

**CPSY 450: Research in counseling
Fall 2017**

Mon 1:40 – 4:00

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LT 1142

Office hours: Monday 4:00 -5:00 PM

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.

Each week will consist of questions and discussions of readings as well as some lecture on the topic. Students are expected to: (a) be prompt, (b) be respectful of each other, (c) come prepared, having read the material and having questions for discussion and (d) ask questions (if you do not know odds are others do not either).

Also, each week a different article, serving as an example, will be assigned to be read by all. A specific student (or students) will present this preassigned article to the class. The student should summarize the article, locate it in a larger landscape of the field, and describe it in sufficient detail that an audience can understand it without being overly burdened with detail. The presentation should also cover why the article is (un)important and offer a critique. The student should then lead class discussion focusing on the assets and liabilities of the article and its potential impact on the field.

The course is structured so that major quantitative analytic tools can be grasped by the student so that they can critically read and evaluate the professional literature and design their own study. The primary goal is for students to understand the fundamental ideas (i.e., big pictures of research methods) involved in each analytic tool and to be able to choose appropriate analyses for their research question. Added training/exercises might be needed for students to be able to apply analytic tools in a technically appropriate manner (i.e., technical procedures of research methods) but the focus of this course is to help students develop a strategic sense of research methods, based on which students can absorb detailed tactical procedures of research methods later.

Specially, therefore, this course is designed to help students achieve two hierarchical learning goals, including: (1) gaining knowledge about research in counseling (e.g., various analytic strategies, and coordination between research questions and research design), and (2) learning application of knowledge in research to research design, critique and interpretation.

Note: The two course objectives are the objectives that students 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 (1) gaining a basic understanding of the subject (e.g., factual

knowledge, methods, principles, generalizations, theories), (2) learning appropriate methods for collecting, analyzing, and interpreting numerical information. The addendum to this syllabus (see last page) explains more about the IDEA Course Evaluation System.

Course Requirements

Students are expected to have read all material for the course and engage in class discussion on the readings. There will be two exams, a midterm and final. Written assignments will consist of a manuscript review, and a research proposal. In addition, students will be expected to present their research proposal to the class.

Grading will be based on midterm exam (20%), final exam (20%), research review (10%), research presentation (15%), research proposal (25%), and class participation (10%).

The **exams** will consist of short answer (e.g., definition of terms) questions as well as an essay or two geared at integration and application of concepts.

Short answer evaluation rubric: Short answers will be evaluated for accuracy of explanation and inclusion of importance.

-Accuracy: 6 points for a completely accurate definition/description, 4 points for a mostly accurate description, 2 point for a small part being accurate but most inaccurate, and 0 points for an inaccurate response.

-Importance: 4 points for an accurate description why the concept is important, 2 point for partial coverage of importance, and 0 points for having no accurate reporting of importance.

Essay evaluation rubric: The paper is evaluated for accuracy of content (40%), adequacy of coverage (40%), and quality of organization (20%).

-Accuracy of content (40%): 40 points for completely accurate information; 30 points for mostly accurate (1 or 2 errors), 20 points for fairly accurate information with several errors, 10 points for mostly inaccurate information, 0 points for inaccurate content.

-Adequacy of coverage (40%): 40 points for complete coverage of content; 30 points for mostly covering content (1 or 2 minor omissions), 20 points for fairly complete information but with some prominent omissions, 10 points for many prominent omissions, and 0 points for egregious omissions.

-Quality of critical examination (20%): 20 points for well organized presentation of content and logical flow; 10 points for partial organization of material and/or some lapses in logical flow, and 0 points for no organization or just listing of material.

Students will hand in a **brief research review** on a manuscript provided. This task is intended to help them hone their critical skills as well as learn the process of manuscript submittal and review. The students are to act as if they were editorial consultants and submit a brief 1-3 page, single spaced review of the manuscript. The specific article to review is posted on blackboard. Reviews will be evaluated using the essay rubric stated above.

Research presentation will consist of the student presenting a research proposal to the class. This should include a brief summary of the research questions and their justification. Most of the presentation should focus on issues of method and analysis. What data will be collected and how? How will the data be analyzed? How will these data and analyses answer the research question? Strength and weaknesses? To assist with this task, the class as a whole (and in smaller groups) will potentially engage in designing several studies.

Research proposal will probably consist of the same content as the research presentation (although this is not necessary). The student will write a research proposal in a manner similar to a journal article (in APA style). This will consist of 3-6 pages of introduction (introduce and justify the research question and review appropriate literature), method (sample, measures, treatments, procedures, analysis), discussion of hypothetical results and what they will state, and finally limitations of the study. This should be no longer than 20 pages of text (excluding references). Reviews will be evaluated using the essay rubric stated above.

Late Assignment Policy: If you submit any assignment after the class start time (i.e., 1:40 PM) of the due date, your assignment will be considered late. You could receive 50% of the total points if you submit your assignment (except the research proposal) within one week after the due date. After one week since the due date, your assignment will not be accepted.

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.

Course Schedule

Class	Content	Assignment
Aug 28	Introduction to course	
Sep 4	Labor day	
Sep 11	Grad school survival Research criteria	Schwartz (2008) Horvind (2009) APA (2008) T2-dissertation guide Tracey-JCP review guidelines
	Basic research design	Heppner et al. Ch 4-5 Tracey (1991)
	Article 1 ()	Kim (2007) example
Sep 18	Significance testing, effect size, and power	Tracey & Glidden-Tracey (1999) Tracey, 2000 Vacha-Haase & Thompson (2004) Cohen (1992) Brown (2015)
	Article 2 ()	Elliott, et al., (2000) example
Sep 25	Measurement: Classical, Item response theory Article 3 ()	Dawis, 1987 Hoyt et al. (2006) Harvey & Hammer (1999) Goldman & Anderson (2007) example
Oct 2	General Linear Model Regression/ Mediation/Moderation Multilevel models Article 4 ()	Wampold & Freund (1987) Frazier et al. (2004) Mallinckrodt (2006) Kahn (2011) Tylkla & Wilcox (2006) example
Oct 9	Mid-Semester Break	
Oct 16	Midterm exam	
Oct 23	Factor Analysis	Fabrigar et al. (1999) Kahn (2006)
	Cluster/MDS	Borgen & Barnett (1987) Fitzgerald & Hubert (1987)
	Article 5 ()	Neville et al. (2000) example
Oct 30	Structural Equation Modeling	Quintana & Maxwell (1999) Weston & Gore (2006)
	Article 6 ()	Dunckley et al. (2000) example

Article Review due		
Nov 6	Longitudinal modeling Missing values Article 7 ()	McArdle, (2009) Graham (2009) Schlomer, Bauman, & Card (2010) Falkenström et al. (2013) example
Nov 13	Meta-analysis Article 8 ()	Ferguson (2009) Quintana & Minami (2006) Xu & Tracey (2016) example
Nov 20	Presentations of proposals	
Nov 27	Presentations of proposals	
Dec 4	Final Exam	
Dec 11	No class in the exam week	Proposals due

Readings

- APA (2008). Reporting standards for research in psychology: Why do we need them? What might they be? *American Psychologist*, 63, 839-851.
- Borgen, F. H., & Barnett, D. C. (1987). Applying cluster analysis in counseling psychology research. *Journal of Counseling Psychology*, 34, 456-468.
- Brown, S. D. (2015). On Statistical Wizardry, Construct Proliferation, and Other Challenges for Our Science. *The Counseling Psychologist*, 43(4), 614-628. doi: 10.1177/0011000015578290
- Cohen, J. (1992). Quantitative Methods in Psychology. *Psychological bul*, 112(1), 155-159.
- Dawis, R. V. (1987). Scale construction. *Journal of Counseling Psychology*, 34, 481-489.
- Dunkley, D. M., Blankstein, K. R., Halsall, J., Williams, M., & Winkworth, G. (2000). The relation between perfectionism and distress: Hassles, coping, perceived social support as mediators and moderators. *Journal of Counseling Psychology*, 47, 437-453.
- Elliott, T. R., Uswatte, G., Lewis, L., Palmatier, A. (2000). Goal instability and adjustment to physical disability. *Journal of Counseling Psychology*, 47, 251-265.

- Fabrigar, L. R., Wegener, D. T., MacCullum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods, 4*, 272-299.
- Falkenström, F., Granström, F., & Holmqvist, R. (2013). Therapeutic alliance predicts symptomatic improvement session by session. *Journal of Counseling Psychology, 60*(3), 317-328. doi: <http://dx.doi.org/10.1037/a0032258>
- Ferguson, C. J. (2009). An effect size primer: A guide for clinicians and researchers. *Professional Psychology: Research and Practice, 40*, 532-538.
- Fitzgerald, L. F., & Hubert, L. J. (1987). Multidimensional scaling: Some possibilities for counseling psychology. *Journal of Counseling Psychology, 34*, 469-480.
- Frazier, P. A., Tix, A. P., & Barron, K. E. (2004). Testing moderation and mediation effects in counseling psychology research. *Journal of Counseling Psychology, 51*, 115-134.
- Goldman, G. A., & Anderson, T. (2007). Quality of object relations and security of attachment as predictors of early therapeutic alliance. *Journal of Counseling Psychology, 54*, 111-117.
- Graham, J. W. (2009). Missing data analysis: Making it work in the real world. *Annual review of psychology, 60*, 549-576.
- Harvey, R. J., & Hammer, A. L. (1999). Item Response Theory. *The Counseling Psychologist, 27*, 353-407.
- Heppner, P. P., Wampold, B. E., & Kivlighan, D. M. (2007). *Research design in Counseling* (3rd ed.). Belmont, CA: Thompson
- Holmbeck, G. N. (1997). Toward terminological, conceptual and statistical clarity in the study of mediators and moderators: Examples from the child-clinical and pediatric psychology literatures. *Journal of Clinical and Consulting Psychology, 65*, 599-610.
- Horvind, S. (2009). From finding and advisor to creating hypotheses: The dos and don'ts of beginning a thesis. *APS Observer, 22*(4), 33-35.
- Hoyt, W. T., Warbasse, R. E., & Chu, E. Y. (2006). Construct validation in counseling psychology research. *The Counseling Psychologist, 34*(6), 769-805.
- Kahn, J. (2006). Factor analysis in counseling psychology research, training, and practice: Principles, advances, and applications. *The Counseling Psychologist, 34*(5), 684.

- Kahn, J. H. (2011). Multilevel modeling: Overview and application to research in counseling psychology. *Journal of Counseling Psychology, 58*, 257-271.
- Kim, B. S. K. (2007). Adherence to Asian and European American cultural values and attitudes toward seeking professional psychological help among Asian American college students. *Journal of Counseling Psychology, 54*, 474-480.
- Mallinckrodt, B., Abraham, W., Wei, M., & Russell, D. (2006). Advances in testing the statistical significance of mediation effects. *Journal of Counseling Psychology, 53*(3), 372-378.
- McArdle, J. J. (2009). Latent variable modeling of differences and changes with longitudinal data. *Annual review of psychology, 60*, 577-605.
- Neville, H. A., Lilly, R. L., Duran, G., Lee, R. M., Browne, L. (2000). Construction and initial validation of the color-blind racial attitudes scale (CoBRAS). *Journal of Counseling Psychology, 47*, 59-70.
- Quintana, S. M., & Maxwell, S. E. (1999). Implications of recent developments in structural equation modeling for counseling psychology. *The Counseling Psychologist, 27*, 485-527.
- Quintana, S. M. & Minami, T. (2006). Guidelines for meta-analyses of counseling psychology research. *The Counseling Psychologist, 34*, 839-877.
- Schlomer, G. L. Bauman, S. & Card, N. A. (2010). Best practices for missing data management in counseling psychology. *Journal of Counseling Psychology, 57*, 1-10.
- Schwartz, M. A. (2008). The importance of stupidity in scientific research. *Journal of Cell Science, 121*, 1771.
- Tracey, T. J. (1991). Counseling research as an applied science. In C. E. Watkins and L. S. Schneider (Eds.), *Research in Counseling* (pp. 1-31). Hillsdale, NJ: Erlbaum.
- Tracey, T. J. G. (2000). Issues in the analysis and interpretation of quantitative data: Deinstitutionalization of the null hypothesis test. In S. D. Brown & R. Lent (Eds.), *Handbook of Counseling Psychology* (3rd ed.) (pp. 177-198). New York: Wiley.
- Tracey, T. J. G., & Glidden-Tracey, C. E. (1999). Integratoin of theory, research design, measurement, and analysis: Toward a reasoned argument. *The Counseling Psychologist, 27*, 299-324.
- Tylka, T. L., & Wilcox, J. A. (2006). Are intuitive eating and eating disorder symptomatology opposite poles of the same construct? *Journal of Counseling Psychology, 53*, 474-485

- Wampold, B. E., & Freund, R. D. (1987). Use of multiple regression in counseling psychology research: A flexible data-analytic strategy. *Journal of Counseling Psychology, 34*, 372-382.
- Vacha-Haase, T., & Thompson, B. (2004). How to Estimate and Interpret Various Effect Sizes. *Journal of Counseling Psychology, 51*(4), 473-481.
- Weston, R., & Gore, J. P. A. (2006). A Brief Guide to Structural Equation Modeling. *The Counseling Psychologist, 34*(5), 719-751. doi: 10.1177/0011000006286345
- Wilkinson, L. (1999). Graphs for research in counseling psychology. *The Counseling Psychologist, 27*, 384-407.
- Xu, H., & Tracey, T. J. G. (2016). Cultural Congruence With Psychotherapy Efficacy: A Network Meta-Analytic Examination in China. *Journal of Counseling Psychology, 63*(3), 359-365. doi: <http://dx.doi.org/10.1037/cou0000145>

SCHOOL OF EDUCATION CONCEPTUAL FRAMEWORK

Social Action through Education. 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 programs are committed to issues of diversity, including, but not limited to, ability status, ethnicity, gender, race, sexual orientation, and social class. We will cover educational and career development issues with diverse populations to facilitate your work with diverse clients and communities.

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, Inquiry, and Social Justice. The specific disposition that student should develop in this class is Professionalism. The descriptions of the expected behaviors for the listed disposition can be found on the rubric posted in LiveText for this course.

**Loyola University Chicago
School of Education
Syllabus Addendum**

IDEA Course Evaluation Link for Students

Each course you take in the School of Education is evaluated through the IDEA Campus Labs system. We ask that when you receive an email alerting you that the evaluation is available that you promptly complete it. To learn more about IDEA or to access the website directly to complete your course evaluation go to: <http://luc.edu/idea/> and click on **STUDENT IDEA LOGIN** on the left hand side of the page.

Dispositions

All students are assessed on one or more dispositional areas of growth across our programs: **Professionalism, Inquiry, and Social Justice**. The instructor in your course will identify the dispositions assessed in this course and you can find the rubrics related to these dispositions in LiveText. *For those students in non-degree programs, the rubric for dispositions may be available through Sakai, TaskStream or another platform.*

Disposition data is reviewed by program faculty on a regular basis. This allows faculty to work with students to develop throughout their program and address any issues as they arise.

LiveText

All students, *except those who are non-degree*, must have access to LiveText to complete the benchmark assessments aligned to the Conceptual Framework Standards and all other accreditation, school-wide and/or program-wide related assessments. You can access more information on LiveText here: [LiveText](#).

Syllabus Addendum Link

- www.luc.edu/education/syllabus-addendum/

This link directs students to statements on essential policies regarding *academic honesty, accessibility, ethics line reporting* and *electronic communication policies and guidelines*. We ask that you read each policy carefully.

This link will also bring you to the full text of our conceptual framework that guides the work of the School of Education – ***Social Action through Education***.