

Unit 9 activities

Guilherme Amorim

2024-10-16

Unit 9 - data activity

Using the Crime Survey for England and Wales, 2013-2014: Unrestricted Access Teaching Dataset, perform the following activities:

Create a crosstab to assess how individuals' experience of any crime in the previous 12 months bcsvictim vary by age group agegrp7. Create the crosstab with bcsvictim in the rows and agegrp7 in the columns, and produce row percentages, rounded to 2 decimal places. Looking at the crosstab you have produced, which age groups were the most likely, and least likely, to be victims of crime?

R

Initial setup and loading data

```
# initial setup

library(haven)
library(skimr)
library(tidyverse)

crime_data<-read_sav("C:/Users/guilhermep/Documents/PgDip/Coding/Module 2/pgdip_module2_practice/Dataset")
```

Crosstab

```
library(gmodels)

## Warning: package 'gmodels' was built under R version 4.3.2

CrossTable(crime_data$bcsvictim,
            crime_data$agegrp7,
            prop.c = F,
            prop.r = T,
            prop.t=F,
            prop.chisq = F,
            chisq = F,
            format="SPSS")
```

```
##
##      Cell Contents
## |-----|
## |              Count |
## |          Row Percent |
## |-----|
##
## Total Observations in Table:  8843
##
##               | crime_data$agegrp7
## crime_data$bcsvictim |      1 |      2 |      3 |      4 |      5 |      6 |
## -----|-----|-----|-----|-----|-----|-----|
##              0 |    523 |    1049 |    1194 |    1242 |    1226 |    1194 |
##              |    7.011% |   14.062% |   16.005% |   16.649% |   16.434% |   16.005% |
## -----|-----|-----|-----|-----|-----|-----|
##              1 |    162 |    310 |    248 |    273 |    202 |    121 |
##              |   11.714% |   22.415% |   17.932% |   19.740% |   14.606% |    8.749% |
## -----|-----|-----|-----|-----|-----|-----|
##          Column Total |    685 |    1359 |    1442 |    1515 |    1428 |    1315 |
## -----|-----|-----|-----|-----|-----|-----|
##
##
```

```
round(prop.table(table(crime_data$bcsvictim,
                       crime_data$agegrp7),1)*100,2)
```

```
##
##      1      2      3      4      5      6      7
##  0  7.01 14.06 16.01 16.65 16.43 16.01 13.83
##  1 11.71 22.42 17.93 19.74 14.61  8.75  4.84
```

```
attr(crime_data$agegrp7, "labels")
```

```
## 16-24 25-34 35-44 45-54 55-64 65-74 75+
##   1     2     3     4     5     6     7
```

From the contingency table and proportions produced, people in age group 2 (25-34) were the most likely and those in age group 7 (75+) the least likely to have been a victim of crime in the past year.

Python