Survey Analysis Workshop

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Block 3: Analysing two variables (and sometimes three) Multiple response

3.3.3 Note on multiple response in 1986 British Social Attitudes survey

Previous tutorials: 3.3.1 Analysing multiple response with SPSS - an introduction 3.3.2a [SPSS 15] First exercise in multiple response

Exemplar: British Social Attitudes survey (1986 wave)

There are several questions in the 1986 survey which allow for multiple response and can legitimately have more than one answer. Some of these are open-ended questions for which up to three, up to five or even more (recorded verbatim) answers have been post-coded: others are pre-coded (with or without the use of showcards).

The latter fall into two groups: those in which all the possible responses have been allocated a different (numeric) value in the coding scheme, and those which have not. Also in the latter, each possible numeric code has been allocated a separate field in the data set (ie record and column(s)), whereas the former have simply been allocated a maximum number of fields into which any numeric code can be entered. Examples are:

1: More codes than fields:

Q70f Groups prejudiced against (open ended)

as very prejudiced against people of other races,	1	f)
or - not prejudiced at all?	3	0.7
Other answer (SPECIFY)	7	ו"
	(575-80)	SPA
IF 'VERY' OR ' A LITTLE' PREJUDICED	CARD 06	(6
f) Against any race in particular? PROBE FOR RACES AND RECORD.	(608-09)	
IF 'BLACK' OR 'COLOURED' MENTIONED, PROBE FOR WHETHER WEST		
IF 'BLACK' OR 'COLOURED' MENTIONED, PROBE FOR WHETHER WEST INDIAN, ASIAN, GENERAL, ETC. RECORD VERBATIM EVERYTHING		1
IF 'BLACK' OR 'COLOURED' MENTIONED, PROBE FOR WHETHER WEST INDIAN, ASIAN, GENERAL, ETC. RECORD VERBATIM EVERYTHING MENTIONED	(610-11)	
IF 'BLACK' OR 'COLOURED' MENTIONED, PROBE FOR WHETHER WEST INDIAN, ASIAN, GENERAL, ETC. RECORD VERBATIM EVERYTHING MENTIONED	(610-11)	
IF 'BLACK' OR 'COLOURED' MENTIONED, PROBE FOR WHETHER WEST INDIAN, ASIAN, GENERAL, ETC. RECORD VERBATIM EVERYTHING MENTIONED	(612-13)	

[Up to three replies post-coded 13 possible codes (01 - 10, 97 -99) 3 fields, cols 08-09, 10-11, 12-13 of record 6]

2) How would you describe yourself: \$751 ... READ OUT as very prejudiced against people of other races, 1 f) ONE CODE ONLY 2 a little prejudiced, 1 = b/K or - not prejudiced at all? 3 9. 1/4 0.71 7 Other answer (SPECIFY) RECOM IF POSSIBLE OTHERUISE FINAL WST WITH SALO (If 575 / OR 2) IF 'VERY' OR ' A LITTLE' PREJUDICED SPARE 576-001 CARD 06 (606-07 f) Against any race in particular? PROBE FOR RACES AND RECORD. 608-09) IF 'BLACK' OR 'COLOURED' MENTIONED, PROBE FOR WHETHER WEST INDIAN, ASIAN, GENERAL, ETC. RECORD VERBATIM EVERYTHING UP TO 3 ANSWERS MAY BE CODED . MENTIONED 09 - OTHER SPECIFIED RACE NATIONALITIES COUNTRIES 01 - ASIANS 10 - AGAINST ALL RACES (OTHER THEM WHITE) NO RACE 02 - BLACKS 612-13 IN PARTICULAR (INCLUDES NO) 03 - COLOUREDS 97 - OTHER ANSWER NOT FAMING INTO 01-10 OH - PAKISTANIS (FINAL WET WITH SAO) + 05 - INDIANS 98 - DONT' KNON OL . SIKHS 99. NA 01 - WEST INDIANS 08 - AFRICANS * FINAL LISTINGS OF ALL ANSWERS WHERE REASONS ONLY WERE RECORDE * ALSO LIST VERBATIM ANSWERS WHERE MORE THAN JUST RACE WAS MENTIONE WITH CODES USED)

[Extract from raw data: record 06]

10192 <mark>06</mark>	3323122111	1112211801501	007800	1111222	511	
10203 0603	8813112311	1332111100601	003120	322222	21212	5
10205 <mark>06010205</mark>	51113111111	2111113102001	010400	1111122	411 2	5

2: One field allocated per code:

Q53 Priorities for Government spending (precoded with showcard)

CARD H Here are some items of gover them, if any, would be your spending? And which next? whole list before deciding.	nment spending. Which of highest priority for <u>extra</u> Please read through the	lst Priority	2nd Priority
		(531-32)	(533-34)
ONE CODE ONLY IN EACH COL.	Education	01	01
	Defence	02	02
	Health	03	03
and the state of the state of the	Housing	04	04
and their start	Public transport	05	05
The second disease of the second second	Roads	06	06
C I FRI THE DE DESCRIPTION	Police and prisons	07	07
and the spinister of	Social security benefits	08	08
No. and the second second second	Help for industry	09	09
and a statistical density has	Overseas aid	10	10
The second se	(NONE OF THESE)	11	11
territe and the second of creating	(Don't know)	98	98

[Two replies only, 13 possible codes (01 to 11) two fields, cols 31-2 and 33-4 of record 5]

[Extract from raw data: record 05]

10192 <mark>05</mark> 203	2	443	0703 1322122222222	11311213	113220707	7111113
10203 05 203	2	443	0904 1411232222332	31811123	233220401	1111111
10205 <mark>05</mark>			0301 13121255111112	21221221	2113501	111111

AQ109a/BQ117b Educational qualifications obtained (precoded with showcard)

	ASK ALL CARD CC	(1565)	
117.a)	Have you passed any exams or got any of Yes the qualifications on this card? No, none	1 2	b) Q.118
	IF YES (CODE 1 AT a)		
1	b) Which ones? Any others? CSE Grades 2-5	01	(1566-71
	CODE ALL THAT APPLY CSE Grade 1 GCE '0' level GCE '0' level School certificate Scottish (SCE) Ordinary	02	(1568-9)
	GCE 'A' level/'S' level Higher certificate Matriculation Scottish (SCE) Higher	03	(1570-1)
	Overseas School Leaving Exam/Certificate	04	(1572-3)
	Recognised trade apprenticeship completed	05	(1574-5)
a second	RSA/other clerical, commercial qualification	06	(1576-7)
	City & Guilds Certificate - Craft/Intermediate/Ordinary/Part I	07	(1578-9)
	City & Guilds Certificate - Advanced/Final/Part II or Part III	08	(1608-9)
	City & Guilds Certificate - Full technological	09	(1610-11)
1 = 1	BEC/TEC General/Ordinary National Certificate (ONC) or Diploma (OND)	10	(1612-3)
1	BEC/TEC Higher/Higher National Certificate (HNC) or Diploma (HND)	11	(1614-5)
11	Teachers training qualification	12	(1616-7)
	Nursing qualification	13	(1618-9)
	Other technical or business qualification/certificate	14	(1620-1)
1	University or CNAA degree or diploma	15	(1622-3
1	Other (SPECIFY)	97	(1624-5)

[18 possible codes (01-15) each in fixed location,

one field per code (cols 66-67, 68-69 ... 78-79 of record 15 and 08-09,10-11, 22-23 of record 16) plus missing code 97,98 or 99 in cols 24-25 of record 16. Total of 16 fields, 32 cols]

[Extract from raw data: records 15 and 16]

.

10192 15 0312601163111362					222012	
10192 16	1	999021117998999	99999	933		07
10203 15 0142801 10203 16		999021117998999	99999	933	2 032	
10080 15 05123191371 1022 10080 16	1032 21 1 1	.02 045040805318302	0005101	1322	222021 0102 222222	05

BQ86a Action would take }

} to stop or change an unjust law (precoded with showcard)

BQ86b Action ever taken }

100	CARD P			Col./	Skip
86.a)	Suppose a law was being considered by Parliament which yo was really unjust and harmful. Which, if any, of the th card do you think you would do? Any others? RECORD IN BELOW, THEN ASK b). MORE THAN ONE CODE MAY BE RINGED	u tho ings COL	ught on this a)		
b)	And have you ever done any of the things on this card abo government action which you thought was unjust or harmful ones? Any others? <u>RECORD IN COL b) BELOW</u> . <u>MORE THAN</u> <u>MAY BE RINGED</u>	uta ?WI ONE	hich CODE		CARD 07 (706-7
		(a) Would do	a	(b) Ever done	
	Contact my MP	1	(671)	1	(708)
	Speak to influential person	2	(672)	2	(709)
	Contact a government department	3	16732	3	(710)
	Contact radio, TV or newspaper	4	(6742	4	(711)
	Sign a petition	5	(675)	5	(712)
-	Raise the issue in an organisation I already belong to	6	16762	6	(713)
-	Go on a protest or demonstration	7	(677)	7	(714)
	Form a group of like-minded people	1	(678)	1	(715)

[9 possible substantive replies, but only 7 codes! columns 71 to 79 of record 6 and columns 08 to 16 of record 7 codes 1 and 2 are repeated at cols 6/78-79 and 7/15-16 and **need changing** (**be careful** with codes 8 and 9 defined as missing!)]

a) 8 = DK, 9 = NA on 679 b) 8 = DK, 9 = NA on 716

[Extract from raw data: records 06 and 07]

10192 <mark>06</mark>	3323122111	11122118	01501	007800	1111222	511 2 1	
10192 <mark>071</mark>	3444444	123555 2	13213221222	3 526	5561654123333	33301040102	211
10203 <mark>06</mark> 03	8813112311	13321111	.00601	003120	322222	21212 5	5
10203 <mark>07</mark>	2 22222888	121776 2	11211212245	1 2363	3666634311113	11801070304	11
10205 <mark>06</mark> 0102	051113111111	21111131	.02001	010400	1111122	411 2 5	5
10205 <mark>07</mark>	5 11111833	124225 2	21112122222	2 236	6865653111222	12308010307	22

AQ117 (BQ125) Welfare benefits received (showcard)

	ASK ALL		
	CARD G G		
125.	Have you or anyone in this household been in receipt of any of the benefits on this card during the last five years?		
	IF YES: Which ones? Any others? Child benefit (family allowance)	1	(1739)
	CODE ALL THAT APPLY Maternity benefit or allowance	2	(1740)
	One parent benefit	3	(1741)
	Family Income Supplement	4	117421
	State retirement or widow's pension	5	(1743)
	Supplementary pension	6	(1744)
	Invalidity or disabled pension or benefit	1	(1745)
	Attendance/Invalid care/Mobility allowance	2	(1746)
	Sickness or injury benefit	3	(1747)
	Unemployment benefit	4	(1748)
	Supplementary benefit	5	(1749)
	Rate or rent rebate or allowance	6	(1750)
	Other benefit(s) volunteered (SPECIFY)	7	(1751)
	NO, NONE	0	(1752)

13 possible replies, but only 6 substantive codes allocated! 12 columns (39-50) of record 17 Code 7 for "other" in col 51 codes 1-6 repeated from col 45 to 50 and **need changing**

	ASK ALL		
	CARD G G		in the second
117	Have you or anyone in this household been in receipt of any of the benefits on this card during the last five years?		1 0 5 0 0
	IF YES: Which ones? Any others? Child benefit (family allowance)	1	(1739)
	CODE ALL THAT APPLY Maternity benefit or allowance	2	(1740)
	One parent benefit	3	(1741)
	Family Income Supplement	4	(1742)
	$\delta = b/\kappa$ or (or 1752 State retirement or widow's pension	5	(1743)
	9 = N/A on Cor 1752. Supplementary pension	6	(1744)
	N.G. If Benefit is Private Invalidity or disabled pension or benefit	1	(1745)
	e.g. frients forsion, Aumony, Attendance/Invalid care/Mobility allowance	2	(1746)
	Benafit e.g. MILK TOKENS DELETE Sickness or injury benefit	3	(1747)
	Copies - IF All castary (a copie Unemployment benefit	4	(17+4)
	Supplementary benefit	5	(1749)
	Housing banking Rate or rent rebate or allowance	6	(1750)
	Other benefit(s) volunteered (SPECIFY) ALCONE IF fossible OTHERLISE	7	(1751)
	FINAL LIST WITH S.No.		-
	* NEW CODE 1752/1 = GRADUATED, SUPERANNUATION WHERE NOT NO, NONE	0	(1752)

[Extract from raw data: record 17]

10192 17 003010501213601	00051025198981		3	98	2111310551870030586131
1020317	03031	5		03	1111290601870300486231
10205 17 136010808323408	01981015102021		4	03	1111310501870300486111

3: Binary variables (dichotomous)

Sets of questions with only two response categories (Yes, No) can be analysed as a block by treating them as multiple response questions. Indeed, any variable can be dichotomised and thus treated. An example in this data set is:

AQ112c/BQ120c Actions as Trade Union member (Yes, No - precoded)

	ASK ALL	Col./ Code	Skip to
120.a)	Are you now a member of a trade	(1657)	
	union or staff association? Yes: trade union Yes: staff association	$\begin{pmatrix} 1\\2 \end{pmatrix}$	c)
	IF NO AT a) No	3 (1658)	b)
	b) Have you ever been a member of a Yes: trade union trade union or staff association? Yes: staff association	$1 \\ 2$	c)
6	IF NOW OR EVER A MEMBER (CODES 1 OR 2 AT a OR b)	3	Q.121
	C) Have you ever READ OUT (RING ONE CODE FOR EACH) YES	NO	0": : : : : 0
	attended a union or staff association meeting?	2	f1659
12-1	voted in a union or staff association election or meeting?	2	(1660
-4	put forward a proposal or motion at a union or staff association meeting? 1	2	(1661
1	gone on strike? 1	2	11662
	stood in a picket line?	2	(1663
	served as a lay representative such as a shop steward or branch committee member? 1	2	(1664

cols 59-64 of record 16 (codes 1, 2)

	ASK ALL							1.
a)	Are you <u>now</u> a member of a trade union or staff association?	ONE CORE O BEDIK GENIA	Yes:	Yes: staff	trade u	nion	(1657) 1 2	c
	IF NO AT a) (If 1653 3)					No	3	ы
	b) Have you ever been a member of a own core owny Yes: trade union trade union or staff association? Sable. Yes: staff association						$\left \begin{array}{c}1\\2\end{array}\right $	c)
	IF NOW OR EVER A MEMBER (CODES 1	9 14 OR 2 AT a OI	R b) If	1657/1	1 00	No	3	Q. 11
	c) Have you ever READ OUT (RING ONE CODE FOR EACH) YES							Lel.
	attended a union or staff association meeting? 1							(165
	voted in a union or staff association election or meeting? 1							(166)
	۰۰. put forward a proposal or motion at a union or staff کتال مع قامی (میران) association meeting? 1							(166
	9= 414 " "	States and	go	ne on st	rike?	1	2	(165
		stoc	d in a	picket	line?	1	2	(166
	served as a lay represent:	ative such a	is a sh	op stewa	rd or			

[Extract from raw data: record 16]

10192 <mark>16</mark>	1	999021117998999	99999 933	07
10203 16		999021117998999	99999 933	
10205 16	9721	063010807327408	001010131 112112	103

Next: 3.3.4 Analysing multiple response in the 1986 British Social Attitudes survey