Activity Title

Place and Age: Examining the Population Structure by Age and Gender across the U.S. for Health Services Planning due to COVID-19

Author Information

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Short Description

The SSDAN WebCHIP software and the Census Reporter website can be used to enrich the applied learning component in any public health or social science course at the undergraduate level. In this exercise, students will first read an article on low food access and mortality from COVID-19 in the Midwest area of the United States (U.S.). Next, students will explore how the American Community Survey (ACS) trend data from 2016 can be used to examine the changing population structure of older adults by age and gender. After viewing national trends, students will visit the Census Reporter website to better understand the population structure by age for various counties or cities in the Midwest. This information can be used for a wide range of applications relating to planning for older adult services: emergency assistance during disasters, constructing health facilities, determining locations for public use amenities, identifying new transportation routes, etc.

Summary

In this applied learning lab assignment, students examine the changing population structure of older adults in the U.S. from 1950 to 2016. Students also explore this structure by gender. Next, students extend this brief analysis by visiting the Census Reporter website to compare the older adult population structure of two or three different cities or counties of interest in the Midwest (based on the low food access and mortality from COVID-19 research article).

After working with the software and Census Reporter, students will write a two-page report describing trends in population aging for the entire U.S. and the two or three selected cities or counties. The cities or counties should be selected after reading the

research article. Students with advanced training in public health or social sciences should extend this analysis to further examine population aging issues with respect to health services planning with respect to COVID-19.

Goals

After completing this module, students will be able to:

· Access data from the American Community Survey.

· Examine population structure by age and gender.

· Use this information to understand older adult population health trends.

· Apply quantitative data analysis to write a short report with recommendations.

Context for Use

This assignment is suitable for courses in demography, economics, public health, public policy, and sociology. Students must integrate table results from the module into a report which addresses (1) the aging of the U.S. population, (2) how the population structure varies by gender, (3) the older adult population size and structure for the two or three selected cities or counties in the Midwest, and (4) how this information can be useful for health planning. For (4), students will need to utilize library sources to obtain peer-reviewed articles which expand upon the COVID-19 research article from this exercise.

Grade Level

Upper undergraduate.

Activity Description and Teaching Materials

Instructions for Data

Before working with the module, read the following article: Sharma, A. (2022). Older Adult Mortality From COVID-19: Food Access as a Determinant Within a Socio-ecological Framework. *The Gerontologist*. (https://doi.org/10.1093/geront/gnab159)

1. Go to http://www.ssdan.net/datacounts/webchip

2. Explore the Choose Dataset area and notice the different tabs.

3. Navigate to the Collection tab and enable acs2016trend.

4. Navigate to the Dataset tab and enable Elderly.

5. The State tab will remain empty.

6. Click Compute Marginals and view the Workbook for trends from 1950-2016, Gender (Sex), Age groups, and Marital status.

7. Navigate to Choose Variables and select AgeEldr for Row and select Year for Column. For Control Variables, select Sex.

8. Navigate to Generate Table, click Frequency, and view the Workbook for trends from 1950-2016 by Age and Gender.

9. Go to https://censusreporter.org/

10. Scroll down to the Profile tab and enter a city or county in the Midwest (based on the research article). Click enter and a new screen will display a map of the place with detailed demographic information. View the Population by age range and take note of the 60-69, 70-79, and 80+ age groups. Also, view the Population by age category circle to the far right and view the age 65 and over legend to take note of the population percentage.

Questions

Provide written answers for each of the questions. Responses should be in an essay format.

1. What trends are shown by age for the different time periods?

2. Why might this occur? Support your response with evidence from external research.

3. What trends are shown by gender?

4. What cities or counties were selected on Census Reporter? Why did you select these places?

5. What is the population structure by age for these places?

6. If you were working for the county or state in the areas of health and policy, what descriptive statements could you make for the population structure by age and what suggestions would you offer to areas with high mortality from COVID-19? How can your analysis be applied for health services planning?

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