## Education in America

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## LEARNING OBJECTIVES:

Skills:

- Learning about survey methodology and sampling methods
- Using software to access and analyze census data
- Identifying independent and dependent variables
- Forming testable hypotheses using quantitative data
- Quantitative writing
- Learning how to construct, read, and interpret bivariate tables displaying
- Creating visual tools representing quantitative data in the form of charts or graphs
- Identifying population trends over time
- Translating data findings to inform decision making
- Using real world data to enhance and support key course concepts

Substance:

- Use Census data to understand how the labor force, earnings, race/ethnicity, age frequencies and percentages and gender interact to discover different trends in the educational attainment over time.


## COMPUTER PROJECT 1: EDUCATION IN AMERICA

General Instructions: Type your answers to these questions on another sheet of paper, but use the charts provided to do your line graphs and bar charts on; do those in ink or with a felt-tip pen. For each question, include the computergenerated WebCHIP tables that you used to construct your line graphs, bar charts, or answers to questions. Label which question(s) each WebCHIP table goes with. Be sure to label and fill in the key to your line graphs. Staple all your work together. (There's five points for doing all this right). The WebCHIP file that you will need to answer each question is shown in parentheses in capital letters.

To open the datasets in WebCHIP:

- Go to http://www.ssdan.net/datacounts/webchip
- Click on the "Data" in the menu bar
- From there, click "Browse" on the left sidebar. Find "cen1990" or "centrend" in the drop-down box and select it. If you don't find a file on one directory, try the other.
- Scroll down through the list until you find the specified dataset. Highlight and click "submit."
- You can also click the links below to launch the dataset in WebCHIP. Instructions:

1. Examine the changes from 1950 to 1990 in the percent of people who have graduated from high school (EDUC5090). Create a line graph showing your results. (Hint: Those graduating from high school include high school graduates, those with some college, and college graduates.) Include the WebCHIP table you used for this question and for all remaining questions.
2. Add to your graph a line that shows cross-time changes in the percent who have graduated from college (EDUC5090). Be sure to label the lines on your graph.
3. How would you summarize these trends? Where do the most striking changes occur? What social, economic, or political factors do you think account for them?
4. Using data from 1950 to 1990, examine changes in the percentage of blacks and nonblacks with a high school education or more (EDUC5090). Create a line graph that shows this trend by race. (Hint: after specifying your 2-way table, you will need to add race as a control variable.)
5. Do the same analysis only this time examine changes over time in the percentage of blacks and nonblacks who are college graduates. Create a line graph that shows this (EDUC5090).
6. Describe the racial differences in educational attainment that you found in questions 4-5.
7. What's happening to racial differences in high school completion over time? What's happening to racial differences in college completion over time? What decades show the most change? In 1990, at which level of education (high school or college) are racial gaps the largest?
8. What factors do you think account for racial gaps in education at the high school level? at the college level? What events or factors do you think explain the over-time trends in race differences in education?
9. Focusing on 35-44 year olds in 1990, which racial group has the highest proportions of its members with advanced degrees--that is, Master's, Ph.D. or professional degrees? (EDUCIMM9) What percent of its members have such degrees? (Hint: Use AGE as a control variable to limit your focus to 3544 year olds.)
10.Using data from 1950 to 1990, examine changes over time in the percentages of men and women who have graduated from college. Create a line graph with a line for women and a line for men. For each year, indicate the percentage of college graduates in each group (EDUC5090).
11.Now look at the lowest level of education, those with less than a high school diploma. Add to the line graph above lines for women and men that show the
percent of each sex with less than a high school education in each of these years.
10. Summarize what your line graph shows. Are the trends different for men than for women?
11. Looking at your line graph, does it seem like education differences explain much of the earnings gap between women and men? (In this forty year period, women's earnings for those in full-time, full-year jobs ranged from about 57-71\% of men's.)
14.Is there any other information about women's versus men's education in this period that you would like to have in order to more fully or accurately question 11 ?
15.Using the file EDUC5090, fill in the table below: (Hint: pay attention to which way tables need to be percentaged to fill in the various information asked for.)

| $1970-1990$ | Percent |
| :--- | :--- |
| Top white-collar occupations |  |
| Graduated from college |  |
| College grads whose jobs are top <br> white-collar |  |
| Percent of high school grads whose <br> jobs are top white-collar |  |

16. Summarize what your table from question 14 shows about the value of a college education in getting a top white-collar job and about the changing likelihood that a college grad will get a white-collar job. What do you think accounts for the differences between 1970 and 1990 in the likelihood that a college graduate will get a top white-collar position?
17.Focusing on 35-44 year olds in 1990, look at the relationship between educational attainment and people's standards of living (PPOVEDU9). Create a bar chart for 35-44 year olds indicating the percentage living comfortably well off (COMF) for each education level.
17. What does your bar chart suggest about the value of an education in the 1990s? Why might a researcher want to limit the sample to $35-45$ year olds? In other words, what kind of biases might be introduced by having people of all ages in the analysis? (Hint: think about the relationship between age and earnings and also between age/cohort and education.)
18. How does your anticipated level of educational attainment compare to your parents' and grandparents' educations? What factors do you think explain these generational differences or similarities? (Each person in the team should answer this question for their family.)

## PROJECT 2: COHORTS AND POPULATION STRUCTURE

General Instructions: Staple the WebCHIP tables that you used to answer these questions to your project. Put the question number(s) that each WebCHIP table is used with on it (e.g., Q1-6). Be sure that your tables or charts identify the population being considered and have a key or otherwise label the categories that are referred to. The WebCHIP file that you will need to answer each question is shown in parentheses in capital letters.

To open the datasets in WebCHIP:

- Go to http://www.ssdan.net/datacounts/webchip
- Click on the "Data" in the menu bar
- From there, click "Browse" on the left sidebar. Find "cen1990" or "centrend" in the drop-down box and select it. If you don't find a file on one directory, try the other.
- Scroll down through the list until you find the specified dataset. Highlight and click "submit."
- You can also click the links below to launch the dataset in WebCHIP.

Instructions:

1. Create a chart of the population frequencies associated with:
a. the 1926-35 birth cohort
b. the 1946-55 birth cohort, and
c. the 1966-75 birth cohort

In other words, you are tracing these three cohorts as they aged from one census to the next (Centrend/PopStruc). Don't fill in any other frequencies. (Hint: Ignore the youngest and oldest age categories on the WebCHIP table since they do not correspond to $10-y e a r$ intervals.)
2. Which of these cohorts would you conclude is a baby boom cohort? What historical factors occurring at the time of its birth are likely to have produced this baby boom? What historical factors occurring at the time of the 1926-35 cohort's birth are likely to have contributed to its size? (If you don't have a sense of the timing of the major events of this century, then check a timetable in a general U.S. history text.)
3. What happened to the population of elementary school children in the U.S. between 1950 and 1960? (Centrend/PopStruc) If the 1950 population of children ages 5-14 is taken as the base population, what is the percent change in the elementary school population between 1950 and 1960? What effects would this change have had? For whom?
4. Ages 15-24 are the ages that most Americans enter the labor market. Knowing this, what census year had the greatest number of labor market entrants? (Centrend/PopStruc) When were these people born? Other things being equal, what sorts of conditions would you expect that this cohort
experienced as it began to enter the job market? How might members of this cohort have responded?
5. Ages 25-34 are typically the peak ages for entering the housing market (buying a first home). Knowing this, what census year experienced the greatest number of people looking for a first home? (Centrend/PopStruc). What effects would this have on the housing market? How might these firsttime buyers have responded?
6. Take the 10-year birth cohort in your table that has the largest size and calculate the decade that it will begin to collect full social security benefits. (Hint: Such benefits become available at ages 65-67). What future decade will see greatest strain on the social security system?
7. Is it possible for a birth cohort in the U.S. to get larger over time? Explain why or why not. What factors affect the initial size of a birth cohort? What affects its subsequent size?
8. Pick the age group that you and your partner were members of in 1990. Compare the size of your age group (birth cohort) to the ones preceding it. What effects do you think the size of your cohort relative to the ones preceding yours will have on your life? Explain why. (Centrend/PopStruc) What cohorts older than yours do you think you should be most concerned about? Why?
9. In 1940, how many women and how many men were in the birth cohort of 1916-1925? (Centrend/PopStruc). Hints: You need to figure out what age the 1916-25 birth cohort was in 1940 in order to look at the right age category. Do the same for 1950--that is, calculate the number of women and the number of men from this birth cohort. Calculate the sex ratios for this birth cohort in 1940 and in 1950. Fill in these sex ratios and frequencies in the table below. Frequencies in the WebCHIP table are shown in 1000's so add three zeroes to get the actual number of women and men.

The Birth Cohort of 1916-1925

|  | 1940 | 1950 |
| :--- | :--- | :--- |
| Number of Women |  |  |
| Number of Men |  |  |
| Sex Ratio |  |  |

10. What period event explains what happened to the sex ratio of this cohort between 1940 and 1950? How did this event impact men? How was its impact different for women of this cohort? (Hint: Think not just about immediate effects of this event, but longer-term ones as well.)
11. Examine what's happened to the sex ratio between 1930 and 1990 for elderly Americans (those 65 and older). Omit other age groups and other periods and then create a WebCHIP table that shows the number of Americans by gender for these two census years. Calculate the sex ratio for the elderly in 1930 and then sixty years later in 1990. (Centrend/PopStruc). What factors are likely to account for the change?
12. Examine the four largest race/ethnic groups in 1990 and the age categories 0-14, 35-44, and 65+ (Cen1990/PopUSA9). Hint: You will need to collapse categories and limit your sample to these races and ages.) Is the race/ethnic distribution of American children (those ages 0-14) different from that of the elderly (those 65+)? Summarize your findings. What factors do you think account for these results?
13. Use the file Cen1990/PopGeo9 to examine the relationship between race/ethnicity and region of residence. Skip the racial category NLOther. Fill in the table below. Are Non-Latin whites over-represented in the South?
U.S. Population in 1990

| Race/ Ethnicity | Modal region of residence | Percent living in this <br> region |
| :--- | :--- | :--- |
| American Indian \% |  |  |
| Asian \% |  |  |
| Black \% |  |  |
| Latino \% |  |  |
| Non-Latin White \% |  |  |
| All Ethnicities \% |  |  |

14.Using the file Cen1990/PopUSA9 and skipping the NLOther and AmIndian racial categories, construct a WebChip table that shows the race/ethnic composition of each region of the U.S. in 1990. From your table, create a stacked bar chart for each region that shows its racial/ethnic composition. Create a key that identifies the pattern used to represent each ethnic group-e.g., diagonal lines for Latinos. What factors might explain the regional patterns that you have found?
15. Use the file Cen1990/PopGeo9 to examine the relationship between race/ethnicity (RACELAT) and type of residence (GEO). Which ethnic group has the largest stake in what happens to non-metropolitan areas? What groups have the biggest stake in the fate of American cities? Which two ethnic groups have the biggest stake in policies that aid the suburbs? Circle the numbers on your WebCHIP table that show this. Which type of residence
(city, suburb, or non-metropolitan) has the highest proportion of non-Latin whites in it? Include the table that shows this.

## COMPUTER PROJECT 3: GENDER IN AMERICA

The WebCHIP file that you will need to answer each question is shown in parentheses in capital letters. On the DataCounts! website, under the "Data" tab, use the "Browse" function to find the datasets.

To open the datasets in WebCHIP:

- Go to http://www.ssdan.net/datacounts/webchip
- Click on the "Data" in the menu bar
- From there, click "Browse" on the left sidebar. Find "cen1990" or "centrend" in the drop-down box and select it. If you don't find a file on one directory, try the other.
- Scroll down through the list until you find the specified dataset. Highlight and click "submit."
- You can also click the links below to launch the dataset in WebCHIP.

Instructions:

1. Limit your sample to people ages 25-64 (the prime working ages) and to those who are in the labor force; exclude other people from your sample. Print a WebChip graph that shows the changes between 1950 and 1990 in the percent of the labor force that is female. (Centrend/Emp5090). Hint: The YEAR variable goes along the $x$ axis of your graph; you will have only one line on your graph that represents the percent female. Summarize the changes between 1950 and 1990. What percent of the labor force is female in 1990?
2. What percentage of women and what percentage of men age 25-64 were in the labor force in the following years? (Centrend/Emp5090). Hint: EMP is one of your variables; you will need to use a control variable in addition to the two crosstab variables.

|  | \% of women in the labor <br> force | \% of men in the labor <br> force |
| :--- | :--- | :--- |
| 1950 |  |  |
| 1960 |  |  |


| 1970 |  |  |
| :--- | :--- | :--- |
| 1980 |  |  |
| 1990 |  |  |

3. Examining your results in questions 1-2, what implications do the labor force trends have for women? For men? Think about what the normative (most common) experience was for women and men in 1950 versus for women and men in the 1990s. What aspects of life are likely to be affected?
4. In 1990, what age group of women (WkAge) has the highest rate of labor force participation? $\qquad$ . What percent of women is this? $\qquad$ Why do you think this is? (Cen1990/EmpEd9). Hint: Either omit men from your sample or useGENDER as a control variable; you will need to use the EMP variable to find the labor force participation rate (\% in the labor force).
5. Examine labor force participation rates for women by educational level. (Cen1990/EmpEd9). Include the WebCHIP table that shows this relationship. What kind of relationship exists between education and female labor force participation--inverse, positive, curvilinear, or no relationship? Why do you think this is the case?
6. Physicians and attorneys are high-status, high-earning occupations in the U.S. They require considerable education and training. Answer questions 4-8 for the occupation and race/ethnicity that is circled. If you are analyzing physicians, use the file CEN1990/DOCTORS9; if you are examining attorneys, use CEN1990/LAWYERS.

Physicians

| Race/ Ethnicity | Percent |
| :--- | :--- |
| American Indians |  |
| Asian- Americans |  |
| Attorneys Blacks |  |
| Latinos |  |
| Whites (NHWHITE) |  |

7. In the race/ethnicity assigned to you, what percent of people in your occupation are women?
8. How does this compare to the percent of the overall labor force 25-64 that is female in the race/ethnicity you have? (Use the file CEN1990/EMPED9; remember that "in the labor force" is a combination of Emp, and Unempled.)
9. Does your race/ethnicity have a higher or lower representation of women in this occupation (physician or attorney) compared to the American population in general?
10.Is there any indication that the gender composition of your occupation has been changing? (Again this question refers only to people of the race/ethnicity that you'vebeen assigned). Include a WebCHIP table that shows this and summarize the table's results on another page (use the file CEN1990/LAWYERS or CEN1990/DOCTORS9).
11.Is there a gender gap in what people in your occupation earn? (Again, this refers to the race/ethnicity you've been assigned.) Include the relevant WebCHIP table and summarize briefly its findings. Use the file CEN1990/LAWYERS or CEN1990/DOCTORS9and categorize the earnings variable as:
a. $<\$ 40 \mathrm{~K}(<\$ 40,000)$
b. $40-70$
c. 70-100
d. $>\$ 100 \mathrm{~K}$

The remaining questions refer to people of all races/ethnicities.
12.Is there any indication that gender differences in earnings are changing for people in your occupation? Compare, for example, 25-34 year olds in your occupation with 55-64 year olds. Include the relevant WebCHIP tables and summarize your results. (The file you will use is CEN1990/LAWYERS or CEN1990/DOCTORS9).
13.Examine full-time, year-round workers $45-54$ years of age who are college graduates. (Use the file CEN1990/WORK9-45) to fill in the table below. You will need to collapse the income variable.) Does having a college degree and being in the peak earning ages eliminate gender differences in earnings for these workers?

FULL-TIME WORKERS WITH COLLEGE DEGREES, AGE 45-54

|  | \% earning <br> $<\$ 35,000$ | \% earning <br> $\$ 35,000+$ | Total |
| :--- | :--- | :--- | :--- |
| Women |  |  | $100 \%$ |
| Men |  |  | $100 \%$ |

14. What about for young workers (ages 25-34) who are college grads and working full-time, year-round, do gender differences in earnings exist? Use the file CEN1990/WORK9-45 to fill in the table below.

FULL-TIME WORKERS WITH COLLEGE DEGREES, AGE 25-34

|  | \% earning <br> $<\$ 35,000$ | \%earning <br> $\$ 35,000+$ | Total |
| :--- | :--- | :--- | :--- |
| Women |  |  | $100 \%$ |
| Men |  |  | $100 \%$ |

15.For 25-34 year old college graduates who are working full-time, plot a graph with the variable gender along the " $x$ " (horizontal) axis and the earning category $>\$ 35 \mathrm{~K}$ as a line on the graph. (Use the file CEN1990/WORK9-25.) Make the same graph for 45-54 year old college grads who are working fulltime. (For this, use the file CEN1990/WORK9-25.) Include your two graphs and describe the differences between the two age groups in the effect of gender on earnings. Why do you think this difference exists?
16. What factors might explain the gender differences in earnings that you found among college graduates of the same age who work full-time, year-round?
17. Plot a graph with education on the "x" (horizontal axis and a line for $>\$ 35 \mathrm{~K}$ earnings for men 25-34 years old who are working full-time, year-round. Do this also for women who are 25-34 and working full-time, year-round. (Use the file CEN1990/WORK9-25.) Include your graphs. Does it pay (in terms of earning a high income) for a young man to invest in education? Does it pay for a young woman to do so?
18.Assume that young women working full-time earn $80 \%$ of what their young male counterparts do while older women working full-time earn only $60 \%$ of what their male counterparts do. Is it possible that when these young women workers reach older ages that their earnings will be only 60\% of men their age? How could this happen?

## CONSTRUCTING GRAPHS ON GENDER AND THE LABOR FORCE

The WebCHIP file that you will need to answer each question is shown in parentheses in capital letters. On the DataCounts! website, under the Data tab, use the Browse function to find the datasets.

To open the dataset in WebCHIP:

- Go to http://www.ssdan.net/datacounts/webchip
- Click on the "Data" in the menu bar
- From there, click "Browse" on the left sidebar. Find "centrend" in the dropdown box and select it.
- Scroll down through the list until you find the dataset "EMP5090.dat".

Highlight and click "submit."

- You can also click here to launch the dataset in WebCHIP.

Some Terminology and WebCHIP Operations:

- The Labor Force: This includes both the employed (empd on the EMP variable) and the unemployed who are looking for work (Unempd on the EMP variable). Thus, if you are asked a question about the percent of the labor force that is female, you will need to combine employed and unemployed people into one category (the labor force). The labor force includes both fulltime and part-time workers. Everyone else (students without jobs, full-time homemakers, retired people, and others who do not have jobs and are not looking for work) are considered "not in the labor force" (NILF on the EMP variable).
- Earnings: Earnings are shown in 1000 s of dollars, indicated by the letter "K". The category " $<15 \mathrm{~K}$ " thus means people earning less than $\$ 15,000$ per year.
- Creating Graphs: The graphing function, in effect, is percentaging across so that the base is the categories of the first variable and the categories of the second variable sum to $100 \%$. If you selected the variable YEAR as the row variable, its categories (1950, 1960, 1970, 1980, and 1990) will run across the bottom of your graph (the horizontal axis). If you selected GENDER as your column variable, then you would see a line for women and a line for men on your graph. The point on the line for women indicating the year 1950 would be read: In 1950 (the base), x \% of the sample was female. The dots indicating the percent female in 1950 and the percent male in 1950 will sum to 100 percent. Select the variable first whose categories you want to run along the horizontal axis of your graph.

O Using a control variable to Plot Graphs for Different Sub-Populations: If you want to plot the percent of the elderly population that is female from 1950 to 1990 and do this separately for black and non-black Americans, first omit those under age 65 to get a sample of the elderly.
O Then, specify your crosstab. Next, specify RACE as the control variable. Finally, plot the graph. You will see one graph for African Americans and another one for Americans of other races.

## COMPUTER PROJECT 4: AMERICAN LIVING ARRANGEMENTS

Make sure that you label on your WebChip tables the question(s) it goes with, the directory/filename that the table came from, and the sample the table refers to (e.g., American men age 25). Staple all of your work together. The WebCHIP file that you will need to answer each question is shown in parentheses in capital letters.

To open the dataset in WebCHIP:

- Go to http://www.ssdan.net/datacounts/webchip
- Click on the "Data" in the menu bar
- From there, click "Browse" on the left sidebar. Find "cen1990" or "centrend" in the drop-down box and select it. If you don't find a file on one directory, try the other.
- Scroll down through the list until you find the specified dataset. Highlight and click "submit."
- You can also click the links below to launch the dataset in WebCHIP.

Instructions:

1. Dramatic changes have occurred in the last 40 years in the living arrangements of American adults. Limit your sample to Americans ages 25+ and combine the marital status categories "divorced" and "separated" (Centrend/Marr502k). Construct a pie chart that shows the marital status distribution of the U.S. population in 1950. Construct a second pie chart that shows this distribution in 1990.
2. Examine the trends in marital status between 1950 and 1990 for AfricanAmerican (Centrend/Marr502k). Which marital status group has experienced the most dramatic growth in this period? Are the trends as striking for nonblacks?
3. Poverty in the U.S. is especially concentrated among young household heads and their children. Examine households headed by 15-24 year olds in 1990 (Cen1990/HHolds9). How much does it matter if a young family household is headed by a married couple (MrrdCp) versus by a woman (FemIFa) in terms of its likelihood of being poor? Looking at your WebCHIP table, does the poverty of young female-headed families seem to be primarily because those families are headed by a single adult or because they're headed by a woman?
a. \% poor among female-headed families?
b. \% poor among married-couple families?
4. Unmarried couples living together has increased in the last forty years. Which group of American women--the never-married, divorced, separated. or widowed--have the highest rates of cohabitation relative to their proportion in the population?(Cen1990/Cohab9-W and Cen1990/Marital9). Why do you think this is?
a. Marital status group: \% of cohabitors from this group \%?
5. Using the file Cen1990/MarEd9 from the 1990 U.S. Census, limit your sample to Americans ages 25+ who have been married at some point in their life. Does education affect the likelihood that such a person is currently married?

Write a paragraph that explores the reasons for this relationship between education and the likelihood of being currently married.
6. Historically in the U.S., miscegenation laws existed that prevented marriage across racial lines. These laws have since been declared unconstitutional. Examine married men ages 15+ in 1990 to determine the extent of intraand inter-racial marriage among these men. Use the variables HRaceLat (husband's race) and WRaceLat (wife's race) on in the files Cen1990/SpRac9M and Cen1990/SpRac9-W, respectively. Print a frequency table that shows husband's race by wife's race. Add up the appropriate frequencies to fill in the "Number" column in the table below. From these numbers, calculate the percent of married men who are in intra-racial marriages and the percent who are in inter-racial marriages and put these percents in the table below. (Hint: The total number of married men in the sample is shown after " $\mathrm{N}=$ " in the line below "Total."

Husbands Age 15+

|  | Number | Percent |
| :--- | :--- | :--- |
| In intra-racial (same <br> race) Marriages |  |  |
| In inter-racial (different <br> race) marriages |  |  |

7. Are younger men more likely to marry outside their race than older men? For this question, skip the racial category "NLOther" on the HRaceLat and the WRaceLat variables. Print a table for 15-24 year old husbands and another one for 55+ year old husbands that shows the racial distribution of wives for each racial group of husbands. For example, for Asian husbands, your table will show the percent who are married to non-Latin white women, the percent married to black women, the percent married to Latinas, and the percent married to Asian women. Summarize the results of your tables. 6 pts.
8. Examining your WebCHIP table for 15-24 year old husbands, fill in the appropriate percents in the table below: Write a paragraph elaborating on the factors likely to account for the racial differences in the extend of interracial marriage.

| Husbands Ages 15-24 in 1990 | Percent |
| :--- | :--- |
| Asian husbands |  |
| Latino husbands |  |


| Black husbands |  |
| :--- | :--- |
| Non-Latin white husbands |  |

9. Which race are young Asian, Black, and Latino men most likely to marry into (excluding their own racial group)? In a paragraph, elaborate on the factors that are likely to explain why this is. 10 pts.
10.Homogamy refers to marriage between people with similar characteristics. Examine young husbands today, those ages 25-34 (Cen1990/SpEd9). Does educational homogamy prevail? Cite figures from your WebCHIP table that support or refute the adage that if one wants to marry a college graduate, one needs to get a college degree oneself. 6 pts.
10. Write a paragraph that explores the reasons behind the patterns you found. What sorts of dynamics are likely to be operating?
11. Historically, most American men married women who were considerably younger than themselves. Using the 1990 Census file of twenty-five year old married men (Cen1990/SpAge9YM), collapse the wife's age variable (WAge) into the following categories: < 24 years old, $24-26$, and $>26$. Assume that 25 year old men whose wives are 24-26 have married age equals.
a. Is it still the case that most American men marry women younger than themselves?
b. What percent do?
13.Focusing on these same twenty-five year old husbands, does their educational level affect the age of the woman they marry? Construct two pie charts, one that shows the age distribution of wives for men who are college graduates and the other showing the age distribution of wives for men who have less than a high school education. Again, you should have three categories for age of wife: <24, 24-26, and $>26$ ).
a. What's the independent variable in your analysis?
14.Write a paragraph that elaborates on likely reasons for the pattern that you found in question 13. Speculate on the reasons men may marry an age equal, a younger woman, or an older woman. What role might a man's educational level have in this? How might women's preferences play a role?

## COMPUTER PROJECT 5: THE POLITICS OF IMMIGRATION

Instructions: There has been considerable political mobilization of late against immigrants, especially in states with large immigrant populations. Some of this anti-immigrant sentiment has been limited to illegal aliens, but in other cases, it has been more generalized hostility against immigrants. Assume that you have
been hired to serve as the research team for a national commission on immigration and asked to prepare a report that addresses these issues:

1. the relative size of the immigrant population
2. the educational attainment of immigrants relative to native-born Americans
3. the proportion of immigrants in top white-collar professions compared to native-born Americans
4. poverty rates for immigrants versus native-born Americans
5. the proportion of immigrants living comfortably compared to the native-born
6. the effect of time in the U.S. on the position of immigrants (e.g., their ability to speak English, their economic standing)
7. geographic differences in immigration and immigration politics
8. the effect of immigration on racial/ethnic composition in the U.S.
9. the politics of immigration and race/ethnicity in the future

The commission is especially interested in whether immigrants are a drain on our society or a contribution to it and if it matters whether a short-term view or longterm view is taken in addressing this question. Sitting on the committee are the mayor of Los Angeles, the governors of California, Florida, and Vermont, and the Secretary of Labor of the Clinton Administration. As a research team, you need to address in your report the specific concerns that each would have as representative of their particular city, state, or nation (in the case of the Labor Secretary). In particular, they are wondering whether in the future immigration is likely to be an important issue for voters in their constituency and whether voter concern on this issue is likely to be divided along racial or ethnic lines. (Here you would need to look at the proportions of immigrants in each area, their racial/ethnic composition, and racial/ethnic projections for the future in these areas.)

Your report should contain a written text with tables, graphs, and/or pie charts that illustrate the findings you refer to in your text. Graphical or tabular displays of data should be clearly labeled so that committee members know what they are looking at. The report should contain some conclusions about the effects of immigration on American society in general and on the particular areas that the commission members are from. Type your report and include as an appendix the WebCHIP tables that you used in preparing your report and visual displays of data.

The following WebCHIP data files are from the 1990 Census and have information relevant to your task.

To open the datasets in WebCHIP:

- Go to http://www.ssdan.net/datacounts/webchip
- Click on the "Data" in the menu bar
- From there, click "Browse" on the left sidebar. Find "cen1990" in the dropdown box and select it.
- Scroll down through the list until you find the specified dataset. Highlight and click "submit."

O EducImm9
O EngAsn9
O EngLat9
O ImmUSA9
O OcIm9-35
O PopProj9

- You can also click the links above to launch the dataset in WebCHIP.

The immigration variable (Imm) has four categories: FB80-90 (foreign born people who came to the US in the period 1980-90), FB70-79 (foreign born who arrived between 1970-79), $\mathrm{FB}<1970$ (immigrants who arrived before 1970), and native (non-immigrants; people born in the US). It is up to you to decide how to categorize variables and present results. Your emphasis should be on providing the committee with as much relevant information as you can and presenting this information in a clear, visually appealing manner.

