

Jay Corzine: Data Analysis Module

Data Analysis Exercise

LEARNING OBJECTIVES:

Skill

- Learning about survey methodology and sampling methods
- Using software to access and analyze census data
- Identifying independent and dependent variables
- Learning how to construct, read, and interpret bivariate tables displaying frequencies and percentages

Substance

- To examine differences in selected structural positions of Blacks, Whites and Latinos in the United States that may help explain long-standing differences in their murder rates

Social Structure, Race/Ethnicity and Homicide

As discussed, the murder rates for Blacks in the United States are substantially higher than those for Whites, with Latino murder rates falling in the middle. These differences have existed throughout the 20th and into the 21st century and, with few exceptions, are found in different sections of the United States. Although biological and genetic explanations for racial differences in crime rates, including murder, have been discredited and are no longer accepted by most criminologists, both cultural and structural theories are widespread in the literature on crime and violence. It is also important to remember that Latino is an ethnic rather than a racial classification. The point of this exercise is to examine differences in selected structural positions of Blacks, Whites and Latinos in the United States that may help explain long-standing differences in their murder rates.

Social Structure and Murder

Although there is not 100 percent consistency in previous research studies, most empirical investigations of murder have found several variables to be related to both individual and group involvement in homicide. Four of the more important independent variables are:

1) **Poverty.** Most studies have found that poverty at both the individual and group level is positively related to murder. That is, murder offenders and victims are disproportionately poor, and groups with higher percentages of their members living in poverty have higher murder rates. In this exercise, you will examine differences in **absolute** poverty defined as falling below a set income standard, i.e. X dollars in income a year. If higher percentages of Blacks and Latinos are poor, it would provide one potential explanation for their higher rate of involvement in lethal interpersonal violence.

2) **Age.** Persons in younger age groups, particularly 15 to 34, are more likely to be involved in a wide range of criminal activities, including violent offenses such as murder. If higher numbers of Blacks and

Latinos than Whites fall into the younger age groups (a difference in what demographers call the **age structure of a population**), it would provide a second potential explanation for racial and ethnic differences in murder rates.

3) **Family Type.** Numerous studies of delinquency have found that juveniles who live with two adults (e.g., two parents, mother and grandmother, etc.) are generally less involved in delinquent behaviors than their peers who live with one adult, typically a parent and more often their mother than their father. Similarly, studies of murder rates have found that populations with greater levels of family disruption, percent divorced for example, have higher levels of killing. Significant differences in family type between Blacks, Whites and Latinos would provide a third potential explanation for differences in murder rates between these groups.

4) **Urban Residence.** In the United States, murder rates are higher in large cities than in smaller cities, suburbs or rural areas. Surprisingly, rural areas often have more murders per capita than small cities and suburbs, but it is large cities that are conducive to high levels of violent crime, notably murder and robbery. If the Black and Latino populations are more concentrated in cities than Whites, a fourth potential explanation for murder rate differences would exist.

Remember, **the point of this exercise is not to examine the relationships of poverty, age, family type and urban residence with murder rates.** Instead, you will determine if there are differences in these variables between Blacks, Whites and Latinos that would provide **possible** explanations for the higher murder rates for Blacks and Latinos in the United States.

For the first three variables of interest, poverty, age and family type, you will be using WebCHIP data file *fpov2k.dat*. For urban residence, you will use WebCHIP data file *ppovgeo9.dat*. Both of these files include data from the 2000 census. Refer to the instructions for using WebCHIP or contact the instructor if you experience difficulties in completing this exercise.

Part 1: Poverty

Using data file *fpov2k.dat*, find the percentages of Blacks, Whites and Latinos living in poverty in 2000.

1. Go to <http://ssdan.net/webchip/webchip4/>
2. Find the "Choose Dataset" section on the left-hand side. Find "ACS 2008" in the drop-down box and select it.
3. Scroll down through the list of data sets until you find "FamPov", select and hit "Compute Marginals"

Copy these numbers into table 1.

Table 1. Race/Ethnicity and Poverty			
Poverty Status	NL Whites	Blacks	Latinos
Non-poverty			
Poverty			

What group has the highest percentage in poverty? _____

What group had the highest percentage in poverty? _____

What are the implications of these findings for explaining differences in murder rates between Blacks, Whites and Latinos in the United States?

Part 2: Age

Using data file *FamPov* find the percentages of Blacks, Whites and Latinos in different age groups and copy the numbers into table 2.

Table 2. Race/Ethnicity and Age			
Age Group	NL Whites	Blacks	Latinos
<25			
25-34			
35-44			
45-54			
55-64			
65+			

What are the differences in the age structures of Blacks and Whites?

What are the differences in the age structures of Latinos and Whites?

What are the implications of these findings for explaining differences in murder rates between Blacks, Whites and Latinos in the United States?

Part 3: Family Type

Continuing to use *FamPov* find the percentages of Black, White and Latino families that are married couples, male headed and female headed. Copy the numbers into table 3.

Table 3. Race/Ethnicity and Family Type			
Family Type	NL Whites	Blacks	Latinos
Married Couples			
Male-headed			
Female-headed			

What group has the lowest percentage of married couples? _____

What group has the next lowest percentage of married couples? _____

What are the implications of these findings for explaining differences in murder rates between Blacks, Whites and Latinos in the United States?

Part 4: Urban Residence

Using data file *ppovgeo2k.dat*, find the percentages of Blacks, Whites and Latinos living in cities, suburbs and non-metropolitan areas.

1. Go to <http://ssdan.net/webchip/webchip4/>
2. Find the "Choose Dataset" section on the left-hand side. Find "ACS 2008" in the drop-down box and select it.
3. Scroll down through the list of data sets until you find "PovGeo", select and hit "Compute Marginals"

Copy the numbers into table 4.

Table 4. Race/Ethnicity and Urban Residence			
Type of Place	NL Whites	Blacks	Latinos
Non-metro			
Suburb			
City			

What group is the most concentrated in cities? _____

What group is the second most concentrated in cities? _____

What are the implications of these findings for explaining differences in murder rates between Blacks, Whites and Latinos in the United States?

Summary and Conclusions

Summarizing the data from tables 1-4 above, what are the differences in the structural positions of Blacks, Whites and Latinos in the United States?

What are the overall implications of the structural positions of Blacks, Whites and Latinos for explaining differences in murder rates between the three groups?
