

UKDS Census Workshops: Online tools for accessing and analysing census data

Workshop 3: Accessing and analysing census microdata using Nesstar

Activity

Task:

- 1) Using Nesstar, explore census microdata to answer a question.
- 2) Create a two-way table to answer a question.

About Nesstar

Nesstar is an online tool provided by the UK Data Service for exploring and accessing to a wide variety of datasets.

Website: <http://nesstar.ukdataservice.ac.uk/webview/>

Activity: Exploring descriptive statistics

In April 2020, statistics released by the UK's Office for National Statistics showed 46.6% of adults in employment were working from home, as a result of the social distancing measures introduced in response to the coronavirus pandemic (ONS, 2020). You want to know:

*What proportion of the population is usually in work?
How many adults in employment are usually working from home?*

To explore the question, you will look at microdata from the 2011 Census. The key variables to explore are:

1. Current employment
2. Place of work
3. Regions – England, Wales, Scotland, Northern Ireland

Note that there are three censuses for the UK. One that covers England and Wales, one for Scotland and one for Northern Ireland. The UK Data Service provides tables of combined UK 2011 Census data through our [InFuse tool](#), however the microdata collections are separated by the three different census collections.

Instructions

1. Navigate to Nesstar: <http://nesstar.ukdataservice.ac.uk/webview/>
2. Find the 2011 Census Microdata
 - Open *Research Datasets*
 - Scroll down to *Census Microdata and Sample of Anonymised Records (SARS)*, expand with +
 - Select *Census Microdata*, expand with +
 - Select *2011*
 - [-] About the UK Data Service Nesstar Catalogue
 - [+] Research Datasets
 - [+] Unrestricted Access Datasets
 - [+] Teaching Datasets
3. Find and explore the variables for England and Wales
 - Select *England and Wales*, expand with +
 - Select *2011 Census Microdata Individual Safeguarded Sample (Local Authority)*, expand with +
 - Select *Variable Description*, expand with +
 - Select *Person*, expand with +
 - [-] Census Microdata and Sample of Anonymised Records (SARs)
 - [-] Census Microdata
 - [+] 1961
 - [+] 1971
 - [+] 1981
 - [-] 2011
 - [-] England and Wales
 - [+] 2011 Census Microdata Individual Safeguarded Sample (Local Authority)
 - [+] Metadata
 - [-] Variable Description
 - [+] Communal Establishment
 - [+] Family
 - [+] Household
 - [+] Occupied Dwellings
 - [+] Occupied Household Spaces
 - [+] Person
 - [+] Persons Aged 4 Years and Over in Full-time Education

Question 1. How many cases are there in the England and Wales 2011 microdata? (hint: look at the summary statistics for any variable)

4. There are several variables that can help you explore employment and answer the main questions posed at the start of this activity.
 - Explore the employment related variables.
 - *Read the variable descriptions and categories carefully.*
 - Some variables include information for people who are no longer working, e.g. *Employment type*
 - Some responses are classed as -9 *Not applicable* and are not counted in reported percentages e.g. *Last year worked*

Variable lastyrwrkg: Last year worked

Values	Categories	N		
1	In employment	1337980		63.8%
2	Last worked in 2011	25456		1.2%
3	Last worked in 2010	98084		4.7%
4	Last worked in 2008 or 2009	100852		4.8%
5	Last worked in 2006 or 2007	62332		3.0%
6	Last worked in 2004 or 2005	53019		2.5%
7	Last worked in 2002 or 2003	43911		2.1%
8	Last worked in 2000 or 2001	46822		2.2%
9	Last worked in 1996 to 1999	77905		3.7%
10	Last worked in 1991 to 1995	84464		4.0%
11	Last worked before 1991	166175		7.9%
-9	Not applicable	751149		

What does this (63.8%) percentage refer to?

Question 2. What proportion of the population is usually in work? (hint: you may need to divide the number of people *currently* working by the total number of cases in the sample.)

5. Working from home
 - Explore variables that show categories for working from home. For example:
 - *Person > Distance travelled to work, or*
 - *Person > Place of work, or*
 - *Person > Workplace*

Question 3. How many adults in employment are usually working from home?

6. (Optional) Explore employment and working from home for Northern Ireland and Scotland
 - Some of the questions might be phrased differently
 - Are there notable differences in the proportion of people working?
 - Are there more or less people working from home?

More detail from the ONS about homeworking during the COVID-19 pandemic:

<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/coronavirusandhomeworkingintheuk/april2020>