Attitudes to poverty

Findings from the British Social Attitudes survey

Alison Park, Miranda Phillips and Chloe Robinson

An examination of public attitudes to poverty, based on data from the British Social Attitudes survey series.

This research examines the public's views about poverty: its meaning, prevalence and causes. It describes the British Social Attitudes survey questions, and presents the most recent findings, from 2003.

Cluster analysis is used to identify two groups with distinctive views about poverty, based on their beliefs about poverty's meaning, prevalence and cause. Regression analysis is then used to explore and better understand the socio-demographic profiles of these two groups.

This report will be of interest to all those concerned with public perceptions of, and attitudes towards, poverty and inequality.

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1 Introduction

The British Social Attitudes survey has included a short series of questions about poverty since the mid-1980s. This summary report begins by describing these questions and presenting the findings obtained when they were last asked in 2003. It then presents the results of cluster analysis, a technique used to help summarise the 2003 findings. Finally, we examine the socio-demographic characteristics of those with particularly distinctive views about poverty.

2 Attitudes to poverty

The first part of this chapter examines the different questions about poverty that were included in the 2003 British Social Attitudes survey. These fall into three broad categories:

1   the meaning of poverty

2   its prevalence

3   its causes.

We then turn to present views on three related topics that are helpful in our understanding of people's views on poverty.

The meaning of poverty

We start by focusing on three questions designed to shed light on the extent to which people have a relatively narrow or broad view as to what poverty actually means. To assess this, we asked respondents to say whether they thought someone in each of the three following circumstances was in poverty or not (the possible answer options being 'yes' or 'no'):

> Would you say that someone in Britain was in poverty if they had enough to buy the things they really needed, but not enough to buy the things most people take for granted?
>
> Would you say that someone in Britain was in poverty if they had enough to eat and live, but not enough to buy other things they needed?
>
> Would you say that someone in Britain was in poverty if they had not got enough to eat and live without getting into debt?

Table 1 illustrates that responses to these questions show a steep upward gradient from the first scenario (which, of the three, presents the broadest definition of what constitutes poverty) to the third (which presents the narrowest). Thus, while one in five (19 per cent) take the view that the first of these scenarios constitutes poverty, nearly half (47 per cent) do so in relation to the second scenario. Nine in ten (90 per cent) think that the third description constitutes poverty.

Table 1 Attitudes to poverty

	%	*n*
Definitions of poverty		
Per cent who think that a person in poverty if have enough to buy the things they really need, but not enough to buy the things most people take for granted	19	
Per cent who think that a person in poverty if have enough to eat and live, but not enough to buy other things they need	47	
Per cent who think that a person in poverty if not got enough to eat and live without getting into debt	90	
Base for each definition of poverty variable		3,272
Prevalence of poverty in Britain today		
Very little	41	
Quite a lot	55	
Base		3,272
Poverty in Britain over last ten years		
Increasing	35	
Decreasing	19	
Staying at same level	39	
Base		3,272
Poverty in Britain over next ten years		
Increase	46	
Decrease	13	
Stay at same level	33	
Base		3,272
Why do people live in need?		
Unlucky	13	
Laziness or lack of will power	28	
Social injustice	19	
Inevitable part of modern life	32	
Base		3,272
Government should redistribute income from the better off to the less well off		
Agree	42	
Neither agree nor disagree	24	
Disagree	32	
Base		3,621
Ordinary working people do not get their fair share of the nation's wealth		
Agree	61	
Neither agree nor disagree	23	
Disagree	13	
Base		3,621
Level of benefits for unemployed people		
Too low and cause hardship	34	
Too high and discourage them from finding jobs	40	
Base		3,272

The prevalence of poverty

We have seen that the majority of people take the view that someone who cannot 'eat and live without getting into debt' is living in poverty. But how prevalent is poverty seen to be in contemporary Britain? To assess this, we asked respondents three questions: one assessing the current picture in Britain, and two focusing on perceived and anticipated change over time:

> Some people say there is very little *real* poverty in Britain today. Others say there is quite a lot. Which comes closest to your view … that there is very little real poverty in Britain, or that there is quite a lot?

> Over the last ten years do you think that poverty in Britain has been increasing, decreasing or staying at about the same level?

> And over the next ten years, do you think that poverty in Britain will increase, decrease or stay at about the same level?

Just over half (55 per cent) take the view that there is 'quite a lot' of poverty in Britain today with 41 per cent thinking that there is very little. Just over a third (35 per cent) think that poverty levels have increased over the last ten years (19 per cent think they have decreased and 39 per cent that they have remained static). Just under a half (46 per cent) think that poverty *will* increase over the next ten years (13 per cent think it will decrease and 33 per cent that it will remain static).

The causes of poverty

Clearly, there are a variety of explanations as to why people might live in poverty, with a broad distinction being made between those that stress social forces that are beyond an individual's own control and those that emphasise a person's own actions. In order to assess people's views on this issue, we asked the following:

> Why do you think there are people who live in need? Of the four views on this card, which one comes closest to your own?

- Because they have been unlucky.

- Because of laziness or lack of will power.

- Because of injustice in our society.

- It's an inevitable part of modern life.

The two most common views as to why people live in need are that it is just an inevitable part of modern life (32 per cent of respondents), or that it reflects laziness or lack of will power on the part of those affected (28 per cent). Nearly one in five (19 per cent) think that this situation reflects social injustice, while 13 per cent take the view that those affected are just 'unlucky'. Overall, therefore, half (51 per cent) choose what we might call a 'social' explanation (here we include both those who see social injustice as the root cause as well as those who see it as being an inevitable part of modern life).

Inequality

How do people's views about poverty relate to the wider issue of inequality in general and the redistribution of wealth from richer to poorer groups? To assess this we asked:

Government should redistribute income from the better off to those who are less well off (agree/neither/disagree).

Ordinary working people do not get their fair share of the nation's wealth (agree/neither/disagree).

We also asked the following questions to gauge views about unemployment benefits – one mechanism by which government can redistribute income to poorer groups:

Opinions differ about the level of benefits for unemployed people. Which of these two statements comes closest to your own view:

- benefits for unemployed people are *too low* and cause hardship

- benefits for unemployed people are *too high* and discourage them from finding jobs?

Overall, opinion is fairly balanced when it comes to views about redistribution. Around four in ten (42 per cent) agree that government should redistribute income from the better off to those who are less well off, while three in ten (32 per cent)

disagree. However, the view that 'ordinary working people do not get their fair share of the nation's wealth' is commonly held (61 per cent agree, while just 13 per cent disagree).[1]

Opinion is divided as to whether unemployment benefit levels are too high or too low, with 34 per cent thinking they are too low and 'cause hardship', while 40 per cent take the view that they are 'too high' and discourage job-seeking.

3 Summarising attitudes to poverty

In order to examine how attitudes towards poverty vary from one group to the next, we used cluster analysis. This technique allows us to examine whether people's responses to the questions considered in Chapter 2 are related to one another. Do, for instance, people with particular views about the meaning of poverty also tend to have distinctive views about its prevalence or cause? Do those who stress the importance of social injustice think poverty is more or less prevalent than those who see poverty as a reflection of a person's own failings? How do views about poverty correspond to views about inequality more generally?

Cluster analysis based on people's responses to the questions considered in Chapter 2 allowed us to divide the population into different groups (or clusters), each with a unique view about poverty.[1] Further details about this analysis can be found in the Appendix to this report. We identified two particular clusters of interest, each accounting for around half of all respondents. Their views are shown in Table 2 and their main defining characteristics are summarised below.

■ Our first group comprises those with the most *liberal* approach to poverty. This group tends to emphasise social factors as explaining why people live in need, with 34 per cent seeing it as a reflection of social injustice and only 13 per cent attributing it to laziness or lack of will power. The overwhelming majority, nine in ten, think that there is quite a lot of poverty in Britain. Of the two groups we identified, this group are the most likely to have a broad definition of poverty, with one-third (33 per cent) thinking that a person is in poverty if they have enough to buy what they really need, but not enough to buy the things that others take for granted. Nearly three-quarters agree with the more restrictive definition of poverty that we offered, that a person is in poverty if they have enough to eat and live, but not enough to buy other things they need. The vast majority also agree with our most narrow definition and think that a person is in poverty if they cannot eat and live without getting into debt. Around half of the liberal group (51 per cent) think that the Government should redistribute income from the better off to the less well off, while just a quarter (26 per cent) disagree. Members of our liberal group are also more likely to feel that unemployment benefit levels are too low than to say they are too high (55 and 30 per cent respectively). Most of those in this group (70 per cent) agree that ordinary working people do not get their fair share of the nation's wealth, whereas only 8 per cent disagree.

■ The second group comprises those with the most *sceptical* view of poverty. They are most likely to see laziness or lack of will power as underpinning why people live in need, 44 per cent doing so, and are the least likely to see social injustice

as being its cause. The majority of this group (77 per cent) take the view that there is very little poverty in modern Britain. They also tend to take a fairly narrow view of what poverty is, with only 6 per cent agreeing with the broadest of our definitions of poverty. That said, over a fifth (22 per cent) would say someone was in poverty if they had enough to eat and live, but not enough to buy other things they need, while 90 per cent agree that someone is in poverty if they cannot eat and live without getting into debt (our most restrictive definition of poverty). Four in ten people in this group (42 per cent) disagree that the Government should redistribute income from the better off to those less well off and a third (33 per cent) agree – though just 5 per cent 'agree strongly'. There is a clear view, held by 58 per cent, that unemployment benefit levels are too high; just 17 per cent of the sceptics feel they are too low.

Table 2 Different views of poverty

	Liberals	Sceptics
Per cent of overall population	51	49
Why do people live in need (%)?		
Unlucky	13	12
Laziness or lack of will power	13	44
Social injustice	34	8
Inevitable part of modern life	35	32
Prevalence of poverty in Britain today (%)		
Very little	9	77
Quite a lot	91	23
Definitions of poverty		
Per cent who think that a person in poverty if enough to buy things really need, but not enough to buy things most take for granted	33	6
Per cent who think that a person in poverty if have enough to eat and live, but not enough to buy other things they need	74	22
Per cent who think that a person in poverty if not got enough to eat and live without getting into debt	94	90
Government should redistribute income from the better off to the less well off (%)		
Agree	51	33
Neither agree nor disagree	23	26
Disagree	26	42
Level of benefits for unemployed people (%)		
Too low and cause hardship	55	17
Too high and discourage them from finding jobs	30	58
Ordinary working people do not get their fair share of the nation's wealth (%)		
Agree	70	54
Neither agree nor disagree	22	26
Disagree	8	19
Base (n)	1,047	1,030

4 Who thinks what?

We turn now to explore the extent to which different groups fall into each of our clusters. Table 3 shows the proportion of a variety of different groups who can be classified as liberals or sceptics.

Table 3 Clusters by socio-demographic characteristics

	Liberals (%)	Sceptics (%)	Base (*n*)
Per cent of overall population	51	49	2,077
Age			
18–34	56	44	514
35–54	53	47	788
55+	44	56	775
Ethnic group			
Black	62	38	42
Asian	32	68	54
White	51	49	1,956
Region			
North East	53	47	112
North West	49	51	195
Yorkshire and the Humber	48	52	183
East Midlands	51	49	172
West Midlands	48	52	225
South West	50	50	160
East of England	40	60	220
Inner London	72	28	95
Outer London	54	46	108
South East	46	54	272
Wales	57	43	126
Scotland	61	39	209
Highest qualification			
Higher education	55	45	632
A level	50	50	295
O/GCSE level	45	55	609
None	52	48	513
Experience of poverty			
Never	44	56	1,134
Rarely/occasionally	58	42	777
Often/most of the time	68	32	165
Religion			
Church of England/Anglican	44	56	594
Roman Catholic	48	52	179
Other Christian	56	44	291
Non-Christian	42	58	66
No religion	55	45	941

Continued overleaf

Table 3 Clusters by socio-demographic characteristics – *continued*

	Liberals (%)	Sceptics (%)	Base (*n*)
Newspaper			
Tabloid	48	52	825
Broadsheet	63	37	209
Regional	61	39	72
Doesn't read newspaper/other	50	50	970
Political affiliation			
Conservative	39	61	572
Labour	58	42	759
Liberal Democrat	53	47	245
Other party	67	33	89
None	48	52	302
Gender			
Men	49	51	948
Women	53	47	1,129
Economic activity status			
Education/training full-time	57	43	78
In work/waiting to take up work	52	48	1,113
Unemployed	63	37	90
Retired	41	59	476
Other	55	45	320
Household income			
Lowest quartile	55	45	559
Second-lowest quartile	49	51	474
Second-highest quartile	49	51	426
Highest quartile	49	51	408
Social class			
Managerial and professional occupations	52	48	753
Intermediate occupations	50	50	249
Employers in small organisations; own account work	40	60	154
Lower supervisory and technical occupations	47	53	265
Semi-routine and routine occupations	54	46	609
Interest in politics			
A great deal	53	47	190
Quite a lot	53	47	455
Some	50	50	711
Not very much	47	53	486
None at all	55	45	233
Family status			
R is not parent of child in household	50	50	1,497
R is parent in couple family	52	48	450
R is parent in single-parent family	61	39	130
Main source of income			
Main income from benefits	64	36	213
Main income from other source	50	50	1,855

Notable differences relate to age and ethnicity. Younger groups are more likely than older ones to be liberals, this applying to 56 per cent of 18–34 year olds and 53 per cent of 35–54 year olds, but only 44 per cent of those aged 55 and over. The latter are thus the most likely to be sceptics. White and black respondents are significantly more likely than Asians to be liberals and are far less likely to be sceptics. Nearly seven in ten (68 per cent) Asian respondents can be classified as sceptics, compared with under half of white and black respondents. Although the sample of Asian respondents included in the survey is small (at just under 54), a difference of this magnitude is statistically significant.

Where a person lives also appears to be related to their attitudes on poverty, with those in inner London being particularly distinctive. Residents of inner London are far more likely to be in the liberal cluster than those living in all other regions of England and Wales (72 per cent are classified as liberal compared to 28 per cent as sceptic).

Education is also important, but not perhaps as much as we might expect. Graduates are more likely than those with O/GCSE-level qualifications to be liberals, and are among the least likely to be sceptics. Those with O/GCSE-level educational qualifications are more likely than those with no qualifications to be sceptics, this applying to just over half. Income does not emerge as significantly related to a person's views on poverty.

The most pronounced differences relate to whether or not a respondent feels that they themselves have experienced poverty, either as a child or as an adult.[1] As Table 3 shows, over two-thirds of those who feel that they have lived in poverty 'often' or 'most of the time' can be classified as liberals, and only 32 per cent as sceptics. By contrast, under half (44 per cent) of those who feel they have 'never' lived in poverty are liberals, while 56 per cent are sceptics.

Religion has a relationship with attitudes, but it is not a particularly clear one. Anglicans and those who belong to a non-Christian religion are less likely to be in our liberal cluster than those who are not religious or who are 'other' Christians.[2] For example, 44 per cent of Anglicans are liberal, compared to 55 per cent of those with no religion.

We might expect newspaper readership to be important in helping to understand a person's views about poverty. As we might suppose, broadsheet readers are the most likely to be in our liberal cluster (together with those who read regional newspapers), and the least likely to be sceptics. Around six in ten (63 per cent) regular broadsheet readers, for instance, are in our liberal cluster, compared to around half (48 per cent) of tabloid newspaper readers and those who do not regularly read a newspaper (50 per cent).

Those who identify with the Conservative Party are more likely to have a sceptical view of poverty than supporters of any other party or those with no political attachment. Six in ten (61 per cent) of Conservatives are sceptics, compared to 42 per cent of Labour supporters and 47 per cent of Liberal Democrats. There is no clear relationship between interest in politics and views of poverty.

The economic activity status of a person is also related to their views on poverty, particularly for those who are not in work or full-time education. The retired are more likely than any other group to be in the sceptic cluster; almost six in ten (59 per cent) of those who are retired can be classified in such a way. Conversely, those who are unemployed are more likely to be liberal; 63 per cent fall into the liberal cluster in comparison to 52 per cent of those in work and 41 per cent of retired people. A person's social class has no clear relationship with their attitudes towards poverty.

Of those whose income mainly comes from benefits, 64 per cent are liberals and just 36 per cent sceptics. In comparison, those people whose main income is from a source other than benefits are equally divided – half fall in the liberal cluster and half in the sceptic cluster.

Finally, lone parents are more likely to be liberal than those with no children currently living with them (61 per cent and 50 per cent classified as liberal respectively). While those in a couple family appear to be more liberal than those with no children in the household, this relationship is not statistically significant.

Gender is not significantly related to people's attitudes towards poverty.

5 Exploring attitudes to poverty

The next stage of our analysis involves using multivariate regression analysis to gain a better understanding of attitudes to poverty. This is particularly advantageous as it allows us to take account of the fact that some of the characteristics considered in Table 3 in Chapter 4 are, themselves, related to one another. The table shows, for example, that a person's views about poverty appear to vary by age and also by religious affiliation. However, age and religion are themselves related (as older groups are more likely to be religious than younger ones). This can make it hard to assess whether it is age or religion (or indeed both) that are associated with a person's attitudes.

One way of addressing this problem is to use multivariate analysis techniques (in this case, logistic regression). We used this to assess the importance of a range of characteristics in predicting a person's likelihood of falling into either of our groups: the liberals and the sceptics. We included 15 characteristics in our analysis, eight of which emerged as significantly associated with the chances of a person being in one of our groups.[1] Some relate to the ascribed characteristics of respondents (in this case, their age, ethnic group and region). Others are socio-economic in nature (notably, whether or not the person has personal experience of poverty and their highest educational qualification). Finally, three can be seen as reflecting people's values – their choice of newspaper, their party political affiliation and their religious affiliation.

The key characteristics that were significantly related to a person's chances of being in each of our groups are summarised in Table 4.[2] The first column describes the characteristic in question, while the two subsequent columns summarise whether or not any aspect of that characteristic was related to the chances of a person being in one of our clusters. If a characteristic is described with a (+) symbol, this means that respondents with this attribute are significantly *more* likely than other groups to be in this cluster. If the symbol is (–) it means that respondents with this attribute are significantly *less* likely to be in this cluster.

Table 4   **Regression**

Characteristic	Liberal	Sceptic
Age	18–34 (+) 55 plus (–)	55 plus (+) 18–34 (–)
Ethnic group	White (+) Asian (–)	Asian (+) White (–)
Region	Inner London (+) East of England (–)	East of England (+) Inner London (–)
Highest educational qualification	Graduate (+) O level/GCSE as highest qualification (–)	O level/GCSE as highest qualifications (+) Graduate (–)
Experience of poverty	Experienced poverty often or most of time in life (+) No experience of poverty (–)	No experience of poverty (+) Experienced poverty often or most of time in life (–)
Religion	Roman Catholic (–)	Roman Catholic (+)
Newspaper readership	Broadsheet reader (+) Does not read paper (–)	Does not read paper (+) Broadsheet reader (–)
Party political affiliation	Labour (+) Conservative (–)	Conservative (+) Labour (–)

What does this exercise tell us? First, it is apparent that, as we have just two clusters, the regression results for the two groups are a 'mirror image' of each other – in other words, if a particular characteristic means a person is *more* likely than someone else to be a liberal, it also means they are *less* likely to be a sceptic. For ease, we have included the results for both groups and we begin here by focusing on the first of our groups – the liberals. Table 4 shows us that, once all the characteristics included in our analysis are taken into account, the groups significantly *more* likely than others to have liberal views about poverty are: 18–34 year olds, those with a white ethnic background, residents of inner London, graduates, people with considerable personal experience of poverty, people who read broadsheet newspapers and those who support the Labour Party.

As we have already seen, all these characteristics are also linked to the chances of a person being in our sceptic camp. All else being equal, older groups (aged 55 and above) are more likely than others to have sceptical views, as are Asians and those living in the East of England. Once again, educational background and personal experience of poverty also matter: those with a low level of qualifications (O/GCSE level) and with no experience of poverty are more likely than other groups to be sceptics. Religion is also related to attitudes to poverty, with those who are Roman Catholic being more likely than others to have sceptical views. Likewise, those who do not regularly read a newspaper and those who are affiliated with the Conservative Party are also more likely to have sceptical views, even when other characteristics are taken into account.

An additional advantage of this form of analysis is that it can allow us to *estimate* the chances of someone with a particular set of characteristics being in a particular group. This is a useful exercise as it allows us to examine the combined impact of different characteristics on the chances of a person having a particular set of views.

Table 5 shows the percentage chance of a person with particular characteristics falling into our 'liberal' camp. The first row shows the overall proportion of people who are liberals (51 per cent), against which the other figures in the table can be compared. The next describes a person with many of the characteristics shown in Table 4 to be linked to having liberal views about poverty – among other things, they are aged 18–34, white, have a degree and live in inner London. As the table shows, a person with these characteristics would be very likely to be in our liberal camp – 96 per cent would be, as opposed to 51 per cent of the population as a whole. As it might be considered fairly unlikely for a person to have considerable experience of poverty alongside many of the other stated characteristics (such as being a graduate), the third row describes a person with many of the same characteristics, but with only occasional experience of poverty – this reduces the chance of being a liberal only slightly to 92 per cent.

The descriptions near the bottom of Table 5 are those groups who are *least* likely to have liberal views about poverty (and are, therefore, the most likely to have sceptical views). So, for example, the last row describes a person who has many of the characteristics linked to being *less* likely to have liberal views, notably being Asian, aged 55 or above, having no experience of poverty and supporting the Conservative party. Fewer than one in ten (8 per cent) of people in this position are estimated to be in our liberal group, compared to around half of the population as a whole.

Table 5 Estimated probability of different groups having liberal views about poverty

Description	Estimated probability (%)
All	51
A graduate aged 18–34, who is not religious and lives in inner London. He/she is white, with considerable experience of poverty, supports the Labour Party and reads broadsheet newspapers.	96
A graduate aged 18–34, who is not religious and lives in inner London. He/she is white, with occasional experience of poverty, supports the Liberal Democrats and reads broadsheet newspapers.	92
A person with no qualifications, aged 35–54, who is Anglican and lives in outer London. He/she is black, has no personal experience of poverty, supports the Labour Party and reads tabloid newspapers.	54
A person with A levels aged 55+, who is a Christian and lives in the West Midlands. He/she is black, with occasional experience of poverty, does not support any political party and reads regional newspapers.	48
A person with A levels, aged 35–54, who is Anglican and lives in the South West. He/she is white, has no personal experience of poverty, supports the Conservative Party and reads tabloid newspapers.	35
A person with O/GCSE-level qualifications, aged 18–34, who is not religious and lives in the West Midlands. He/she is Asian, with occasional experience of poverty, does not support any political party and does not read newspapers.	21
A person with O/GCSE-level qualifications, aged 55+, who is Roman Catholic and lives in the East of England. He/she is white, has no personal experience of poverty, does not support any political party and reads tabloid newspapers.	18
A person with A levels, aged 55+, who follows a non-Christian religion and lives in the North West. He/she is Asian, with no personal experience of poverty, supports the Conservative Party and does not read any newspapers.	8

Notes

Chapter 2

1   See Sefton (2005) for a discussion of how the wording of this question may be interpreted by respondents in a different way to similar questions that refer to those with high or low incomes.

Chapter 3

1   After initial exploratory analysis, we excluded from the cluster analysis two of the questions considered in Chapter 2 (whether or not poverty had increased or fallen over the last ten years and whether it would increase or fall over the next ten years). We did, however, include the question about the current prevalence of poverty in Britain.

Chapter 4

1   This is based on responses to the following question: 'Looking back over your life, how often have there been times in your life when you think you have lived in poverty by the standards of that time?'

2   It should be noted that the non-Christian group has a small base (66).

Chapter 5

1   Further details can be found in the Appendix to this report.

2   In addition to these characteristics that are significant at the 5 per cent level, two characteristics are significant at the 10 per cent level: tabloid newspaper readers (less likely to be liberal, more likely to be a sceptical); and those who support a party other than the Conservatives, Labour or Liberal Democrat (more likely to be liberal, less likely to be sceptical).

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Appendix: The methodology

Cluster analysis

Cluster analysis is a statistical technique used to classify informants into a small number of groups (clusters) based on two or more variables. In some cases there are hypotheses regarding the number and make-up of such groups, but more often there is little or no prior information concerning which informants will be grouped together (an *a priori* approach). This latter approach makes cluster analysis an exploratory tool of analysis.

There are a number of clustering algorithms available in statistical packages such as SPSS and STATA. All have as their primary purpose the measurement of mathematical distance between individual observations and groups of observations (Finch, 2005).

In this case, we were interested in grouping respondents based on their dichotomously scored responses to a series of questions about poverty. The variables used to group respondents into clusters are shown in Box A1.

Box A1 Variables capturing dimensions of poverty, BSA 2003

The meaning of poverty

- Would you say that someone in Britain was in poverty if they had enough to buy the things they really needed, but not enough to buy the things that most people take for granted?

- Would you say that someone in Britain was in poverty if they had enough to eat and live, but not enough to buy other things they needed?

- Would you say that someone in Britain was in poverty if they had not got enough to eat and live without getting into debt?

The prevalence of poverty

- Some people say there is very little real poverty in Britain today. Others say there is quite a lot. Which comes closest to your view – that there is very little real poverty in Britain, or that there is quite a lot?

Continued overleaf

> **Box A1   Variables capturing dimensions of poverty, BSA 2003
> – *continued***
>
> *The causes of need*
>
> ■   Why do you think there are people who live in need? Because of laziness or a lack of will power?
>
> ■   Why do you think there are people who live in need? Because of injustice in our society?
>
> *Redistribution*
>
> ■   Government should redistribute income from the better off to those who are less well off. (Agree strongly/disagree strongly)
>
> *Levels of unemployment benefits*
>
> ■   Opinions differ about the level of benefits for unemployed people. Which of these two statements comes closest to your view? Benefits for unemployed people are too low and cause hardship, or benefits for unemployed people are too high and discourage them from finding jobs? (Benefits too low/ benefits neither too high nor too low)
>
> *Distribution of wealth*
>
> ■   Ordinary working people do not get their fair share of the nation's wealth. (Agree strongly/disagree strongly)

Cluster analysis proceeds in two steps. First, a distance measure is selected to calculate distances between observations based on the observed survey variables. Second, a standard cluster analysis algorithm is applied to these distances so that the observations in a sample are partitioned into different clusters and members of each cluster are as close to each other as possible and as far as possible from members in other clusters.

Distance measures

A popular group of distance measures designed for binary or dichotomous data is known collectively as matching coefficients. There are several types of matching coefficients, all of which take as their main goal the measurement of similarity on the binary items between any two observations (Finch, 2005). The logic underlying these

techniques is that two individuals should be viewed as similar to the degree that they share a common pattern of attributes among the binary variables. In other words, observations with more similar patterns of responses on the items are seen as closer to one another than those with more disparate responses.

Clustering algorithm (k-means clustering)

K-means clustering is a non-hierarchical approach that can be used to identify segments in a sample of observations. Using a suitable measure of mathematical distance k-means cluster analysis is a partitioning method that produces k different clusters that are of greatest possible distinction.[1] By identifying the clusters we are then able to find out how these clusters are different.

Rather than measure similarity between any two individual observations, k-means clustering applies the same logic to measure the distance between individual observations and a group average.

The k-means cluster procedure in STATA was used to conduct the cluster analysis. The Jaccard measure of similarity on binary data was chosen as the measure of distance. Every cluster is defined by its own cluster members and by its centre. The centre for each cluster is the point to which the sum of distances from all members in the cluster is minimised according to an objective function. The algorithm involves the following steps.

1   Select k points at random to serve as the initial group centres, one for each cluster.

2   Each observation is assigned to a cluster that has the closest centre.

3   After all observations have been assigned, the k centres are recomputed.

4   Steps 2 and 3 are repeated until the observations no longer move from one cluster to another and the iterative procedure is terminated.

Researchers using cluster analysis are advised that non-hierarchical techniques usually generate different solutions, depending on the sequence of observations in the dataset, choice of distance measures and the method by which initial clusters are selected. Thus, the procedure is usually run multiple times to mitigate these drawbacks (Bowker *et al.*, 2005, p. 92). In this case, the k-means clustering algorithm was run 100 times generating 100 sets of two clusters. The final cluster solution

described in this report was determined by the average of the 100 runs. That is, a respondent was assigned to the 'liberal' cluster if he was allocated to that cluster on more than 50 occasions.

Sensitivity analysis

'Textbook' examples of cluster analysis are often selected or tailored to show up the techniques to their best advantage. In real research, such examples are rare. The literature on cluster analysis highlights potential problems that can arise, particularly when the indicators used are categorical rather than continuous. For example, Bartholomew *et al.* (2002, pp. 44–9) present an illustration of cluster analysis using data taken from the 1986 British Social Attitudes Survey where the division of respondents into two clusters based on responses to four questions could have been achieved on the basis of a single item.

To check the sensitivity of the final cluster solution we re-ran the cluster analysis under different conditions. Again the procedure was run 100 times before assigning cluster membership. The different conditions involved using:

■ a different measure of similarity (matching rather than Jaccard)

■ a subset of the poverty variables

■ two random halves of the dataset.[2]

The sensitivity of the final cluster analysis result can be compared by examining the degree of overlap in cluster membership between the final solution and that provided by the re-runs.[3] The higher the degree of overlap the more confidence we can place in the robustness of the final analysis. Table A1 shows the degree of overlap in cluster membership between the final and alternative solutions. The findings clearly demonstrate that the final cluster grouping stands up extremely well to changes in the procedure.

Table A1 Sensitivity analysis results

Alternative solution	Percentage overlap in cluster membership
Matching coefficient	93
Omitted second definition of poverty item[a]	83
Random halves of the data	98

a   A person is in poverty if they have enough to eat and live, but not enough to buy other things they need. This indicator was omitted, as it appeared to be an important influence on the final cluster solution.

Regression analysis

Regression analysis aims to summarise the relationship between a 'dependent' variable (in this case, having 'liberal' or 'sceptical' views about poverty) and one or more 'independent' variables. It shows how well we can estimate a respondent's score on the dependent variable from knowledge of their scores on the independent variables. It is often undertaken to support a claim that the phenomena measured by the independent variables cause the phenomenon measured by the dependent variable. However, the causal ordering, if any, between the variables cannot be verified or falsified by the technique. Causality can be inferred only through special experimental designs or through assumptions made by the analyst.

Tables A2 and A3 show the results of the logistic regression models reported earlier (using the deviation method). Particular attention should be paid to the B coefficients. If the coefficient has a positive sign, this means that that characteristic is associated with the dependent variable being more likely; if it has a negative sign, this means it is less likely. The tables also show the statistical significance of the results; in all cases, our criterion for significance was 0.05. This means that there is less than a 5 per cent chance that the association we find between the dependent variable and the independent variable is simply the result of sampling error and does not reflect a relationship that actually exists in the general population.

The tables include only those variables found to be significantly related to a person's views about poverty. Seven other characteristics were included in the analysis but were not significantly associated with a person's chances of being in one of our two groups once the other variables had been taken into account. These were: gender; family status; employment status; income; class; interest in politics; and main income source.

Table A2   Regression results for liberal cluster

	B	SE	Wald	Sig.	Exp(B)
Age			16.27	0.00	
18–34	0.26	0.08	11.07	0.00	1.30
35–54	0.04	0.06	0.40	0.53	1.04
55+	−0.30	0.08	15.30	0.00	0.74
Highest qualification			10.90	0.01	
Higher education	0.18	0.08	4.68	0.03	1.20
A level	−0.09	0.10	0.72	0.40	0.92
O/GCSE	−0.20	0.08	6.49	0.01	0.82
None	0.11	0.09	1.35	0.25	1.11
Religion			9.14	0.06	
Church of England/Anglican	−0.12	0.12	0.99	0.32	0.89
Roman Catholic	−0.33	0.15	4.72	0.03	0.72
Other Christian	0.16	0.14	1.47	0.23	1.18
Non-Christian	0.20	0.31	0.41	0.52	1.22
No religion	0.09	0.11	0.67	0.41	1.09
Experience of poverty			49.88	0.00	
Never	−0.56	0.08	44.95	0.00	0.57
Rarely/occasionally	0.02	0.08	0.09	0.77	1.02
Often/most of time	0.53	0.13	15.94	0.00	1.70
Ethnic group			12.94	0.00	
Black	0.35	0.28	1.51	0.22	1.42
Asian	-0.92	0.30	9.63	0.00	0.40
White (plus mixed/other/don't know/refused)	0.57	0.20	8.44	0.00	1.77
Region			25.12	0.01	
North East	−0.09	0.20	0.22	0.64	0.91
North West	−0.16	0.15	1.23	0.27	0.85
Yorkshire and the Humber	-0.21	0.15	1.89	0.17	0.81
East Midlands	−0.14	0.15	0.84	0.36	0.87
West Midlands	−0.14	0.13	1.05	0.30	0.87
South West	0.09	0.16	0.31	0.58	1.09
East of England	−0.39	0.14	7.95	0.00	0.68
Inner London	0.80	0.24	11.42	0.00	2.23
Outer London	0.21	0.19	1.22	0.27	1.23
South East	−0.20	0.13	2.52	0.11	0.81
Wales	0.03	0.18	0.04	0.85	1.03
Scotland	0.20	0.16	1.53	0.22	1.22
Newspaper			18.76	0.00	
Tabloid	−0.18	0.10	3.33	0.07	0.84
Broadsheet	0.43	0.14	9.90	0.00	1.53
Regional	0.05	0.20	0.07	0.79	1.05
Doesn't read newspaper/other	−0.30	0.10	9.93	0.00	0.74
Political affiliation			36.11	0.00	
Conservative	−0.42	0.10	17.60	0.00	0.66
Labour	0.25	0.09	7.89	0.00	1.29
Liberal Democrat	0.02	0.13	0.02	0.90	1.02
Other party	0.39	0.21	3.44	0.06	1.48
None	−0.20	0.12	2.81	0.09	0.82
Other/don't know/refused	−0.04	0.17	0.07	0.79	0.96
Constant	0.05	0.19	0.07	0.79	1.05

Table A3 Regression results for sceptic cluster

	B	SE	Wald	Sig.	Exp(B)
Age			16.27	0.00	
18–34	−0.26	0.08	11.07	0.00	0.77
35–54	−0.04	0.06	0.40	0.53	0.96
55+	0.30	0.08	15.30	0.00	1.35
Highest qualification			10.90	0.01	
Higher education	−0.18	0.08	4.68	0.03	0.84
A level	0.09	0.10	0.72	0.40	1.09
O/GCSE	0.20	0.08	6.49	0.01	1.22
None	−0.11	0.09	1.35	0.25	0.90
Religion			9.14	0.06	
Church of England/Anglican	0.12	0.12	0.99	0.32	1.12
Roman Catholic	0.33	0.15	4.72	0.03	1.39
Other Christian	−0.16	0.14	1.47	0.23	0.85
Non-Christian	−0.20	0.31	0.41	0.52	0.82
No religion	−0.09	0.11	0.67	0.41	0.92
Experience of poverty			49.88	0.00	
Never	0.56	0.08	44.95	0.00	1.74
Rarely/occasionally	−0.02	0.08	0.09	0.77	0.98
Often/most of time	−0.53	0.13	15.94	0.00	0.59
Ethnic group			12.94	0.00	
Black	−0.35	0.28	1.51	0.22	0.71
Asian	0.92	0.30	9.63	0.00	2.51
White (plus mixed/other/don't know/refused)	−0.57	0.20	8.44	0.00	0.56
Region			25.12	0.01	
North East	0.09	0.20	0.22	0.64	1.10
North West	0.16	0.15	1.23	0.27	1.18
Yorkshire and the Humber	0.21	0.15	1.89	0.17	1.23
East Midlands	0.14	0.15	0.84	0.36	1.15
West Midlands	0.14	0.13	1.05	0.30	1.15
South West	−0.09	0.16	0.31	0.58	0.92
East of England	0.39	0.14	7.95	0.00	1.48
Inner London	−0.80	0.24	11.42	0.00	0.45
Outer London	−0.21	0.19	1.22	0.27	0.81
South East	0.20	0.13	2.52	0.11	1.23
Wales	−0.03	0.18	0.04	0.85	0.97
Scotland	−0.20	0.16	1.53	0.22	0.82
Newspaper			18.76	0.00	
Tabloid	0.18	0.10	3.33	0.07	1.19
Broadsheet	−0.43	0.14	9.90	0.00	0.65
Regional	−0.05	0.20	0.07	0.79	0.95
Doesn't read newspaper/other	0.30	0.10	9.93	0.00	1.35
Political affiliation			36.11	0.00	
Conservative	0.42	0.10	17.60	0.00	1.52
Labour	−0.25	0.09	7.89	0.00	0.78
Liberal Democrat	−0.02	0.13	0.02	0.90	0.98
Other party	−0.39	0.21	3.44	0.06	0.68
None	0.20	0.12	2.81	0.09	1.22
Other/don't know/refused	0.04	0.17	0.07	0.79	1.05
Constant	−0.05	0.19	0.07	0.79	0.95

Notes

1   The number of clusters is specified at the outset. In general, the method is applied to the data for different numbers of groups and then an attempt is made to select the number of groups that provides the best fit for the data while avoiding small cluster sizes (Rabe-Hesketh and Everitt, 2004).

2   The full dataset was split into two halves at random and the cluster analysis was re-run on each half.

3   For example, if 150 out of 200 respondents were placed in the same cluster by two different analyses, then the percentage overlap in cluster membership would be (150/200) * 100 = 75 per cent.