

HEALTH SERVICES RESEARCH METHODS (HS 237A)

Fall 2005

Prof. Alexander Ortega

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Tuesdays and Thursdays, 2:00-3:50pm

Room 41-235 CHS

COURSE SYLLABUS

Description

This course covers health services research conceptualization, modeling, literature review, study design, sampling, surveys, data collection, measurement, and research ethics. It is the first of a three quarter sequence on health services research. The second course (HS 237B) is a first-level applied data analysis course that focuses on the application of regression analysis to health services models. The third course (HS 237C) is a second-level data analysis course that provides more exposure to more advanced statistical and econometric techniques applied to health services research.

Objectives

Upon completion of HS 237A, student should:

- Understand the process of writing a research proposal
- Be able to explicate what health services research is and its relationship to the various social sciences
- Comprehend, formulate, and employ theory, models, hypotheses, and variables in the conceptualization of a health services research problem
- Understand how to conduct literature reviews and critically review the literature
- Appreciate the basic research designs used in health services research as well as their relative strengths and weaknesses
- Understand the rudiments of designing a survey
- Be familiar with basic sampling techniques
- Have a grasp of the different data and funding sources available in the field of health services
- Understand the major ethical issues in conducting health services research, and begin to formulate one's own ethical research standards
- Complete UCLA's on-line certification courses titled, "Protection of Human Research Subjects" and "HIPAA Clinical Research Training Course"

Required Reading (all reading should be done in advance of class)

- Singleton, R.A., Jr., *Approaches to Social Research*, Fourth Edition, Oxford University Press, 2004 (available from UCLA Health Sciences bookstore)

- Hulley, S.B., S.R. Cummings, W.S. Browner, et al. (eds.), *Designing Clinical Research*, Baltimore: Williams and Wilkins, 2001 (available from UCLA Health Sciences Bookstore)
- A reader of selected articles available from UCLA Academic Publishing

Assignments/Grading

- Literature review (10%; due 10/25)
- Development of conceptual model (10%; due 11/3)
- Critique of published research study (10%; due 11/29)
- Research proposal (20%, based on revised literature review; due 12/1)
- Completion of human subjects certification program (10%; any time in quarter)
- Final exam (40%; 12/13, 3-6pm)

Lecture	Date	
1	9/29/05	Introduction to Research Methods
2	10/4/05	Defining the Problem: Research Objectives and Hypotheses
3	10/6/05	Conceptual Modeling I (Research proposal assigned)
4	10/11/05	Literature Review I (Cheryl Bartel & Andrea Lynch, guest lecturers)
5	10/13/05	Conceptual Modeling II
6	10/18/05	Literature Review II (Cheryl Bartel & Andrea Lynch, guest lecturers)
7	10/20/05	Study Design: Observational Studies
8	10/25/05	Study Design: Experimental Studies (Lit review due)
9	10/27/05	Surveys I (Linda Bourque, guest lecturer)
10	11/1/05	Surveys II (Linda Bourque, guest lecturer)
11	11/3/05	Sampling Strategy (Conceptual model due)
12	11/8/05	Sample Size and Power
13	11/10/05	Measurement Issues and Variable Selection I
14	11/15/05	Measurement Issues and Variable Selection II
15	11/22/05	Writing and Critiquing a Scientific Article (Article critique assigned)
16	11/24/05	Thanksgiving (no class)
17	11/29/05	Research Ethics and Human Subjects I (Kathryn Atchison, guest lecturer; article critique due)
18	12/1/05	Sources of Data and Management (Research proposal due)
19	12/6/05	Research Ethics and Human Subjects II (Kathryn Atchison, guest lecturer)

Topics & Readings

9/29/05: Introduction to Research Methods

Introduction to Research Methods
Introduction to the Field of Health Services Research

Singleton & Straits, Chapters 1 & 2.

Institute of Medicine, *Health Services Research: Work Force and Educational Issues*, Washington, DC: National Academy Press, 1995: 13-41.

Crombie, I.K., and H.T.O. Davis, "Related Disciplines" in *Research in Health Care: Design, Conduct and Interpretation of Health Services Research*, New York City: John Wiley & Sons, 1995: 178-198.

10/4/05: Defining the Problem: Research Objectives and Hypotheses

Hulley, Cummings et al., pp.3-13.

Hulley, Cummings, et al., pp. 17-23.

Neuman, W. *Social Research Methods, Qualitative and Quantitative Approaches*. Boston: Allyn and Bacon, 1994: Chapter 2, pgs. 17-32.

10/6/05 Conceptual Modeling I

Morris, W.T., "On the Art of Modeling," *Management Science* 13(12), August 1967: B-707 – B-717.

Stokey, E., and R. Zeckhauser, *A Primer for Policy Analysis*, New York: W.W. Norton, 1978: 8-21.

Shi, L. *Health Services Research Methods*. New York: Delmar, 1997: Chapter 1, pgs. 1-30.

Singleton & Straits, pp. 78-90.

10/11/05 Literature Review I (Cheryl Bartel & Andrea Lynch, guest lecturers)

Counsell, C., "Formulating Questions and Locating Primary Studies for Inclusion in Systematic Reviews," *Annals of Internal Medicine* 127, 1997: 380-387.

Meade, M.O., and W.S. Richardson, "Selecting and Appraising Studies for a Systematic Review," *Annals of Internal Medicine* 127, 1997: 531-537.

Egger, M., and G.D. Smith, "Meta-analysis: Potential and Promise, *British Medical Journal* 315, 1997: 1371-4.

Egger, M., G.D. Smith, and A.N. Phillips, "Meta-analysis: Principles and Procedures," *British Medical Journal* 315, 1997: 1533-1537.

Greenhalgh, T., "How to Read a Paper: Assessing the Methodological Quality of Published Papers," *British Medical Journal* 315, 1997: 305-8.

10/13/05: Conceptual Modeling II

Andersen, R.M., "Revisiting the Behavioral Model and Access to Medical Care: Does it Matter?," *Journal of Health and Social Behavior* 36, March 1995: 1-10.

Andersen, R.M., and P.L. Davidson, "Improving Access to Care in America: Individual and Contextual Indicators," in: Andersen, R.M., T.H. Rice, and G.F. Kominski, eds. *Changing the U.S. Health Care System: Key Issues in Health Services, Policy, and Management*. 2nd edition. (San Francisco, Jossey-Bass, 2001), pp. 4-10 assigned.

Milgram, S., "Behavioral Study of Obedience," *Journal of Abnormal and Social Psychology* 67(4), 1963: 371-378.

Milgram, S., "Some Conditions of Obedience and Disobedience to Authority," *International Journal of Psychology* 6(4), 1968: 259-276. **Optional**

Commentaries of Milgram article. *International Journal of Psychology* 6(4), 1968: 277-295. **Optional**

10/18/05: Literature Review II (Cheryl Bartel & Andrea Lynch, guest lecturers)

See readings for 10/11/05

10/20/05: Study Design: Observational Studies

Hulley, Cummings et al. pp. 95-105

Hulley, Cummings et al. pp. 107-120

Hulley, Cummings, et al. pp. 125-137.

10/25/05: Study Design: Experimental Studies

Singleton & Straits, pp. 179-185 & Chapter 8 (pp. 210-235).

Hulley, Cummings et al. pp. 143-155

Hulley, Cummings et al. pp. 157-172

Hulley, Cummings et al. pp. 175-189

10/27/05: Surveys I (Linda Bourque, guest lecturer)

Singleton & Straits, Chapters 9 & 10.

Ferber, R., et al., "What is a Survey?" Subcommittee of the Section on Survey Research Methods, American Statistical Association, Washington, DC (no date).

Aday, L.A., *Designing and Conducting Health Surveys*, Second Edition, San Francisco: Jossey-Bass, 1996, Chapter 9 & 12.

Resources recommend by Dr. Bourque (not in reader):

Aday, L.A., *Designing and Conducting Health Surveys*, Second Edition, San Francisco: Jossey-Bass, 1996 (remainder of book).

Fink, A., *The Survey Kit*. Thousand Oaks, CA: Sage, 2002. (Ten-volume series by A. Fink, L. Bourque, E.P. Fielder, M. Litwin, and S. Oishi.)

11/1/05: Surveys II (Linda Bourque, guest lecturer)

Kornhauser, A., and P.B. Sheatsley, "Questionnaire Construction and Interview Procedure," Appendix B, in C. Seltiz et al. (eds), *Research Methods in Social Relations*, 3rd Edition. Austin, Texas: Holt, Rinehart and Winston, 1976.

Krosnick, J.A., et al., "The Impact of 'No Opinion' Response Options on Data Quality," *Public Opinion Quarterly* 66, 2002: 371-403.

11/3/05: Sampling Strategy

Hulley, Cummings et al. pp. 25-33

Singleton & Straits, Chapter 6.

11/8/05: Sample Size and Power

Hulley, Cummings et al. pp. 51-63.

Hulley, Cummings, et al. pp. 65-81.

11/10/05: Measurement Issues & Variable Selection I

- Hulley, Cummings, et al. pp. 37-47.
- Singleton & Straits, pp. 67-78 & Chapter 5.
- 11/15/05: Measurement Issues & Variable Selection II
- Marx, R.G., et al. "Clinimetric and Pyschometric Strategies for Development of a Health Measurement Scale," *Journal of Clinical Epidemiology* 1999;52(2):105-111.
- Zyzanski, S.J., and E. Perloff. "Clinimetrics and Psychometrics Work Hand in Hand," *Archives of Internal Medicine* 1999;159(15):1816-1817.
- 11/22/05: Writing and Critiquing a Scientific Article
- Walker, A.M., "Reporting the Results of Epidemiologic Studies," *American Journal of Public Health* 1986;76(5):556-558.
- Gregg, M. B., *Field Epidemiology*. New York: Oxford University Press, 1996: 139-151.
- Colton, T., *Statistics in Medicine*. Boston: Little, Brown and Company, 1974: 315-322.
- 11/29/05: Research Ethics and Human Subjects I (Kathryn Atchison, guest lecturer)
- Singleton & Straits, Chapter 16.
- Botkin, J.R., "Protecting the Privacy of Family Members in Survey and Pedigree Research," *Journal of the American Medical Association* 285(2), Jan. 10, 2001: 207-211.
- Russo, E., "Putting 'Errors' in Perspective," *The Scientist* 14(6), March 20, 2000. (3 pp)
- Institute of Medicine, "Responsible Research: A Systems Approach to Protecting Research Participants." Washington, DC: Institute of Medicine, October 2002.
<http://www.iom.edu/Object.File/Master/4/157/0.pdf>
- 11/24/05 Thanksgiving (no class)
- 12/1/05 Sources of Data and Management
- Hulley, Cummings, et al. pp. 247-257.
- Hulley, Cummings, et al. pp. 259-269.

12/6/05: Research Ethics and Human Subjects II (Kathryn Atchison, guest lecturer)

Blumenthal, D., "Academic-Industrial Relationships in the Life Sciences," *New England Journal of Medicine* 349(25), December 18, 2003: 2452-2459.

Bates, T., et al., "Authorship Criteria and Disclosure of Contributions: Comparison of 3 General Medical Journals With Different Author Contribution Forms," *Journal of the American Medical Association* 292(86), July 7, 2004: 66 - 88.

Lo, B., and R. Bayer, "Establishing Ethical Trials for Treatment and Prevention of AIDS in Developing Countries," *British Medical Journal* 327(7410), August 9, 2003: 337-339. **Handout**

Stossel, T.P., "Regulating Academic-Industrial Research Relationships—Solving Problems or Stifling Progress?" *New England Journal of Medicine* 353(10), September 8, 2005:1060-1065.