

# British Social Attitudes survey, 2017, Environment and Politics: Open access teaching dataset

### Instructor notes

This short guide is designed to help those planning teaching and other learning activities using the <a href="British Social Attitudes Survey">British Social Attitudes Survey</a>, 2017, Environment and Politics:

Open Access Teaching Dataset. It discusses the contents of the dataset and ways it could be used for teaching quantitative research methods.

The questions on the environment were only asked in a quarter of the interviews but they are still representative of the population.

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# Research topics in the dataset

The dataset contains variables covering attitudes to the environment and political views, together with demographic characteristics of the survey respondents. Example questions and topics to explore with the data include:

- What factors are associated with behaviours and attitudes towards the environment?
- What factors are associated with different political perspectives?
- Whether political perspectives impact behaviours and attitudes towards the environment.

## Interval / continuous variables

The interval / continuous variables in the dataset are:

- Left-right attitudes (*leftrigh*)
- Liberal-authoritarian values (libauth)

Interval / continuous variables can also be generated from the questions on attitudes and behaviours to climate change (see below for further details). The variables can be seen in the documentation here.

Ideas for teaching key quantitative methods topics
Associations between categorical variables (chi², Phi and Cramer's V)
There are potentially associations between categorical variables in the dataset.
Appendix I shows those that are statistically significant and that might be interesting to explore. There are associations between demographic variables such as age and education, which means there is potential for confounding if one or more are omitted, for example differences by education vary when age is also considered.

#### Comparing means

You can test for differences in left-right and liberal-authoritarian attitudes between variables by comparing the means for each category. To see if the results are statistically significant, you would need to use an individual samples t-test for variables with 2 categories or a one-way ANOVA for those with more than two categories.



Dimension reduction using theoretical approach or factor analysis

Interval / continuous variables can be generated from the questions on attitudes and behaviours to climate change using either a theoretical process or factor analysis.

- Students can discuss which questions go together, whether some are more important than others and develop one or more indexes from them.
- Factor analysis in SPSS identifies two factors. One factor loosely relates to
  individual actions such as reducing car use and the other factor is about taxes and
  charges aimed at protecting the environment. The first factor explains 35% of the
  variance and the second 18%.

#### Correlation

The correlation between interval / continuous variables (liberal-authoritarian, left-right, attitudes to climate change) could be tested and illustrated with a scatter plot.

#### Model building

In addition to analysis techniques, the dataset is well-suited for teaching thoughtful and considered model building. With the variety of the variables in the dataset, students can practice applying theoretical skills to build varied models based on literature.

The factors associated with left-right, liberal-authoritarian or climate change could be used to develop a linear regression based on the individual and household characteristics of the respondents. For example, we might expect age, social class, income and having children to influence attitudes towards climate change. Left-right and liberal-authoritarian attitudes may also have an effect.

#### Weights

The weighting variable is the 'WtFactor' variable. This variable is the overall weight for the total sample (including the boost samples of younger people).



# Appendix I = significant associations between categorical variables

The four tables show the statistically significant associations between demographic, environmental and political variables held in the dataset.

Table 1 – statistically significant associations between demographic factors

	Demographic factors							
Variable	Sex	Age	Married	Children	Education	Social class		
Sex			✓	✓		✓		
Age			✓	✓	✓	✓		
Married	✓	✓		✓		✓		
Children	✓	✓	✓		✓			
Education		✓		✓		✓		
Social class	✓	✓	✓		✓			

Table 2 – statistically significant associations between demographic factors and attitudes to the environment

Variable	Environmental factors									
	Climate change	Car usage						Plane usage		
	Belief	Allowed	Reduced	No point if others don't	Higher tax	Incentives to reduce emissions	Allowed	Higher prices		
Sex					✓	✓				
Age	✓			✓						
Married				✓						
Children				✓						
Education	✓	✓		✓	✓	✓	✓	✓		
Social class	✓	✓	✓		✓	✓		✓		



Table 3 – statistically significant associations between demographic factors and political attitudes and behaviours

	Demographic factors								
Variable	Interest in politics	Voted in last election	Active in charities	Active in politics	People like me have no say	Party ID			
Sex	✓					✓			
Age	✓		✓	✓		✓			
Married	✓		✓			✓			
Children	✓		✓			✓			
Education	✓	✓	✓	✓	✓	✓			
Social class	✓	✓	✓		✓	✓			

Table 4 – statistically significant associations between political and environmental attitudes and behaviour  $^1$ 

	Environmental factors								
	Climate change	Car usage					Plane usage		
Variable	Belief	Allowed Reduced	Reduced	No point if others don't	Higher tax	Incentives to reduce emissions	Allowed	Higher prices	
Interest in politics	✓		✓	✓	✓	✓	✓	<b>√</b>	
Voted in last election	✓								
Active in charities	<b>✓</b>								
Active in politics	✓								
People like me have no say	<b>√</b>								
Party ID	✓		✓	✓	<b>✓</b>	✓		<b>✓</b>	



**Note 1:** There were no responses for questions on car and plane usage in the questions on whether people voted in the last election, were active in charities or politics or whether people like me have no say