## U.S. HOUSING PATTERNS, LIVING ARRANGEMENTS AND LIFE CHANCES

## I. INTRODUCTION.

In this assignment you will use U.S. census data to get an overview of housing patterns (ownership and types of housing) and living arrangements as a way of understanding more about one example of what Weber referred to as life chances (or, basically, the ability to access to resources we need to live a good life). As well, access to housing is considered one of the main features of the American Dream. Unfortunately, as the need for low-income housing units has doubled over the last three decades, the number of low-income housing units nationwide has been cut in half. Minneapolis and other cities have established annual goals for increasing the stock of affordable housing in response to a severe shortage of low-cost housing.

The exercises in this assignment basically involve using U.S. census data (through a program called WebCHIP) to construct cross-tables. The various cross-tables that you construct will allow you to examine the influence of a variety of personal and family characteristics on ownership, types of housing and living arrangements. After you have written generalizations, answered questions, and completed analyses using the census data, you will compare your conclusions based on the census data with information from another source.

## II. LEARNING OBJECTIVES.

## A. Technical data base and data analysis skills

As you complete this exercise you will learn how to:

1. Access U.S. census data from the SSDAN site
2. Set up cross-tables properly (including the correct way to total percentages to 100)
3. Write simple generalizations from selected tables
4. Understand basic causal analysis including the difference between independent and dependent variables
5. Use a control variable to further examine your cross-tabulated data
6. Construct a bar graph using the WebCHIP site
7. Get information from CensusScope on housing
8. Get information from the U.S. Census Bureau website

## B. Sociological reasoning skills

By completing this exercise you will

1. Gain knowledge of how age, race, gender, disability status, and household type affect housing patterns and living arrangements
2. Gain knowledge of some of the housing patterns and living arrangements of older citizens
3. Gain knowledge of the complex meaning of social diversity in terms of gender, race, marital status, within-age cohort differences, and disability as it relates to home ownership, type of housing and living arrangement
4. Find out what percentage of American families could afford to purchase a modestly priced home
5. Find out whether rent as a percentage of household income increased or decreased from 1989 to 1999
6. Compare your analysis based on census data with a report of the National Fair Housing Alliance or with any one of a number of articles listed at the end of this assignment
7. Learn what is meant by co-housing and be asked to suggest how it might improve residential living experiences in the U.S.

## III. CENSUS DATA.

Within what is referred to as WebCHIP, you will use three different data sets, taken from the U.S. census, and constructed by the Social Science Data network (SSDAN) at the Population Studies Center at the University of Michigan. All of this data will be from the 1990 census. You will also go to the U.S. Census website and the site for CensusScope.

Within WebCHIP, the three data sets you will use for this assignment are housng9.dat, eldlvmr9.dat and eldrel9/eldrel9.dat. While the first data set deals with all age groups, the second two deal only with the population 65 and older.

The first data set is found in the folder cen1990. In this data set, the independent variables (causes) are age, race, and household type, and the dependent variables (effects) are home ownership and types of housing. The second data set is available through the folder, custom. For this data set, the independent variables are region, poverty, gender and race; the dependent variable is living arrangement. The third data set is found in the folder, geo1990. The independent variables in this data set are marital status, gender, disabled and race, while the dependent variables are home ownership, types of housing, and living arrangements. This table summarizes the names and other details about the data sets:

| Folder | Data Set | Independent <br> variable (variable <br> shorthand name) | Dependent <br> Variables (variable <br> shorthand name) | Common language <br> names used in parts <br> of the instruction |
| :--- | :--- | :--- | :--- | :--- |
| cen1990 | housng9.dat | Age | Rousng9.dat | RacLat |
| cen1990 | housng9.dat | HHType | age |  |
| cen1990 | housng9.dat |  | Homeownr | race |
| cen1990 | housng9.dat | eldrel9.dat | Region | household type ownership |
| cen1990 | eldrel9.dat | Pov | tyrel9.dat | Gender |
| custom | eldrel9.dat | RacLat | region |  |
| custom | eldrel9.dat | AgeElder | poverty |  |
| custom | eldrel9.dat | eldlvmr9.dat | Marital | gender |
| custom | eldlvmr9.dat | Gender | race |  |
| custom | eldlvmr9.dat | RaceLat | LivArrng | age groups within |
| custom | eldlvmr9.dat | Disabl | living arrangement |  |
| geography | eldlvmr9.dat |  | Homarital status |  |
| geography | LivArrng | gender |  |  |
| geography | geography | geography | geography | geography |

## IV. WEBCHIP - GENERAL DIRECTIONS

A. Accessing WebCHIP. You can also access WebCHIP by going to the address:
a. http://www.ssdan.net/datacounts/data/
b. From there, click "Browse" on the left sidebar. Find cen1990 in the drop-down box and select it. Then find housng9.dat and click "Submit."
B. Independent and Dependent Variables. On the next screen you will first select the independent variable (cause) or what is referred to as the column variable; then select the dependent variable (effect) or what is referred to as the row variable. Select percentage down (always select percentage down unless stated otherwise) and then Crosstab.
C. Printing - NO! You cannot easily print the information you get. The easiest way to do this exercise is to simply copy the information in pencil in the blocks. You will get two copies of this assignment, one for your rough work, and the second to hand in. Make sure that the one you hand in is completed with a black pen and is neatly done (avoid erasing or else use white out).
D. Control Variable.

If a control variable is going to be used it will always be selected after the independent and dependent variables are selected for the initial cross-table. After the cross-table is set up, highlight the name of the control variable first and then click on Control. Make sure that you
do not have two variables highlighted in the control box. Select cross-table once again. Remember to go back up on the screen to get the information for the beginning of this "new" cross-table with the control variable since you will be at the bottom of the table (the top category of the control variable may not be visible until you scroll upwards).
$E$. Doing a second cross-table in the same data set.
The clear text bar only clears what you can see on the screen. It does not always clear all the previous work from the memory. When you need to do a second cross-table in the same data set simply use the back arrow (to go back to the submit query screen and reenter the name of the folder and the data set if necessary).
F. Entering Information in Tables.

Always round off the percentages; do not use decimal places. They will then sometimes total 99 or 101 and you should simply make sure that you've added up the rounded numbers properly in the total percentage row. Always make sure that the numbers are correctly lined up in your final copy.

## V. WebCHIP EXERCISES

FIRST DATA SET:
$* * * * *$
Cen1990 (folder) /housng9.dat (data set)
You can click here to launch the dataset in WebCHIP.

One of the parts of the American Dream is the idea that every adult should be able to own a home. Before you access the 1990 Census data, write down on this line your guess about the two types of household that are more likely to be owners than renters.

## EXERCISE 1A. OWNERSHIP PATTERNS AND ALL HOUSEHOLD TYPES (20 points)

Select HHType (as the independent or column variable) and Homeownr (as the dependent or row variable). Create a crosstab. Remember to always select percentage down unless otherwise stated.

Fill in the following table from the information on the screen. In each table a few of the answers/figures are filled in to help you check if you are entering the right information.

Household Type by Owner or Renter (\%)

|  | Married <br> Couple | Male <br> Family | Female <br> Family | Male <br> Nonfamily | Female <br> Nonfamily | All <br> categories |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Homeowner | 79 |  |  |  |  |  |
| Renter |  |  |  |  |  |  |
| Total \% | 100 |  |  |  |  |  |

Write a simple statement (generalization) describing one pattern you see in this table.

Why do you think there are differences in home ownership by household type? Are there any patterns that surprise you and, if so, why were you expecting a different result?

Next, create a bar graph and draw the "bars" for percentage of owners and renters into this chart:

| 80 |  |  |  |
| :--- | :--- | :--- | :--- |
| 60 |  |  |  |
| 40 |  |  |  |
| 20 |  |  |  |
| 0 | Married Couple | Male Family | Female Family |

EXERCISE 1B. OWNERSHIP PATTERNS AND RACE AND AGE. (20 points)
Finally, in this last table dealing with ownership patterns, the independent variable is race and the dependent variable is owning a home. Age is the control variable. Be careful to copy only the percentage of those owning a home and only for the age groups listed here (14-24 is not included).

Percentage Owning a Home by Age and Race

|  | NonLatino <br> White | Black | Latino | Asian | American Indian |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $25-34$ | 52 |  |  |  |  |
| $35-44$ | 73 |  |  |  |  |
| $45-54$ |  |  |  |  |  |
| $55-64$ |  |  |  |  |  |
| $65+$ | 78 |  |  |  |  |

Roughly how many years do the Black and Latino households need to "catch up" to the NonLatino White households ownership patterns of ages 25-34? $\qquad$ . What do you think explains this gap in ownership between the NonLatino White and other groups? You can guess here since you do not have additional data provided to answer this question.

EXERCISE 1C. OWNERSHIP PATTERNS: FAMILY HOUSEHOLDS. (20 points)

In this next exercise the focus will be on the family household types (meaning that the nonfamily types are ignored). Two control variables are used, first race in the first table and then age in the second table. For the first control variable table, select HHType (as independent or column variable), Homeownr (as dependent or row variable) and RaceLat (as the control variable). Finally create a crosstab. Fill in the following table by putting in only the percentages for those owning a home.

## Percentage of Families Owning a Home by Race

|  | Married Couple | Male Family | Female Family |
| :--- | :--- | :--- | :--- |
| NonLatino White |  | 63 |  |
| Black |  |  |  |
| Latino |  |  |  |
| Asian |  | 44 |  |
| American Indian |  |  |  |

Next select HHType as the independent variable, Homeownr as the dependent variable and Age as the control variable. Remember to use the back arrow (<---) at the top left of the screen to return to the submit query page. (This ensures that all the previous table information is cleared out.) Put in only the percentages for those owning a home.

Percentage of Families Owning a Home by Age

|  | Married Couple | Male Family | Female Family |
| :---: | :---: | :---: | :---: |
| $25-34$ |  |  |  |
| $35-44$ |  | 80 |  |
| $45-54$ |  |  |  |
| $55-64$ |  |  |  |
| $65+$ |  |  |  |

Which control variable, race or age, together with household type, seems to explain the most about home ownership? The best way to answer this question is to write a generalization saying which combination of which control variable with household type has the highest percentage of home owners.

## EXERCISE 2. TYPE OF HOUSING. (20 points)

Still in folder, Cen1990, and dataset housng9.dat, this next exercise will involve looking at the patterns of types of homes. For your independent variable (column variable) select age; for your dependent variable (row variable) select housing. Then create a Crosstab.

Age and Type of Housing

|  | $25-34$ | $35-33$ | $45-54$ | $55-64$ | $65+$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| House <br> Building with 2-9 <br> apartments | 55 | 73 |  |  |  |
| Building with 10 or more <br> apartments |  |  |  |  |  |
| Mobile Home |  |  |  |  |  |
| Other |  |  |  |  |  |
| Total \% |  |  |  |  |  |

Still in folder, Cen1990, and dataset housng9.dat select HHType as your independent variable; for your dependent variable (row variable) select housing. Then create a crosstab.

Type of Family and Type of Housing (\%)

|  | $25-34$ | $35-33$ | $45-54$ | $55-64$ | $65+$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| House <br> Building with 2-9 <br> apartments | 55 | 73 |  |  |  |
|  |  |  |  |  |  |
| Building with 10 or more <br> apartments |  |  |  |  |  |
| Mobile Home |  |  |  |  |  |
| Other |  |  |  |  |  |
| Total \% |  |  |  |  |  |

Write a one-sentence generalization for each for each of the previous two tables, summarizing how age or type of family affects access to specific types of housing.

## SECOND DATA SET: <br> *****

## custom (folder)/eldrel9.dat (data set)

You can click here to launch the dataset in WebCHIP.
EXERCISES 3-4. LIVING ARRANGEMENTS FOR THOSE 65 AND OLDER (50 points)
These next tables deal only with those 65 years of age and older.
Use the custom folder and the eldrel9.dat data set for the tables in Exercise 3. In this next table, pov (poverty or socioeconomic status) is the independent or column variable and living arrangement is the row or dependent variable.

Persons 65 and Older Poverty by Living Arrangement

|  | Poverty | Near Poor | Middle | Comfortable |
| :--- | :--- | :--- | :--- | :--- |
| Alone |  |  |  |  |
| With Relatives | 36 |  |  |  |
| With Nonrelatives |  |  |  |  |
| Total \% |  |  |  |  |

Which socioeconomic groups have the highest percentage of individuals living alone?
$\qquad$

In this next table, you will use Poverty as the independent variable and living arrangement at the dependent variable. Control for Gender.

Persons 65 and Older Poverty by Living Arrangement with Gender as Control Variable

|  | Poverty <br> Male | Poverty <br> Female | Near <br> Poor <br> Male | Near Poor <br> Female | Middle <br> Male | Middle <br> Female | Comfortable <br> Male | Comfortable <br> Female |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Alone | 34 |  |  |  |  |  |  |  |
| With Relatives |  | 27 |  |  |  |  |  |  |
| With <br> Nonrelatives |  |  |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |  |  |

What do you notice about the effect of gender on living arrangements when combined with socioeconomic status?

In this next table the independent variable is poverty and the living arrangement is the dependent variable. Race is the control variable. Please note that these are only the percentages for living alone.

## Persons 65 and Older Living Alone by Poverty and Race

|  | Poverty | Near Poor | Middle | Comfortable |
| :--- | :--- | :--- | :--- | :--- |
| NonLatino <br> White |  | 56 |  |  |
| Black |  |  |  |  |
| Latino |  |  |  |  |
| Asian |  |  |  |  |
| American <br> Indian |  |  |  |  |

What is the percentage of NonLatino Whites over 65 years of age, who are in poverty and living alone?
$\qquad$ . Which particular race/ethnic group and socioeconomic status category combination has the lowest percentage of those 65 and older living alone? $\qquad$ .

Based on this table, which variable, Race/Ethnicity or socioeconomic status has more influence on living alone for those 65 and older. Explain your answer.

Perhaps some of the differences in living arrangement may be attributable to both socioeconomic status and the region of the country. In this next table select poverty as your independent variable and living arrangement as your dependent variable. Use region as your control variable.

## Persons 65 and Older Living Alone by Poverty and Region (control variable)

|  | Poverty | Near Poor | Middle | Comfortable |
| :--- | :--- | :--- | :--- | :--- |
| Northeast |  | 65 |  |  |
| Midwest |  |  |  |  |
| South |  |  |  |  |
| West |  |  |  |  |

Does the region of the country seem to have any influence on the living arrangement of those 65 and older? Or, does one's socioeconomic status seem to offer a better explanation based on the percentages in this table. Explain briefly.

In the literature on sociology of aging it is argued that those within the age group 65 and over should not be assumed to be internally homogeneous (the same). Construct this next table with poverty as the independent variable and living arrangement as the dependent variable. Age is the control variable). Can one argue, based on this table, that the older the age of the person, the more likely that person will live alone? Explain.

## Persons 65 and Older Living Alone by Age of Elderly and Poverty

|  | Poverty | Near Poor | Middle | Comfortable |
| :--- | :--- | :--- | :--- | :--- |
| $65-74$ |  |  | 44 |  |
| $75-84$ |  |  |  |  |
| $85+$ |  |  |  |  |

In aging research they sometimes refer to double and triple "jeopardy." What this means is that being over 65 creates disadvantages for individuals, which would be the first jeopardy. If you are over 65 and female that's referred to as double jeopardy. And, if you are over 65, female and from a minority group (simply all those that are NonLatino whites), then you are said to be facing triple jeopardy. In this next table, select gender as your independent variable and living arrangement as your dependent variable. Then use Race as your control variable. Enter into the table only the percentages of those "living alone." Which gender-race combination (in this next table) has the highest percentage of those living alone?

Do you think that living alone should be considered as a disadvantage (as an indicator of poorer quality of life) or as an advantage?

## Persons 65 and Older Living Alone by Gender and Race

|  | Male | Female |
| :--- | :--- | :--- |
| NonLatino White |  |  |
| Black | 23 |  |
| Latino |  |  |
| Asian |  |  |
| American Indian |  |  |

## ***** <br> THIRD DATA SET <br> *****

geo1990 (folder)/eldlvmr9.dat (data set
You can click here to launch the dataset in WebCHIP.
EXERCISE 5. DISABILITY AND LIVING ARRANGEMENT (20 points)
In this next table select disabled as the independent variable and living arrangement as the dependent variable.

Disabled by Living Arrangement (\%)

|  | Yes | No |
| :--- | ---: | ---: |
| Alone |  |  |
| With relatives |  |  |
| With nonrelatives | 2 |  |
| Total \% |  |  |

In this next table select disabled as the independent variable and living arrangement as the dependent variable. Gender will be the control variable.
Disabled by Gender and Living Arrangement (\%)

|  | Male - Disabled | Female - Disabled | Male - <br> Not Disabled | Female <br> Not Disabled |
| :--- | ---: | ---: | ---: | :---: |
| Alone | 18 |  |  |  |
| With relatives |  |  |  |  |
| With nonrelative |  |  |  |  |
| Total \% |  |  |  |  |

In this next table, the independent variable is disabled and the dependent variable is living arrangement. Control for poverty. Pick only the "Yes" (that is disabled) category.

|  | Poverty | Near Poor | Middle | Comfortable |
| :--- | :--- | :--- | :--- | :--- |
| Alone |  |  |  |  |
| With relatives | 35 |  |  |  |
| With nonrelative |  |  |  |  |
| Total \% |  |  |  |  |

Write a one-sentence generalization for each of the previous three tables. (3 generalizations!)

What is your reaction to the data from these three tables? Did any of it surprise you? What other variables might be important in understanding why these patterns exist?
VI. (20 points) For the next part of this assignment you need to go to http://www.censusscope.org

- Go to the link for housing characteristics.
- Look at the bar char for Rent as Percentage of Household Income (1989 and 1999).
- For roughly what percentage of all units was rent $35 \%$ or more of income in 1999?
$\qquad$
- Was this an increase or decrease? $\qquad$
- United Way and other groups regard anyone paying more than $30 \%$ of their income on rent as households at risk for poverty or for poorer quality of life. So, then, roughly what percentage of households (units) could be described as housing-stressed in 1999 based on this bar chart? $\qquad$ _.
- What percentage of households (units) could be described as most privileged in both 1989 and 1999 based on this bar chart? $\qquad$ .
VII. (20 points) Now, go to http://www.census.gov
- Under the section on People, click on the Housing link.
- On the next screen click on Housing Affordability.
- Click on the PDF file (if you don't have acrobat reader on your computer you need to use a computer with Acrobat Reader) entitled, "Who Can Afford to Buy a House in 1995?"
- Under Highlights find the answers to these questions:
o In 1995, about $\qquad$ percent of American families (current owners as well as renters) could afford to purchase a modestly priced house in the area where they lived.
o This 1995 percentage was $\qquad$ (higher or lower) than in 1984 or 1988 when about $\qquad$ percent could afford such a purchase.
0 modestly priced home than lower down payments (which would also increased monthly mortgage payments) or a significant reduction in interest rates.

STOP.
DO NOT READ THE REPORT OR ARTICLE FOR THIS SECTION BEFORE COMPLETING THE PREVIOUS SECTION.

This part of the assignment will not make sense unless you have completed the previous exercises. VI. (30 points) Compare your analysis (thus far using the WebCHIP data) of census data with a report of the National Fair Housing Alliance OR with one of five articles listed below. Read through the article, and then write a short paragraph indicating what you learned from this article or report. Did this report change your view about any of the comments you made earlier in this assignment?

| Article or Report | Where to access this report or article? (note that you <br> may not be able to easily print the report and may <br> have to read it and take notes) |
| :--- | :--- |
| William Tisdale (1999) "Fair housing strategies for the <br> future: A balanced approach." Cityscape: A Journal of <br> Policy Development and Research 4(147-160) | Go to http://www.google.com and put in the title of <br> the article (4 words should be sufficient). |
| Julian Bond (1996) "Historical perspectives on fair <br> housing." John Marshall Law Review volume 29: pp. <br> $315-330$ | Order through the university library homepage -- <br> interlibrary loan copy. Please note that this make take <br> several weeks. |
| Tom Davies, Kim Beasley, and Stephen Sanders (1992) <br> "Implementing fair housing." Paraplegia News 46: 35- <br> 43 | InfoTrac - Library homepage. Put in the title of the <br> article |
| John Yinger (1999) "Sustaining the Fair Housing Act." <br> Cityscape: A Journal of Policy Development and <br> Research 4(93-106) | Go to http://www.google.com and put in the title of <br> the article (4 words should be sufficient). |
| Report: "2002 Fair Housing Trends Report." | Go to http://www.nationalfairhousing.org |
| Wendy Weiser and Geoff Boehm (March-April, 2002) <br> "Housing discrimination against victims of domestic <br> violence." Clearinghouse Review 35, pp. 708-718 | Order through the university library homepage -- <br> interlibrary loan copy. Please note that this make take <br> several weeks. |
| Michael J. Yelnosky (Fall, 1999) "What does testing tell <br> us about the incidence of discrimination in housing <br> markets?" Seton Hall Law Review 29: 1488-1497 | Order through the university library homepage -- <br> interlibrary loan copy. Please note that this make take <br> several weeks. |
| Author of the article or report you used | Your written comments: |

