

INLS 884 Seminar in Research Methodology

TERM: Spring 2014

TIME: Friday, 9:00-11:45 AM

LOCATION: Manning Hall, Room 014

COURSE WEBSITE: http://ils.unc.edu/courses/2014_spring/inls884/

INSTRUCTOR: Diane Kelly, Ph.D., Associate Professor

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OFFICE: Manning Hall, Room 10

OFFICE HOURS: By appointment

Motivation and Purpose

My motivation for teaching this course is to create a forum where Ph.D. students can examine key issues related to research design and methodology. The SILS Ph.D. program offers a two-semester course which introduces students to basic research issues and ILS literature and problems, but there is no Ph.D. course at SILS which teaches students about research methods. I believe that all Ph.D. students should have a firm foundation in, and grasp of, research methods. Currently, it is difficult to see where (and how) students acquire such knowledge. Trial-and-error is important, but so too is formal instruction. INLS 780/581 (Research Methods) offers some foundation, but it is a Master's course designed with the professional (not researcher) in mind. Not only is there a gap in the formal education for Ph.D. students in this area, there is also a gap for master's students who are interested in taking a more advanced course in research methods.

The purpose of this course is to formally guide students' exploration of, and engagement with, a series of topics related to research design and methodology, including theory, measurement and data collection. This course also introduces students to the sociology of science, ethics and scientific integrity.

Understanding research methods is essential to a life of research. Congratulations. You have chosen wisely by signing up for this course because you are unlikely to have a formal opportunity to engage in sustained discussion and exploration of these topics again – you'll be too busy doing your own research! Even if you do not plan to use all of the methods discussed in this course, understanding various methods and approaches to research will give you a better perspective and a greater understanding of the methods you plan to use. Besides, you never know what type of method you'll use in the future.

Assumptions & Prerequisites

This course is for Ph.D. students (or those considering the Ph.D. program who have had prior experience with basic research methods) or advanced Master's students (where advanced means that the student

has completed INLS 780 or 581 or some other equivalent). I assume that all students have completed a basic research methods course and have had some exposure to statistics and data analysis. This is not a statistics/data analysis course, although we will discuss a few topics related to power and sampling, and factor analysis. I do not assume that all students have completed independent research projects, but I do assume that all students have at least a desire to do so in the future.

Preparation

This course has a heavy reading load. I expect you to prepare for each class by reading the assigned materials. Many of these readings are dense. I do not expect you to understand every single thing in all articles. Remember, read for main ideas and themes and take notes of what you find (otherwise you might forget). You are not reading in preparation for a final exam. You are reading in preparation for discussion. I believe through your engagement with the articles you will absorb important ideas even if you cannot remember all the 'facts' from the articles and/or some things do not make much sense.

Some things will stick, other things will not ... as an example, I encountered many of these readings in the first Ph.D. course I took on research foundations. I remember (a) struggling to read many of the pieces and (b) not understanding 100% of everything that I read. However, to this day, I appreciate the perspective these articles and the process of engagement with difficult texts gave me (and I even remember a few things too!). I still read, consult and study these articles regularly for my own research. And, as a programming note, even though I will be reading many of these pieces for the umpteenth time, I know (and accept) there will still be things that I will not fully understand. I ask your forgiveness now if I am unable to explain something adequately.

We will spend the majority of class time discussing the readings. I will be prepared to introduce the materials and pose some questions for us to consider if we have a hard time starting the discussion or get stuck (although you all may not need any prompting!). Occasionally, I will demonstrate things and present examples for discussion.

A good way for you to prepare for our discussions is to annotate the articles (engage!): note your questions and what appears to be the main ideas and themes of the work; note similarities to your experiences and/or other things you've read. And, again, realize that just because you ask a question in class does not mean that I will be able to answer it.

Readings

Most of the readings will be available in Sakai.

Assignments

You essentially have one project that consists of multiple parts: (1) a description of a particular method (or issue related to methodology) using primary sources; (2) a review of research studies about this

method/issue; (3) a review of five studies from ILS that you think are the BEST examples of this method, with an explanation of why and critique (if some improvements could be made); (4) a proposal for a study to examine some aspect of the method (a study about methods -- my favorite kind!); (5) class lead about this method. These different parts will be due at different times during the semester.

My expectation is that you will do original work in this course. It is fine for you to build on your previous work, but it is unacceptable to submit the same work (or nearly the same work) that you used for another course or as part of your research assistantship. If you have questions about this, please come and talk to me.

Parts 1-3: Description of Method and Review of Research (40%)

The purpose of this assignment is for you to engage with the methods literature. You will need to consult two types of literature: (1) literature describing the origins, history and mechanics of the method and (2) literature describing empirical studies about different aspects of the method. *At a minimum*, you should consult and include *four* resources for Part 1, *four* resources for Part 2 and *four* resources for Part 3. Feel free to discuss your selections for Part 1 with me; I am familiar with many research methods writings and can (hopefully) verify these as authoritative sources or recommend others.

You should try to find the most authoritative sources for Part 1 (i.e., those which are most cited when discussing the method), the most interesting, novel and compelling for Part 2 and model cases for Part 3. For Parts 2 and 3, be sure to include a description of each study (this is so that we can get a sense of what the study was about and how the authors conducted the research).

This paper is primarily a *descriptive* literature review and synthesis; imagine you were writing this paper for a professional audience who does not have familiarity with the method. Of course, you might notice inconsistencies and differences in how researchers describe the method or in how they advise it be implemented. Please discuss these differences if appropriate. Being analytical is fine, and I hope to hear your ideas and reactions to what you read and find, but understand this paper will primarily be descriptive, which might make you uncomfortable.

Your paper should be about 20 double-spaced pages. Use the APA style (I'll check it!). You should upload this paper into our Resources directory.

Part 4: Research Proposal (40%)

Building on the work you completed in Parts 1-3, you will design and propose original, empirical research to study some aspect of your method. Your study will be similar to those you reviewed for Part 2 (hopefully, you'll be able to use these studies as motivation for whatever you propose). Your proposed research project should be something that could be completed during a semester (consider your scope). Your proposal should include (a) a general description of the topic and problem, including motivation for doing the research and importance of doing the research; (b) statement of the research questions and/or hypotheses; (c) short literature review (~10 pages); (d) method for investigating the problem; (e) data analysis plan; (f) statement of the potential implications of your findings and what you hope to

learn from the research and (g) identification of challenges, barriers and limitations of the research (be sure to discuss validity, reliability, transferability, etc.).

You should describe the method in detail including how you will define, operationalize and measure concepts. You should describe a sample and your recruitment strategy. You should describe the study procedures and any instruments.

Your proposal should be about 20 double-spaced pages. Use the APA style (I'll check it!).

Part 5: Class Lead (20%)

You will lead half a class period when we discuss 'your' method. You will need to select two articles/chapters for us to read in advance (please send these at least two weeks before your scheduled class). Make sure you allot some time to tell us about what you reviewed in Parts 1-3 and for questions and discussion. I assume (recommend) that the readings you select for the day will be from Parts 1-3, but plan to tell us about everything you found.

Style

You are required to use APA style for all assignments in this course. The following resources can help you understand and implement this style:

- American Psychological Association. (2009). *Publication manual of the American Psychological Association (6th ed.)*. Washington, DC: Author. [sils library reference book]
- APA style website: <http://www.apastyle.org/>
- The basics of APA style online tutorial (<http://www.apastyle.org/learn/tutorials/basics-tutorial.aspx>)
- Purdue online writing lab: <http://owl.english.purdue.edu/owl/resource/560/01/>

It is strongly recommended that you watch the basics of APA style online tutorial before you submit the first assignment. Your use of APA style will be evaluated in all assignments.

Observe the following technical specifications when writing your papers:

- Provide a separate reference page.
- Give your paper a title. Whatever title you choose, it should reflect clearly and concretely the content of your paper.
- Double-space your paper, use one-inch margins and 12-point font.
- Proof-read and copy-edit your paper. Points will be deducted for gratuitous spelling and grammatical errors.

Grading Scale

[H] High Pass (95% - 100%)	Truly outstanding work that goes well-beyond the requirements specified in the assignment description. This is a mark of distinction. Very few papers will receive this grade.
[P] Pass (80% - 94%)	Papers that receive this grade will meet all or most of the requirements specified in the assignment description. Work that is quite good will receive this grade because of the large range. In this class, my expectation is that most papers will receive a score between 85-94%.
[L] Low Pass (70% - 79%)	Papers that receive this grade are barely acceptable. I <i>usually</i> do not assign this grade. If your paper is a disorganized mess or if you have clearly missed the mark, then I will assign you a temporary grade and ask you to do it over. A 'do-over' at this level will not receive a grade higher than the lowest grade received by someone who did not have the do-over option.
[F] Fail (0% - 69%)	Papers that receive this grade are unacceptable and meet very few (if any) of the requirements specified in the assignment description. This is another grade that I <i>usually</i> do not assign. Instead, I will assign you a temporary grade and ask you to re-do the assignment. A 'do-over' at this level will not receive a grade higher than the lowest grade received by someone who did not have the do-over option.

UNC Honor Code and Campus Code

It shall be the responsibility of every student at the University of North Carolina at Chapel Hill to obey and to support the enforcement of the Honor Code, which prohibits lying, cheating, or stealing when these actions involve academic processes or University, student, or academic personnel acting in an official capacity.

It shall be the further responsibility of every student to abide by the Campus Code; namely, to conduct oneself so as not to impair significantly the welfare or the educational opportunities of others in the University community.

Schedule

January 10: Introductions and Course Overview; Approaches

- Bryman, A. (1984). The debate about quantitative and qualitative research: A question of method or epistemology? *British Journal of Sociology*, 35(1), 75-92.
- Siever, R. (1968). Science: Observational, experimental and historical. *American Scientist*, 56, 70-77.
- Suchman, E. A. (1954). The principles of research design. In J. T. Doby (Ed.) *An Introduction to Social Research* (pp. 49-50).

January 17: Philosophy & Theory

- Lincoln, Y. S. & Guba, E. G. (1985). Chapter 1. Postpositivism and the naturalistic paradigm. *Naturalistic Inquiry* (pp. 14-46). Sage Publications.
- Littlejohn, S. (1992). Chapter 2: Theory in the process of inquiry. *Theories of Human Communication*, (pp. 21-37), Wadsworth Publishing Co.
- Fiske, S. T. (2004). Mind the gap: In praise of informal sources of formal theory. *Personality and Social Psychology Review*, 8(2), 132-137.
- Wyer, R. S. (2004). A personalized theory of theory construction. *Personality and Social Psychology Review*, 8(2), 201-209.
- **Review:** Bates, M. J. (2005). An introduction to metatheories, theories and models. In K.E. Fisher, S. Erdelez and L. E. F. McKechnie (Eds.), *Theories of Information Behavior*, (pp. 1-24). Information Today, Inc.
- **Additional (not required, but an easy, short read):** Kumasi, K. D., Charbonneau, D. H., & Walster, D. (2013). Theory talk in the library science scholarly literature: An exploratory analysis. *Library & Information Science Research*, 35, 175-180.

January 24: Sociology of Science

- Kuhn, T. S. (1970). Chapter 2: The route to normal science. *Structure of Scientific Revolutions* (pp. 10-22), University of Chicago Press.
- Merton, R. K. (1973). The normative structure of science. *The sociology of science: Theoretical and empirical investigations* (pp. 267-278), University of Chicago Press.
- Merton, R. K. (1973). The Matthew Effect in science. *The sociology of science: Theoretical and empirical investigations* (pp. 267-278), University of Chicago Press.
- de Solla Price, D. J. (1986). Prologue to a science of science. *Little Science, Big Science ... and Beyond* (pp. 1-29), Columbia University Press.
- de Solla Price, D. J. (1986). Invisible colleges and the affluent scientific commuter. *Little Science, Big Science ... and Beyond* (pp. 56-81), Columbia University Press.
- National Academy of Sciences (1995). *On being a scientist: Responsible conduct in research, second edition*. Online: http://www.nap.edu/openbook.php?record_id=4917

January 31: Choices and Constraints

- Golden, M. P. (1976). Choices and constraints in social research. In M. P. Golden (Ed.), *The Research Experience* (pp. 3-31), F.E. Peacock Publishers, Inc.

- Browne, J. (1976). The used-car game and Field work for fun and profit. In M. P. Golden (Ed.), *The Research Experience* (pp. 60-84), F.E. Peacock Publishers, Inc.
- Doob, A. N. & Gross, A. E. (1976). Status of frustrator as an inhibitor of horn-honking responses. In M. P. Golden (Ed.), *The Research Experience* (pp. 481-494), F.E. Peacock Publishers, Inc.
- Dell, N., Vaidyanathan, V. Medhi, I., Cutrell, E., & Thies, W. (2012). "Yours is better!" Participant response bias in HCI. *Proceedings of ACM CHI Conference (CHI '12)*, 1321-1330.

February 7: Surveys

- Vaus, D. (2002). Editor's introduction: Social surveys – an overview. *Social Surveys, v.1*, (pp. iv-xliv), Sage Publications.
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, Mail and Mixed-Mode Surveys (3rd Edition)*. John Wiley & Sons, Inc.: Hoboken, NJ. Chapters 1 & 3.
- Tourangeau, R., Rips, L. J., & Rasinski, K. (2000). *The Psychology of Survey Response*. Cambridge University Press. Chapters 1 & 8.
- Krosnick, J. A. (1991). Response strategies for coping with the cognitive demands of attitude measures in surveys. *Applied Cognitive Psychology, 5*, 213-236.

February 14: Surveys and Question Design (Guest: Teresa Edwards, Odum Institute)

- Willis, G. B. (1999). Cognitive interviewing: A "How To" Guide. Online at <http://www.hkr.se/pagefiles/35002/gordonwillis.pdf>.
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, Mail and Mixed-Mode Surveys (3rd Edition)*. John Wiley & Sons, Inc.: Hoboken, NJ. Chapters 4-6.

February 21: Naturalistic Inquiry

- Lincoln, Y. S. & Guba, E. G. (1985). Chapter 09. Designing a naturalistic inquiry. *Naturalistic Inquiry* (pp. 221-249). Sage Publications.
- Lincoln, Y. S. & Guba, E. G. (1985). Chapter 10. Implementing the naturalistic inquiry. *Naturalistic Inquiry* (pp. 250-288). Sage Publications.
- Lincoln, Y. S. & Guba, E. G. (1985). Chapter 11. Establishing trustworthiness. *Naturalistic Inquiry* (pp. 289-331). Sage Publications.

February 28: Measurement

- Neuman, W. L. (1994). Chapter 8: Specialized measurement topics, scales and indexes. *Social Research Methods: Qualitative and Quantitative Approaches* (pp. 145-168). Allen and Bacon, Inc.
- DeVillis, R. F. (2012). *Scale development: theory and applications*. Thousand Oaks, CA: Sage. Chapters 1 & 5.
- Spector, P. E. (1992). *Summated rating scale construction: An introduction*. Sage Publications, Inc. (Available online through UNC Libraries: <http://srmo.sagepub.com/view/summated-rating-scale-construction/SAGE.xml?rskey=fgA7DU&row=1>)
- O'Brien, H.L., & Toms, E.G. (2008). What is user engagement? A conceptual framework for defining user engagement with technology. *Journal of the American Society for Information Science and Technology, 59*(6), 938–955.
- O'Brien, H. L. & Toms, E. G. (2010). The development and evaluation of a survey to measure user

engagement. *Journal of the American Society for Information Science & Technology*, 61(1), 50-69.

March 7: Measurement (Demonstration/Lecture by Diane)

- **DUE: Parts 1-3**

March 14: SPRING BREAK

March 21: Anita (Experiments) & Amanda (Focus Groups)

March 28: Emily (Semi-structured interviews) & Leslie (Participant Observation)

April 4: Sumayya (Case Studies) & John (Surveys)

April 11: Issues in Sampling & Data Collection

- Compeau, D., Marcolin, B., Kelley, H. & Higgins, C. (2012). Generalizability of information systems research using subjects – a reflection on our practices and recommendations for future research. *Information Systems Research*, 23(4), 1093-1109.
- Rosenthal, R. & Rosnow, R. L. (2009). Introduction and Summary. *Artifacts in Behavioral Research*. Oxford University Press.
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences*, 33, 61-135.
- Hargittai, E. & Karr, C. (2009). Wat R U Doin? Studying the thumb generation using text messaging. In E. Hargittai (Ed.) *Research Confidential: Solutions to Problems Most Social Scientists Pretend They Never Have*. University of Michigan Press.

April 18: No Class

April 25: Issue in Data Analysis

- Abelson, R. P. (1995). *Statistics as Principled Argument*. Lawrence Erlbaum Associates, Publishers. (Chapters 1 & 9).
 - Shmueli, G. (2010). To explain or predict? *Statistical Science*, 25(3), 289-310.
 - Lin, M., Lucas, H. C., & Shmueli, G. (2013). Research Commentary – Too big to fail: Large sample sizes and the p-value problem. *Information Systems Research*, 24(4), 906-917.
 - Cohen, J. (1990). Things I have learned (so far). *American Psychologist*, 45(12), 1304-1312. Online: http://www.personal.kent.edu/~dfresco/CRM_Readings/Cohen_1990.pdf
 - SKIM: Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology*, 22, 5-55.
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May 2

- **Due: Part 4**