

Block 2: Analysing one variable

2.3 Data transformations

2.3.1.5 Conditional frequencies homework exercises

[Draft only: 2 July 2013]

Previous sessions: [2.3.1.3 Conditional frequencies exercise](#)
[2.3.1.4 Specimen answers for exercise 2.3.1.3](#)

Exemplar: British Social Attitudes 1989

File: [e:weebly downloads\bsa89\bsa89.txt](#) [or download [bsa89.txt](#)]

Research question 1:

What is the distribution of respondents' personal gross income from paid work (Q.918b)? What shape does the distribution have? What is the distribution for women only? What is the distribution for men only? Are there any differences?

Research question 2:

What other variables might affect income regardless of gender? What effect do they have by themselves? What effect does gender have when these other variables are taken into account?

Procedure

Here is a facsimile of page 52 of the 1989 questionnaire: Q.918a asks for total gross income of the household from all sources, Q.918b for the respondent's own gross or total earnings from paid work.

- 52 -

		Col./ Code
ASK ALL CARD X8		
918a)	Which of the letters on this card represents the total income of your household from <u>all</u> sources <u>before</u> tax? Please just tell me the letter.	
NB: INCLUDES INCOME FROM BENEFITS, SAVINGS, ETC. ONE CODE IN COLUMN a)		
IF RESPONDENT IS IN PAID WORK (CODE 03 AT Q.22, p.7) ASK b). OTHERS GO TO Q.919		(a) House- hold <u>Income</u> 1725-26
b)	Which of the letters on this card represents your <u>own</u> gross or total <u>earnings</u> , <u>before</u> deduction of income tax and national insurance? ONE CODE IN COLUMN b)	(b) Own <u>Earn- ings</u> 1727-28
	X =	01
	P =	02
	Q =	03
	R =	04
	T =	05
	S =	06
	O =	07
	K =	08
	L =	09
	B =	10
	Z =	11
	M =	12
	F =	13
	J =	14

IF RESPONDENT IS IN PAID WORK (CODE 03 AT Q.22, p.7) ASK b). OTHERS GO TO Q.919

b) Which of the letters on this card represents your own gross or total earnings, before deduction of income tax and national insurance? **ONE CODE IN COLUMN b)**

(b)
<u>Own</u>
<u>Earn-</u>
<u>ings</u>
1727-28

A showcard (without the numeric codes) was used from which respondents indicated the letter next to their income group and the interviewer circled the numeric code in the right hand margin.

Code	Letter on card	1989 Income
01	X	Less than £2,000
02	P	£2,000 - £2,999
03	Q	£3,000 - £3,999
04	R	£4,000 - £4,999
05	T	£5,000 - £5,999
06	S	£6,000 - £6,999
07	O	£7,000 - £7,999
08	K	£8,000 - £9,999
09	L	£10,000 - £11,999
10	B	£12,000 - £14,999
11	Z	£15,000 - £17,999
12	M	£18,000 - £19,999
13	F	£20,000 - £22,999
14	J	£23,000 +

(b)
<u>Own</u>
<u>Earn-</u>
<u>ings</u>
1727-28

The letters represent the income groups on the showcard and the respondent's income group is entered as a 2-digit numeric code on record 17 columns 27 - 28 (**1727 - 28** in right margin). Missing value codes 98 and 99 are entered for D/K and N/A.

You have already read in respondent's sex, but it won't harm you to do it again. You can't see it on the facsimile question below, but it's on record 14.

901.	Now I'd like to ask for a few details about each person in your household. Starting with yourself, what was your <u>age</u> last birthday?										
	WORK DOWN COLUMNS OF GRID FOR EACH HOUSEHOLD MEMBER.										
		Resp- ondent	2	3	4	5	6	7	8	9	10
a)	Sex:	11	15	20	25	30	35	40	45	50	55
	Male	1	1	1	1	1	1	1	1	1	1
	Female	2	2	2	2	2	2	2	2	2	2
		12-13	16-17	21-22	26-27	31-32	36-37	41-42	46-47	51-52	56-57
b)	Age last birthday:										

- Task 1:** a) Read in raw data for Q.901a (Sex of respondent) and Q.918b (Gross income of respondent from paid work, if working).
- b) Produce initial frequency counts as a check on the data.
- Task 2:** a) Specify missing values, variable labels and value labels.
- b) Produce a frequency count for sex and a separate one for income (with barchart).
- Task 3:** Produce conditional frequency counts (with barcharts) of income group, first for men only, then for women only.
- Task 4:** Produce a contingency table of income group by sex (with correct percentages for comparing the incomes of men and women)

There are two separate specimen answers (one for tasks 1 and 2 and another for tasks 3 and 4) but try to do these yourself.

If you struggle even with the specimen answers, go over both tutorial 2.3.1.1 and specimen answer 2.3.1.4 again, and again. Practice makes perfect and you need to be able to open, write, execute and save files almost as second nature, otherwise you will always have problems with the mechanics and never get to grips with the logic and theory underpinning the analyses you will be doing later.

Forward to [2.3.1.6.1: Specimen answer for tasks 1 and 2](#)

Forward to [2.3.1.6.2: Specimen answer for tasks 3 and 4](#)

Research question 2:

What other variables might affect income regardless of gender? What effect do they have by themselves? What effect does gender have when these other variables are taken into account?

Think about it and write a few ideas down, then look for test variable candidates in file:

e:weebly downloads\bsa89\newbsa89.sav.

If you don't have the file, download [newbsa89.sav](#) from this site.

In Block 3 we will be investigating my own selection of possible candidates.

[\[Back to Block 2 menu\]](#)