Workshop on the Project on Human Development in Chicago Neighborhoods
ICPSR Summer Program in Quantitative Methods of Social Research
Sponsored by the National Institute of Justice, U.S. Department of Justice

June 16-20, 2008

G150 / Perry Building
University of Michigan-Ann Arbor
330 Packard Street
Ann Arbor, Michigan

Instructors:
Christopher Maxwell, Associate Professor
         Michigan State University / The University of Michigan
Kaye Marz, NIJ Project Manager at NACJD/ICPSR
Brady T. West, M.A., Lead Statistician, Center for Statistical Consultation and Research
         University of Michigan-Ann Arbor

Brent Phillips, ICPSR/NACJD Lab Instructor

Monday, June 16, 2008

9:00- 9:30: Introductions to ICPSR, NACJD, Summer Program

9:30-10:00: NIJ’s Data Resources Program (Ronald Wilson, Program Officer)

10:00-10:30: Conceptual Overview of PHDCN

10:30-10:45: Break

10:45-12:00: Research Design and Instruments

12:00-1:15: Lunch

1:15 -2:15: PHDCN at ICPSR

2:15-2:30: Break

2:30-4:00: Participant and Project Introduction

4:00-5:30: Reception, Perry Atrium

6:00- Lab
Tuesday, June 17, 2008

9:00-9:30: Introductions and Conceptual Overview

9:30-10:30: Two-level Cross-sectional Data and Models (Sampson and Bartusch, 1998)
   ● Characterizing the distribution of legal cynicism in a single neighborhood
   ● Comparing two neighborhoods
   ● Extending the approach to \( J \) neighborhoods
   ● Exploring two-level cross-sectional data

10:30-10:45: Break

10:45-12:00: Fitting Models and Interpreting Results
   ● One-way analysis of variance with random effects
   ● Means as outcomes
   ● A random coefficient model (an extension of Sampson and Bartusch)
   ● Means and slopes as outcomes

12:00-1:00: Lunch

Wednesday, June 18, 2008

9:00-10:45: Two-level Models for Individual Change
   ● Conceptual overview
   ● Characterizing change in delinquent behavior for a single adolescent
   ● Comparing change for two adolescents
   ● Extending the approach to \( n \) adolescents

10:45-11:00: Break

EXAMPLE 2: TWO-LEVEL WITH EX2 FILES

11:00-12:00: Fitting Models and Interpreting Results
   ● Organizing Data to Study Individual Change
   ● Exploring two-level repeated measures data: Delinquency Data
   ● Describing the Average Trajectory of Change
   ● Assessing Individual Variation in Change
   ● Estimating Individual Slopes and Curves
   ● Modeling Correlates of Change (Gender and Living Arrangement)

12:00-1:00: Lunch
1:00-3:30: Extensions to Three-level Models (Sampson, Raudenbush, and Earls, 1997)
  - Conceptual Overview
  - Model Fitting Example: Explaining Changes in Delinquency with both Individual- and Neighborhood-level Covariates

**EXAMPLE 3: THREE-LEVEL WITH EX2 FILES**

3:30-3:45: Break

3:45-5:00: Hands-on Computer Session

**Thursday, June 19, 2008**

9:00-10:30: Models for Non-Normal Outcomes
  - Conceptual Overview
  - Binary Outcomes
  - Count Outcomes

10:30-10:45: Break

**EXAMPLE 4: TWO-LEVEL EXAMPLE USING EX3 FILES**

10:45-12:00: Fitting Models and Interpreting Results
  - Two-level Cross-Sectional Example w/ Binary Outcome: The Probability of Living with Both Parents

12:00-1:00: Lunch

**EXAMPLE 5: THREE-LEVEL EXAMPLE USING EX3 FILES**

1:00-3:30: Fitting Models and Interpreting Results
  - Three-level Repeated Measures Example w/ Count Outcome: Number of violent acts committed against other persons in the past year

3:30-3:45: Break

3:45-4:45: Hands-on Computer Session

4:45-5:00: Discussion / Questions

**Friday, June 20, 2008**

9:00 - Lab

10:00-12:30 Presentation & Discussion