Survey Analysis Workshop

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Block 2: Analysing one variable

2.2: Interval and ratio variables

2.2.1.1 [myclass] Frequencies for interval variables

[11 pages]

Exemplar: Pre-course survey of interests and experience.

Task: What is the age distribution of the sample and what is its average age? What

shape does the distribution have? Where are the cutting points to divide the

sample into three approximately equal groups?

Folder: myclass
File: myclass3.sav

Variables: age

SPSS: FREQUENCIES

2.2.1.2 [bsa86] Exercise - Reading in data for interval variables

[13 pages]

Exemplar: British Social Attitudes 1986 (facsimile questions)

Question: What is the distribution of the number of people in a household, including the

respondent? What is the average number of persons per household?

What is the age distribution of the sample and what is its average age? What shape does the distribution have? Where are the cutting points for the oldest

10% and 25% and the youngest 10% and 25%?

Tasks: Read in raw data for number of people in a household and age of the

respondent. Save contents of data editor in a *.sav file and of syntax editor in a

*.sps file.

Folder: mybsa86

File: bsa86.txt (raw data from the 1986 British Social Attitudes survey)

New files: mybsa86_3.sps

mybsa86_3.sav

SPSS commands¹ used:

TITLE DATA LIST EXECUTE LIST

General formats:

TITLE '<Any text>' .

DATA LIST FILE = '<location and name of external data file>'

RECORDS = <number of records per case>

/ <record> <varname(s)> <column(s)> · <varname(s)> <column(s)> ~ ~ ~

/ <record> <varname(s)> <column(s)> ~ ~ ~ .

EXECUTE. [Executes all pending operations.]

LIST /CASES <n>.

2.2.1.3 [bsa86] Extending your data dictionary

[10 pages]

Exemplar: British Social Attitudes 1986

File: mybsa86 3.sav

Task: Add missing values, variable labels and value labels for v1508 (Number of

persons in household) and v1512 (Age of respondent). Save contents of data

editor in a *.sav file and syntax editor in a *.sps file.

New files: <u>mybsa86_4.sps</u>

mybsa86_4.sav

Commands²: TITLE

MISSING VALUES VARIABLE LABELS

2.2.1.4 [bsa86] Exercise - Frequencies for interval variables

[3 pages]

Exemplar: British Social Attitudes 1986

Task: 1: What is the distribution of the number of people in a household, including

the respondent? What is the average number of persons per household?

2: What is the age distribution of the sample and what is its average age?

What shape does the distribution have? Where are the cutting points for the

oldest 10% and 25% and the youngest 10% and 25%?

File: <u>mybsa86_4.sav</u>

Commands: TITLE

FREQUENCIES

2.2.1.5 [bsa86] Specimen answer for frequencies exercise

[8 pages]

Exemplar: British Social Attitudes 1986

File: mybsa86 4.sps

Commands: TITLE

FREQUENCIES

² General format:

TITLE '<Any text you like>'.

<variable list> (<value list>)

where <value list> can be:

(i) up to three numeric or alphanumeric values enclosed in round brackets and separated by commas or blank spaces eg:

missing values age (0,98,99)

(ii) for numeric values only, a range of the form:

```
<value> THRU <value>
LOWEST THRU <value>
<value> THRU HIGHEST
```

. . . enclosed in round brackets, eg:

missing values age (0, 98 thru highest)

```
VARIABLE LABELS                                                                                                                                                                                                                                                                                                                                                  <pre
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~ ~ ~ ~

2.2.1.6 [bsa89] Homework exercises

[4 pages]

Exemplar: British Social Attitudes 1989

Questions: 1. What is the distribution of the number of people in a household, including

> the respondent? What is the average number of persons per household? 2. What is the age distribution of the sample and what is its average age? What shape does the distribution have? Where are the cutting points for the

oldest 10% and 25% and the youngest 10% and 25%?

3. How many men are there, and how many women?

Folder: mybsa89 bsa89.txt File:

2.2.1.7 [bsa89] Specimen answer for homework exercises

[10 pages]

Exemplar: British Social Attitudes 1989

Folder: mybsa89 Commands: title

data list

missing values var labels value labels execute.

New files: mybsa89_2.sps

mybsa89 2.sav

freq2.sps

[Brand new: bit more housekeeping]

2.2.1.8 [bsa89] Supplementary exercise - combining your saved files [6 pages]

Exemplar: British Social Attitudes, 1989

Task: Combine previously saved files into a single file: save the combined file as

mybsa89 3.sav

mybsa89 1.sav Files:

mybsa89 2.sav

Command: MATCH FILES [not used as GUI is quicker]

GUI menu: Data > Merge Files > Add Variables:

New files: mybsa89 3.sps

mybsa89 3.sav