

University of Washington

Social and Behavioral Methods in Public Health Genetics

PHG 543 3 credits

Spring Quarter 2008

Instructors

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Class Hours and Location: Thursday 2:30-5:20pm
Health Sciences Bldg., Room T 360A

Course Description

This course provides an overview of social and behavioral research and theory used in the study of public health genetics. Examples are from a range of disciplines, using a variety of methodologies. Prerequisites: graduate standing in Public Health Genetics, Health Services, or permission of instructor.

Objectives

By the end of the course, students will be able to:

- Demonstrate an understanding of the conceptual underpinnings, assumptions, research strategies, and methods for health behavior research
- Distinguish among and recognize the value of diverse research traditions and the benefits of mixed methods used to study behavioral and social aspects of health in terms of guiding principles, research strategies, methods, and expected outcomes.
- Describe the components of a research proposal used in the health sciences
- Explain and apply the principles of qualitative research, survey research, and intervention research.
- Identify ethical and moral issues in the conduct of studies related to public health
- Design a research project to examine an issue of relevance to the broad field of public health

Course Format

The classes combine didactic presentation, discussion, and critique of published research. Each class session will include discussion of the theory and method utilized in a particular area of study. Examples will be drawn from social and behavior health research. Students should be familiar with the readings for each session.

Requirements

Required readings are available online and on reserve at the Health Sciences Library.

Required Texts

Aday, Lu Ann. (1996) Designing and conducting health surveys. 2nd Ed. Jossey-Bass: San Francisco, CA. (See class schedule for Ch. readings)

Creswell, John W. (1998) Qualitative inquiry and research design: choosing among five traditions. Sage, Thousand Oaks, CA. (See class schedule for Ch. readings)

Assignments

Grades

Your grade for this class will be determined using these guidelines:

- 70% Problem write-up (7 total)
- 30% Grant proposal

Problem Sets

Each week we will introduce a research related issue or problem as an assignment. You will write up your responses (1-2 pages) and bring those the following week, where these will be discussed as a group. The aim is for these problem sets to contribute to the final assignment, which is a modified research proposal.

Grant proposal

The final paper will be a research proposal on a health behavior or health and social science topic that is relevant to your areas of interest. The length is 10-15 pages (double spaced) and includes Specific Aims, Background and Significance (modified), and Research Design and Methods. The research can be of any specific methodology, but it must be made clear and justified. For example, your research project could be an intervention study, a survey, or a qualitative study. You should use an NIH grant proposal format. Create a presentation on this with handouts for the class for an informal (and supportive!) grant review. You may revise you grant based on this feedback before you submit your written proposal.

Points may be taken off for late assignments. If you anticipate having difficulty in meeting this or any other requirement of the course, please discuss this with the instructor before the assignment is due. Presentation due **May 15**, final paper due **June 9**.

Disability Access

If you would like to request academic accommodations due to a disability, please contact Disabled Student Services, 448 Schmitz, 543-8924 (V/TDD). If you have a letter from Disabled Student Services indicating you have a disability that requires academic accommodations, please present the letter to one of the faculty so we can discuss the accommodations you might need for class.

Course Schedule

Wk	Topic
1 4/3	Overview of research process; anatomy of a grant proposal <i>Selected Problem: Writing Study Aims</i>
2 4/10	Qualitative research; Overview of methods <i>Group discussion: Study aims</i> <i>Selected problem: Comparing qualitative methods</i>
3 4/17	Quantitative design, sampling, recruitment; Survey design; how to develop scales <i>Group discussion: Comparing qualitative methods</i> <i>Selected Problem: 1)</i> <i>2)</i>
4 4/24	<i>(not sure what to call this class—any suggestions?)</i> <i>Group discussion:</i> <i>Selected Problems: How to review a research article</i>
5 5/1	Intervention design and development <i>Group discussion: Research article review</i> <i>Selected problem: need problem from Hendrika</i>
6 5/8	Toolkit for qualitative research: fieldwork strategies, observations, interview, focus groups <i>Group discussion:</i> <i>Selected Problem: Aims, background, methods</i>
7 5/15	Student presentations: Aims, background, methods <i>Group discussion: grants reviews</i>
8 5/22	Selected problems in the conduct of research projects <i>Selected Problem: need problem from Nora</i>
9 5/29	Feasibility studies and program of research <i>Group discussion:</i> <i>Selected Problem</i>
10 6/5	Dissemination of research: Where, who, how? <i>Group discussion:</i>

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Class Objectives and Readings

Week 1 & 2: Qualitative Research, the Research Proposal

Learning Objectives:

1. describe issues to be considered in qualitative research
2. explain the structure of an NIH research proposal
3. write sample specific aims

Readings:

- Creswell: Intro, Ch. 1, 2, and Appendix B – F
- Daly, et al.....A hierarchy of evidence.....
- Qualitative Methods in Health Research, Office of Behavioral and Social Sciences Research, NIH

Optional readings:

- a. NIH grant examples: Bowen: Melanoma ??—Deb, I'd like to offer them a grant online. Is this still the best one—any others you would recommend?
- b. Meeker, Family surrogate decision making
- c. Buchbinder, Battered women

Week 3: Quantitative design; Survey design (all these readings are from last time, please update)

Aday chapters 5-7, 14-16

McQuillan GM, Porter KS, Agelli M, and Kongton R. (2003) Consent for genetic research in a general population: the NHANES experience. *Genet Med* 5:35-42.

Tambor ES, Chase GA, Faden RR, Geller G, Hofman KJ, and Holtzman NA. (1993) Improving response rates through incentive and follow up: the effect on a survey of physicians' knowledge of genetics. *Am J Public Health*, 83:1599-1603.

How to design quantitative questions and How to develop scales

Aday, Ch. 3, 4, 8-11, Resources in back

Cella D, Hughes C, Peterman A, Chang CH, Peshkin BN, Schwartz MD, Wenzel L, Lemke A, Marcus AC, and Lerman C. (2002) A brief assessment of concerns associated with genetic testing for cancer: the Multidimensional Impact of Cancer Risk Assessment (MICRA) questionnaire. *Health Psychol.* Nov 21(6): 564-72.

Abramsky L, Fletcher O. (2002) Interpreting information: what is said, what is heard—a questionnaire study of health professionals and members of the public. *Prenat Diag*, 22:1188-1194.

Hamann HA, Croyle RT, Venne VL, Baty BJ, Smith KR, and Botkin JR. (2000) Attitudes toward the genetic testing of children among adults in a Utah-based kindred tested for a BRCA1 mutation. *Am J Med Genet*, 92: 25-32.

Week 4: Applying principles of survey research

Learning objectives:

1. Evaluate published research reports

Readings:

Week 5: Intervention design and development

Learning objectives:

1. explain how a conceptual framework guides health behavior interventions and be able to describe some theories of behavior change.
2. describe how a conceptual framework translates into actual intervention strategies.
3. describe different types of formative research and their methods
4. apply marketing techniques to development and design of interventions.

Readings:

- Theory at a Glance (NCI booklet on theory: URL <http://www.nci.nih.gov/PDF/481f5d53-63df-41bc-bfaf-5aa48ee1da4d/TAAG3.pdf>).
- Raczynski et al. REACT theory-based intervention to reduce treatment-seeking delay for Acute Myocardial Infarction. *American Journal of Preventive Medicine*, 1999.16(4):325-334.
- Siegel and Lotenburg. Chapter 11 Formative Research (pp 301-346) . In Siegel and Lotenberg (second edition) *Marketing Public Health. Strategies to Promote Social Change*. 2007. Jones and Bartlett publishers, Inc. Sudbury MA.
- Siegel and Lotenburg, Chapter 3 “Marketing Social Change (pp. 45-73)—Hendrika—can you get these to Nora?”

Week 6: Toolkit for qualitative researchers

Learning Objectives:

1. identify the major data collection methods used in qualitative research
2. describe the strengths and limitations of each method

Creswell: Ch. 3, 4, 6, 7, Ch. 5 is optional

Fontana, A & Frey, JA. (1994) . Interviewing: the art of science. In Denzin, N. K. & Lincoln, Y.S. Eds. *Handbook of qualitative research*. (pp. 361-376). Thousand Oaks: Sage Publications.

Adler & Adler, *Observational Techniques*.

McLafferty....Focus group interview

Meho, E-mail interviewing.....

Week 7: In class presentations

Learning Objectives:

1. understand the grant review process

Week 8: Data collection, data analysis, conducting a research project—Nora, can you write objectives and choose readings?

Readings”

Aday chapters 12, 13, 14, 15

Creswell, Chapter 8, 10, 11

Optional Readings:

- a. Sandelowski, Qualitative analysis:
- b. Sandelowski, Finding the findings

Week 9: Feasibility studies

Week 10: Dissemination/translation of research

Learning objectives

1. explain need for dissemination of research findings
 2. describe challenges of publishing research results
- Khoury, M.J., et al. The continuum of translation research in genomic medicine: how can we accelerate the appropriate integration of human genome discoveries into health care and disease prevention? *Genetic in Medicine* 9 (10):665-674

Optional Readings

- a. Israel, BA, Schulz, AJ, Parker, EA, Becker, AB, Allen III AJ, & Guzman JR. (2002) Critical issues in developing and following community based participatory research principles. In Minkler M & Wallerstein N, Eds. *Community based participatory research for health*. (pp. 53-76) Jossey-Bass Publishing.
- b. Wolcott, Writing up qualitative research
- c. Sullivan, Top 10 reasons
- d. Sandelowski, M. Writing a good read

Instructor Schedule

1 – 4/3	<p>Overview of research process; anatomy of a grant proposal <i>Selected Problem: Research problem vs. research question; Writing Study Aims</i></p>	Barbara
2 – 4/10	<p>Qualitative research; Overview of methods <i>Group discussion: Study aims</i> <i>Selected problem: Comparing qualitative methods</i></p>	Barbara
3 – 4/17	<p>Quantitative design, sampling, recruitment; Survey design; how to develop scales <i>Group discussion: Comparing qualitative methods</i> <i>Selected Problem:</i></p>	Deb
4 – 4/24	<p>Applying principles of survey research (?) <i>Group discussion:</i> <i>Selected Problems: How to review a research article</i></p>	Nora
5 – 5/1	<p>Intervention design and development <i>Group discussion: Article review</i> <i>Selected problem:</i></p>	Hendrika
6 – 5/8	<p>Toolkit for qualitative research: fieldwork strategies, observations, interview, focus groups <i>Group discussion:</i> <i>Selected Problem: Aims, background, methods</i></p>	Barbara
7 – 5/15	<p>Student presentations: Aims, background, methods <i>Group discussion: grants reviews</i></p>	Barbara, Hendrika
8 – 5/22	<p>Special topics in research: data analysis; data cleaning, missing data, low response rates, human subjects etc. <i>Selected Problem:</i></p>	Nora
9 – 5/29	<p>Feasibility studies and program of research <i>Group discussion:</i> <i>Selected Problem:</i></p>	Deb
10 – 6/5	<p>Dissemination of research: Where, who, how? <i>Group discussion</i></p>	Barbara/Deb

