COMMUNITY HEALTH SCIENCES/EPIDEMIOLOGY M218
Questionnaire Design and Administration
Course web site: http://ccle.ucla.edu

Day & Time:  Mon & Wed  8-10 A.M.    Instructor:  Linda B. Bourque
Room:  CHS 41-268    Office:  41-230 CHS
ID#:  840 108 200 (CHS)    Office Hrs:  Mon & Wed 10:00-11:30
                                      844 110 200 (EPI)  Sign up for appointments on sheet outside office.

TEXTBOOKS:

A. Required books available for purchase in the Health Science Bookstore:

   3. Materials available on course website and other UCLA web sites.

B. Recommended books available for purchase in the Health Sciences Bookstore.


C. Recommended books available in the UCLA libraries:


**D. Supplementary Materials**

All of the following articles are available on the class website at [http://ccle.ucla.edu](http://ccle.ucla.edu). When you use information from articles, please remember that they are under copyright.

**Articles on the Web Site:**


   a. Valliant R. Comment, 105-110.
   b. Rivers D. Comment, 111-117.
   c. Crawford CAG. Comment, 118-123.
   d. Terhanian G., Comment, 124-129.
   e. Langer G. Comment, 130-136.


   a. Groves RM. Nonresponse rates and nonresponse bias in household surveys, 646-675.
   e. Olson K. Survey participation, nonresponse bias, measurement error bias and total bias. 737-758.
   f. Keeter S, C Kennedy, M Dimock, J Best, P Craighill. Gauging the impact of growing nonresponse on estimates from a national RDD telephone survey. 759-
779.
h. Link MW, AH Mokdad, D Kulp, A Hyon. Has the national do not call registry helped or hurt state-level response rates? A time series analysis. 794-809.


Course Materials Available on Course Web Site

Information about Institutional Review Boards


2. Siegel, Judith, Linda Bourque, Example of Submission, Questions Raised by the IRB and Responses, 2002.

Materials developed at the UCLA Institute for Social Science Research

Engelhart, Rita, “The Kish Selection Procedure”

Codebooks

Example of a Codebook, December 1, 2002.

Also on earthquake web site:
http://www.sscnet.ucla.edu/issr/da/earthquake/erthqkstudies2.index.htm

The construction of scales and indices


Materials related to the administration and analysis of data collected with questionnaires

1. Questionnaire for Assignment #1
2. Record for Non-respondents
3. Enlistment Letters
4. Call Record
5. Formatting Questionnaires
6. Income Questions
7. Calculating Response Rates
8. Examples of Grids
9. Codebook and Specifications
10. Constructing a Code Frame
11. Scale Construction Example


The books and articles listed above will give you a background on and an introduction to surveys and questionnaires. Each book has different strengths and weaknesses. They should be considered resources. The required books are available in the Health Sciences Bookstore. The Recommended books are available in the various UCLA libraries. The decision as to which books you buy and the order in which you read them is yours. I recommend reading all the material you buy or check out as soon as possible. It will then be available to you as a resource as we go through the quarter.

The articles on the web site provide you with examples of some of the journals where research about questionnaires, their administration, and surveys can be found. They also provide information about some of the “cutting-edge” issues of concern. Currently, a major focus is on response rates, particularly for telephone interviews, and web-based administration of questionnaires.
COURSE REQUIREMENTS AND GRADING

Subjects and Site:

Each student selects a topic on which s/he wants to design questionnaires, and the site(s) at which s/he will conduct the interviews needed in pretesting the questionnaire. You are free to select any site and any sample of persons with the following exceptions:

1. All respondents MUST be at least 18 years of age.

2. DO NOT collect information from respondents such as name, address, and phone number which would enable them to be identified.

3. DO NOT interview persons in the Center for Health Sciences or persons connected with the Center for Health Sciences.

4. DO NOT interview your fellow students, your roommates, your friends, your relatives, or persons with whom you interact within another role (e.g., employees, patients).

5. DO NOT ask about topics which would require the administration of a formal Human Consent Form.

Should you violate these requirements, the data collected will not fulfill the requirements for an assignment in this class. Only interviews, not self-administered questionnaires, can be used for pretesting the questionnaires developed in this class.

Course Objectives and Assignments:

The objective of this course is to learn how to design respectable questionnaires. Research data can be collected in many ways. Questionnaires represent one way data is collected. Although usually found in descriptive, cross-sectional surveys, questionnaires can be used in almost any kind of research setting. Questionnaires can be administered in different ways and the questions within a particular questionnaire can assume an infinite variety of formats.

As is true of any research endeavor, there are no absolutes in questionnaire design. There are no recipes and no cookbooks. The context of the research problem you set for yourself will determine the variety of questionnaire strategies that are appropriate in trying to reach your research objective; the context will not tell you the absolutely “right” way to do it.

The final “product” for the quarter is a questionnaire designed in segments and pretested at least three times. The questionnaire will be designed to collect data to test a research objective specified by you during the second week of the quarter. The final version of the questionnaire is due Wednesday, December 17th at 5:00 PM. All assignments must be typed; handwritten materials are not accepted. Every version of your questionnaire must be typed, but final versions should be as close to “picture-ready” copy as you can manage. For Assignment 6, due on
December 17th, you will provide the final copy of your questionnaire, a full copy of Interviewer/Administrator Specifications, a Codebook and/or coding instructions, a summary of data collected in your last pretest, a tentative protocol that could be used to analyze data collected with your questionnaire, and what, if anything, further you would like to do if time allowed.

The following six assignments will move you toward the final product.

**ASSIGNMENTS**

**Assignment 1: Practice Interviewing (5% of Final Grade) Due October 13**

This assignment is designed to expose you to the process of interviewing. Questionnaires will be handed out on the first day of class (October 6). You are to conduct 9 interviews. On October 13, turn in both the completed interviews and a brief write-up describing where you went, what happened and a brief description of the data you collected. These materials are also on the course web site.

In selecting respondents, go to a central public location such as a shopping area, the beach, or a park. In conducting your interviews, try to obtain a range of ages, sexes, and ethnic groups. You will be given identification letters to carry in case anybody asks who you are. **DO NOT INTERVIEW ON PRIVATE PROPERTY UNLESS YOU HAVE PERMISSION. THIS AFFECTS MANY SHOPPING CENTERS.**

Keep track of the characteristics of refusals on the “Record for Non-respondents.” A refusal is a person you approach for an interview who turns you down.

**Assignment 2: Statement of Your Research Question (5% of Final Grade) Due October 15**

Questionnaires are designed to get data that can be used to answer one or more research questions. To help you get started, state a research question. Remember it should be relevant to the interviewing sites available to this class. Is your research question, as written, testable? What concepts are included in or implied by your question? Can your concepts be operationalized into working definitions and variables for which a questionnaire is a viable data collection procedure?

**Assignment 3: Completion of Human Subjects Protection Certification (5% of final grade) Due October 29**

All UCLA faculty, staff, students and administrators who conduct research with human subjects are required to complete the Collaborative Institutional Training Initiative (CITI) Training Program prior to conducting research. This is required for both funded and unfunded research. For Assignment 3, complete the CITI Training Program and turn in a copy of the certificate that documents that you completed the training on October 29.
Some of you may already have completed CITI training as part of a job or other activity at UCLA. If you have completed training, you do not have to redo it. Please turn in a copy of your certificate on October 29.

For those who have not completed training, go to the main web site for the Human Research Protection Program at http://ohrpp.research.ucla.edu/. Click on “Education and Training” at http://ohrpp.research.ucla.edu/pages/certification. Read through the section on Collaborative Institutional Training Initiative. You will be completing the training program for Social and Behavioral researchers and staff. If, in fact, you were submitting an application to one of the Institutional Review Boards, your application would go to the South General Campus IRB.

I recommend that you read through the questions and answers at “Frequently Asked Questions and Answers” at http://ohrpp.research.ucla.edu/faq/one-faq?faq_id=7602. These give you information about the certification process. Then click on “Collaborative Institutional Training Initiative” at https://www.citiprogram.org/default.asp to start the training program. After you are finished, you can click on http://www.citiprogram.org to get a copy of your certificate.

Assignment 4: “Mini-Questionnaire” #1. (20% of Final Grade) Due November 5

Part 1

Prepare and test “Mini-Questionnaire” #1. This represents your first attempt at designing a questionnaire to test your “Research Question.” The substantive content of the questionnaire should focus on current status, behaviors or knowledge. You can choose any topic that interests you, but since our focus is on “health,” you may want to consider asking about: 1) Current acute and chronic diseases, accidents, injuries, disabilities, and impairments; and 2) Knowledge and use of health services.

In addition to substantive content, all questionnaires must collect some demographic information on such things as:

1. Respondent age
2. Respondent education
3. Individual, family or household income
4. Occupation
5. Respondent marital status

There is no limit to the number of questions you may include. However, you must provide a minimum of 6 questions in addition to the demographic questions discussed above. I expect your questionnaire to include a mixture of open-ended and closed-ended questions. Open-ended questions are particularly useful when you are in the process of exploring an area of research or in the initial stages of designing a questionnaire.

In preparing the questions in your questionnaire, keep in mind the problems of survey research design which have been discussed in class and in the readings. Pay particular attention to the following:
1. Respondent frame of reference—will it be the same as yours?
2. Level of concreteness/abstraction.
3. Question referent—is it clear, and is it what you intend?
4. Tone of question—will it stimulate yea-saying? Or nay-saying?
5. Balance—within the question and across the set of questions.
6. Problems of bias induced by wording—watch out for leading, loaded terms, etc.
7. Screening questions to reduce noise due to non-attitudes.

Indicate explicitly the format of the questions. How will it look? Present the questions in the order you want them to appear in the questionnaire. Pay particular attention to the following:

1. Problems of preservation due to fatigue.
2. Problems of bias induced by contamination of responses due to ordering of questions.
3. Problems of threatening material/invasion of privacy.
4. Skip patterns to tailor questionnaire for various respondent types.

In sum, your questionnaire should look as much as possible like a finished product, ready to be fielded or at least pre-tested.

Part 2

In addition to your questionnaire you must provide a justification for each question. This is the beginning of writing Specifications. For each question or set of related questions there should be a brief statement as to why the question is included/necessary, and the rationale behind the format selected. IT IS NOT SUFFICIENT TO SAY “IT'S SELF-EVIDENT.” It is NEVER self-evident to someone else—like me! Specifications should also include the research question being tested and information about how your sample was selected and from where.

Part 3

Test your questionnaire by interviewing a convenience sample of at least five respondents.

On November 5, turn in:

1. All the completed interviews you did.
2. One copy of your specifications for me.
3. One copy of the blank questionnaire for me.
4. Fifteen copies of the blank questionnaire; these are to share with your classmates.
5. A brief report (5-7 typed pages) describing the instrument you constructed, the data collected with it, the respondents from whom the data was collected, what you think worked well and what you think did not, and how you would change it.
Assignment 5: “Mini-Questionnaire” #2. (25% of Final Grade) Due November 26

Revise the questionnaire you designed in Assignment 4 in accordance with your accrued wisdom and the succinct observations from me and your classmates.

Add a new set of questions that collects at least one of the following: sensitive behaviors, retrospective data, or attitudes and opinions. For example, you might design questions that will elicit information about substance abuse (e.g., use of alcohol), the use of non-traditional health practices (e.g., faith healers, curanderos, over-the-counter drugs, other people's drugs, etc.), threatening behaviors (e.g., abortion, etc.). Retrospective data might be collected about past health care experienced by the respondent over his/her lifetime. Finally, you might find out the respondents' opinions of their current or past health care. If you have a good reason, you could adopt or adapt sets of questions from other studies if they help you get to your objective.

Explicitly indicate the format of the questions. Will there be a checklist? How should it look if presented to the respondent? Do you need a card to cue the respondent? What should be on the card? Are other visual aids needed?

Start designing a codebook that can be used with your questionnaire. The codebook should include information on how verbal answers are converted to numbers, where the variables are located in the data set, and the names of the variables in the data set. I recommend using your questionnaire as the basis for your codebook.

Whenever you write a question, you should have in mind the probable responses--if you cannot think of the responses, then you have not thought about the question enough!! The process of setting up categories for expected (and finally actual) responses is called code construction. Closed-ended, pre-coded questions have already had codes constructed for them; the respondent is presented with a specified set of alternatives which are the codes used later in data analysis. The only additional coding problem presented by pre-codes is how to handle residuals. For the code construction assignment, you must consider each of your pre-coded questions, assign numbers to the alternatives following the procedures outlined in class discussions and readings, and solve the residual problem.

For open-ended questions, you have to consider all possible responses and list these along with code numbers. Include instructions for the coder to follow regarding how many responses are to be coded, any precedence rules to follow and any other problems you think might arise. Remember in this case also to provide a way of handling residual categories.

Remember to include codes for the required questions on age, education, income and marital status. Do not attempt to set up a code for occupation; do write a paragraph outlining your thoughts about how one would go about coding occupational data.

You do not have to write specifications for this assignment. You may want to start
revising your old ones and writing new ones in anticipation of Assignment 5.

Test your questionnaire by interviewing at least five respondents.

On November 26, turn in:

1. A report (7-10 typed pages) describing the development of the instrument--why items were selected, how and why they were revised; the data collected with this instrument; the sample of respondents from whom the data were collected.

2. Sixteen copies of the blank questionnaire; one for me and 15 to share with your classmates.

3. The codebook.

Assignment 6: Your Magnum Opus! (40% of the final grade) Due December 17 by 5:00 PM

This is the culmination of all your work! Revise your earlier questionnaires consistent with your vastly increased wisdom. Remember that you should have a “final product” that is as close to “picture-ready copy” as you can manage. This questionnaire should include variable names for coding. Turned in with the questionnaire are a final set of Specifications and a final Codebook, along with a write-up that summarizes your pretest interviews of this version of the questionnaire with 8-10 respondents, a proposed analysis plan, and discussion of any further changes that might be considered were you to actually use this instrument in a study.

On December 17, turn in:

1. A 7-10 page report that summarizes your pretest interviews, a proposed analysis plan, and a discussion of any further changes that should be considered were you to actually use this instrument in a study.

2. One blank questionnaire.

3. One set of final specifications.

4. One final codebook.
GENERAL STATEMENTS ON GRADING AND PRESENTATION OF ASSIGNMENTS

When you enter M218, it is assumed that you will exit with a grade of “B.” A “B” is a good, respectable grade. I write lots of letters of recommendation for people who get “B’s” in M218. An “A” grade is earned by doing a really exceptional job. If you end up with a “C” grade, it is probably because you did not make a serious effort in this class: you did not do the reading, you never came to class, you left all the assignments for the night before, etc. In other words, it is hard to get a “C” in this class, BUT if that is what you earn, then that is what you will get.

It is expected that all assignments will be turned in on the date due. There are no extensions. Incompletes are not given in this course.
## CLASS SCHEDULE

<table>
<thead>
<tr>
<th>WEEK/DATE, ASSIGNMENTS</th>
<th>TOPIC, RELEVANT READINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WEEK 1:</strong> October 6 &amp; 8</td>
<td>STARTING A RESEARCH STUDY</td>
</tr>
<tr>
<td>1. Overview of M 218</td>
<td></td>
</tr>
<tr>
<td>2. Research Questions</td>
<td></td>
</tr>
<tr>
<td>3. Hypotheses, Concepts, and Working Definitions</td>
<td></td>
</tr>
<tr>
<td>4. Variables: Independent, dependent, control</td>
<td></td>
</tr>
<tr>
<td>5. Levels of Measurement</td>
<td></td>
</tr>
<tr>
<td>Relevant Readings: Aday, Chapters 1-5; Bourque &amp; Fielder, Chapter 1.</td>
<td></td>
</tr>
</tbody>
</table>

| WEEK 2: October 13 | CONTEXT FOR & TYPES OF QUESTIONNAIRES  |
| ASSIGNMENT 1 DUE | 1. Data Collection Options  |
| 2. Administrative Types  |
| 3. Surveys & Cross Sectional Studies  |
| 4. Question Types: Open/Closed  |
| 5. Information Obtainable by Questionnaire: Facts, Behaviors, Attitudes  |
| Relevant Readings: Aday, Chapters 1-5; Bourque & Fielder, Chapter 1; Bourque in Lewis Beck, Bryman, Liao, pp. 229-230; Curtin, Presser, Singer; Fricker et al.; Chang, Krosnick, 2009, 2010; Krosnick, 1999. |

| October 15 | MANAGING DATA USING AVAILABLE SOFTWARE  |
| ASSIGNMENT 2 DUE | Elizabeth Stephenson, Director, UCLA Social Science Archive  |

http://www.icpsr.umich.edu/icpsrweb/content/deposit/guide/index.html
WEEK 3: October 20

HUMAN SUBJECTS PROTECTION AND FORMS

Relevant Readings: OPRS web site and materials on class web site.

“BEGINNINGS” AND “ENDS” OF QUESTIONNAIRES
1. Call Record Sheet
2. Enlistment Letters
3. Questions to Interviewer
4. Selecting the respondent

Relevant Readings: Bourque & Fielder, Chapter 6; Binson; Couper, 1997; Gaziano; Engelhart; Krenzke, Li, Rust; examples on websites.

October 22

QUESTIONS TO OBTAIN DEMOGRAPHIC INFORMATION
1. Why?
2. How much?
3. How?
4. Location?
5. Household Roster
6. Selecting Questions from Other Studies

Relevant Readings: Aday, Chapters 8, 10; Bourque & Fielder, Chapters 2, 3; Bhopal, Donaldson; Fullilove; Kornhauser, Sheatsley; Sigelman, Tuck, Martin; Martin et al, 1990; Yan, Curtin, Jans; examples on course web site and earthquake web site.
WEEK 4: October 27 & 29

QUESTIONNAIRE SPECIFICATIONS
1. Functions
2. Format

Relevant Readings: Bourque and Fielder, Chapter 3; Kornhauser, Sheatsley.

October 29

ASSIGNMENT 3 DUE

WEEK 5: November 3

ASCERTAINING INFORMATION ABOUT RETROSPECTIVE BEHAVIORS
1. Grids
2. Histories
3. Aided Recall
4. Use of Records

Relevant Readings: Aday, Chapter 11; Blair, Ganesh; Bradburn et al, 1987; Bradburn, 2004; Presser et al, 2004.

November 5

MEASURING ATTITUDES
ASSIGNMENT 4 DUE
1. Beginning
2. Developing Composite Measures
3. Use of Existent Measures
4. Adopting and Adapting

Relevant Readings: Aday, Chapter 11; Inkelas et al; McKennel; Bourque, Shen; Krosnick et al, 2002; Shaeffer et al, 2005; Yeager, Krosnick, 2012; examples on websites.

WEEK 6: November 10 & 12

WORKSHOP ON ASSIGNMENT 4

WEEK 7: November 17 & 19

CODEBOOKS AND CODE CONSTRUCTION
1. Objective
2. Types
3. Content Analysis

Relevant Readings: Aday, Chapter 13; Bourque & Fielder, Chapter 3; Bourque and Clark; Bourque, Coding, Code Frames; examples on web sites.
<table>
<thead>
<tr>
<th>WEEK 8: November 24</th>
<th>CONDUCTING THE CALIFORNIA HEALTH INTERVIEW SURVEY (CHIS)</th>
<th>Questionnaire Design, Sampling and Contracting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Matt Jans, Ph.D., Survey Methodologist &amp; Data Quality and Survey Methodology Manager, CHIS</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>November 26</th>
<th>ASSIGNMENT 5 DUE</th>
<th>MEASURING HEALTH-RELATED QUALITY OF LIFE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ronald Hays, Ph.D., Professor, General Internal Medicine, and Health Policy and Management</td>
<td></td>
</tr>
</tbody>
</table>

**Relevant Readings:**


<table>
<thead>
<tr>
<th>WEEK 9: December 1 &amp; 3</th>
<th>WORKSHOP ON ASSIGNMENT 5</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>WEEK 10: December 8</th>
<th>EFFECTS OF INCENTIVES &amp; LANGUAGE</th>
</tr>
</thead>
</table>

**Relevant Readings:**

**SENSITIVE BEHAVIORS Relevant Readings:**
Tourangeau, Yan 2007; Peter, Valkenburg 2011; Barton 1958; Couper et al 2010.
ADMINISTRATION OF SURVEYS, DATA PROCESSING AND ANALYSIS OF QUESTIONNAIRE DATA
1. Raw Data vs. Processed File
2. Coding
3. Data Entry/Keypunching
4. Cleaning
5. Raw vs. Actual Variables
6. Data Quality, Missing Data, etc.

Relevant Readings: Aday, Chapters 13, 14, 15; Bourque & Fielder, Chapter 6.

FORMATTING QUESTIONNAIRES
1. Order/Location
2. Grouping
3. Spacing

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>ASPH COMPETENCIES</th>
<th>RELEVANT MATERIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upon completing this course…</td>
<td></td>
<td>All textbooks, readings, lectures and assignments.</td>
</tr>
<tr>
<td>Know how to design, develop, administer and document questionnaires.</td>
<td><strong>E.2.</strong> Identify the causes of social and behavioral factors that affect health of individuals and populations.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>E.5.</strong> Describe steps and procedures for the planning, implementation and evaluation of public health programs, policies and interventions.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>E.6.</strong> Describe the role of social and community factors in both the onset and solution of public health problems.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>E.8.</strong> Apply evidence-based approaches in the development and evaluation of social and behavioral science interventions.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>C.1.</strong> Identify key sources of data for epidemiologic purposes.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>C.10.</strong> Evaluate the strengths and limitations of epidemiologic reports.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Communication and Informatics:</strong> The ability to collect, manage and organize data to produce information and meaning that is exchanged by use of signs and symbols; to gather process, and present information to different audiences in-person, through information technologies, or through media channels; and to strategically design the information and knowledge exchange process to achieve specific objectives.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Program Planning:</strong> The ability</td>
<td></td>
</tr>
<tr>
<td>Assignments 4 and 6</td>
<td>Lectures on 10/27 &amp; 10/29</td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------</td>
<td></td>
</tr>
<tr>
<td>Know how to write questionnaire specifications.</td>
<td>K.3. Explain how the findings of a program evaluation can be used. K.7. Differentiate among goals, measurable objectives, related activities, and expected outcomes for a public health program. Communication and Informatics: The ability to collect, manage and organize data to produce information and meaning that is exchanged by use of signs and symbols; to gather process, and present information to different audiences in-person, through information technologies, or through media channels; and to strategically design the information and knowledge exchange process to achieve specific objectives.</td>
<td></td>
</tr>
<tr>
<td>Know how to develop codebooks.</td>
<td>Communication and Informatics: The ability to collect, manage and organize data to produce information and meaning that is exchanged by use of signs and symbols; to gather process, and present information to different audiences in-person, through information technologies, or through media channels; and to strategically design the information and knowledge exchange process to achieve specific objectives.</td>
<td>Assignments 5 and 6 Lectures on 11/17 &amp; 11/19</td>
</tr>
</tbody>
</table>
| Know how to submit research proposals for review by Institutional Review Boards. | E.9. Apply ethical principles to public health program planning, implementation and evaluation.  
J.2. Apply basic principles of ethical analysis (e.g. the Public Health Code of Ethics, human rights framework, other moral theories) to issues of public health practice and policy. | Assignment 3  
Lecture on 10/20 |