

## Block 3: Analysing two variables (and sometimes three)

## Derived variables

## 3.5.2.1 COUNT and COMPUTE - Preliminary notes

[Screenshots: SPSS15; last modified: 24 August 2011; previous version: 24 September 2009]

**Exemplar:** Fifth form survey [fifthx.sav](#)

**Variables to be derived:** Attachment to status quo  
Negative attitudes to women ("Sexism")

**Source variables:** Q.34 (items o,p,q,r);  
Q.33 (negative items a,e,f,j,o: positive items d,h,m,n)

In the following exercises we are going to create derived variables containing scores on two simple attitude scales, one to measure teenagers' attachment to the status quo, the other to measure attitudes to women. We shall be using data from a survey of fifth-formers in a North London comprehensive school (11-18 mixed).

This survey was designed and conducted (under my guidance and supervision) by three 2<sup>nd</sup> year undergraduate students as part of their group research project<sup>1</sup> for BA Applied Social Studies (Social Research) at the then Polytechnic of North London (PNL, now part of London Metropolitan University). The self-completion questionnaire was administered during time-tabled Social Studies classes on a single day in December 1981. It was completed by all fifth form pupils (N=142) present on the day of the survey and, time permitting, was followed by discussion with class teachers and the PNL students of the issues covered.

The questionnaire aimed to discover something about pupils' future expectations and awareness of, and attitudes towards, various current social issues and problems. It replicates various items and scales from other work<sup>2</sup>. Don't let the date put you off. Resources, time and available technology permitting, this survey was conducted as far as possible to professional standards and in accordance with the Codes of Conduct of the Social Research Association, the British Sociological Association and the Market Research Society. It can serve as a learning aid, especially regarding questionnaire design and layout, computer processing and documentation.

You don't actually need it at the moment, but [Fifth form questionnaire](#) is a facsimile of the original questionnaire. Because the data were also to be used for teaching, a User Manual<sup>3</sup> was prepared which incidentally serves as a model for similar student projects. It contains a codebook with frequency counts for all variables, basic coding information and a facsimile of the original questionnaire. You can see it on [Playground to Politics: Users' Manual \(Hall & Walker 1982\)](#)

The data from the survey were initially punched on 80-column Hollerith cards. The questionnaire is laid out for data entry on 3 cards, but multi-punched responses were later spread out on an

<sup>1</sup> Paul Ahmed, Harriet Cain and Alan Cook **Playground to Politics: a study of values and attitudes among fifth formers in a North London comprehensive school** Report on 2<sup>nd</sup> year project for BA Applied Social Studies (Social Research) Polytechnic of North London, 1982.

<sup>2</sup> Wilson-Patterson, *Neo-conservatism*; Bradburn, *Affect Balance*; Himmelweit, *Attachment to status quo* etc., some of which were also used in the [St Paul's Girls' School Survey 1973](#) (see: [Questionnaire for St Paul's Girls' School survey 1973](#)) and the [SSRC Survey Unit Quality of Life Surveys](#)

<sup>3</sup> John Hall and Alison Walker, **User manual for Playground to Politics: a study of values and attitudes among fifth formers in a North London comprehensive school** Survey Research Unit, Polytechnic of North London 1982 (mimeo 40 pp – codebook, questionnaire, coding notes)

additional card to yield 4 cards (records) per case. The SPSS saved file [fifthx.sav](#) contains all the data with full dictionary information. **Positional<sup>4</sup> variable names** are used.

**Facsimile extracts from the questionnaire**

**Introduction** emphasising voluntary nature of survey and confidentiality.

<p>FIFTH-FORM VALUES AND ATTITUDES</p> <p>In this survey we are interested in what you read and watch, and in your opinions on various social issues and problems. The questionnaire is voluntary and your answers will be confidential.</p> <p>DO NOT PUT YOUR NAME ON THE QUESTIONNAIRE</p> <p>This is not a test, and there are no right or wrong answers. Just put your own opinions. If you do not know how to answer a question, or do not wish to, leave it blank. Indicate your answers by ticking the triangles (e.g. <input checked="" type="checkbox"/>) or by circling the numbers (e.g. 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3) as appropriate.</p> <p>If you don't understand a question, just ask for help.</p>	<p>Office use only Please do not write in this column</p> <hr/> <p>CARD 1 - Serial (1-3)</p> <p>(4) BLANK</p> <p>(5) <input type="text" value="1"/></p>
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**Attachment to status quo**

Four items in question Q.34 (items o,p,q,r) are replicated from a scale developed by the late Prof Hilde Himmelweit<sup>5</sup> to measure "attachment to status quo" among teenagers.

CARD 2

Q 34.	Do you agree or disagree with the following statements: (Ring the numbers)				
	Disagree Strongly	Tend to Disagree	Tend to Agree	Agree Strongly	
o) It is best to be like the others and not to stand out from the rest.	1	2	3	4	(75)
p) People who are content with what they have will have a better life than those who are always trying to improve their position.	1	2	3	4	(76)
q) We are all born to our various social positions and it won't do to change them.	1	2	3	4	(77)
r) The greatest source of happiness in life is to be satisfied with whatever you have.	1	2	3	4	(78)

From the questionnaire extract above we can see (in the right hand margin) that the data are to be entered, one column per response, in columns 75 to 78 on record 2. They have therefore been given **positional** variable names **v275 v276 v277 and v278**. These variables will be used to create an index of "attachment to status quo".

<sup>4</sup> See [1.3.1 Conventions for Naming Variables in SPSS](#) for an explanation of this variable naming convention and the reasons for preferring it over the use of mnemonics.

<sup>5</sup> Despite intensive searches, including asking Dave Phillips (one of her original research staff) I can find no trace of a reference in the literature, but the scale was definitely used in a study of teenagers and politics. Most likely source is her work on one of the early British birth cohort studies.

## Negative Attitudes to Women ("Sexism")

Question Q.33 is slightly more complex. It consists of 14 statements measuring opinions about women, some negative, some positive, with which pupils can agree or disagree on a 4-point scale. (Codes 1 to 4 on columns 48 to 61 of record 2, read into SPSS using positional variable naming convention as **v248 to v261**: SPSS automatically generates intermediate variable names)

Q.33. Here are some statements made about women, We would like to know if you agree or disagree with them. (Please put a ring round the number which indicates your answer).		Disagree Strongly	Disagree	Agree	Agree Strongly	
a)	Careers are fine for women but real fulfilment is a home and kids.	1	2	3	4	(48)
b)	Women should not expect men to pay for them when dating etc.	1	2	3	4	(49)
c)	Half of all top jobs should be reserved for women.	1	2	3	4	(50)
d)	It is a good thing that women can become airline pilots, plumbers etc.	1	2	3	4	(51)
e)	Women are too emotional.	1	2	3	4	(52)
f)	Women are not as ambitious as men.	1	2	3	4	(53)
g)	Women are as intelligent as men.	1	2	3	4	(54)
h)	Women do not need to be beautiful to be successful	1	2	3	4	(55)
j)	Husbands rather than wives should have the final voice in family matters.	1	2	3	4	(56)
k)	There is no difference in brain- power between men and women	1	2	3	4	(57)
l)	If women are paid as much as men they should pay for themselves when dating etc.	1	2	3	4	(58)
m)	Women should get equal pay for doing the same work as men.	1	2	3	4	(59)
n)	Beauty contests are degrading to women and should stop.	1	2	3	4	(60)
o)	Romantic love is dead	1	2	3	4	(61)

Nine of these items, five of which are negative (a,e,f,j,o) and four positive (d,h,m,n) will be used to construct an index of "Sexism".

**End of sesion**

**Next tutorial:** [3.5.2.2 Data checks 1 - Status quo](#)

**Feedback on ease of understanding and use of tutorial, please, to:** [johnfhall@orange.fr](mailto:johnfhall@orange.fr)