

**Productive Aging: Examining Trends in Health and Employment Status by Age**  
Quantitative Data Analysis Assignment  
GTY/SOC 318 - Sociology of Aging  
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Learning Objectives

After completing this module, students will be able to:

- Access and use data from the Census and the American Community Survey to examine the relationship between two variables.
- Interpret a frequency table.
- Interpret a cross-tabulation.
- Use information from a cross-tab to draw conclusions about the relationship between two variables.
- Write clear conclusions based on data, and support these conclusions with numerical evidence.
- Use findings from quantitative data on employment status to discuss implications for “productive aging” initiatives, civic engagement, and labor force participation in later life.
- Use quantitative data to document the tripartitioned life course.
- Apply quantitative data analysis to make relevant policy recommendations.

Instructions for Accessing and Using the Data

- Go to [www.ssdan.net/datacounts](http://www.ssdan.net/datacounts)
- Click on the “Data” tab
- After clicking on the “Data” tab, choose “Browse” (below the “Data” heading)
- You are now on the *Dataset Browser* page. This Dataset Browser page is referenced as the starting point in each of the three questions below. Here you will find a drop-down menu on the right-hand side of the screen, where you can choose the name of the dataset that is specified in each question.
- If you are having problems or are confused, please note that you can access a tutorial of the WebChip program here: [http://www.ssdan.net/datacounts/howto\\_webchip.html](http://www.ssdan.net/datacounts/howto_webchip.html)

Process

You will use the datasets specified below and the WebChip software to answer the following questions. Use the directions provided above to access the DataCounts website and get to the *Dataset Browser* page. Please answer each of the questions below in essay format, with separate sections for each numbered question below (i.e., you should have four separate sections in your final report). Please see the example report format at the end of this assignment, and format your own report in the same manner.

1. Use Census data from 1950 through 1990 to examine trends in the employment status of adults. From the drop-down menu, choose the dataset “CENTREND” and then click submit. From the next drop-down menu, choose “EMP5090.DAT” and then click submit. Next, select WebCHIP 2.0. Click on “Command” and then choose “Crosstab.” For the row variable, choose age (“WkAge”) and click OK. Click “Command,” and select employment status (“Emp”) as the column variable; click OK. You want to use this dataset to produce crosstabs that show the percent employed by age group separately for 1950, 1960, 1970, 1980, and 1990. Therefore, you need to control for year. Click on “Table,” choose “Control,” select “Year” and click OK. To finish the crosstab, you must then decide whether you should percentage across the rows *or* percentage down the columns. Click on “Table” and choose “Percent Across” or “Percent Down.” You will see three tables appear. Note that the employment status categories (the column headings) are employed (Emp), unemployed but looking for work (Unemp), and not in the labor force (NILF; this includes those who are not working and not looking for work, such as retirees or homemakers).
  - a. First, concentrate on trends over time for individuals 65 and over.
    - i. What trends do these data show? Back up your statement with evidence.
    - ii. Why do you think these trends might exist? Speculate on potential reasons by drawing from our class discussions.
  - b. Looking just at the 1990 year, compare employment status by age group.
    - i. What trends do these data show? Back up your statement with evidence.
    - ii. Why do you think these trends might exist? Speculate on potential reasons by drawing from our class discussion (e.g., comment on the tri-partitioned life course.)
  
2. Use data from the 2008 American Community Survey to examine the employment status (full-time, part-time, unemployed, not in labor force) of older adults by age group (65-74, 75-84, 85+). From the drop-down menu on the *Dataset Browser* page choose the “ACS2008” data and then click submit. From the next drop-down menu, choose the “ELDREMP.DAT” dataset and click submit. Next, select WebCHIP 2.0. Click on “Command” and then choose “Crosstab.” Choose the age variable (AgeEldr) for the row variable and click OK. Click on “Command” and then choose the employment variable (Emp2) for the column variable. To finish the crosstab, you must then decide whether you should percentage across the rows *or* percentage down the columns. When making this decision, remember that you want to produce a cross-tab that will show the percent of people in each employment status within each age group. Click on “Table” and choose “Percent Across” or “Percent Down.” This will produce the crosstab table.
  - a. Now that all older adults are not together in one 65+ age group (as they were in the previous question), what trends are evident? Support your conclusion with evidence.
  - b. What do you notice with respect to the percentages of each age group engaged in full-time versus part-time work? Support your conclusion with evidence.

3. Use Census data from 1990 and 2000 to examine the percent of older adults who have health problems that limit their ability to work, and then compare the two time periods.
  - a. From the drop-down menu on the Dataset Browser page, choose “CEN1990” and then click submit. From the next drop-down menu, choose “ELDDSAB9.DAT” and then click submit. Next, select WebCHIP 2.0. Click on “Command” and then choose “Crosstab.” Choose the age variable (AgeElder) for the row variable and click OK. Click on “Command” and then choose the health limits work variable (WrkLmt) for the column variable. You want to produce a cross-tab that will show the percent of people with health problems that limit their ability to work within each age group. Decide whether you should percentage across the rows *or* percentage down the columns. Then, click on “Table” and choose the appropriate percentage choice (either “Percentage across” or “Percentage down”). This will produce a table showing the percent of individuals in each age group that have no work limitations versus the percent that have health problems limiting their work.
    - i. Use this cross-tab to make your own table, and show it in your report (you can use the format provided at the end of the document).
  - b. Make the same table using data from the 2000 Census. From the drop-down menu on the Dataset Browser page, choose “CEN2000” and then click submit. From the next drop-down menu, choose “ELDDSAB2k.DAT” and then click submit. Next, select WebCHIP 2.0. Click on “Command” and then choose “Crosstab.” Choose the age variable (AgeElder) for the row variable and click OK. Click on “Command” and then choose the health limits work variable (WrkLmt) for the column variable. You want to produce a cross-tab that will show the percent of people with health problems that limit their ability to work within each age group. Decide whether you should percentage across the rows *or* percentage down the columns. Then, click on “Table” and choose the appropriate percentage choice (either “Percentage across” or “Percentage down”). This will produce a table showing the percent of individuals in each age group that have no work limitations versus the percent that have health problems limiting their work.
    - i. Use this cross-tab to make your own table, and show it in your report (you can use the format provided at the end of the document).
  - c. Compare the two tables you created.
    - i. What do you notice about the percent of elders whose health limits their ability to work in 1990 versus in 2000? Support your conclusions with evidence.
4. Imagine that you have started your own consulting firm in which you apply your sociological and gerontological training to analyze data and make policy recommendations for government agencies and businesses. Review all of the trends you have documented in numbers 1-3 above. Integrate and analyze these trends to make policy recommendations as appropriate below.

- a. You have been hired as a consultant for a business that is trying to retain its older workers. Based on the data you have examined above (and course material), what strategies do you recommend the company might pursue?
- b. You are hired as a consultant for a non-profit agency particularly interested in increasing the number of older adults who volunteer for their group. Based on our class discussions and the data you have examined above, what strategies do you recommend the agency might pursue?
- c. Involvement in either paid or unpaid work in later life is considered to be productive aging. What do the trends you have documented with your data analysis (in questions 1-3 above) suggest regarding the potential for productive aging, both now and in the future?

### Grading

Please consult the grading rubric for detailed information on grading. Grades will be determined based on the extent to which you correctly and thoroughly answer all of the questions above. The final report should be “polished.” Grammatical mistakes, formatting errors, and poor writing detract from your ideas, lessen the quality of your work, and will result in a lower grade. Late assignments will receive a ten-point deduction for each day late.

Example Format of Final Paper for Submission  
Student's Name

*Trends in the Employment Status of Older Adults between 1950 and 1990*

Underneath this heading, you will include your answers to the first question in essay format (paragraphs). Be sure to fully answer the questions as clearly as possible, and use correct grammar and format.

*Employment Status of Older Adults by Age Group*

Underneath this heading, you will answer the second question in essay format. Please be careful to fully answer all of the sub-questions.

*Percent of Older Adults with Health Problems that Limit their Employment, 1990 and 2000*

Answer the third question in essay format below this heading. Again, be sure to answer all parts of the question. **INCLUDE BOTH OF THE TABLES YOU MADE HERE.** You can use the example tables below.

**Table 1. Cross-tabulation using 1990 Census Data**

	<i>No Health Problems Limit Work</i>	<i>Health Problems do Limit Work</i>	<i>TOTAL</i>
<i>Age 65-74</i>			
<i>Age 75-84</i>			
<i>Age 85+</i>			
<i>TOTAL</i>			

**Table 2. Cross-tabulation using 2000 Census Data**

	<i>No Health Problems Limit Work</i>	<i>Health Problems do Limit Work</i>	<i>TOTAL</i>
<i>Age 65-74</i>			
<i>Age 75-84</i>			
<i>Age 85+</i>			
<i>TOTAL</i>			

*Policy Recommendations*

Here, you will answer both parts of the fourth question. Note that these questions are the type of questions that applied sociologists and gerontologists might answer. Being able to use data correctly to answer research questions is a valuable skill that employers look for in potential employees, regardless of your major.