

Introducing ACS Data to Veterans Studies students

SOC 2801 – Veterans in American Society (Online) Fall 2022

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This at home exercise is designed to introduce students to the veteran data available in ACS to help them find demographic context to the national conversations around the veteran community.

Learning Objectives:

Skill

- Get familiar with data from the American Community Survey
- Learn how to use Census Bureau's data website to extract demographic and socio-economic data
- Create tables using quantitative data
- Learn how to read and interpret tables displaying frequencies and percentages
- Improve student's confidence in reading and discussing data from tables

Substance

- Better Understand veteran population of the nation and a state:

Summary

Each student will work on the assigned project from below based on data from the 2016-2020 American Community Survey (ACS). Submissions are required before class on _____. We will use that class period to review how to manipulate the ACS data, and to discuss the insights each student found.

Teaching Material

1. *The Changing Face of America's Veteran Population* by Katherine Schaeffer, Pew Research Center, April 2021. <https://www.pewresearch.org/fact-tank/2021/04/05/the-changing-face-of-americas-veteran-population/>
2. *Who are our nation's veterans and how is their standard of living changing?* by USAFacts.org, November 2020. <https://usafacts.org/articles/who-are-our-nations-veterans-and-how-is-their-standard-of-living-changing/>
3. ACS (data.census.gov) Veterans Status (Table S2102)
4. Other available tables include B21001-B21005, and many others.
5. Microsoft Excel or similar spreadsheet program

Instructions:

This exercise is to introduce you to demographic and socioeconomic data from the American Community Survey (ACS) from the U.S. Census Bureau. Read the two articles cited above then follow the steps below.

Steps to access the American Community Survey data

6. Go to data.census.gov website
 7. In the search by type S2101
 8. Click the “+” to view all products
 9. Select “2020: ACS 5-Year Estimates Subject Tables”
 10. Select your table (s) by clicking on the square boxes and then click on “View” or “Download
 11. Print or Download the table as an Excel File
- If you need to have a new run click on “Back to Search” and then click on red “X” to clear your previous selection. Repeat the steps starting from step #2.

There are many ways to get to your data and you may try some of the options once you are at the website data.census.gov

Review the following definitions before moving to the module requirements.

(From: https://nces.ed.gov/nceskids/help/user_guide/graph/variables.asp)

Variable: A variable is an object, event, idea, feeling, time period, or any other type of category you are trying to measure. There are two types of variables-independent and dependent.

Independent variable: An independent variable is exactly what it sounds like. It is a variable that stands alone and isn't changed by the other variables you are trying to measure. For example, someone's age might be an independent variable. Other factors (such as what they eat, how much they go to school, how much television they watch) aren't going to change a person's age. In fact, when you are looking for some kind of relationship between variables you are trying to see if the independent variable causes some kind of change in the other variables, or dependent variables.

Dependent Variable: Just like an independent variable, a dependent variable is exactly what it sounds like. It is something that depends on other factors. For example, a test score could be a dependent variable because it could change depending on several factors such as how much you studied, how much sleep you got the night before you took the test, or even how hungry you were when you took it. Usually when you are looking for a relationship between two things you are trying to find out what makes the dependent variable change the way it does.

– An Independent Variable causes a change in a Dependent Variable.

Univariate: dealing with one variable. For example, veterans status or employment status are single variables or they are two “univariates”. A table dealing with only one variable will be

called a univariate table. For example, a table dealing just with veteran status will be called a univariate table

Bivariate – a table dealing with two variables is called a bivariate table. For example, A table dealing with only age and sex will be called a **bivariate table**. (Sometimes this is called a cross-tab)

Requirements

1. Looking only at Veterans, using “age” as variable
 - a. Prepare a univariate table on that variable.
 - b. In your univariate table, list both numbers and percentages
 - c. Write a 1 sentence summary in plain language the data in your table
 2. Using Veteran status and one of the following variables: (Age, Race, Employment Status, Educational Attainment, Poverty Status, Disability)
 - a. Prepare a cross-tab of veteran status against your chosen variable*
 - b. In your table, list both numbers and percentages
 - c. Using Veteran Status as an independent variable and your other variable as the dependent variable, construct a short (2-3 sentence) plain language description of your chart.
- *Note: you will need to manipulate (and transpose) the data in excel to create the appropriate tables for this requirement. We recommend copying the original data on to a new “sheet” in excel for each exercise.*
3. Review the rest of the data in table S2101 write a paragraph describing it.
 4. Repeat steps 1-3 above, but use only data for the state of Missouri (Filter> Geography>Missouri).
 5. Reread the two articles linked above then reflect on what you read and what you found in ACS data. Write a short paragraph describing any insights you gained from seeing this information presented in this manner. Were the results what you expected? Why or why not?

Examples Solutions:

United States Census Bureau

s2101 Advanced Search

All **Tables** Maps Pages Microdata Help FAQ Feedback

American Community Survey

S2101 | VETERAN STATUS

2020: ACS 5-Year Estimates Subject Tables

Notes Geos Years Topics Surveys Codes 123 Hide Transpose Margin of Error Restore Excel CSV ZIP Print Map

United States						
	Total		Percent		Veterans	
Label	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
✓ Civilian population 18 years and over	252,130,477	±8,872	(X)	(X)		
✓ PERIOD OF SERVICE						
Gulf War (9/2001 or later) veterans	(X)	(X)	(X)	(X)	(X)	(X)
Gulf War (8/1990 to 8/2001) veterans	(X)	(X)	(X)	(X)	(X)	(X)
Vietnam era veterans	(X)	(X)	(X)	(X)	(X)	(X)
Korean War veterans	(X)	(X)	(X)	(X)	(X)	(X)
World War II veterans	(X)	(X)	(X)	(X)	(X)	(X)
✓ SEX						
Male	122,388,943	±10,289	48.5%	±0.1		
Female	129,741,534	±5,820	51.5%	±0.1		

ACSST5Y2020.S2101-2022-03-29T194509.xlsx - Excel

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United States						
	Total		Percent		Veterans	
Label	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Civilian population 18 years and over	252,130,477	±8,872	(X)	(X)	17,835,456	±52,869
PERIOD OF SERVICE						
Gulf War (9/2001 or later) veterans	(X)	(X)	(X)	(X)	3,679,378	±17,925
Gulf War (8/1990 to 8/2001) veterans	(X)	(X)	(X)	(X)	3,813,314	±22,041
Vietnam era veterans	(X)	(X)	(X)	(X)	6,281,803	±24,101
Korean War veterans	(X)	(X)	(X)	(X)	1,361,621	±9,191
World War II veterans	(X)	(X)	(X)	(X)	512,607	±5,524
SEX						
Male	122,388,943	±10,289	48.5%	±0.1	16,207,488	±46,941
Female	129,741,534	±5,820	51.5%	±0.1	1,627,968	±11,817
AGE						
18 to 34 years	75,074,439	±13,539	29.8%	±0.1	1,568,922	±11,951
35 to 54 years	82,600,411	±9,971	32.8%	±0.1	4,174,725	±20,127
55 to 64 years	42,092,810	±5,262	16.7%	±0.1	3,176,620	±15,340
65 to 74 years	30,547,950	±4,981	12.1%	±0.1	4,651,690	±17,144

Ready

Question 1.

	A	B	C	D	E	F	G
1							
2	Veterans by Age						
3	AGE	Population	Percentage				
4	18 to 34 years	1568922	8.80%				
5	35 to 54 years	4174725	23.40%				
6	55 to 64 years	3176620	17.80%				
7	65 to 74 years	4651690	26.10%				
8	75 years and over	4263499	23.90%				
9	TOTAL	17835456	100.00%				
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Approximately 2/3s of all veterans in the United States are over 55 years old.

Question 2:

	A	B	C	D	E	F	G	H	I	J
1		White alone		Black or African American alone		American Indian and Alaska Native alone		Asian alone		Native Hawaiian, Other Pacific Islander alone
2	Veterans	14,415,980	80.80%	2,145,181	12.00%	134,281	0.80%	307,191	1.70%	
3	Nonveterans	167,714,090	71.60%	28,725,360	12.30%	1,837,806	0.80%	14,367,838	6.10%	4
4	Total	182,130,070		30,870,541		1,972,087		14,675,029		4
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When compared to their national non-veteran counterparts, white (alone) veterans are over-represented in veteran populations; black veterans are proportionally represented; Asian and Hispanics are underrepresented among veterans

Question 3: MO Veterans

	A	B	C
1	MO Vets By Age	#	Percent
2	Civilian population 18 years and over		
3	AGE		
4	18 to 34 years	31,264	8.00%
5	35 to 54 years	85,557	21.90%
6	55 to 64 years	72,359	18.50%
7	65 to 74 years	109,722	28.00%
8	75 years and over	92,611	23.70%
9		391513	100.10%
10			

The age distribution of veterans in MO is roughly analogous to that of the entire country.

Label	White alone	Black or African American alone	American Indian and Alaska Native alone	Asian alone	Native Hawaiian and Other Pacific Islander alone	Some other race alone	Two or more races	Hispanic or Latino (of any race)
Veterans	340,901	36,218	2,103	2,034	439	2,106	7,712	7,684
Nonveterans	3,580,565	478,280	16,931	95,796	5,295	47,093	110,790	156,607

When compared to national veteran racial distributions, veterans in MO are more white (89% vs 80%), similarly black, and other ethnicities are much less represented.