

British Social Attitudes 2009 to 2014: Missing values

(Draft only: John F Hall 5 April 2016)

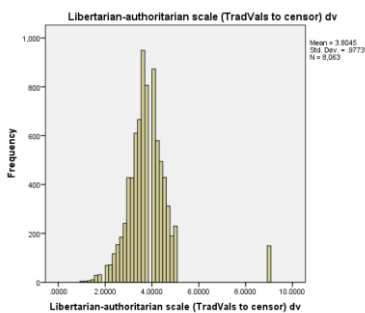
Missing (negative) values have been declared for most variables as **Lo thru -1**, but the original positive values have not been changed to match. This causes serious errors in statistical calculations such as summated scales derived from several items.

For instance:

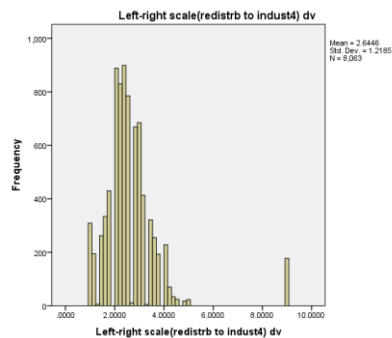
```
freq libauth leftright welfare2 /for not /his.
```

. . to get:

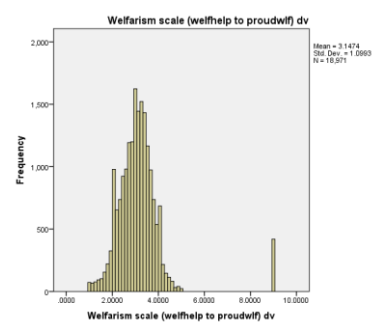
[libauth]



[leftright]



[welfare2]



Something clearly not right here. Check value range of source items:

```
desc welfhelp to censor /sta min max.
```

	N	Min	Max
WelfHelp The welfare state encourages people to stop helping each other? B2.42a	14666	1	9
MoreWelf Govt should spend more money on welfare benefits for the poor? B2.42b	14666	1	9
UnempJob Most unemployed could find a job if they really wanted one? B2.42c	14666	1	9
SocHelp Many people who get social security don't really deserve any help? B2.42d	14666	1	9
DoleFidl Most people on the dole are fiddling in one way or another? B2.42e	14666	1	9
WelfFeet If welfare benefits weren't so generous, people would learn to stand on own feet? B2.42f	14666	1	9
DamLives Cutting welfare benefits would damage too many people's lives? B2.42g	14666	1	9
ProudWif The creation of the welfare state is one of GB's proudest achievements? B2.42h	14666	1	9
Redistrib Government should redistribute income? A2.65aB2.43aC2.35a	16641	1	9
BigBusnN Big business benefits owners at workers' expense? A2.65bB2.43bC2.35b	16641	1	9
Wealth 'Working people not get fair share nation's wealth? A2.65cB2.43cC2.35c	16641	1	9
RichLaw One law for rich and one for poor? A2.65dB2.43dC2.35d	16641	1	9
Indust4 Boss get better of employees if gets the chance? A2.65eB2.43eC2.35e	16641	1	9
PubOwnSt Major public services and industries ought to be in state ownership? C2.35f	1017	1	9
TradVals Young people not enough respect for GB values? A2.66aB2.44aC2.36a	16641	1	9
StifSent Criminals given stiffer sentences? A2.66bB2.44bC2.36b	16641	1	9
DeathApp Some death penalty is the most appropriate sentence? A2.66cB2.44cC2.36c	16641	1	9
Obey Schools should teach children to obey authority? A2.66dB2.44dC2.36d	16641	1	9
WrongLaw Always obey law, even if particular law is wrong? A2.66eB2.44eC2.36e	16641	1	9
Censor Censorship films+mag is necessary to uphold morals A2.66fB2.44fC2.36f	16641	1	9
Valid N (listwise)	0		

Looks like value **9** has not been declared as missing in the source variables. In this case a range of missing values **Lo** → **-1** has been declared for the scales and for the source variables, but the source variables still carry their original data values as entered.

Need to decide whether to recode **9** to **-9** and declare missing as **Lo** → **-1**, but this will need to be consistent for all variables. Could change specification of missing values for all variables to include **-999** → **-1** and **-99** → **-1**?

The value labels for:

[censor] source item

[leftright] derived scale



Values **8** and **9** need to be changed to **-8** and **-9**.

[Censor] *Censorship of films and magazines is necessary to uphold moral standards: [S-C]ABC*

Before recoding:

		N
Valid	1 Agree strongly	3002
	2 Agree	7437
	3 Neither agree nor disagree	3353
	4 Disagree	1893
	5 Disagree strongly	631
	9 Not answered (9)	325
Total	16641	
Missing	-1 skip, didn't return SC questionnaire	2758
	Total	19399

After recoding

		N
Valid	1 Agree strongly	3002
	2 Agree	7437
	3 Neither agree nor disagree	3353
	4 Disagree	1893
	5 Disagree strongly	631
	Total	16316
Missing -9	-1 skip, didn't return SC questionnaire	2758
	Total	3083
Total	19399	

[Leftright] *Left-right scale (redistrb to indust4) dv*

(NB: tables below have been cropped: too many f6.4 values to be tabulated)

Before recoding

		N
Valid	1.0 Left	538
	~~~~~	~~~
	5.0000 right	59
	<b>9.0000 Missing values</b>	<b>349</b>
Total	<b>16641</b>	
Missing	-1.0000 No self-completion	2256
	System	502
	Total	2758
Total	19399	

After recoding

		N
Valid	1.0 left	538
	~~~~~	~~~
	5.0000 right	59
	Total	16292
Missing -9.0000	-1.0000 No self-completion	2256
	System	502
	Total	3107
Total	19399	

Rating scales

My preferred solution for **Agree** \longleftrightarrow **Disagree** and similar rating items is to change all codes **8** (*Can't choose*) to **-8** and all codes **9** (*Not answered*) to **-9** and then recalculate any derived variables. Missing values for both source and derived variables can then be declared as **Lo** \rightarrow **-1**.

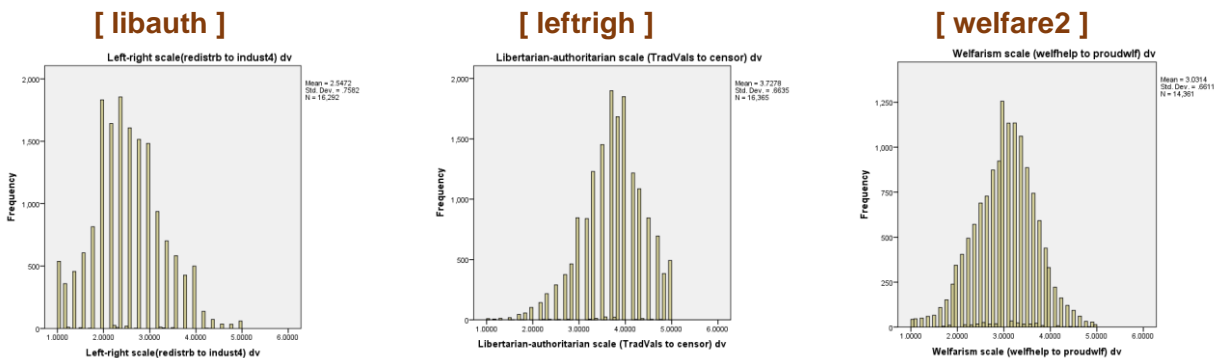
```

recode gmlmarry to welfare2 (8=-8)(9=-9).
missing values gmlmarry to welfare2 (lo thru -1).
descriptives censor leftright /sta mea min max.
    
```

Descriptive Statistics

	N	Minimum	Maximum	Mean
censor Censorship of films and magazines is necessary to uphold moral standards: [S-C]ABC	16316	1	5	2.37
leftright Left-right scale(redistrb to indust4) dv	16292	1.0000	5.0000	2.547231
Valid N (listwise)	16238			

Derived scales now show correct values in range 1 to 5:



Household variables

Note that for some variables **0** (*No further person in household*) is effectively also a missing value.

14	Househd	Nominal	Number living in household, i...	{-1, Not ...	LO - -1
15	P2Sex	Nominal	Person 2 SEX	{-1, Not ...	LO - -1
16	P2Age	Scale	Person 2 age last birthday	{-1, No f...	LO - -1

Values for [p2sex]

The Value Labels dialog box for variable P2SEX shows the following mappings:

- 1 = "Not applicable"
- 0 = "No further person in HH"
- 1 = "Male"
- 2 = "Female"
- 8 = "Don't know"
- 9 = "Refused"

In this and many other instances, values **0**, **8** and **9** should be treated as missing.

For household composition variables, value **0** (*No further person in HH*) needs to be declared as missing, as well as values **8** and **98** (*Don't know*) and **9** and **99** (*Refusal*).

In SPSS, missing values are limited to three discrete values, but many variables have more than three. However, by recoding values **8** and **98** (*Don't know*) to **-8** and **-98**, and values **9** and **99** (*Refusal*) to **-9** and **-99** missing values for these variables can then be declared as a range **Lo → 0**, which only counts as two, leaving one spare discrete missing value.

All the household variables can be recoded as follows:

```
freq p2sex.
recode rsex to p15rel (8 = -8)(98=-98)(9=-9)(99=-99).
missing values rsex to p15rel (lo thru 0).
freq p2sex.
desc rage /sta min max.
```

[p2sex] before recoding:

	N
Valid 0 No further person in HH	5712
1 Male	6976
2 Female	6704
9 Refused	7
Total	19399

[p2sex] after recoding:

	N
Valid 1 Male	6976
2 Female	6704
Total	13680
Missing -9	7
0 No further person in HH	5712
Total	5719
Total	19399

[p2rel] before recoding:

	N
Valid 0 No further person in HH	5712
1 Partner/spouse/cohabitee	10321
2 Son/daughter (inc step/adopted)	1930
3 Parent/ parent-in-law	896
4 Other relative	236
5 Other non-relative	294
8 Don't know	3
9 Refusal	7
Total	19399

[p2rel] after recoding:

	N
Valid 1 Partner/spouse/cohabitee	10321
2 Son/daughter (inc step/adopted)	1930
3 Parent/ parent-in-law	896
4 Other relative	236
5 Other non-relative	294
Total	13677
Missing -9	7
-8	3
0 No further person in HH	5712
Total	5722
Total	19399

Still need value labels for **-9** and **-8**

[rage] after recoding:

Descriptive Statistics

	N	Min	Max
Rage Person 1 age last birthday	19367	17	97
Valid N (listwise)	19367		

Need to check if **97** is a genuine age or a code for "97 or older"

As well as **98** "Don't know" and **99** "Refused" a number of variables have large numbers of cases with values such as **95** "Depends" **96** "Other" **97** "None of these".

151	CPvWhyM	Nominal	Which do you think is the main reason why children are in poverty in Britain?
-----	---------	---------	---

15 = "Because of inequalities in society"
96 = "Other (PLEASE WRITE IN)"
97 = "None of these"
98 = "Don't know"
99 = "Refused"

These need to be dealt with or clearly signposted:

151 CPvWhyM
157 WHNREL
158 WHOREL

Variables for option choices from a card (eg 166 [**PrvHspP3**]) can be treated like rating scales.

Some **Agree** ↔ **Disagree** variables are measured on a 0-10 scale, not 1-5.

EUKNOW2 Edit only codes 5,6

