

**Disability:  
Equality/Inequality**



**An introduction to disabilities issues using WebCHIP and US Census Data provided by the Social Science Data Analysis Network, Population Studies Center, University of Michigan.**

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## Disability: Equality/Inequality

### LEARNING OBJECTIVES:

#### *Skill*

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

#### *Substance*

- Use demographic information to understand inequalities for the disabled in the United States

The Americans with Disabilities Act of 1990, signed into law by President George Bush, constitutes a commitment on the part of the United States to include people with disabilities as fully as possible in American society. It is intended to assure, to the extent that the law is followed, that individuals with disabilities shall not be subject to discrimination as a result of their disabilities. It is an equal opportunity law, which assures equal access to housing, employment and public accommodations. People with disabilities, according to the Act are individuals who have "a physical or mental impairment that substantially limits one or more of [their] major life activities." Major life activities are functions such as caring for oneself, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning or working.

In passing the ADA, Congress found that:

**Some 43,000,000 Americans have one or more physical or mental disabilities, ... historically, society has tended to isolate and segregate individuals with disabilities, ... discrimination against individuals with disabilities persists in such critical areas as employment, housing, public accommodations, education, transportation, communication, recreation, institutionalization, health services, voting, and access to public services.**

It is important to understand that the ADA is an equal opportunity law, not one that gives any kind of preferences to individuals with disabilities or mandates any affirmative action. According to the Act itself:

**the Nation's proper goals regarding individuals with disabilities are to assure equality of opportunity, full participation, independent living, and economic self-sufficiency for such individuals; ... the continuing existence of unfair and unnecessary discrimination**

**and prejudice denies people with disabilities the opportunity to compete on an equal basis and to pursue those opportunities for which our free society is justifiably famous, and costs the United States billions of dollars in unnecessary expenses resulting from dependency and nonproductivity.**



### I. Identifying People with Disabilities

The actual identification of individuals with disabilities is not always an easy matter. Many people are limited in one way or another, although not legally "disabled." If an individual claims that he or she has been a victim of disability discrimination, a court may have to decide whether or not he or she is, in fact, legally a member of the protected class.

The enumeration of individuals with disabilities for census or survey purposes is even more difficult. Census takers and social researchers must ask relatively clear and simple questions. The objective is to ask the right questions to elicit answers that will truly indicate whether or not a person is disabled.

In 1990 the U. S. Census included four questions on disability:

1. **Does this person have a physical, mental or other health condition that has lasted for six months or more and which limits the kind or amount of work this person can do at a job?**
2. **Does this person have a physical, mental or other health condition that has lasted for six months or more and which prevents this person from working at a job?**
3. **Because of a health condition that has lasted for six months or more, does this person have any difficulty going outside the home alone, for example, to shop or visit a doctor's office?**
4. **Because of a health condition that has lasted for six months or more, does this person have any difficulty taking care of his or her own personal needs such as bathing, dressing, or getting around inside the home?**

#### Finding the best indicator.

1. Which of the four questions above would you chose as the best single indicator of someone you would consider to be "disabled"? \_\_\_\_\_
2. Why did you choose this indicator \_\_\_\_\_

3. Which is the indicator of the most severe disability? \_\_\_\_\_
4. Should only those who answer "Yes" to all three questions be counted as "Disabled?"
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Note: The census does not include people who are institutionalized. While these people should not be neglected, this exclusion is fortunate for our purposes since we will want to compare the employment and earnings, and the life-chances of people with disabilities relative to others in society.



### Describing the "Disability Community"

A Bureau of the Census fact sheet on Disability, "We asked...You told us", indicates that West Virginia has the highest percentage of people with disabilities.

5. Why do you think this is so?
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Since there are many types of disabilities and many degrees of limitation, the "Disability Community" or population is a diverse group -- as diverse as the African American "Community" or any neighborhood "Community." It is religiously, politically, ethnically, and in many other ways. People with disabilities do share the common characteristic of physical or mental limitation, however, and they also share the effects of discrimination.

#### A. Gender

Presumptions, of course, need to be verified by the numbers. First, check the gender differences to see if men or women are more likely to be disabled.

6. Using DISABL9, Cross Tab Gender (row) and WorkLmt (column) to determine the percent of women who reported work limited status compared to the percent of men who reported work limitations.

- Go to <http://www.ssdan.net/datacounts>
- Click on the “Data” in the menu bar
- From there, click “Browse” on the left sidebar. Find “**custom**” in the drop-down box and select it.
- Scroll down through the list of data sets until you find “**disabl9.dat**” Highlight and click “submit.”
- You can also click [here](#) to launch the dataset in WebCHIP.

Which do you want to look at: (a) the percent of women who are work limited, or (b) the percent of people with work limitations who are women? (Hint: notice that there are more women in the census than men.) Then do the same for the mobility limitation indicator (MobLmt) and the personal care limitation indicator (SelfCare). Record your results on the following tables.

#### Work Limitation

	Yes	No	
Female			100%
Male			100%

#### Mobility Limitation

	Yes	No	
Female			100%
Male			100%

#### Self Care Limitation

	Yes	No	
Female			100%
Male			100%

7. What differences, if any, do you see?

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8. What might account for these differences?

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**B. Age**

Next, look at the differences in age. Using the mobility limitation indicator, compare the age percentages (of those who answered "Yes" to the mobility limitation question) with the age percentages of the population as a whole (All).

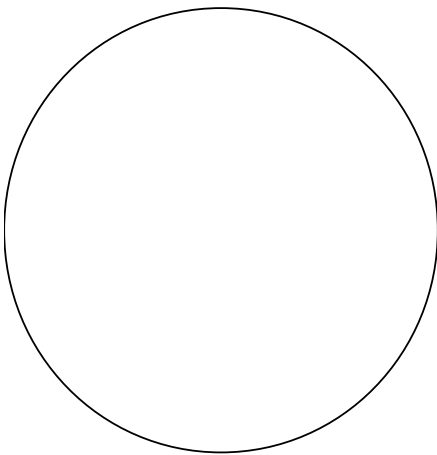
9. Construct a pie chart for the mobility limited class illustrating age groups and a second pie showing the age distribution of the population in general.

Age

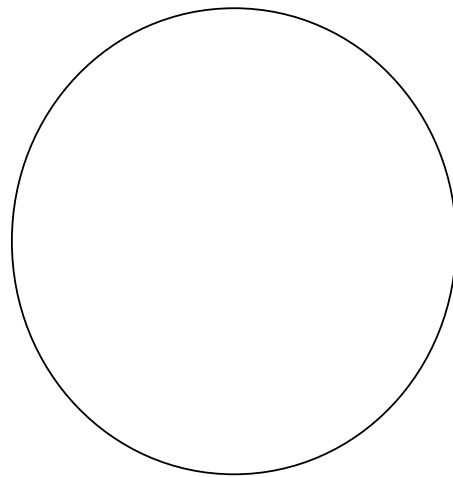
- 65+
- 55-65
- 45-54
- 35-44
- 25-35

Comparison of people with disabilities to the U.S. population by age categories

Age 25+ only



Mobility Limited



U.S. Population

10. What differences do you find?

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11. What might account for these differences?

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Does the inclusion of the 65+ age group distort this picture? With mobility limitations and self-care limitations it makes sense to consider ALL Americans. But for questions of employment, people over 65 are often retired. To get a better picture of the workforce, modify the file to Omit the 65+ age group and use the WorkLmt variable.

12. Fill in the table showing the percent of the disabled population in each age category and the percent of the population in each age category.

	Age				
	25-34	35-44	45-54	55-64	Total
% of Worklimited Disabled					100%
% of Population					100%

13. How would you describe the differences here?

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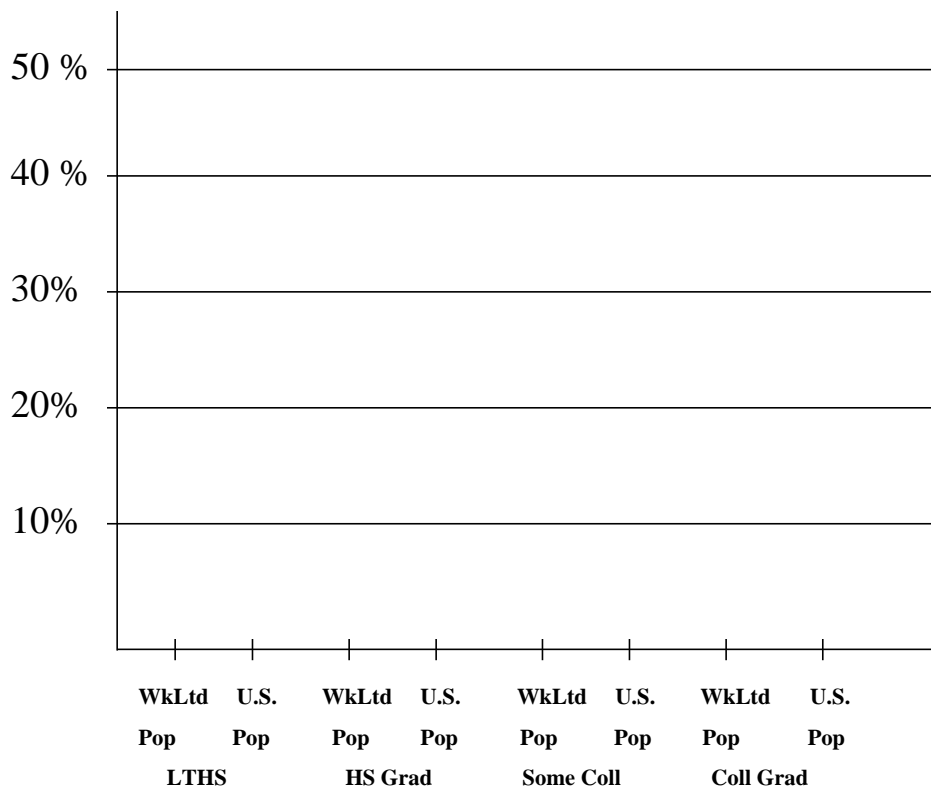
### C. Education

Now, compare the educational levels of the disability community with the educational distribution of the general population. Again, which indicator would be best? Well, perhaps we should include as many people with disabilities as possible, so use the worklimited variable.



(Remember, you modified the file to omit those age 65+; so open the DISABL9 file again by clicking [here](#), so that you will include all age categories.) Use the worklimited and education variables. At each educational level compare the percent of people who answered “Yes” to worklimited disability with the percent of the population at that level.

**14.** Construct a series of bar graphs illustrating this comparison.



**15.** What differences do you find?

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**16.** What might account for these differences?

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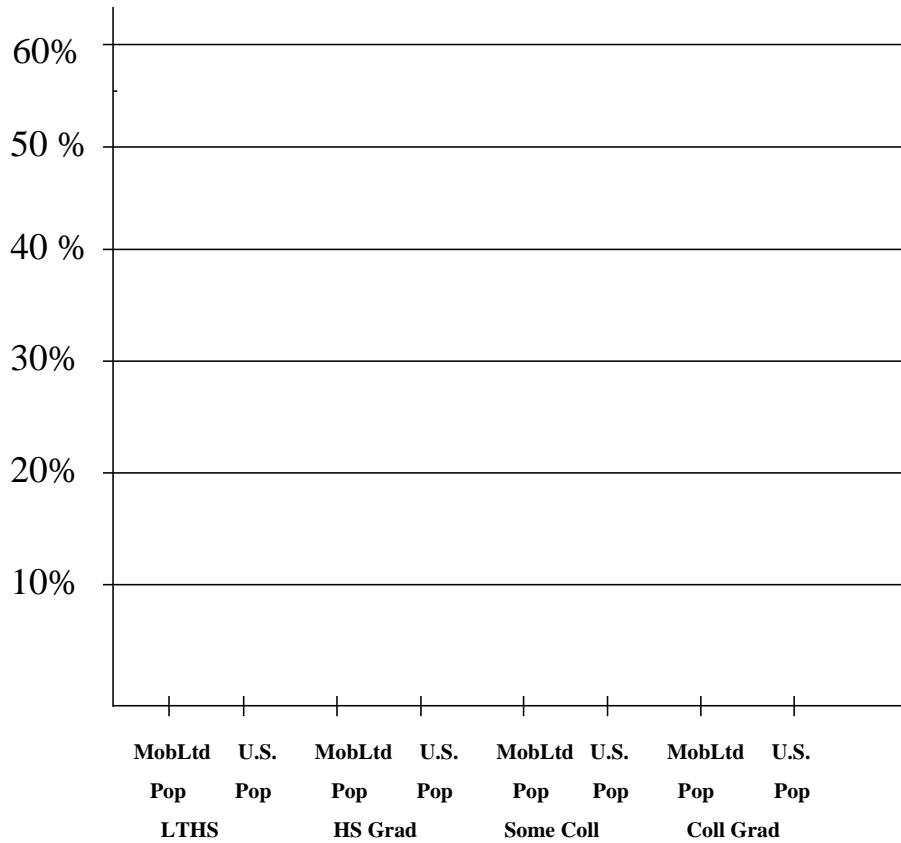
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But perhaps there is a difference in educational attainment between people with work limitations and people with mobility limitations.

**17.** Repeat the last comparison using the Mobility Limitation indicator:



**18.** Do people with mobility limitations do better or worse educationally than people with work limitations?

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**D. Race and Ethnicity**

Finally, compare the disability "Community" with the general population along racial and ethnic lines? Try each disability indicator using the total population (All) for comparison. The objective is to see if disabilities are evenly distributed throughout the major racial and ethnic categories.

19. Fill in the percent table below to make this comparison.  
 (NLW means Non-Latino White; neglect the NLOth category.)

	NLW	Black	Latino	Asian	Am Ind	Total
<b>Population</b>						<b>100%</b>
<b>Work Limited</b>						<b>100%</b>
<b>Mobility Limited</b>						<b>100%</b>
<b>Self-Care Limited</b>						<b>100%</b>

20. Are there significant differences?

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21. What might account for these differences?

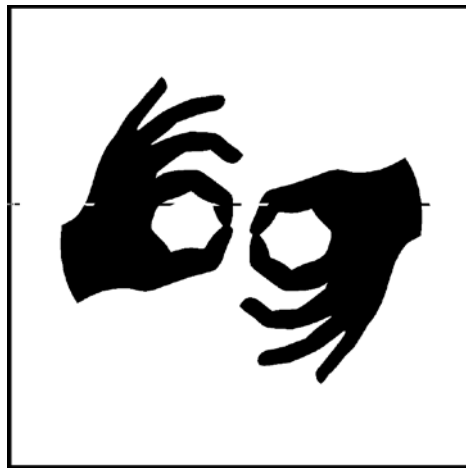
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**Summary:**

22. How would you describe the disability population compared with the population in general in terms of gender, age, education and race/ethnicity?

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**Large  
Print**

## II. Disability and Life-Chances

In this section we look at the life-chances of people with disabilities. The phrase "life-chances" is used here to designate a person's general prosperity, standard of living, or satisfaction with life. This, of course, depends upon many factors. Income or wealth is important, but satisfaction with one's life can also be measured in terms of the ability to control daily activities, fulfillment of personal goals, enjoyment of relationships, etc.

**23.** What would you count as most important for your own general prosperity?

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_

Individuals with disabilities may be more challenged in finding "life, liberty, and the pursuit of happiness" than non-disabled people. They may also find special sensitivity or fulfillment that able-bodied people do not have.

What indicators of good life-chances should social researchers use? Unfortunately, the census doesn't include any questions on the subject, so we will have to use some rather "objective" features of prosperity.



### A. Education.

First, look again at the similarities and differences in education you found under question **16** above. Now develop the investigation of education a little further by using the DISABL9 file to compare the educational attainment of people with and without Mobility Limitations for young, middle and older age groups. This will allow you to see if education is any more available to people with disabilities **now** (younger age group) than it was **years ago** (older age group). Click [here](#) to open the dataset in WebCHIP.

**24.** Control for Age and use Education and Mobility Limitation variables to complete the following tables.

#### Age 25-34

<b>Mobility Limitation</b>	No				
	Yes				
		<b>Less than High School</b>	<b>High School</b>	<b>Some College</b>	<b>College Grad</b>

#### Age 45-54

<b>Mobility Limitation</b>	No				
	Yes				
		<b>Less than High School</b>	<b>High School</b>	<b>Some College</b>	<b>College Grad</b>

**Age 65+**

**Mobility  
Limitation**

**No**

**Yes**


**Less than  
High School**

**High School**

**Some College**

**College Grad**

**25.** What differences do you find at the various educational levels and do you think there has been any progress over time?

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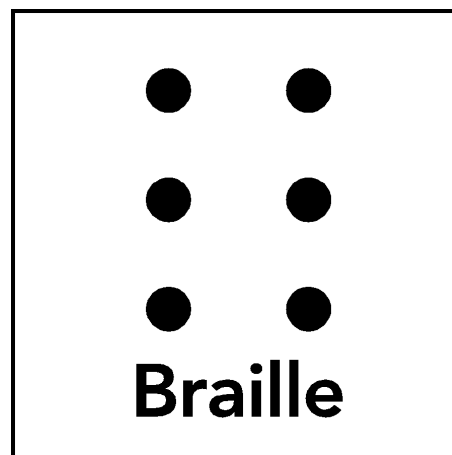
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Do you think men and women with disabilities fare equally well in education? Release the control for age and control for gender. Examine the two tables generated.

**26.** Do more men or women with disabilities graduate from

**High School?    Men    Women**

**College?        Men    Women**



**B. Marriage**

Would you expect that people with disabilities marry at the same rate as people without disabilities?

**27.** Using the MOBLMT9P file construct a percentage table illustrating the percent in each marital status category for people with and without mobility limitations.

1. Go to <http://www.ssdan.net/datacounts>
2. Click on the "Data" in the menu bar
3. From there, click "Browse" on the left sidebar. Find "**custom**" in the drop-down box and select it.
4. Scroll down through the list of data sets until you find "**moblmt9p.dat**" Highlight and click "submit."
5. You can also click [here](#) to launch the dataset in WebCHIP.

Mobility  
Limited

No							100%
Yes							100%

Never Married    Living Together    Currently Married    Divorced    Separated    Widowed

**28.** What differences do you find here and how might you account for them?

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**29.** Rework this comparison eliminating (Omit) any category that might distort the picture.



**Mobility Limited**

No							100%
Yes							100%

Never Married    Living Together    Currently Married    Divorced    Separated    Widowed

**30.** Explain what you have done and what you would conclude.

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**C. Standard of Living**

Are people with disabilities more or less likely to live on incomes lower than the official U.S. Poverty Level?

**31.** Construct a similar 2x2 contingency table to check your opinion.

		Poverty	Non Poverty	
<b>Mobility Limited</b>	No			100%
	Yes			100%

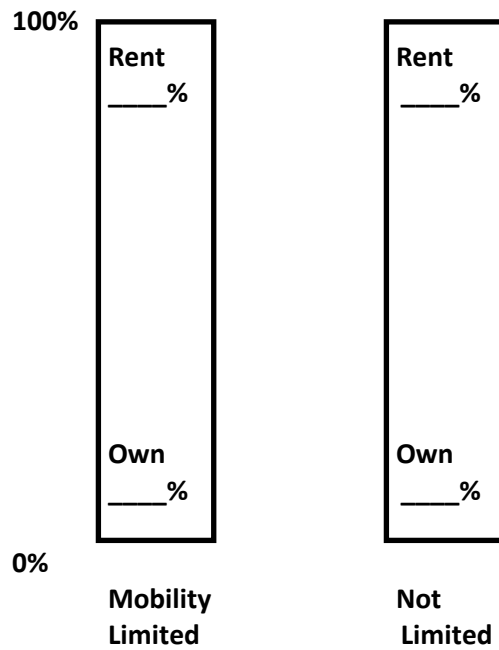
**32.** Are there more men or women with disabilities in Poverty? Modify the file to include only people with mobility limitation (omit MobLmt "No") and CrossTab Gender and Poverty. Fill in the following table comparing the percent of mobility limited women and men in poverty.

		Poverty	Non-Poverty	
<b>Female</b>				100%
<b>Male</b>				100%

#### D. Home Ownership

Home ownership is surely one of the most important American ideals.

33. Using the file MobLmt9, fill in the stacked bar graph below comparing home ownership and rental among the disabled and non-disabled populations. Click [here](#) to open the dataset in WebCHIP.



**CONCLUSION**

**34.** How would you describe the "life-chances" of people with disabilities as compared with people without disabilities according to the evidence developed in this study concerning education, marriage, standard of living, and home ownership?

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### III. Disability and Inequality

Having compared the disability community to the general population in terms of gender, age, race/ethnicity and education, and life-chances, we now turn to the question of whether differences reflect serious inequalities, and the even more difficult question of whether inequalities reflect discrimination on the basis of disability.

#### A. Employment: Occupations and Earnings

The first step toward determining whether there is discrimination on the basis of disability in this country is to compare the employment and earnings of people with disabilities to the employment and earnings of the population in general.

#### B. Employment

The data file WKLTEMP9 contains census data comparing people with work limitations to the population in general with respect to age, gender, education, employment and earnings.

1. Go to <http://www.ssdan.net/datacounts>
2. Click on the "Data" in the menu bar
3. From there, click "Browse" on the left sidebar. Find "custom" in the drop-down box and select it.
4. Scroll down through the list of data sets until you find "wkltemp9.dat" Highlight and click "submit."
5. You can also click [here](#) to launch the dataset in WebCHIP.

In order to have an effective comparison, first omit all those over age 65 from the file (since they would be likely to be retired).

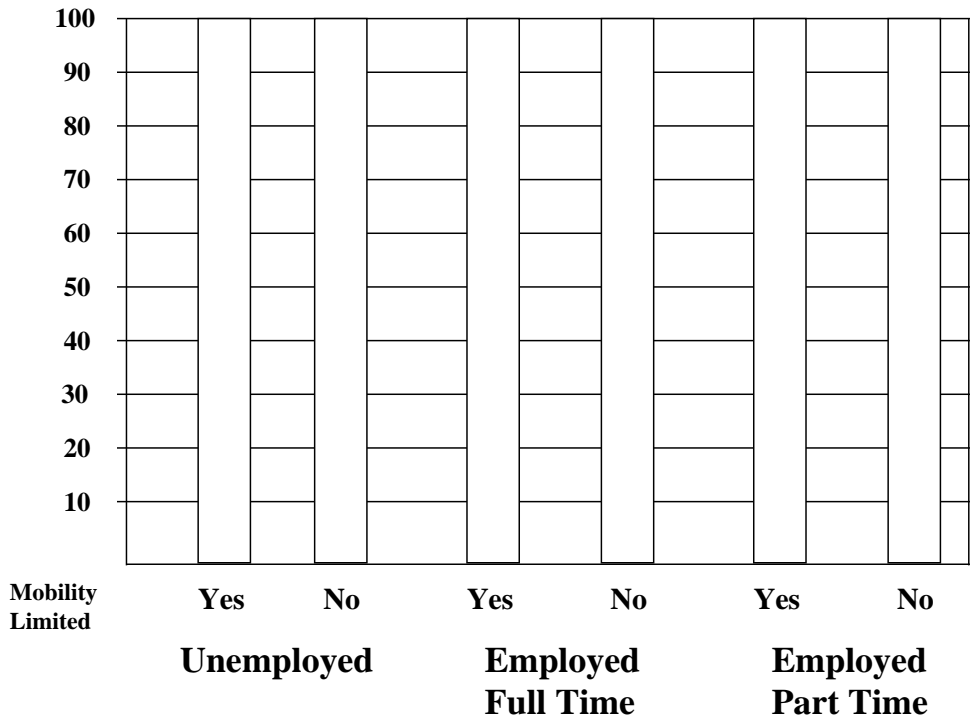
35. Cross Tab Work Limitation with Employment and note the large difference between those with disabilities and those without who are listed as Not in the Labor Force.

#### Percent Not in the Labor Force

<b>Work Limitation</b>	<b>No</b> _____%
	<b>Yes</b> _____%

To find out whether people with disabilities are employed more or less than people without disabilities, omit from the employment variable those listed as Not in the Labor Force (NILF); this includes people who retired before age 65, homemakers, full-time students and others not seeking employment.

36. Create a side-by-side bar chart illustrating the employment status of people in the labor force with disabilities compared with that of people without disabilities.



37. Of the people in the labor force, are those with disabilities disproportionately unemployed or under-employed?  
Explain.

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### C. Availability for Work

Are people with disabilities seeking work? One census indicator is the "Availability for work" question.

38. Construct a table using the file WKLTOCC9 showing the percent available for work of the disability and non-disability populations. (Again, omit those age 65+.)

- Go to <http://www.ssdan.net/datacounts>
- Click on the "Data" in the menu bar
- From there, click "Browse" on the left sidebar. Find "custom" in the drop-down box and select it.
- Scroll down through the list of data sets until you find "wkltocc9.dat" Highlight and click "submit."
- You can also click [here](#) to launch the dataset in WebCHIP.

#### Available for Work

		Yes	No	
Mobility Limited	No			100%
	Yes			100%

39. Describe the data in this table. What conclusions would you draw from this?

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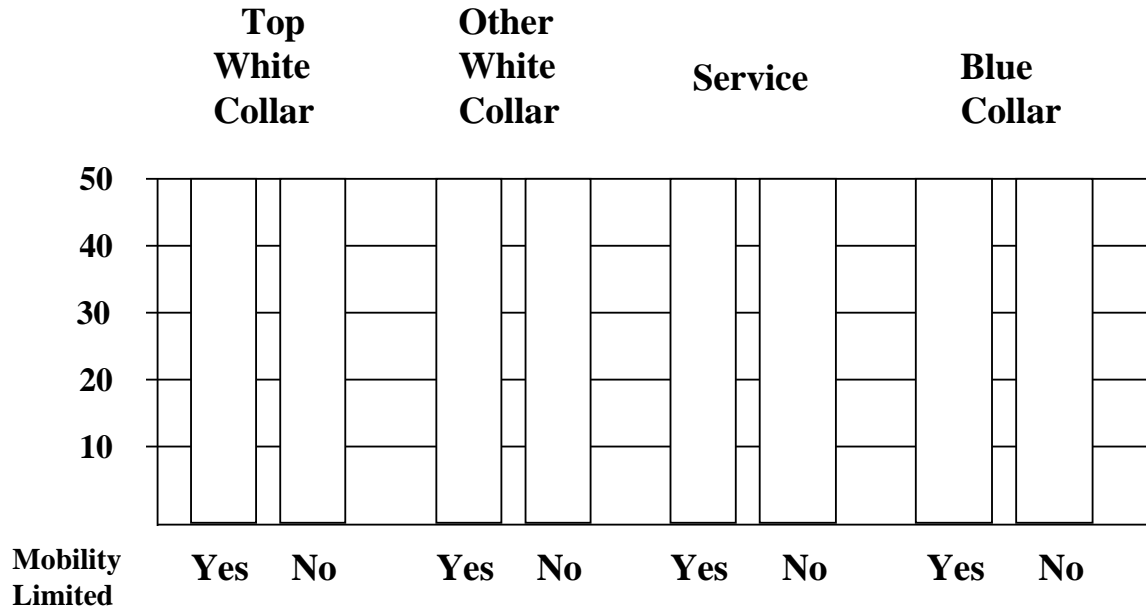
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**D. Occupations**

Would you expect people with disabilities to be employed more or less in certain occupations? (Watch out for stereotypes and myths here!)

- 40. Create a set of bar graphs showing the percent of disabled and non-disabled by occupational sectors. Use the WKLTOCC9 data file. Click [here](#) to open the dataset in WebCHIP.



- 41. Describe your findings.

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- 42. How would you account for any differences here?

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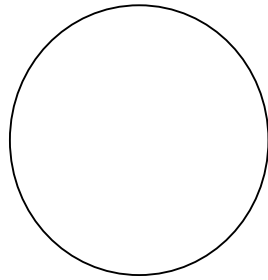
**E. Earnings**

Finally, look at the earnings of people with disabilities relative to their education.

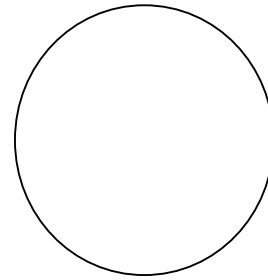
- 43. Using the WKLTOCC9 data, create a set of pie charts to illustrate the percentages of a cross-tabulation of work limited disabilities and earnings. Control for education to look at each educational level separately. Click [here](#) to open the dataset in WebCHIP.

## Earnings of People with Work Limitation Disabilities By Educational Level

**Key**       <15K       15-25K       25-35K  
**Earnings in \$**       35-50K       50+K

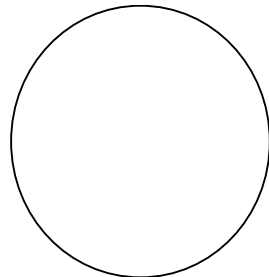


**Work Limited**

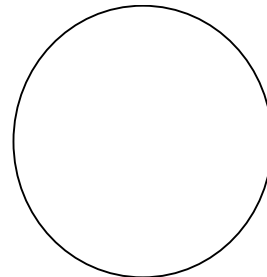


**Not Work Limited**

### **LESS THAN HIGH SCHOOL EDUCATION**



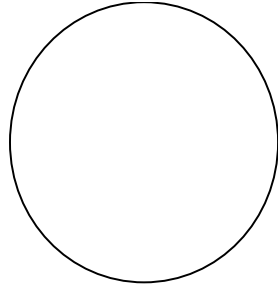
**Work Limited**



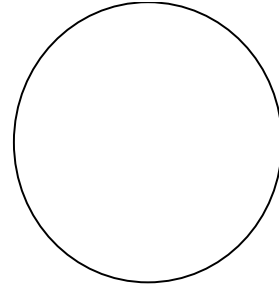
**Not Work Limited**

### **HIGH SCHOOL EDUCATION**



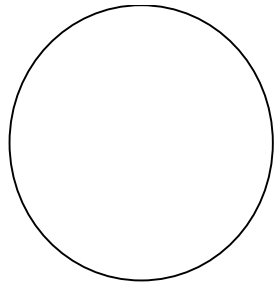


**Work Limited**

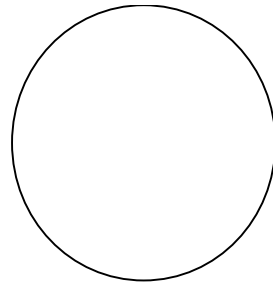


**Not Work Limited**

**SOME COLLEGE EDUCATION**



**Work Limited**



**Not Work Limited**

**COLLEGE GRADUATE**



44. Summarize your findings concerning the relationship between education and earnings with respect to people with disabilities.

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#### Conclusion: Disability and Discrimination

45. Does this information indicate that there is employment discrimination against people with disabilities? Describe the data you have developed in a way to support your conclusions.

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#### For Further Investigation: Gender Bias

Use the WKLTEMP9 file to determine whether women with disabilities are more or less likely to be employed than men and whether they earn less.

- Go to <http://www.ssdan.net/datacounts>
- Click on the "Data" in the menu bar
- From there, click "Browse" on the left sidebar. Find "**custom**" in the drop-down box and select it.
- Scroll down through the list of data sets until you find "**wkltemp9.dat**" Highlight and click "submit."
- You can also click [here](#) to launch the dataset in WebCHIP.