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## **Principles of Sociology**

We have spent the last few weeks discussing race, class, and gender inequalities and how sociologists conceptualize these inequalities on the structural, rather than the individual, level. In this second research report, you will have the opportunity to apply this structural perspective. You will use U.S. Census data from 1950 to 1990 to analyze shifts in occupational structures in your home state and how these shifts vary by race, sex, or education. This analysis is macro (state) level, so keep this in mind as you are thinking about and writing about your research.

### Learning Objectives:

#### *Skill*

- To understand the logic of control variables in bivariate tables
- Learning about survey methodology and sampling methods
- Using software to access and analyze census data
- Identifying independent and dependent variables
- Quantitative writing

#### *Substance*

- To recognize the existence of social structure by observing economic shifts and how they vary by social group
- To understand how sociologists use empirical data, such as the U.S. Census, to generate knowledge

### Variables:

You will analyze trends in occupational distribution (dependent variable) by year (independent variable) controlling for race, sex, or education (control variables). Below are descriptions of these variables as operationalized in this dataset:

#### ***Occupation:***

Top white collar: professional workers, executives, administrators, and managers

Other white collar: administrative support, clerical and sales workers, technicians, and related support

Service: private household, protective service, and other service workers

Top blue collar: “skilled” blue collar jobs such as precision production, craft, and repair workers

Other blue collar: workers in less skilled blue collar jobs

Farm: workers in the farm, forestry, and fishery occupations

#### ***Race:***

Nonblack: all persons who did not report race as black

Black: all persons who reported race as black

#### ***Education:***

Less than high school: persons who have not graduated from high school

High school graduate: persons who have graduated from high school

Some college: persons who have completed some years of college or attained an Associate Degree

College graduate: persons who have graduated from 4-year college

**Sex:**

Male

Female

### Data Analysis:

1. Go to <http://www.ssdan.net/datacounts>
2. Click on the “Data” in the menu bar
3. From there, click “Browse” on the left sidebar. Find “**geo1990**” in the drop-down box and select it.
4. Scroll down through the list of data sets until you find “**oced5090.dat**” Highlight and click “submit.”
5. You can also click [here](#) to launch the dataset in WebCHIP.
6. Create a cross tabulation using the dependent variable in the rows and the independent variable in the columns. Make sure that your table is percentaged appropriately.
7. Examine the results.
  - a. How were workers in your state distributed across the occupational structure in 1950?
  - b. How did this change by 1990?
8. Now choose race, sex, or education as a control variable and create a new cross tabulation. You will now have what are called partial tables—separate tables of occupation by year for each category of your control variable.
9. Examine these tables.
  - a. Does the occupational structure in 1950 differ by your control variable?
  - b. Does it differ in 1990?
  - c. Does the rate or nature of change in occupational structure over time vary by your control variable?

You can also explore the other datasets to see how they might help you understand the above analysis. For example, analyzing the centrend → edoc502k.dat dataset will give you trends in occupational structure for the whole US. Also, geo2000 → edoc502k → edoc502k.XX (the two-letter abbreviation for your state) will give you the occupational structure for your state in 2000.

### The Write-Up:

1. Create reader-friendly tables and graphs to display the results of your analysis.
  - Copy your tables (the bivariate crosstab and all partial tables) into Excel by using the copy and paste shortcuts.
  - Number and title your tables and edit them so that they look neat and reader-friendly. Your tables should include the cell frequencies, cell percentages, and column totals.
  - Create line charts from your data using the graph function in Excel. I will demonstrate in class how to do this. (If you have questions, ask me or a classmate).
2. Write a 3 to 4 page paper that reports your analysis. It should include:
  - **Title**

- **Introductory paragraph** that introduces your research question. Unlike Report 1, you will need to come up with your own research question. Remember that the analysis you are doing here is macro, so be sure that your hypothesis and analysis reflect this. For example, your research question will be something like “how do changes in the occupational structure in California between 1950 and 1990 vary by sex?”
- Paragraph that describes your **hypothesis** and the reasoning behind your hypothesis
- **Methods**: Describe the dataset (decennial U.S. Census); your independent, dependent, and control variables and how they are measured; and your analytical strategy (i.e., “I first examine changes in the occupational structure between 1950 and 1990 for all residents, and then control for sex.”)
- **Findings**: a discussion of the results of your analyses
- **Conclusion** that generalizes your specific findings to the larger research question
- **Tables and line charts**