

Technical and Professional Development at NatCen Social Research



EXECUTIVE SUMMARY OF THE PLACEMENT

- Summer placement with **NatCen** from 13th June to 8th July
- Worked as an Analyst under the Department of Children, Families and Work.
- Supervised by **Allison Dunatchik** who is an Analyst (Researcher)

Responsibilities

- Facilitated **data management** with multiple projects
- Co-produced the generic, **infographic report** on the English Longitudinal Study of Aging (ELSA)
- Designed **syntax** for multiple projects using SPSS and Stata
- Produced daily reports on data collection using **Excel**

SOFT SKILLS @NatCen

- Teamwork** - liaised for task allocation and feedback; volunteered for tasks
- Communication** - contributed in daily and project-based meetings
- Time management** - three projects at the same time
- Analytical Skills** - researched for concepts and analysed data
- Problem Solving**

ANALYSIS AND FINDINGS BY PROJECTS

ELSA

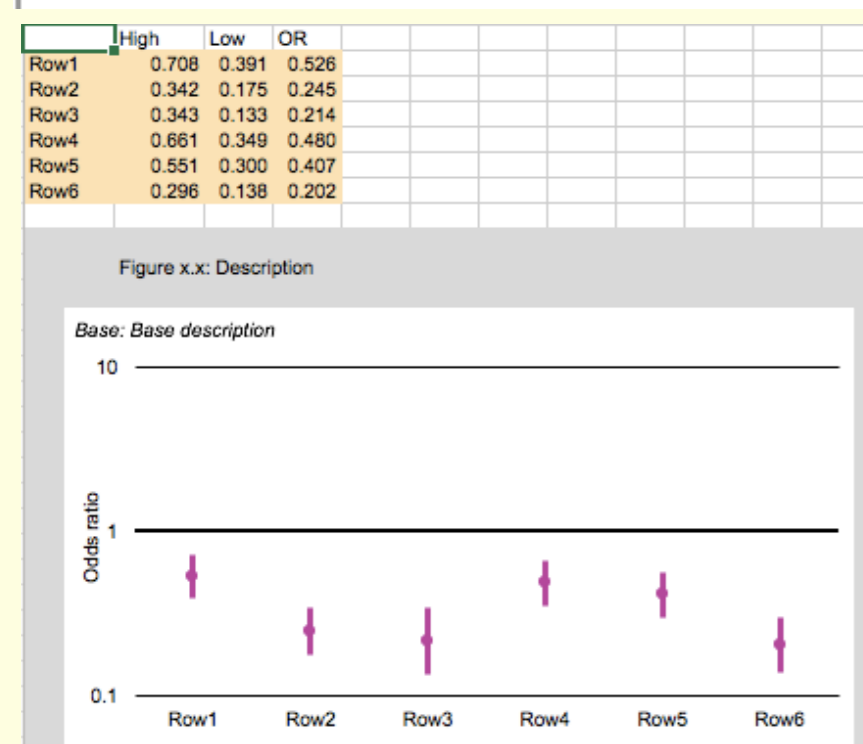
Aim: To report the lives of people in England ages 50 and over, thus advising on government plans of health care and pensions.

Dataset - The English Longitudinal Study of Aging (ELSA) is a study tracking over 10,000 people aged 50 and over biennially since 2002.

Task - Devised SPSS syntax for descriptive statistics on 'Living Comfortably' and 'Contributing to Society' upon operationalisation of the concepts and finalising variables.

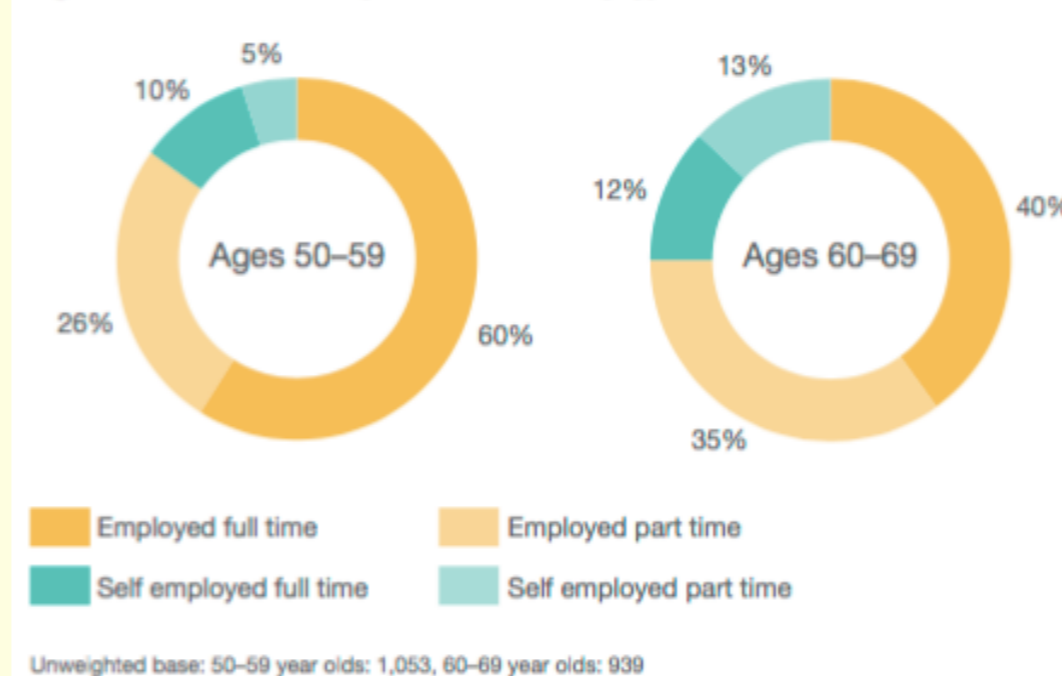
E.g.1: Assigning binary values to yes/no questions to create a composite dummy for consumer goods

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* Consumer durables owned.
missing values hohavtv hohavvr hohavcd hohavff hohavwm hohavwd hohavdw hohavmo hohavpc hohavtd hohavph hohavdv hohav95 hohav96 (-9 thru -1).
nmulticode /dichfrom = hohavtv /dichto = hohav96 /column = filter /weight = w7xwgt /psu = idahhw7 /strata = gor /sigtest = off /graph_selected = off /stratatest=off.
** Consumer durables owned by sex.
nmulticode /dichfrom = hohavtv /dichto = hohav96 /column = disex /weight = w7xwgt /psu = idahhw7 /strata = gor /sigtest = off /graph_all = off /graph_selected = off /stratatest=off.
** Consumer durables owned by age.
nmulticode /dichfrom = hohavtv /dichto = hohav96 /column = Age4groups /weight = w7xwgt /psu = idahhw7 /strata = gor /sigtest = off /graph_all = off /graph_selected = off /stratatest=off.
** Consumer durable deprivation.
count durable_deprived = hohavtv hohavvr hohavcd hohavff hohavwm hohavmo (0).
freq durable_deprived.
compute durable_deprived2 = -5.
if durable_deprived lt 2 durable_deprived2 = 0.
if durable_deprived = 2 durable_deprived2 = 1.
if durable_deprived gt 2 durable_deprived2 = 2.
freq durable_deprived2.
ntables /row = durable_deprived2 /column = disex /weight = w7xwgt /psu = idahhw7 /strata = gor /rowcat = 1 /graph = off /sigtest = off /stratatest = off /title = Consumer durable deprivation by sex.
ntables /row = durable_deprived2 /column = Age4groups /weight = w7xwgt /psu = idahhw7 /strata = gor /rowcat = 1 /graph = off /sigtest = off /stratatest = off /title = Consumer durable deprivation by age group.
```



E.g.2: NatCen has a number of basic Excel templates for charts, which I used throughout the report. Like the template on the left, just copy-pasting the statistics from SPSS output into the section at the top, and then applying the template to them will yield charts like the ones at the bottom. The ones in the 'findings' section were also modified based on these.

Figure 8: 50-59 and 60-69 year olds in work by type of work



Prescription Patterns on Dependency Forming Drugs

Aim: To find out the trends in prescription patterns in dependency-forming drugs at GP, local health centre and hospital level, thus guiding medical practices in institutions.

Dataset to be used: *Clinical Practice Research Datalink GOLD* (my task had no data access at that time)

Tasks:

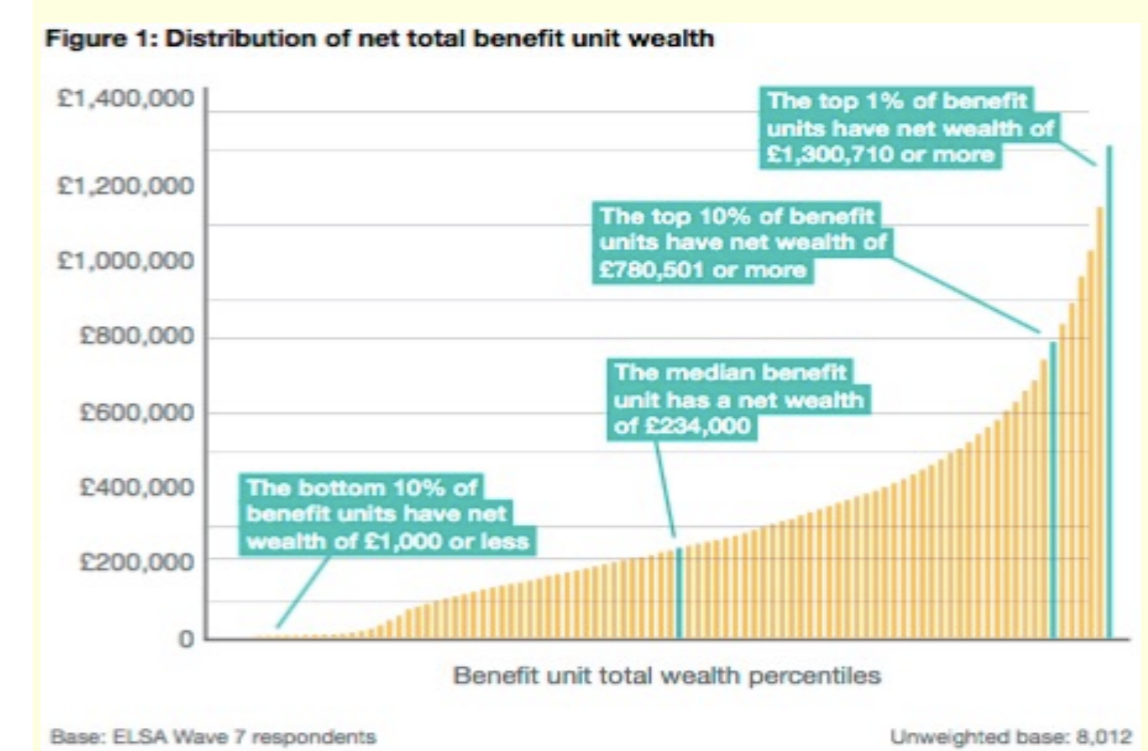
- Merged datasets by formulating a common variable in the three (patient-based dataset, GP-based dataset, practice-based dataset)
- Devised Stata syntax/commands for statistics and calculation results (without the actual data)

Work Experience in schools and colleges

Aim: Through large-scale survey (online and via telephone) to track the provision of work experience and other career programs in schools and colleges, seeking areas for improvement.

Task: Produced a daily report on data collection and sample using Excel - which involved descriptive statistics and simple tabulation.

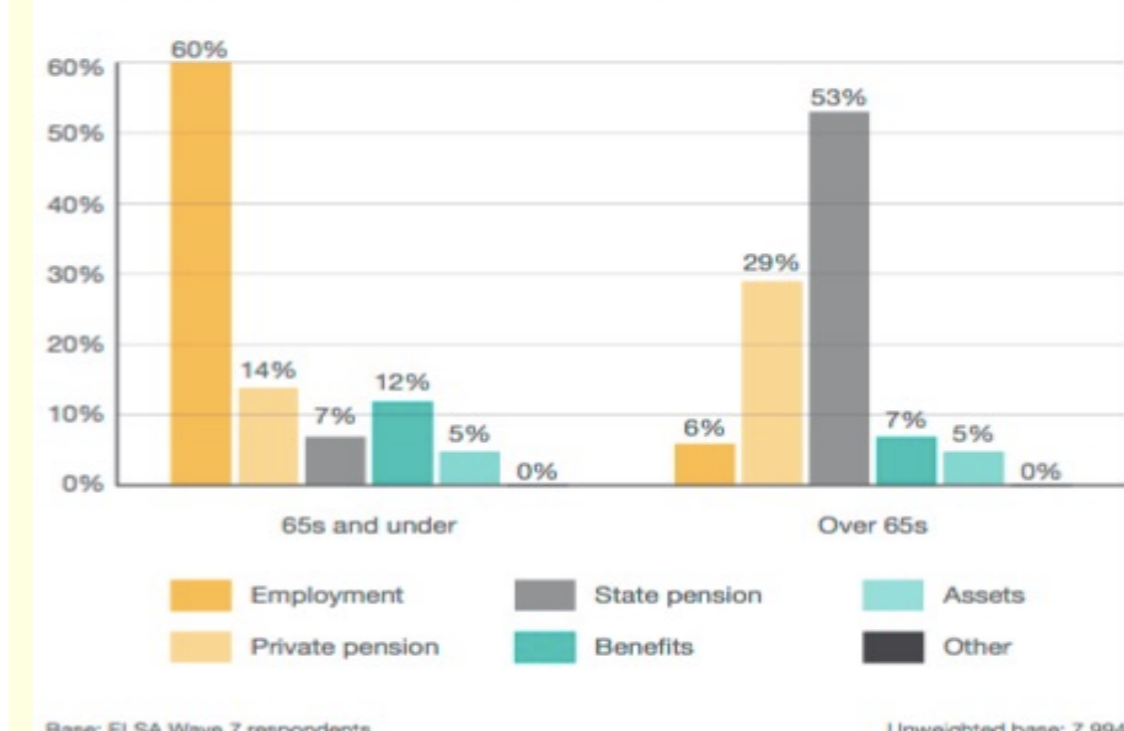
Findings and Ideas



The stacked column chart marks a clear distribution of wealth. However, the whole report was constrained by the measuring unit - Benefit Unit, thus unable to locate individuals accurately.

*A 'benefit unit' is a single adult, or a couple living as married, and dependent children

Figure 5: Income composition by whether under or over 65 years old



The clustered column chart not only shows the composition of benefits received by senior citizens in the study, but also presents a comparison between the 2 age groups. The results marks the clear distinction between employment status and pension, giving clear message on further effort needed in such divide.

However, the process of deciding age group divisions has been less careful through my task, which presumption might have played a big role.

The study on **Prescription Patterns** came across as challenging due to the difficulty in mimicking actual data through a fabricated dataset. However, the task of devising syntax without actual data was more helpful for my practicing **Stata commands** as it required more logical thinking in commands and more comprehension of the interview **questions/variables**.

And the project about **Work Experience** made me more familiar with the actual fieldwork stage. The daily report combined with the regular strategy meetings in the team taught me about the importance of **flexibility** as we had to change plans onsite to cope with technical problems with the survey online.