<u>Data Analysis Assignment</u>
Putting Census Data to Work

This assignment is part of a Sociology department effort to engage students in a wide variety of Sociology classes (not just Statistics classes) in various kinds of data analysis. Learning to use quantitative information is essential in most forms of employment and in most academic pursuits. The department's effort was supported by a training grant from the American Sociological Association and the National Science Foundation.

WHAT WILL YOU LEARN BY DOING THIS ASSIGNMENT?

Skill
- You will gain some experience describing and analyzing simple descriptive statistical information.

Substance
- You will learn the US Census is a good source of information about the characteristics of the population living in different parts of the country.

- You will learn that you can get data on states and cities, as well as the United States as a whole, from the Census.

- You will learn that there are practical uses for the information about the characteristics of the population of a given region.

THE PROBLEM

Policy-makers need to design policies that are suited to the population they are trying to affect. It would make little sense, for example, to develop a policy that aimed to improve the health of Americans by providing them with milk if we learned that the majority of Americans were lactose-intolerant!!

You have been made responsible for developing an anti-poverty program for each state in the United States. You are going to start with two states: Ohio and any other state of your choice. Before you decide what kind of policy would work best in each state, you need to know something about the characteristics of the poor in each state. You have decided that the first thing you would like to know is the **age** characteristics of the poor.

WHAT DO YOU NEED TO KNOW TO ANSWER THE QUESTION?

You need to locate information about which age groups have the highest poverty rates and which age groups account for the largest percentage of the poor (note that these are NOT necessarily the same thing!!).

GETTING THE INFORMATION YOU NEED

You will be working with web-based data taken from the US Census. These are easier to work with than "raw" Census data, but the exercise will give you an idea that there is a lot of information to be found in the Census.

1. Access CensusScope by going to www.censusscope.org/)

2. At the top of the CensusScope page, you will see several tabs. Click on "Charts and Trends."

3. Find the link for information about Poverty (it is in the list of topics in the upper left hand part of the screen). Click on this link. What you will see is information about poverty in the US in 1990 and 2000. You will **not** be using these data for this assignment.

4. OHIO DATA – poverty: on the left side of the page, you will see a section called "change location." You can select a state or metropolitan area here. In the Choose a State menu, select Ohio. Click "View Chart." You will now see data on poverty rates for various age groups in Ohio's population. (At the top right, link to the "print-friendly" version of the data and print the page.). Focus on the 2000 data.

5. COMPARISON STATE DATA -- poverty: using the button on the left of the page, "zoom out" to the US page. Then, choose any other state from the "choose a state" menu. Click on "view chart." This will give you data on the state you chose. Print this page. Again, focus on the 2000 data.

ANALYZING WHAT YOU FOUND

Your job is to figure out on which age group anti-poverty policy should focus in the two states you are analyzing. So, you need to compare the age groups within each state, then compare the two states to each other to see if they are similar or different. Focus on the data for 2000 (ignore 1990).

1. Start with OHIO. There are four age groups in the chart: 11 and under, 12-17, 18-64, and 65 and older. You need to find out:

    a. What is the poverty rate for each group

    b. Which of the four groups accounts for the largest amount of poverty

2. To get the answer to question a, estimate what percentage is represented by the darker section of each age group's 2000 bar. (note: you'll be estimating this way. You can get an exact number by scrolling down to the table below and calculating what percentage of each group is "in poverty." For example, for 11 and under, you can see that the age group contains 1,872,988 people; 297,008 are "in poverty." Do the math and you get a poverty rate of about 15.8% for this group.

3. To get the answer to question b, scroll down to the table underneath the bar diagram. There you can see how many people are "in poverty" in each age group. Which is the largest group of poor people? (note: you can calculate what percentage of the total poor falls into each age group by adding up the total number of poor people in Ohio in 2000, then figuring out what fraction of this is accounted for by each age group).

4. Then follow the same steps for the COMPARISON STATE.

WRITING UP YOUR ANALYSIS

Follow this "recipe:"

1. Introduction – tell me what the essay is about and which states you're comparing.

2. Methods – explain what data you're using.

    a. Where did you get it

    b. How did you estimate or calculate the poverty rate for each group?

    c. How did you calculate the size of the poverty population?

    d. What is the difference between b and c?

3. Ohio Analysis:

    a. Which group has the highest poverty rate? (provide numbers)

    b. Which age group accounts for the most poverty? (provide numbers)

4. Comparison State Analysis:

    a. Which group has the highest poverty rate? (provide numbers)

    b. Which age group accounts for the most poverty? (provide numbers)

5. Conclusion:

    a. Which age group should be the focus of anti-poverty policy in Ohio? Back up your answer using the data you presented.

    b. Which age group should be the focus of anti-poverty policy in the comparison state? Back up your answer using the data you presented.

Be sure to explain whether you used the poverty rate for each age group or the actual number of poor people in each age group. And explain why.