1995). Clinical significance of the National Institute of Mental Health Treatment of Depression Collaborative Research Program data. *Journal of Consulting and Clinical Psychology*, 63, 321-326. **Be Prepared to Discuss This Article**

Choi, K. H., Busky, W., & Johnson, B. (2010). Evaluation of counseling outcomes at a university counseling center: The impact of clinically significant change on problem resolution and academic functioning. *Journal of Counseling Psychology*, 57, 297-303. **Be Prepared to Discuss This Article.**