

University of Guelph
Department of Family Relations and Applied Nutrition

FRAN*6560 Special Topics in Applied Human Nutrition U [0.50] or
FRAN*6200 Special Topics in Family Relations and Human Development U [0.50]

Basic Survey Methods for Health and Consumer Contexts Fall 2015

Course Outline

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Class Time Wednesdays, 1-3 pm, MACS 331

Course Description

The purpose of this research methods course is to develop skills in conducting survey research in health and consumer contexts. Students will work on individual projects step-by-step over the course of the semester.

Learning Outcomes

- Students develop skills in conceptualization, design, pilot-testing, analysis and presentation of results of health- and consumer-related surveys.
- Students use different technologies and software (Qualtrics).

Format

- Students will work on a survey project of interest throughout the semester.
- They need to come prepared to discuss the weekly readings and/or other activities.
- They will complete a reflective piece (paragraph or other) on each week's topic and how it relates to their project. Each week we will discuss learnings of applying the topic to their survey project.
- Each student will need to act as participant for another student's survey development process

Login for Qualtrics here <https://www.uoguelph.ca/ccs/service/online-surveys>

Basic knowledge of SPSS is assumed

References/Resources

1. Aday, Lu Ann. Cornelius, Llewellyn Joseph. Designing and conducting health surveys: a comprehensive guide 3rd ed. San Francisco: Jossey-Bass c2006. Book in library RA408.5A33
2. Dillman, Don A., Smyth, Jolene D.; Christian, Leah Melani. Internet, mail, and mixed-mode surveys: the tailored design method, 4th ed. Hoboken, N.J.: Wiley & Sons c2014. (suggest to buy). The 3rd edition c2009 is available at University of Guelph Library Guelph McLaughlin Book Stacks (HM538 .D55 2009).
3. Streiner DL and Norman GR. Health Measurement Scales: A practical guide to their development and use. David L. Streiner and Geoffrey R. Norman, 4th ed. Oxford: Oxford University Press 2008. Online at library. (2015 edition now out)
4. CIHI. Pan-Canadian Primary Health Care Indicator Update Report (2012). <https://secure.cihi.ca/estore/productFamily.htm?pf=PFC2000&lang=en&media=0> Accessed July 17, 2015.
5. Qualtrics University. Learn Qualtrics in 5 Steps. <http://www.qualtrics.com/university/researchsuite/misc-pages/misc/learn-qualtrics-in-5-steps/>
6. Fitzpatrick R, Davey C, Buxton M, Jones D. Evaluating patient-based outcome measures for use in clinical trials: a review. Health Technology Assessment 1998;2(14):74. <http://www.journalslibrary.nihr.ac.uk/hta/volume-2/issue-14#hometab0>
7. Wright JG, Feinstein AR. A comparative contrast of clinimetric and psychometric methods for constructing indexes and rating scales. J Clin.Epidemiol. 1992 Nov;45(11):1201-18.
8. Presser S, Couper MP, Lessler JT, Martin E, Martin J, Rothgeb JM, Singer E. Methods for Testing and Evaluating Survey Questions. Public Opinion Quarterly 2004 Mar 1;68(1):109-30.
9. Willis G. Cognitive Interviewing: A "How To" Guide. <http://fog.its.uiowa.edu/~c07b209/interview.pdf>
10. BEATTY P, Willis G. RESEARCH SYNTHESIS: THE PRACTICE OF COGNITIVE INTERVIEWING. Public Opinion Quarterly, Vol. 71, No. 2, Summer 2007, pp. 287–311.
11. Blair J, Conrad FG. Sample Size for Cognitive Interview Pretesting. Public Opinion Quarterly 2011;75:636-58.
12. Heesch KC, van Uffelen JG, Hill RL, Brown WJ. What do IPAQ questions mean to older adults? Lessons from cognitive interviews. Int J Behav.Nutr.Phys.Act. 2010;7:35.
13. Statistics Canada. Survey Methods and Practices (12-587-X). <http://www5.statcan.gc.ca/olc-olc/olc.action?objId=12-587-X&objType=2&lang=en&limit=0> Accessed July 17, 2015.

Syllabus

Week	Topic	Readings and Assignments
1 Sept 16th	Conceptualizing Topics, using theory, adapting and developing new Questionnaires Methods for formulating survey objectives, developing the study design and defining survey variables from theory Example - CIHI PHC indicators project	Streiner – Chap 2 and 3 Aday- – Chap 1 and 2 Dillman -none CIHI PHC website and process
2 Sept 23rd	Qualtrics Tutorials – take the test	Jennifer Marvin - LIB 034A PB away
3 Sept 30	Methods of data collection Methods of data collection: personal interview, telephone interview; self-administered questionnaire; computer-assisted interview; internet surveys; Comparison of advantages and limitations of different methods;	Aday – Chap 5 Dillman – Chap 2 and 8-10 Streiner – Chap 13
4 Oct 7	Formulating survey questions from variables General principles of question writing; Common errors in question wording; Questions about specific topics: demographics, behaviour, knowledge, attitudes, health; Concepts of scales and indexes- psychometric and clinimetric approaches	Aday Chap 8 -11 Dillman Chap 4 and 5 Wright 1992
5 Oct 14	Formatting the questionnaires Paper size; Cover letter; Front page; First question; Number of questions; Question order; Instructions; Skip instructions; Mixed mode issues	Aday Chap 12 Dillman Chap 6 and 7
6 Oct 21	Pre-testing and pilot testing cognitive interviewing, Assessment at different stages of development	Presser2004 Willis How to Guide Beatty and Willis Blair Example – Heesch - IPAQ
7 Oct 28	Sampling the survey participants Types of probability sample designs: simple random sample, stratified sample; cluster sample; internet samples; Advantages and limitations of different sample designs; Weighting the sample data to reflect the population; Sample size calculations – how to decide	Aday - Chap 6 and 7 Dillman – Chap 3 StatsCan. Survey Methods and practices

Week	Topic	Readings and Assignments
8 Nov 4	Implementing the survey Types and sources of error in a survey; Factors affecting response rates: multiple contacts, incentives, other factors; Quality control and field procedures for different types of surveys; internet surveys Preparing the data for analysis Creating a data dictionary; Checking for errors; Data entry; Data cleaning; Imputations; Computing simple frequencies	Aday Chap 13 and 14 Dillman Chap 2
9 Nov 11	Basic Analysis and Interpretation of Survey Data Comparisons of categorical data – multi-group Graphical presentation of descriptive data	Start analysis exercise with PCAS (to be provided) Streiner Chap 6
11 Nov 18	Reliability and Validity – introduction Reliability - ICC (Cronbach’s alpha), kappa Correlations – doing the calculations and interpreting the results Examining validity of questionnaires Responsiveness in interventions	Hand in PCAS analysis Aday Chap 3 - intro Scales and indexes - Streiner Chap 6-12 Fitzpatrick 1998 (SPSS Guides to calculations)
12 Nov 25th	Oral Presentation and demonstration of draft surveys – progress to date	Oral presentation
Dec 11	Final assignment due	Self-reflective report Final version of questionnaire

Assignments (grade distribution) - Rubrics to come

1. PCAS analysis - Report on analysis of supplied survey dataset from primary care patient survey of experiences – descriptive analysis of the participants, testing of two hypotheses 20%
2. Oral Presentation - 20%
3. Self-reflective report (5 pages) on development of: 25%
 - a. Conceptual model
 - b. Development of variables to be considered
 - c. Development of questions
 - d. Experience with development of question wording and formats
 - e. Results of pre-testing or cognitive interviewing – in-class only
4. Final version of questionnaire produced in Qualtrics 35%