## Soc. 208: Survey Research Methods

Fall, 2006 M 1:15 – 3:45 p.m. Room 331, Sociology/Psychology

Instructor: Nan Lin 266 Soc/Psy phone: 660-5610

e-mail: nanlin@duke.edu

Teaching Assistant: Dan Ao

253 Soc/Psy phone: 660-5604

e-mail:danao@soc.duke.edu

Course Blackboard: Soc208.

#### **INTRODUCTION:**

This course selectively introduces survey research methodologies in sociology so that each student gains the basic knowledge in the conduct and evaluation of survey research. The topics to be covered include: (1) theory construction, (2) the linkage between theory and research, (3) the specification of models and hypotheses, (4) the design issues in survey research (sampling, data collection, measurement), (5) the basics of data analysis, and, (6) if time permits, selected topics in analysis (multicollinearity, interactions, selectivity bias, and estimations of lagged effects).

We will employ the following formats:

- 1. Readings and lectures: I will provide lectures on each of the topics and each student is expected to have read the assigned readings on the topic before the class.
- 2. Group assignments: Several assignments are given to students in small groups so that you may take advantage of full discussion while you are completing your assignments. Each group will be responsible for a verbal presentation in class.
- 3. Individual assignments: There will also be assignments where each student is expected to conduct and complete each assignment independently.
- 4. One term paper: Each student is expected to turn in a term paper on one of the following topics:
  - a.. a research proposal: designs a research project employing survey methods.
  - b. a research project: presents a research study, employing a survey data set(s).

#### **RECOMMENDED TEXTS:**

There is no required text. All recommended texts will be on reserve at the Perkins Library.

Karl Raimund Popper, Logic of Scientific Discovery. Rutledge.

Thomas S. Kuhn, <u>The Structure of Scientific Revolutions.</u> University of Chicago Press.

C. Backstrom and G. Hursh 1963 Survey Research. Northwestern Uni. Press

Peter Blau and Otis Dudley Duncan. 1967. American Occupational Structure. (BD)

Edward Carmines and Richard Zeller. 1979. <u>Reliability and Validity Assessment</u>. Sage

Jacob Cohen. 1977. Statistical Power Analysis for the Behavioral Sciences

Jean Converse and Stanley Presser. 1987. <u>Survey Questions: Handcrafting the Standardized Questionnaire.</u> Sage.

Floyd J. Fowler, Jr. 1984. Survey Research Methods Sage

Mark Granovetter. 1973/1995. <u>Getting a Job</u>. Cambridge, MA: Harvard University Press. (MG) {Granovetter 1973}

Granovetter, Mark. 1973. "The Strength of Weak Ties." *American Journal of Sociology* 78:1360-80.

R. M. Groves and R. L. Kahn, Surveys by Telephone.

Lawrence C. Hamilton. 1993. Statistics with STATA 3. Duxbury

George Homans. 1950. The Human Group. Harcourt, Brace and World. (GH)

Graham Kalton. 1979. <u>Introduction to Survey Sampling</u>. Sage.

Jill Kiecolt and Laura Nathan. 1985. Secondary Analysis of Survey Data. Sage.

Paul F. Lazarsfeld and Robert K. Merton. 1954. "Friendship as Social Process: A

Substantive and Methedological Analysis," pp. 298-348 in The Varied Sociology of Paul F. Lazarsfeld, edited by P. L. Kendall. NY: Columbia University Press. (RM) {Lazarsfeld and Merton 1954}

Nan Lin. 1976. Foundations of Social Research. McGraw-Hill.

Lin, Nan. 1982. "Social Resources and Instrumental Action." Pp. 131-45 in *Social Structure and Network Analysis*, edited by P. V. Marsden and N. Lin. Beverly Hills, CA: Sage.

Nan Lin. 2001. <u>Social Capital: A Theory of Social Structure and Action.</u> New York: Cambridge University Press. (NL)

C. A. Moser and G. Kalton, Survey Methods in Social Investigation.

Radloff, Lenore S. 1977. "The CES-D Scale: A Self-Report Depression Scale for Research in the General Population." *Applied Psychological Measurement* 1:385-401.

P. H. Rossi, J. P. Wright and A. B. Anderson. 1983. <u>Handbook of Survey Research</u> Academic Press.

Arthur Stinchcombe. 1968. Constructing Social Theories. Harper.

Donald Treiman. 1970. "Industrialization and Social Stratification," pp. 207-234, in <u>Social Stratification: Research and Theory for the 1970s</u>, edited by E. O. Laumann. Inidianapolis: Bobbs-Merrill. (DT)

### **Data Set and Computer Programs**

USA 2002 survey STATA Mplus

#### **SCHEDULE**

## Weeks 1, 2 and 3 (Aug. 28<sup>th</sup>, Sep. 4<sup>th</sup>, Sep. 11<sup>th</sup>):

**Theory Construction**: explanation, theoretical structure, propositions.

\*Arthur Stinchcombe. 1968. Constructing Social Theories. pp. 15-28.

\*Nan Lin. 1976. Foundations of Social Research. pp. 15-56.

## Popper versus Kuhn:

e.g.: http://huizen.daxis.nl/~henkt/popper-kuhn-controverse.html

### **Individual Assignments #1 and 2: Theoretical structure and propositions**

Explicate one of the following "theories" as a theoretical structure with (1) the explanation, (2) deduced propositions, and (3) assumptions:

Set 1: Week 2: George Homans' Human Interaction Theory (GH Chapter 2)

Week 3. Lazarsfeld and Merton's Homophily Theory (RM)

Set 2: Week 2. Blau and Duncan's Stratification Theory. (BD Chapter 5)

Week 3. Treiman's Development and Stratification Theory.

Set 3: Week 2: Granovetter's Strength of Ties Theory (MG 1974 article)

Week 3: Lin's Social Capital Theory. (1982; NL Chapter 5)

## Week 4 (Sep. 18<sup>th</sup>)

**Hypothesis:** formulation and organization, epistemic issues

\*Nan Lin. 1976. Foundations of Social Research., pp. 42-70

**Deduction and Induction:** linkages between explanation and observations.

Individual Assignment #3: Select a "theory" and explicate its explanation, theoretical structure, propositions, and hypotheses. Or, begin with observed relations, and formulate explanation(s) and propositions.

## Week 5 (Sep. 25<sup>th</sup>).

**Sampling**: cross-sectional, panel

Graham Kalton. 1979. Introduction to Survey Sampling

\*C. Backstrom and G. Hursh, <u>Survey Research</u>. Chapter 2.

\*Floyd J. Fowler, Jr. 1984. <u>Survey Research Methods</u> Chapter 2.

Nan Lin, Alfred Dean and Walter Ensel, eds. 1986. <u>Social Support, Life Events and Depression</u> Academic Press. Chapter 3 by Ensel

Jacob Cohen. <u>Statistical Power Analysis for the Behavioral Sciences</u>. Introductory chapter.

General Social Surveys. Appendix on Sampling Design

**US 2002 CITY SURVEY** 

#### **Assignment: Group Assignment #1: Sampling exercise**

Draw a probability sample of adults from the city of Durham for a study on the effect of marital relations on psychological well-being.

## Weeks 6 and 7 (Oct. 2<sup>nd</sup>, Oct. 16<sup>th</sup>):

#### **Measurement and Instrumentation**

Scaling and indexing (summated, ordered, factor scoring)
Reliability
Validity
Response effect

Edward Carmines and Richard Zeller. 1979. Reliability and Validity Assessment.

\*Nan Lin, 1976, Chapter 10.

\*Radloff, Lenore S. 1977. "The CES-D Scale: A Self-Report Depression Scale for Research in the General Population." *Applied Psychological Measurement* 1:385-401.

**Individual Assignment #4:** Constructing indicators for at least two variables in a hypothesis (including a scale and an index)

# Week 8 (Oct. 23<sup>rd</sup>).

#### **Data Collection:**

Personal interview, telephone interview, and mail questionnaire Interveiwer recruitment and training Quality control: random check, follow-ups Pilot study, pretest Panel design

Jean Converse and Stanley Presser. 1987. <u>Survey Questions: Handcrafting the Standardized Questionnaire.</u>

\*R. M. Groves and R. L. Kahn, <u>Surveys by Telephone</u>.

\*C. Backstrom and G. Hursh 1963 Survey Research Chapters III, IV, V

Floyd J. Fowler, Jr. 1984. Survey Research Methods Chapter 7

2002 USA Survey Questionnaire

## **Individual Assignment #5: interview exercise**

To conduct a single interview and write a report assessing the effort

## Week 9 (Oct. 30<sup>th</sup>):

## **Data Processing**

Coding

Verification: logical

Handling of missing values

### **Group Assignment #2: Computer exercise**

Frequencies and univariate statistics Missing data treatment

#### **Data Analysis**

Descriptive
Hypothesis-testing
Estimations:
Decomposition:

Lawrence C. Hamilton. 1993. Statistics with STATA 3.

\*D. F. Alwin and R. M. Hauser, 1975, "The decomposition of effects in path analysis," American Sociological Review, 40:37-47 or Marsden, pp.

### **Individual Assignment #6: Correlation and Regression**

Decisions: pair-wise versus list-wise deletion

metric versus standardized coefficient

## Week 10 and 11 (Nov. 6<sup>th</sup>, Nov. 13<sup>th</sup>).

### **Topics in Analysis:**

- a. Structural equations
- b. Multicolinerity
- c. Interaction effect
- d. Lagged effect
- e. Selectivity bias
- f. Multi-level analysis

\*Nan Lin, "The Invisible Hand of Social Capital", 2003.

\*Kent Smith & M S. Sasaki. 1979. "Decreasing multi-colinearity," Sociological Methods & Research. 8:1(Aug.) pp. 35-56.

Mplus manual

## **Individual Assignment #7: Structural Equation Modeling**

Estimating the effect of social capital on achievement

## Week 12 (Nov. 20th).

## Back to Theory and the Real World

### **Ethical Issues in Survey Research**

Protecting human subjects: institutional board

data confidentiality

Integrity in the conduct of research

Integrity in the analysis and interpretation

# Weeks 13 (Nov. 27<sup>th</sup>)

**Individual Report of the Final Term Paper**