Department for Business Innovation & Skills

RESEARCH

BIS RESEARCH PAPER NO. 200

The effect of Higher Education on graduates' attitudes: Secondary Analysis of the British Social Attitudes Survey

NOVEMBER 2015

This report was prepared by John Brennan (The Open University), Jenny Chanfreau, Jerome Finnegan, Julia Griggs, Zsolt Kiss and Alison Park (NatCen Social Research) for the Department of Business innovation and Skills.

Contents

Executive Summary

This report presents the results of detailed secondary analysis of data from the British Social Attitudes survey to inform understanding of the ways in which higher education affects our attitudes and values.

The project sought to address a number of overarching research questions, with a particular focus on exploring how people's attitudes varied according to their level of education, in particular, whether graduates' attitudes differed significantly from those with other educational qualifications. It used an iterative, multi-stage methodology:

- Stage one used t-test and cross-tabulation analysis to show the pattern of attitudes by level of education, and to check for significant associations between educational level and attitudes.

- Stage two used multivariate regression analysis to test for significant relationships between educational level and attitudes when taking into account other background (socio-demographic) characteristics.

- Stages three and four used more advanced multivariate analysis techniques (multilevel modelling and path analysis) to explore variations in the effect of education on attitudes over time, and the mediating effect of other variables. Due to their more speculative nature, these results are reported in Appendix D.

The selection of attitudinal indicators also used an iterative approach – the number of indicators narrowing at each stage, with the increasing complexity of analysis methods. Stage one explored associations between educational level and a large number of attitudinal variables (see Appendix B for the full list) across a range of themes and sub-themes. At Stage two individual indicators were chosen from the initial list on the basis that they represented a particular sub-theme well, were from as recent a survey as possible and were significantly associated with educational level. Indicators with time series data were also prioritised to allow trend analysis at Stage three.

Key findings from Stages one and two are summarised below:

Politics: Interest in politics and political activity increased incrementally with educational level, with graduates expressing the highest level of interest and greatest likelihood of having taken political action. Graduates were similarly more likely than other educational groups to feel they had a say in what the government did and to feel it mattered which political party was in power (i.e. to feel they had greater political efficacy). Differences between graduates and other educational groups identified in the cross-tabulation analysis remained significant when controlling for other background characteristics for all attitudinal measures except political trust.

Environment: Overall, graduates were the most likely to express concern about the environment and the most willing to say they would make or accept changes to the way they used transport for environmental reasons, while those in the no qualifications group expressed the lowest levels of knowledge and concern about the environment. Differences

identified in the Stage one analysis did not always remain significant when controlling for other background characteristics, most notably in relation to changing behaviour for environmental reasons (see Table 4.1 for a summary of results).

Gender roles and personal relationships: Again, results suggest that people's attitudes vary with educational level. However, attitudinal differences did not always remain significant when other background characteristics were taken into account, indicating that other factors may be driving differences in attitude to gender roles. This appears to be the case for attitudes to women's preferences for a home and children over a career.

Immigration: The pattern of attitudes to immigration by educational level showed three distinct groups. Those with a degree were the least likely to feel immigration had a negative effect on Britain's economy or cultural life and the least likely to support a reduction in immigrant numbers; those with A-levels or with below degree level HE/FE qualifications had relatively similar mid-range attitudes and those with GCSEs only or no qualifications formed a third group with quite similar negative views towards immigration, and a desire for far stronger controls on migrant numbers. Importantly, all differences observed in the Stage one cross-tabulation analysis remained once a range of other background factors had been taken into account. This was true for all educational levels, suggesting a robust relationship between the experience of degree level higher education and attitudes to immigration.

Welfare benefits: Overall graduates tended to express the most tolerant attitudes towards benefits and their recipients, and (when controlling for other background factors) those with no qualifications the least. Beyond this there was no clear relationship between attitudes and educational level. As with attitudes to immigration, all differences between educational levels remained even when controlling for other background characteristics.

National identity and support: Graduates were the most likely to self-identify as British rather than English and to believe that being born in Britain was relatively unimportant in determining whether someone was 'truly' British. They also had the lowest level of 'unconditional support' for one's country. The attitudes of those in the no qualification group showed the greatest differences when compared to the graduate group. However, when controlling for other background characteristics differences between some attitudinal measures were no longer significant.

Entrepreneurship: Results show that differences in entrepreneurship, in particular attitudes to starting a business, do not remain significant for all groups after controlling for other background characteristics. Instead, findings suggest that whilst those in the higher educational groups (degree to A-level / GCSEs) do not differ significantly from one another, those in the no qualifications group are less likely to have started/ thought about starting their own business, or to feel it is a realistic ambition for them to have.

In summary, findings indicated a clear association between education and attitudes across a range of attitudinal areas and sub-topics. The results suggest that educational level (in particular, having a degree) is associated with: interest and involvement in politics; political efficacy; environmental awareness and concern; perceptions of gender roles; attitudes to immigration and immigrants; perceptions of welfare benefits and benefit recipients; national identity and entrepreneurship.

In many cases the attitudinal ‘benefits’ of education increase incrementally, with graduates displaying:

- The highest levels of political engagement and efficacy,
- The greatest degree of environmental knowledge, concern and willingness to take action for the sake of the environment;
- Less traditional and more tolerant attitudes to gender equality and personal relationships;
- More tolerant attitudes towards immigrants and welfare recipients.

In addition, it appears that while attitudes tend to change broadly incrementally with educational level, it is having a degree where we see the greatest difference. For example, results suggest that graduates are considerably more likely to see immigration as having a positive effect on Britain’s economy than those in other educational groups.

1 Introduction

This report presents the results of detailed secondary analysis of data from the British Social Attitudes survey to inform understanding of the ways in which higher education affects our attitudes and values. The overall purpose of the research was to update and expand the evidence base in relation to the 'wider benefits' of higher education. The report details the background to the study, the research methodology used, and the key findings.

1.1 Background

There is considerable interest in developing a better understanding of the benefits of higher education, both to the individuals concerned and to wider society more generally. Much of the attention paid to the direct benefits of higher education have focused on its economic returns and are well understood. Graduates are, for example, more likely to be in work and can expect to receive, on average, over £100,000 more over their lifetime than those with two or more A-levels (BIS, 2011); The most recent estimates have been even higher (BIS, 2013a). But there is increasing interest too in understanding whether and how higher education affects a far wider set of outcomes, many of which are attitudinal in focus. These range from a person's sense of political efficacy and their engagement and interest in politics, to their views about key social and political issues, from immigration to same sex marriage. These issues do not just have consequences for the individuals involved; in many cases they also matter for society as a whole.

Steps have already been taken to investigate this issue, including a recent review of over 50 publications (BIS, 2013b) and a summary of the key individual and societal benefits that higher education offers (BIS, 2013c). The latter presents findings of higher education's benefits as a matrix, dividing topic areas into four quadrants, separated by two axes, one relating to the benefit of higher education to individuals versus society and the other to the nature of the benefit in economic or market terms versus broader more social non-market benefits.

The four quadrants are:

- Non-market benefits to wider society (e.g. greater social cohesion)
- Non-market benefits to the individuals (e.g. greater general health)
- Market benefits to wider society (e.g. greater labour market flexibility)
- Market benefits to the individual (e.g. higher earnings)

The existing literature makes clear that the mechanisms by which higher education can help shape a person's attitudes and values are not entirely transparent (BIS, 2011). But conceptually there are at least three different possible explanations for any differences that exist between graduates and non-graduates:

- **Pre-existing differences** between the sorts of people who go into higher education and those who do not. For example, pupils with lower qualifications (and all the

known factors that correlate with this) are less likely to enter higher education than their better performing peers. Age is another key factor here, as the expansion of higher education means there is a clear correlation between age and education, with older groups being disproportionately likely not to have a degree.

- The **direct impact** of higher education upon graduates. The explanations that underpin this will vary depending on the topic in question, but will include factors such as the effects of enhanced cognitive and general academic skills, learned capacity to empathise with other people's viewpoints, exposure to liberal values and mixing with a wider variety of groups than might otherwise have been the case (see for example, Feinstein, 2002; Evans, 2002). Factors such as these may help to explain the fact that, for example, graduates are more likely than non-graduates to feel that they understand the political system (Lee and Young, 2013).

- Finally, higher education is likely also to have an **indirect impact** upon attitudes, as it will affect other factors that may well shape people's views – for instance, occupation, income and housing tenure.

1.2 Project aims

The project set out to address a number of overarching research questions:

- How do people's attitudes to a broad range of issues vary according to their level of education – in particular how do graduates' attitudes vary from those with other levels of educational attainment/ no formal qualifications?

- To what extent does the relationship that exists between higher education and attitudes disappear once socio-demographic differences between graduates and non-graduates are taken into consideration? For example, to what extent does the greater tolerance of graduates towards immigration appear to be the result of higher education as opposed to their general socio-economic advantage (measured through variables such as income and employment)?

- To what extent does post-compulsory schooling but non-degree level education impact upon people's attitudes, and how does this compare with the impact of degree level education? More generally, is there evidence that education has an incremental, step-like, impact on attitudes – or does (degree level) higher education have a disproportionate impact on attitudes?

It is important to note, that while this secondary analysis of British Social Attitudes survey data offers the opportunity to answer interesting and important question like these, there are also limitations to what can be done. Importantly, the British Social Attitudes survey does not allow us to consider, or to control for, educational differences within the graduate group, such as subject of study or type of institution. The graduate group created for this analysis (like the other educational groups) takes the 'average' respondent with a degree. Additionally, it does not offer explanations for any differences it reveals.

2 Methodology

2.1 Analysis methods

There were four key stages to the analysis. The number of attitudinal indicators narrowed at each stage with the complexity of analysis methods (discussed in Section 2.2.2, below):

1. Stage one: How do people's attitudes, to a broad range of issues, vary according to their level of education – in particular how do graduates' attitudes vary from those with lower levels of education?

   Method: Cross-tabulations show the pattern of attitudes by level of education. T-tests, and chi-square tests were used to check for significant associations between educational level and attitudinal indicators.

2. Stage two: To what extent does the relationship that exists between higher education and attitudes disappear once socio-demographic differences between graduates and non-graduates are taken into consideration?

   Method: Multivariate analysis (linear regression) to test for significant relationships between educational level and each attitudinal indicator, when taking into account other socio-demographic characteristics. Each of the regression models for the 2013 and 2011 attitudinal indicators included the same set of control variables, as did those for 2012, 2010:[1]

   - Gender
   - Age
   - Ethnic background
   - Economic activity
   - Socio-economic classification group (NS-SEC)
   - Household income
   - *Whether the respondent was born in the UK*[2]
   - UK region.

[1] It is important to note that the study was not searching for the best models to explain the variance in attitudes. Instead the aim was to understand how the effect of education varies across models (i.e. across different attitudinal indicators) when controlling for a range of key demographic variables.

[2] This variable was not included in the 2010 or 2012 British Social Attitudes survey, and was therefore excluded from a small number of the regression models.

3. Stage three: Is there evidence that education has an incremental, step-like, impact on attitudes – or does (degree level) higher education have a disproportionate impact on attitudes?

   Method: More advanced multivariate analysis techniques (i.e. multilevel modelling) were used to explore variations in the effect of education on attitudes over time. Multilevel modelling (with random slopes and random intercepts) allows the effect for each education category to vary across the years. This makes it possible to calculate the effect of educational level on a particular attitude for individual years. Put simply, this method enables us to calculate the effect of educational level on, for example, attitudes to same sex relationships in 1990 and then compares it to the effect educational level had in 2013.

4. Stage four: Are the effects of educational attainment on attitudes mediated by other factors?

   Method: Path analysis was used to unpick the relationship between educational attainment and a small number of attitudinal indicators. While path analysis is not a test of causality, this technique does bring us closer to being able to offer causal explanations than less sophisticated methods. Specifically, path analysis was used in the form of mediation and moderation models to explain:

   i) How educational attainment affects a particular 'attitude': whether the effect is a direct one or mediated by (/channelled through) another variable.

   ii) Whether the effect of education on a particular 'attitude' differs for people belonging to different groups, in particular, whether the effect of educational attainment varies for different higher education cohorts (e.g. those who are likely to have completed their degree in the 1980s or earlier, compared to recent graduates).

The results of Stages three and four, which use more advanced techniques to explore shifts over time and seek explanations for some of the differences identified in Stages one and two, are presented in Appendix D.

2.2 The data

2.2.1 The British Social Attitudes survey

The British Social Attitudes survey is Britain's leading barometer of the views of the nation. Every year the survey asks a randomly selected sample of approximately 3,300 individuals a series of questions designed to assess their attitudes on a range of issues. Since it began in 1983 the British Social Attitudes survey has covered topics including political allegiance and trust, public expenditure and benefits, poverty, education, the environment, immigration and crime. Some questions are repeated annually, offering the opportunity to monitor patterns of continuity and change in people's social, political and moral attitudes. Other questions have been included less regularly, often in response to important national events or debates.

2.2.2 Key measures: Attitudes

This secondary analysis project sought to explore the link between higher education and people's attitudes in a number of key social and political topic areas. The British Social Attitudes survey offered considerable opportunity to explore attitudes in a large number of different areas. Indeed, the number of potential indicators was too great to take wholesale into the analysis and it was necessary to choose both topics and questions that best suited the project's aims. This process began with a review of the content of the last ten years of the survey with a particular focus on data collected since 2009.

Having reviewed the content of the 2010-2013 surveys it was decided, in communication with the Department for Business Innovation and Skills, on the list of topics to be included in the initial analysis – t-tests and cross-tabulations. Decisions were made following an exploration of research literature (discussed in Section 1.1 above) and in discussion with experts. Questions were selected on an individual basis from within topics, rather than being taken as complete blocks. The choice of individual questions was based on an assessment of how relevant and useful they were to addressing the study's aims. No statistical analysis took place until this initial list (see Appendix B) had been selected.

The selection of variables for the Stage two regression analyses took place after t-test and cross-tabulation analyses had been completed. At this point only those variables significantly associated with educational level were considered for inclusion.

Although data reduction techniques such as factor analysis / Principle Components Analysis were considered as a way to create a composite variable for each sub-topic, this was ruled out. It was thought that the validity of the composite measure would be compromised by including only a select subset of the original variables rather than all of them, particularly as they had not been designed or selected to be consolidated. Furthermore, data reduction presented technical difficulties as different questions within topics used different answer scales. Additionally, it was felt that the meaningfulness of regression results would be reduced by creating a factor to represent an 'attitude' rather than a clear, more easily interpreted statement. For example, it is more difficult to derive the meaning of low score on a factor labelled 'political efficacy' than to say that people with degree level qualifications feel they have more say in what the government does.

Table 2.1 shows the range of topics and indicators selected for Stage two. Each theme includes a number of sub-themes, which typically map onto previous analysis of British Social Attitudes survey data. Individual indicators were chosen on the basis that they represented a particular sub-theme well, were from as recent a survey as possible and were significantly associated with educational level. Indicators with time series data were also prioritised to allow trend analysis at Stage three. In the main, one or two questions were used as indicators of a particular 'attitude' to ensure it was as transparent as possible (although the indicator used to capture political activity does use a suite of questions [3].

[3] Although data reduction techniques were considered inappropriate for bringing together disparate questions within topics, among the original list were a set of questions on political activity which were felt to offer potential to create a composite measure. These questions all followed the same format, elicited the same binary response and had been successfully combined in an earlier study (Curtice and Seyd, 2003). Details of the questions and the results are set out in Section 3.1.

Table 2.1: Attitudinal indicators used in the Stage two analysis		
Topic	**Sub-theme**	**Indicator of attitudes (latest year question asked)**[4]
POLITICS	Political engagement	- Have you ever done any of the things on this card about a government action which you thought was unjust and harmful? (2011). See Section 3.1 for the list of political activities.
	Interest in politics	- How much interest do you generally have in what is going on in politics? (2013)
	Political efficacy	- People like me have no say in what the government does (2011) - It doesn't really matter which party is in power, in the end things go on much the same (2011)
	Political trust	- How much do you trust politicians of any party in Britain to tell the truth when they are in a tight corner? (2013)
ENVIRONMENT	Environmental knowledge	- How much do you feel you know about the causes of environmental problems? (2010)
	Environmental concern	- How concerned are you about environmental issues? (2010) - We worry too much about the future of the environment and not enough about prices and jobs today (2010).
	Environmental action	- The price of a plane ticket should reflect the environmental damage caused, even if this makes at travel much more expensive (2013) - I am willing to reduce the amount I travel by car to help reduce the impact of climate change (2013) - There is no point in reducing my car use to help the environment unless others do the same (2013)
GENDER ROLES AND RELATIONSHIPS	Gender roles	- All in all, family life suffers when the woman has a full-time job (2012) - A job is all right, but what most women really want is a home and children (2012).
	Personal relationships	- What would your general opinion be about sexual relations between two adults of the same sex? (2013)

[4] It is important to note that not all British Social Attitudes survey questions are asked of the full sample, meaning that not all topics/sub-topics have the same sample size. Some topics are asked of one third of the sample (approximately 1,100 respondents), some of two thirds (2,200) and some of all 3,300 respondents.

Table 2.1: Attitudinal indicators used in the Stage two analysis (continued)		
Topic	**Sub-theme**	**Indicator of attitudes (latest year question asked)**
IMMIGRATION	Immigration control	- Do you think the number of immigrants to Britain nowadays should be increased or reduced? (2013)
	Effect of immigration	- Are migrants good or bad for Britain's economy (2013) - Do migrants enrich or undermine Britain's cultural life (2013)
	International students	- International students from outside the European Union imposes significant costs on the British economy (2013)
BENEFITS	Welfare benefits	- Many people who get Social Security don't really deserve any help (2013) - Most people on the dole are fiddling it one way or another (2013) - If welfare benefits weren't so generous people would learn to stand on their own two feet (2013)
NATIONAL IDENTITY	National identity	- Do you think of yourself as more English or British (England only)? (2013)
	Britishness	- How important is it to have been in born in Britain to be truly British (2013) - It is impossible for people who do not share Britain’s customs and traditions to become fully British (2013)
	National support	- Generally speaking, Britain is a better country than most other countries (2013) - People should support their country even if their country is in the wrong (2013)
STARTING A BUSINESS	Entrepreneurship	- Have you ever or would you ever consider starting your business? (2013) - Do you think that starting your business would be realistic ambition? (2013)

2.2.3 Key measures: educational level

The analysis used a derived five category variable of educational level[5] created by recoding the respondent's highest educational qualification into five categories. The first of these categories (degree) includes degree and postgraduate degree level qualifications. The second, higher education/ further education below degree, includes vocational qualifications, such as teaching and nursing qualifications. Those categorised as 'foreign or other qualifications' have been excluded from the analysis as it was not possible to say with any certainty which of the educational levels they belonged to. (Appendix A includes further details of how this variable was derived, including the specific qualifications included in each category.)

Table 2.2 Educational level: All adult British Social Attitudes survey respondents 2013

Base: All adults	%
Degree or equivalent – including postgraduate degree[6] (degree)	25
HE/FE below degree	12
A-level or equivalent (A-levels)	19
Below A-level / GCSE or equivalent (GCSEs)	25
No qualifications (none)	19
Unweighted base	*2943*
Weighted base	*2971*

[5] Stage one t-tests used a binary variable which separated those with a degree level qualification from those with a below degree level qualification: 1) 'Higher education – degree or above'; 2) 'Any other educational qualification – below degree. Respondents belonging to the 'no qualification' group were excluded from the t-tests as it was felt that this quite distinct group might distort results.

[6] Approximately 8 per cent of the degree group reported a postgraduate degree as their highest qualification.

How do people's attitudes vary according to their level of education?

The chapters that follow explore the link between educational level and attitudes on a range of issues:

- Politics
- The environment
- Gender roles and relationships
- Immigration
- Benefits
- National identity
- Entrepreneurship.

As noted in section 2, each of these broad topics has been divided into sub-themes, each captured by a small number of British Social Attitudes survey questions. Initially the relationship of each of these questions (listed in Appendix B) with educational level has been explored using t-test and cross-tabulation analysis. For those questions where attitudes vary by educational level, we selected a subset for further (regression) analysis to explore whether the association between attitudes and education remains after other socio-demographic factors are taken into account. The results of both levels of analysis are presented in the charts that follow, and regression results are presented in full in Appendix C.

3 Politics

This first section considers the effects of educational level on attitudes to politics. It brings together the results of the Stage one cross-tabulation analysis with the Stage two regression analysis, focusing on those questions found to be significant at Stage one, and considered to best represent a particular dimension of people's attitudes to politics, specifically:

- Political engagement;
- Political interest;
- Political efficacy;
- Political trust.

In this case, nine questions from the 2013 questionnaire, three from 2012 and 26 from 2011 were included in the Stage one analysis (see Appendix B). Once recoded, all 2013 and 2012 variables were significantly related to a person's educational attainment (to the 0.05 level) and all bar two of the 2011 variables were significant. The two questions that were not significantly related to educational level asked:

Which of these statements comes closest to your view … General elections should be held on a fixed date every four or five years, or, the Prime Minister should be able to hold a general election whenever he or she decides?

How much do you trust the police?

3.1 Political engagement

As we moved into the second stage, the regression analysis, we considered a range of indicators representing political engagement; an interest in politics; political efficacy and personal trust (see Table 2.1). In the case of political engagement a single indicator (the dependent variable in the regression analysis) was constructed from a suite of simple questions designed to explore respondents' experience of political action.[7] The question asked:

> *Have you ever done any of the things on this card about a government action which you thought was unjust and harmful?*

- *Contact my MP or MSP*
- *Speak to an influential person*

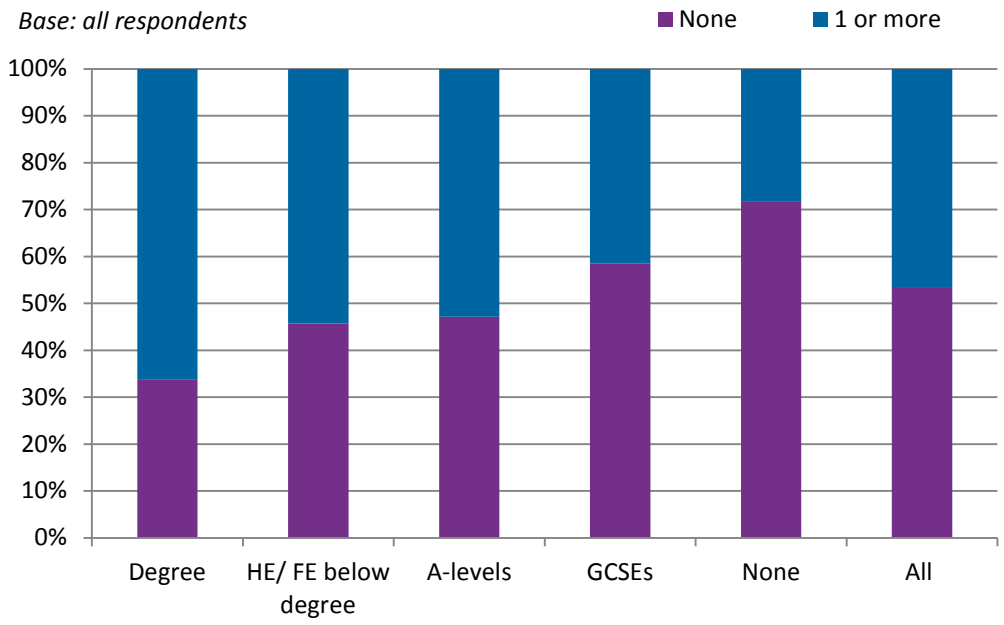
[7] These measures have been grouped together as indictors of political engagement in keeping with earlier analyses of British Social Attitudes survey data (Curtice and Seyd, 2003).

- *Contact a government department*
- *Contact radio, TV or a newspaper*
- *Sign a petition*
- *Raise the issue in an organisation I already belong to*
- *Go on a protest or demonstration*
- *Form a group of like-minded people.*

A scale was created that counted how many activities people had ever done, ranging from zero to eight. Overall, less than half (47 per cent) had ever undertaken any of these actions.

Experience of political action varied considerably by educational attainment, with political activity being most common among those with a degree (two-thirds of graduates reported one or more of the activities). In comparison, around half of those with below degree level higher education qualifications (54 per cent) or with A-levels (53 per cent) reported one or more of the listed activities, as did approximately two-fifths of those with GSCE level qualifications (41 per cent) and just under a third of those with no qualifications (28 per cent).

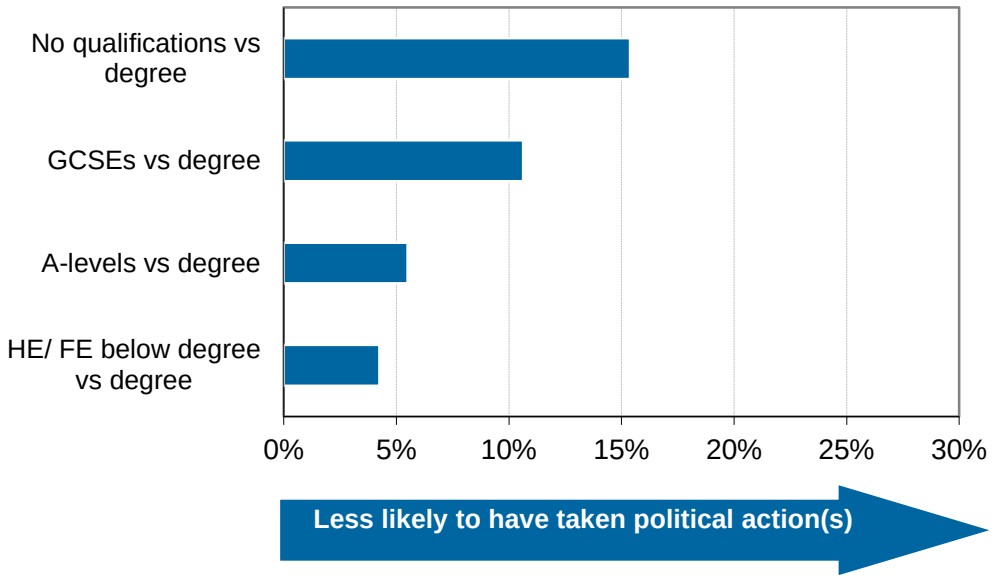
Figure 3.1 How many of the things on this card have you done about a government action which you thought was unjust and harmful?



This pattern remained in the regression analysis, which controlled for other background characteristics, such as age and income, and considered the total number of political actions taken. Figure 3.2 illustrates the effect of educational level on political action, transforming regression coefficients into percentages for ease of interpretation.

This chart clearly shows the incremental increase in political activity with educational level. Specifically, those with no qualifications were 15 percentage points less likely to have taken political action than those with a degree.

Figure 3.2 Effect of different educational levels on political action: regression analysis



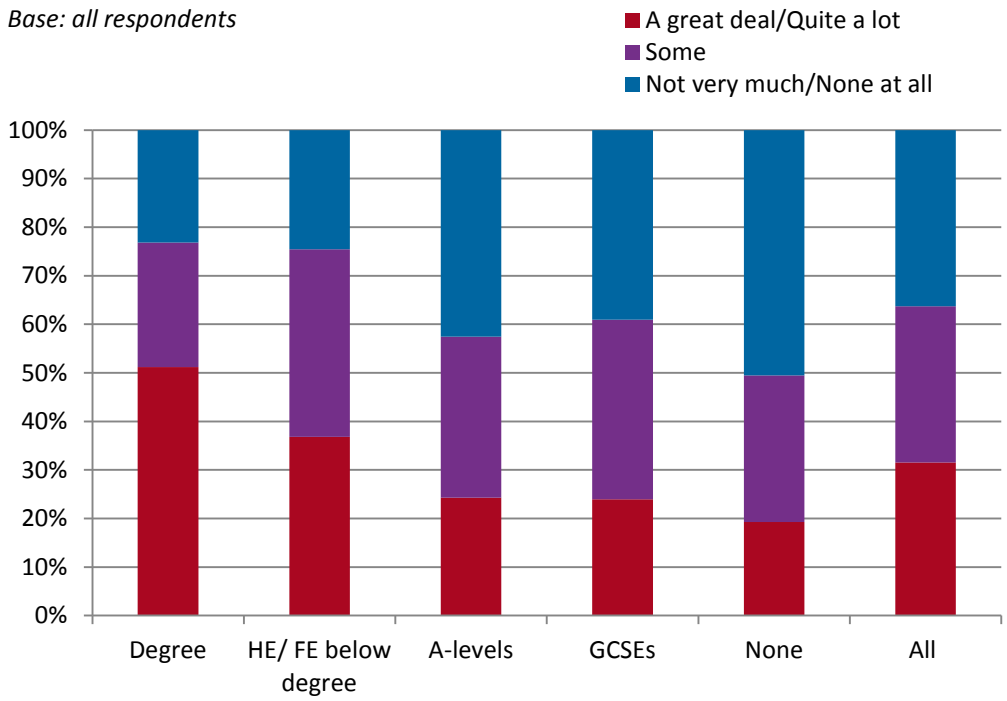
3.2 Political interest

Taking the t-test and cross-tabulation results as our starting point we selected ‘a general interest in politics’ to take forward for more detailed analysis. It was felt that this question - reproduced below as it appears in the British Social Attitudes survey - best encapsulated the concept of political interest:

> *How much interest do you generally have in what is going on in politics… a great deal, quite a lot, some, not very much, or, none at all?*

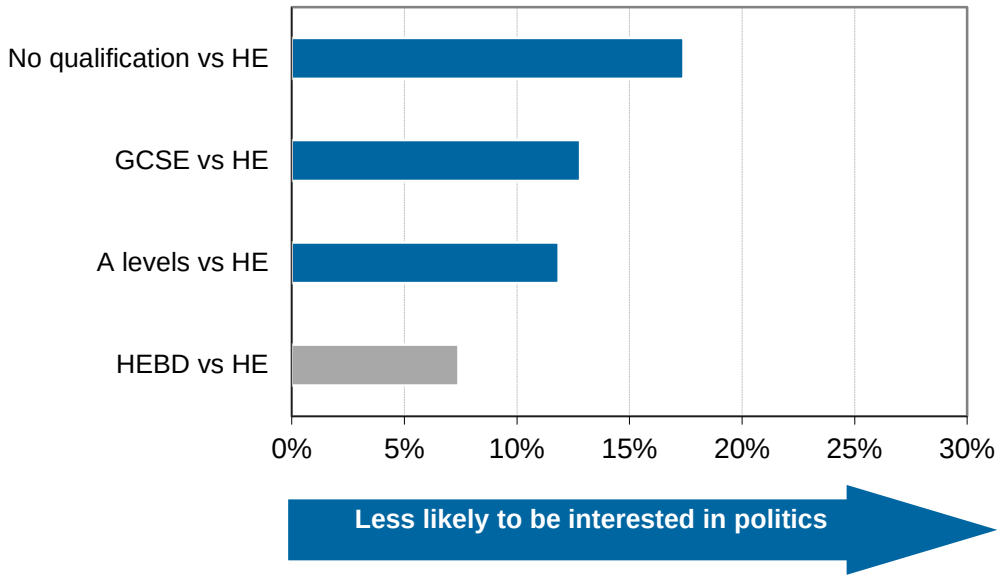
The cross-tabulation results, summarised in Figure 3.3, show that political interest varied by level of qualification, increasing incrementally with educational level (with a much smaller difference between the A-level and GCSE groups). Interest in politics was lowest among the no qualification group (19 per cent reporting a great deal or quite a lot of interest) and highest among those educated to degree level (51 per cent).

Figure 3.3 How much interest do you generally have in what is going on in politics? By educational level



The overall relationship between education and political interest was apparent even once other characteristics had been controlled for using regression analysis – with all educational levels showing a statistically significant difference except the HE/FE below degree group. Figure 3.4 shows how the level of political interest reported increases with educational level.

Figure 3.4 Effect of different educational levels on interest in politics: regression analysis



NB: Blue bars denote statistically significant coefficients; grey bars non-significant ones

3.3 Political efficacy

The 2011 survey included a number of questions to assess whether people felt that they personally had any say over how governments run the country (which is referred to in the literature as personal efficacy)[8] and whether people thought the political system works for the citizens it serves (system efficacy). The following two questions were used to measure a) personal efficacy, and, b) system efficacy:

Personal efficacy: *People like me have no say in what the government does*

1. *Agree strongly*
2. *Agree*
3. *Neither agree nor disagree*
4. *Disagree*
5. *Disagree strongly*

[8] For further details see Lee and Young (2013).

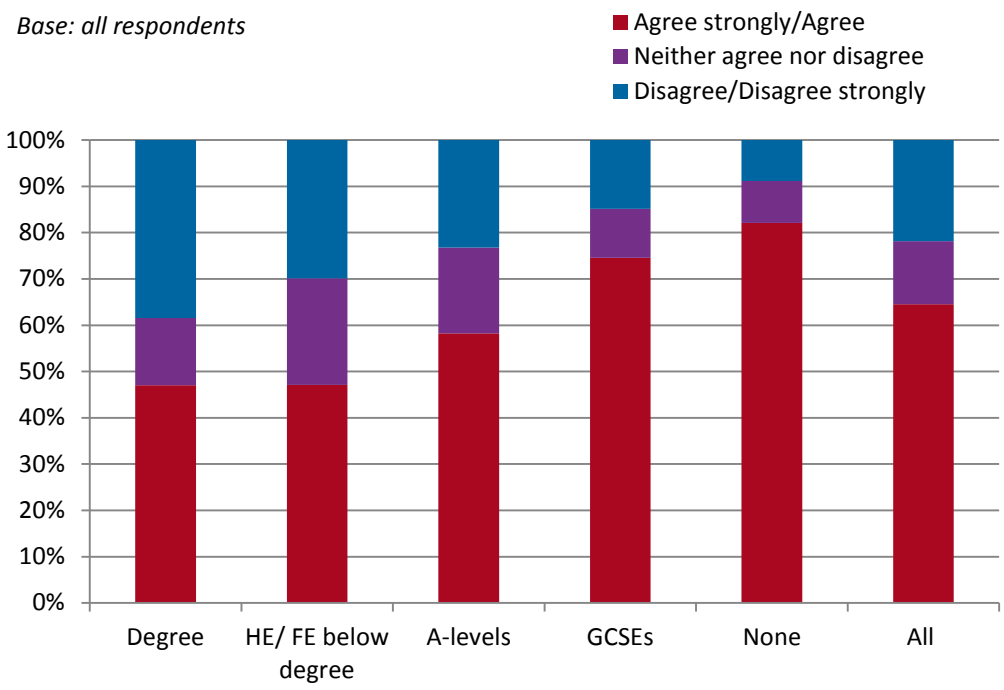
System efficacy: *It doesn't really matter which party is in power, in the end things go on much the same*.

1. *Agree strongly*
2. *Agree*
3. *Neither agree nor disagree*
4. *Disagree*
5. *Disagree strongly*

3.3.1 Personal efficacy

Just under three-quarters (72 per cent) of respondents agreed with the first statement, with higher agreement on average among those with lower levels of qualifications. Over four-fifths (82 per cent) of those with no qualifications agreed or agreed strongly that they had no say in what the government does, compared to just under half of those with a degree (47 per cent).

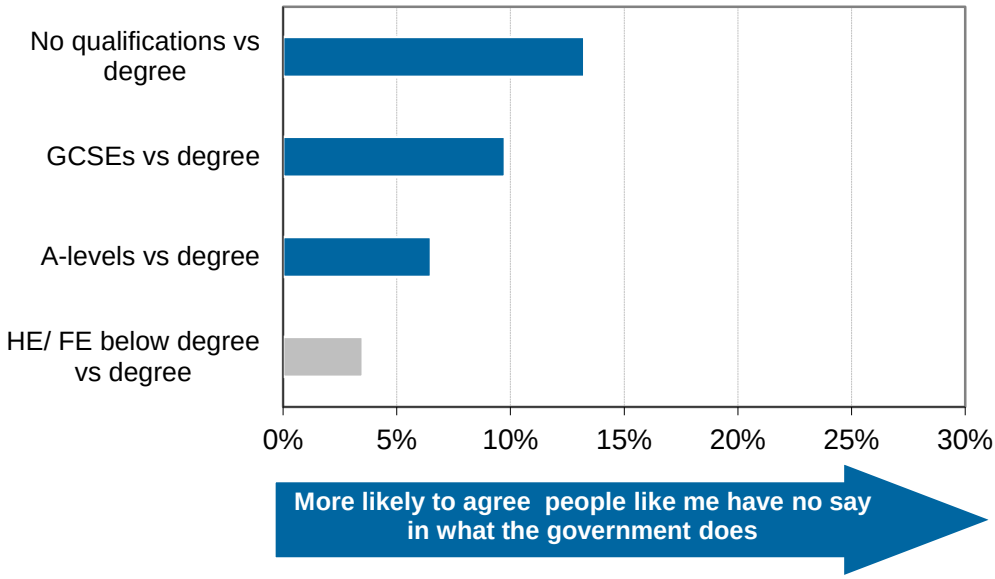
Figure 3.5 People like me have no say in what the government does



When controlling for other characteristics, there was no significant difference between those with a degree and those with below degree level HE/FE qualifications. However

those with no qualifications, GCSEs and A-levels were significantly more likely to agree with the statement, and therefore, less likely to feel they have a say in what the government does. Indeed, those with no qualifications were approximately 18 percentage points more likely than the graduate group to feel they had 'no say in what the government does'.

Figure 3.6 Effect of different educational levels on agreement with the statement 'people like me have no say in what the government does': regression analysis

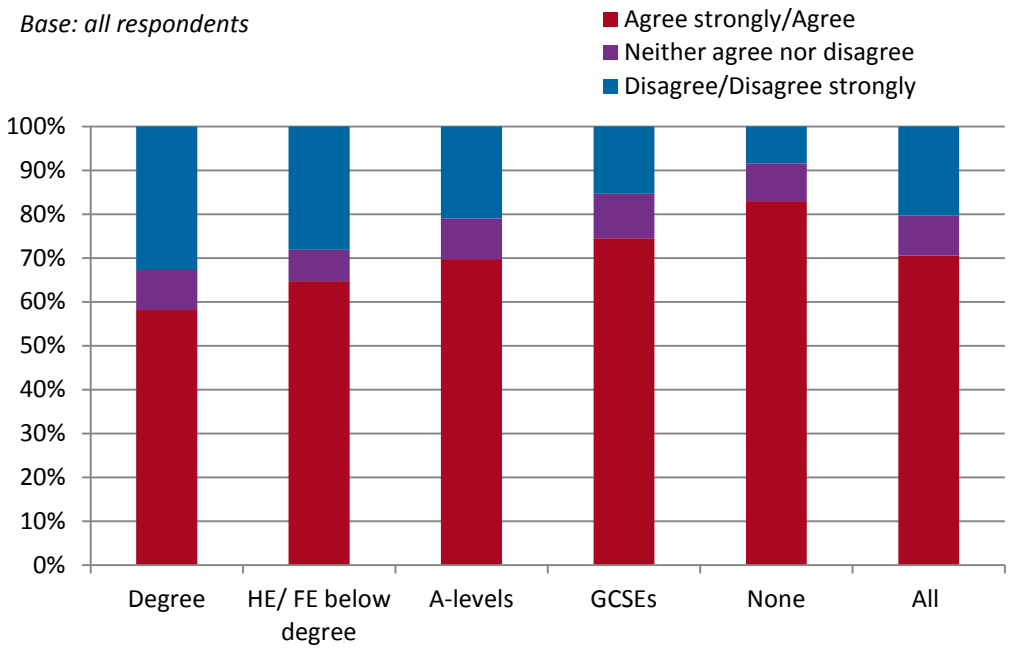


NB: Blue bars denote statistically significant coefficients; grey bars non-significant ones

3.3.2 System efficacy

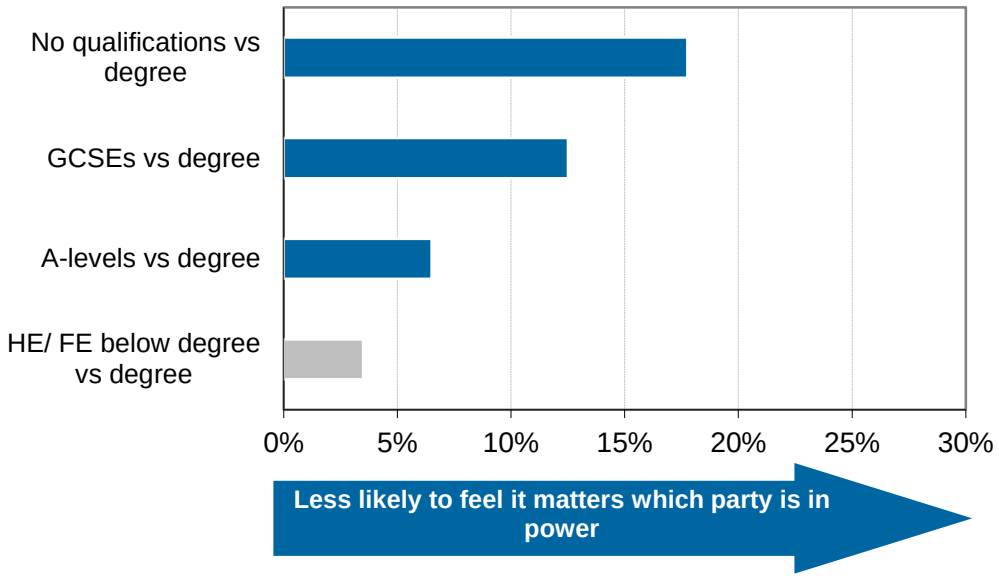
People in the lower educational groups were again more likely to think that it does not really matter which political party/ies is in power. Over four-fifths (83 per cent) of respondents with no qualifications agreed or agreed strongly with the statement, compared to 58 per cent of those with a degree.

Figure 3.7 It doesn't really matter which party is in power, in the end things go on much the same?



As before, when controlling for other background characteristics, the views of people with below degree level HE/FE qualifications did not differ from those of graduates, but agreement with the statement was significantly higher among the A-level, GCSE and no qualification groups. Specifically, those with no qualifications were approximately 13 percentage points less likely than those with a degree to feel it matters which political party/ies are in power.

Figure 3.8 Effect of different educational levels on agreement with the statement 'It doesn't really matter which party is in power, in the end things go on much the same': regression analysis



NB: Blue bars denote statistically significant coefficients; grey bars non-significant ones

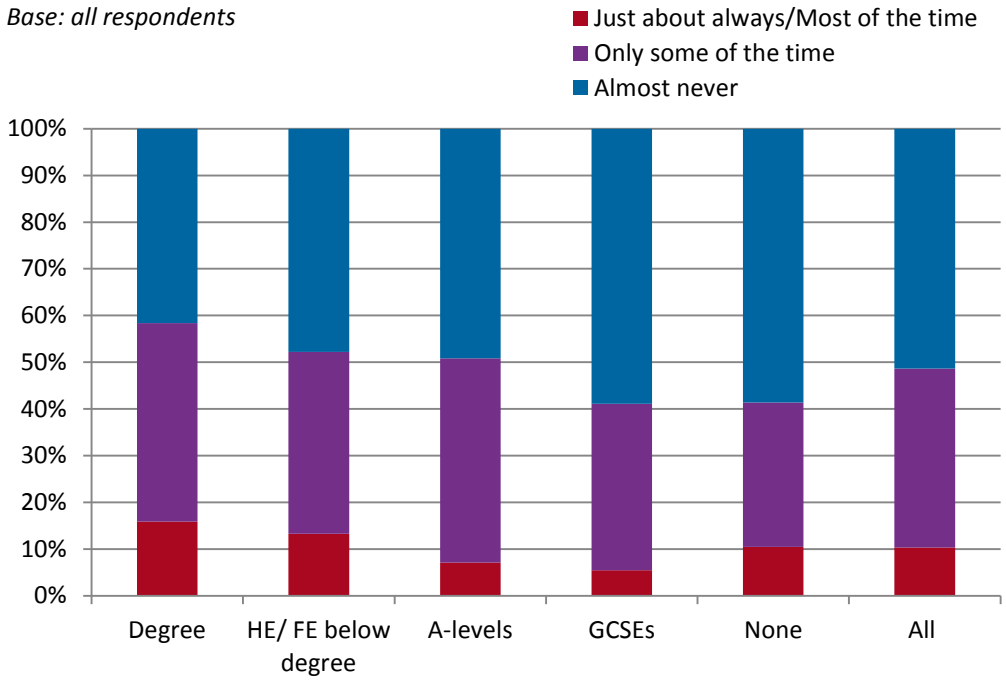
3.4 Political trust

To measure political trust the 2013 British Social Attitudes survey asks the following question:

How much do you trust politicians of any party in Britain to tell the truth when they are in a tight corner?

1. *Just about always*
2. *Most of the time*
3. *Only some of the time*
4. *Almost never*

Figure 3.9 How much do you trust politicians of any party in Britain to tell the truth when they are in a tight corner?



While the descriptive, cross-tabulation analysis showed variation in attitudes by educational level (as displayed in Figure 3.9), this relationship was no longer significant when other background characteristics were taken into account (chart not shown).

3.5 Summary: politics

People's attitudes to politics did tend to vary according to their education level, and for a number of issues educational level did appear to have an independent association with attitudes even after taking into account other background characteristics. Table 3.1, below, brings together key findings from this section.

Table 3.1 Do the attitudes of graduates differ significantly from those with other levels of education when other factors are taken into account?: Politics				
Base: All adults				
	HE/FE below degree	A-levels	GCSEs	No quals
General interest in politics	✓	✓	✓	✓
Political engagement	✓	✓	✓	✓
Personal efficacy	**X**	✓	✓	✓
System efficacy	**X**	✓	✓	✓
Political trust	**X**	**X**	**X**	**X**

In sum:

- Interest in politics increased incrementally with educational level. Graduates expressed the highest level of interest, followed by those with below degree level HE/FE qualifications; political interest then declined with qualification levels.

- Political engagement varied significantly by level of qualification, with higher levels of engagement tending to be found among those in the higher educational levels. This finding reflects other analysis of British Social Attitudes data (Lee and Young, 2013).

- When it comes to measures of political and system efficacy, gradates and those with below degree level HE/FE qualifications held similar views, and were more engaged than those with lower qualifications. A similar pattern was evident when looking at whether people had ever undertaken any political action – the number of actions taken was highest among those with a degree, followed by those with below degree level HE/FE qualifications or A-levels, then lower among those with just GCSEs and lowest of all among those without qualifications.

4 Environment

The following section considers questions about the environment included in the British Social Attitudes Survey between 2010 and 2013. Specifically it considers the relationship between people's attitudes towards environmental issues and their level of education. It brings together the results of the cross-tabulation analysis with Stage two regressions, taking a subset of questions deemed to be significant at Stage one to test in a basic regression model, thus controlling for key demographic variables.

Twelve questions from the 2013 survey and 19 from British Social Attitudes survey 2010 were included in the Stage one analysis under the environment heading (see Appendix B). Once recoded, 11 of the 2013 variables and 17 of 2010 variables were significantly related to a person's educational attainment. The three questions which were not significantly related to educational level asked:

- *I am willing to reduce the amount I travel by plane (To help reduce the impact of climate change) [2013].*
- *Have you taken part in a protest / demonstration about environmental issues in the last 5 years [2010]?; and*
- *How far do you agree with the statement, 'all we do in modern life harms environment' [2010].*

Of those questions found to be significant, a small number were selected to represent the following sub-themes (see Table 2.1):

- Environmental knowledge;
- Environmental concern;
- Environmental action.

4.1 Environmental knowledge

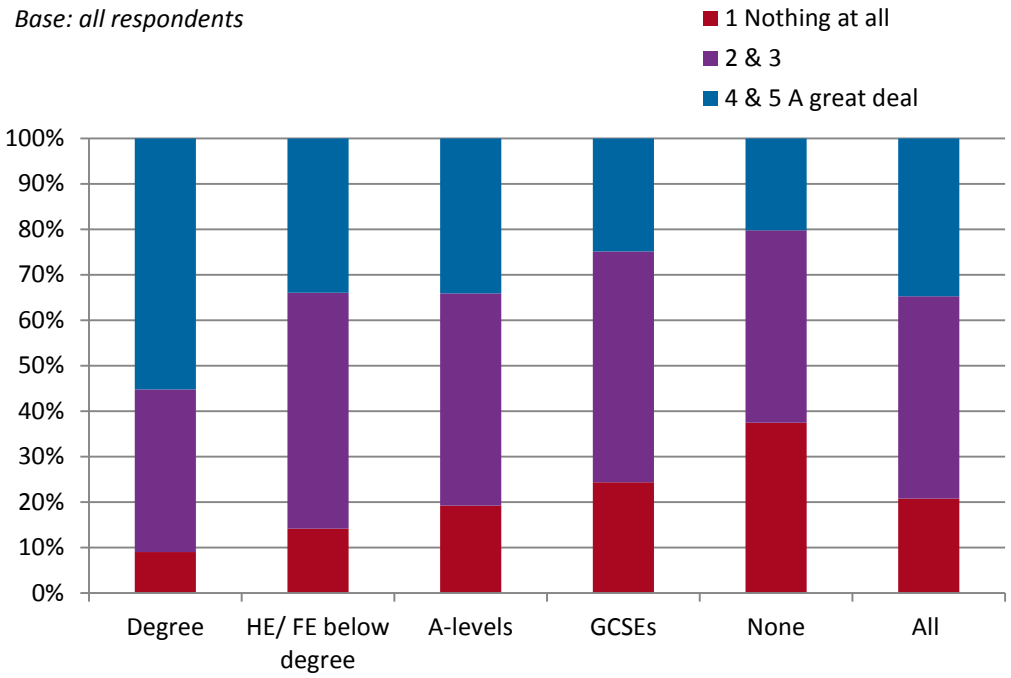
A key aspect underlying a person's attitudes to the environment is their knowledge and understanding of environmental problems. In order to assess this knowledge the 2010 British Social Attitudes survey asked:

> *How much do you feel you know about the causes of environmental problems… where 1 indicates you feel you know nothing at all and 5 indicates you feel you know a great deal.*

Results of the Stage one cross-tabulation analysis showed significant differences by educational level (displayed in Figure 4.1). Just over half (55 per cent) of those with a degree selected a number at the top of the answer scale (4 or 5 - a great deal), compared

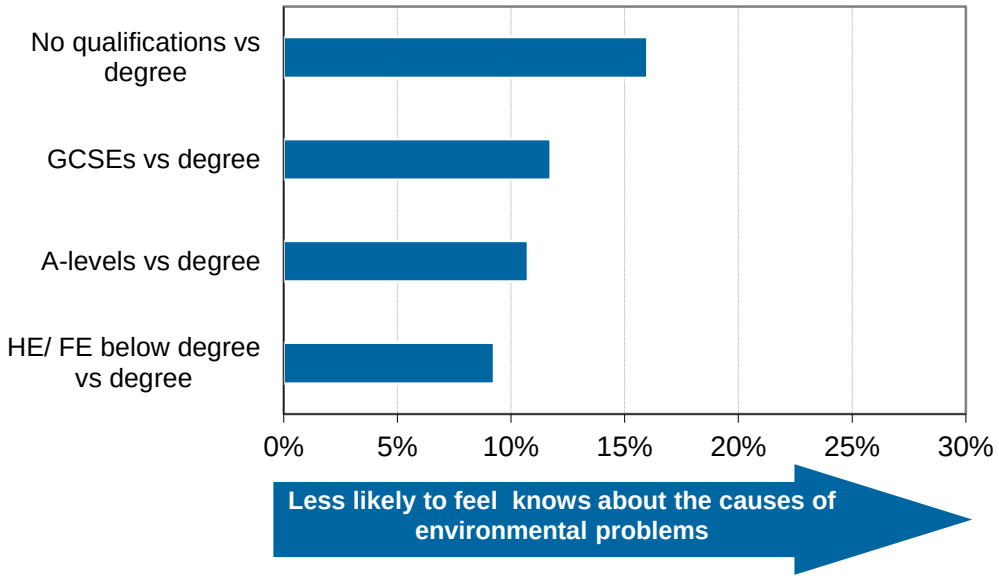
with just over a third of those with A-level qualifications or below degree level HE/FE qualifications (34 per cent), a quarter of those with GCSE qualifications (25 per cent) and a fifth of those without qualifications (20 per cent).

Figure 4.1 How much do you feel you know about the causes of environmental problems?



When controlling for other characteristics in the Stage two regression analysis, this pattern of results remained significant. Figure 4.2 displays the regression coefficients converted into percentages. This chart suggests that self-reported knowledge of the causes of environmental problems increased incrementally with educational level. Specifically, those with no qualifications were 16 percentage points less likely to report a good knowledge of the causes of environmental problems than those with a degree level qualification.

Figure 4.2 Effect of different educational levels on knowledge of the causes of environmental problems: regression analysis



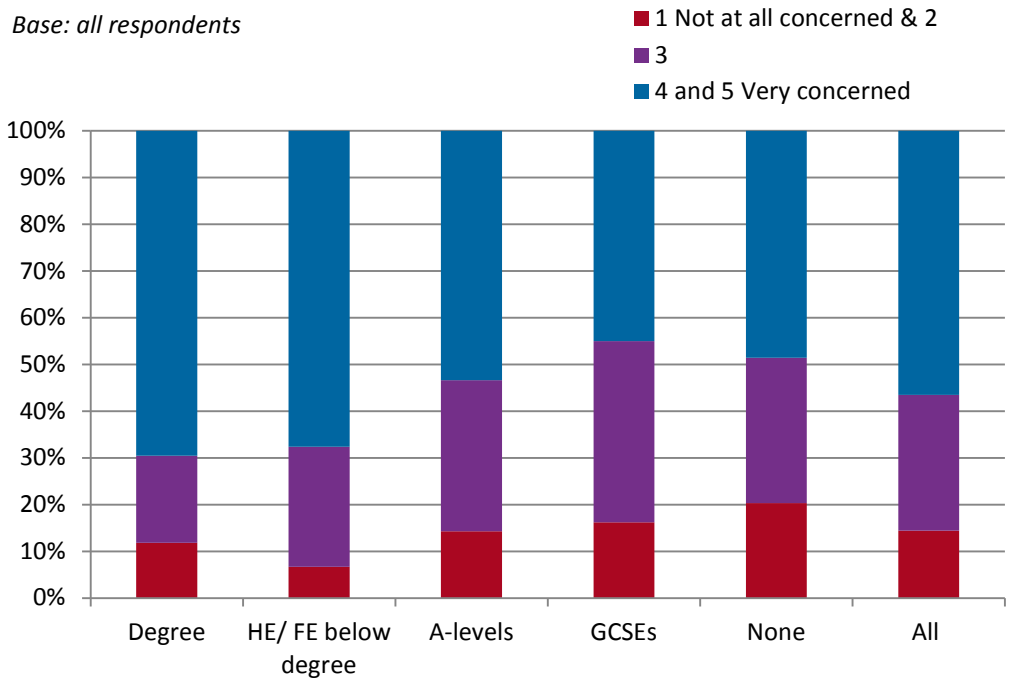
4.2 Environmental concern

Two British Social Attitudes survey questions were taken forward to the Stage two analyses to illustrate respondents' level of concern about the environment. The first was included in the 2010 survey and asked:

> *Generally speaking, how concerned are you about environmental issues… where 1 means you are not at all concerned and 5 means you are very concerned?*

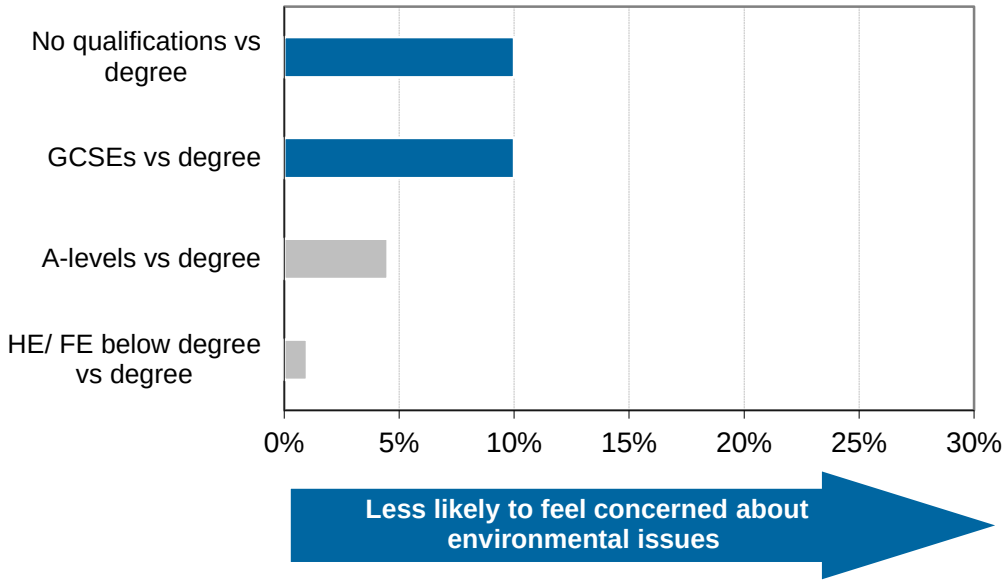
Stage one cross-tabulation results are displayed in Figure 4.3. This graph shows that levels of concern were highest among those with a degree (70 per cent chose one of the two categories at the top of the scale, 4 or 5 – very concerned) and lowest amongst those in the GCSE group (45 per cent).

Figure 4.3 Generally speaking, how concerned are you about environmental issues?



When controlling for other background characteristics the level of environmental concern expressed by those with GCSEs and with no qualifications remained significantly lower when compared to those with a degree. Specifically, respondents in the GCSE and no qualification groups were ten percentage points less likely to express concern about the environment than those in the degree level group. However, differences between graduates and those with below degree level HE/FE qualifications/ with A-levels were not statistically significant (see Figure 4.4).

Figure 4.4 Effect of different educational levels on concern about environmental issues: regression analysis



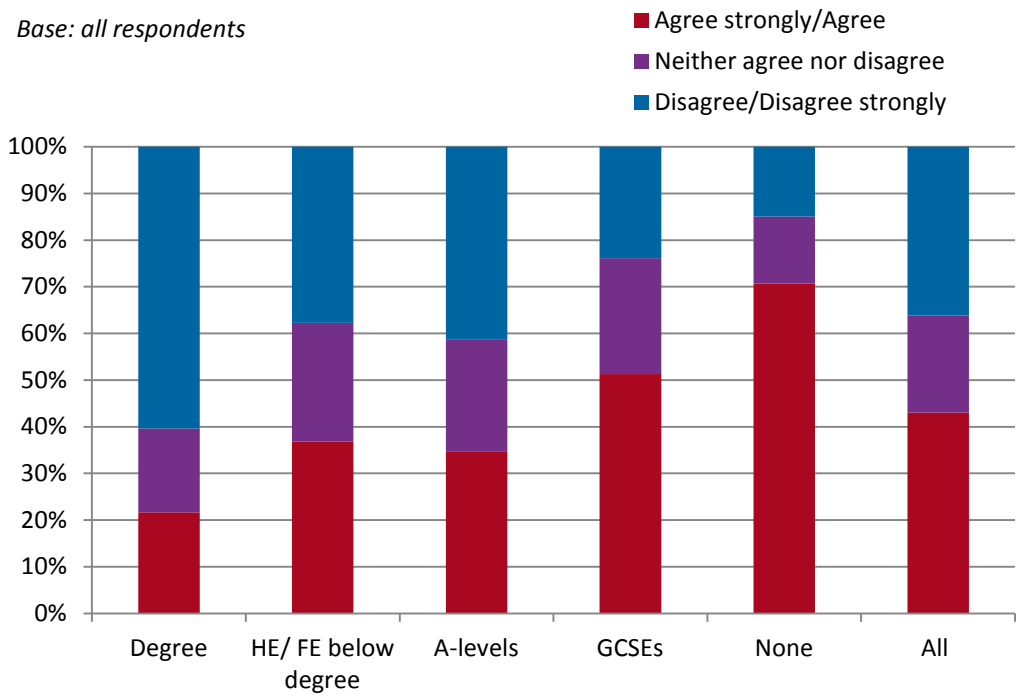
NB: Blue bars denote statistically significant coefficients; grey bars non-significant ones

Also connected with environmental concern, the 2010 British Social Attitudes survey asked respondents to what extent they agreed or disagreed with the following statement:

> *We worry too much about the future of the environment and not enough about prices and jobs today… Do you agree strongly, agree, neither agree nor disagree, disagree, disagree strongly?*

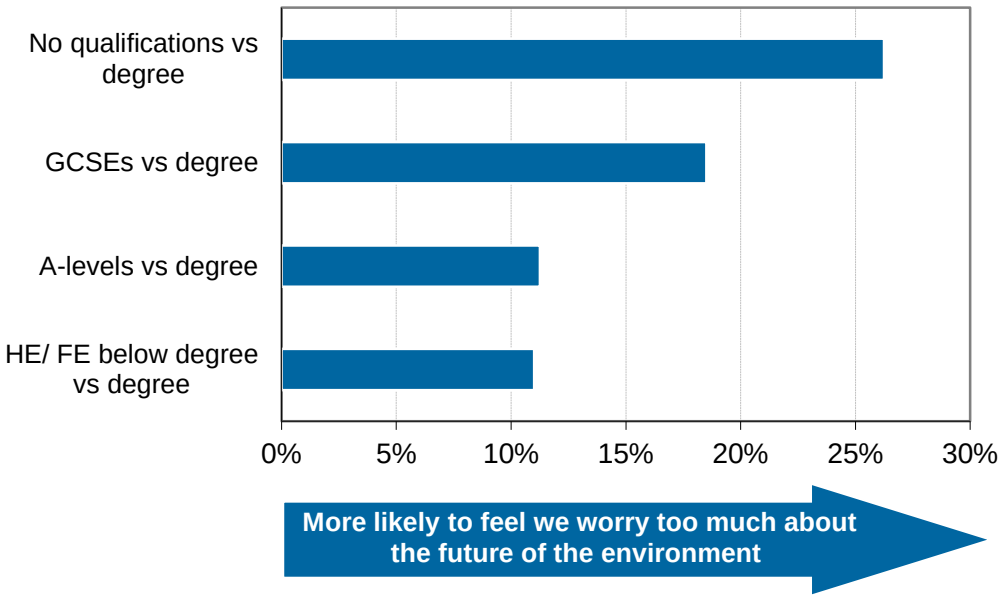
Reponses varied significantly by educational level, in keeping with earlier analysis of this question (see, for example, Taylor, 2011). The majority of those with a degree level qualification disagreed or disagreed strongly (60 per cent) that we worry too much about the environment, compared to around two-fifths of those with A-levels (41 per cent) and those with below degree level HE/FE qualifications (38 per cent). Around a quarter of those with GCSEs (24 per cent) and 15 percent of those in the no qualifications group, felt that we worry too much about the environment at the expense of prices and jobs.

Figure 4.5 We worry too much about the future of the environment and not enough about prices and jobs today



When controlling for other background characteristics this pattern remained significant. Figure 4.6 shows that those with no qualifications were more than 25 percentage points more likely to feel we worry too much about the future of the environment. As with the cross-tabulation analysis the difference between those with a degree level qualification and those with A-levels is larger than between those in the HE/FE below degree and degree level groups. By comparing Figure 4.6 with the other regression tables we can also see that differences by educational level were relatively pronounced for this question.

Figure 4.6 Effect of different educational levels on agreement with the statement 'we worry too much about the future of the environment and not enough about prices and jobs today': regression analysis



4.3 Environmental action

The 2013 survey included a set of questions about attitudes to the environment that specifically related to a willingness to take environmental action and the use of transport. These included the following:

The price of a plane ticket should reflect the environmental damage that flying causes, even if this makes air travel much more expensive;

For the sake of the environment everyone should reduce how much they use their cars;

There is no point in reducing my car use to help the environment unless others do the same.

Agreement with the first statement (about plane ticket pricing) varied by educational level (see Figure 4.7). Agreement was highest among those with a degree (56 per cent agreeing or agreeing strongly) followed by those with A-levels (45 per cent), then those with GCSEs/ below degree level HE/FE qualifications (39 and 38 per cent respectively) and was lowest among those without qualifications (35 per cent).

Differences between educational groups remained significant for all except those with A-levels when controlling for other factors, including income. This suggests differences cannot be explained by those with higher qualifications being better able to afford the higher air fares implied in the statement (see Figure 4.8).

Figure 4.7 The price of a plane ticket should reflect the environmental damage that flying causes, even if this makes air travel much more expensive

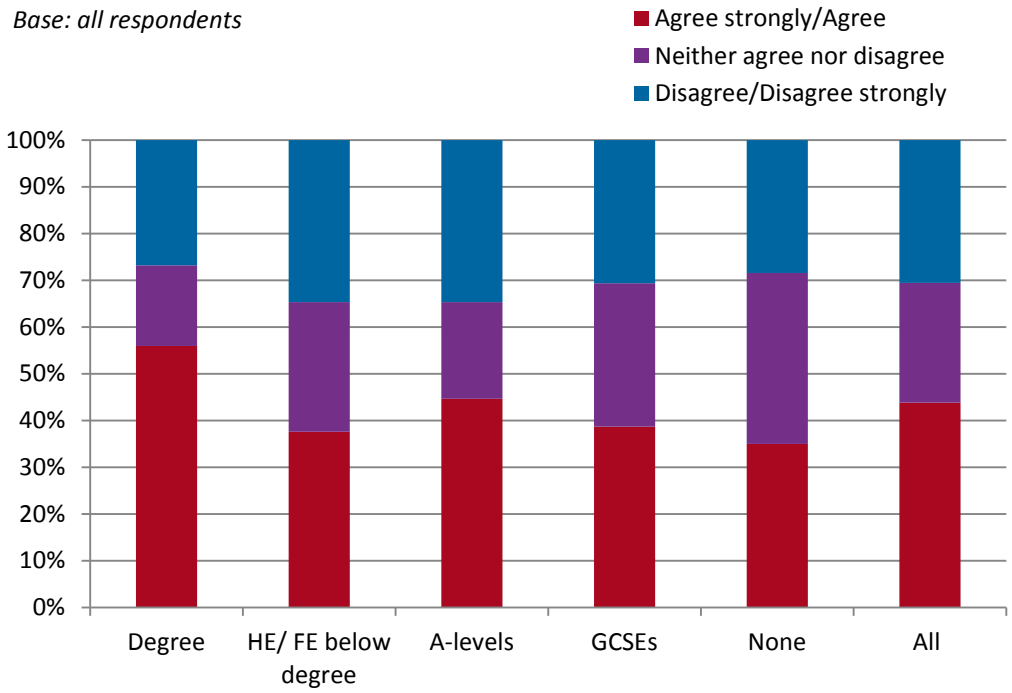
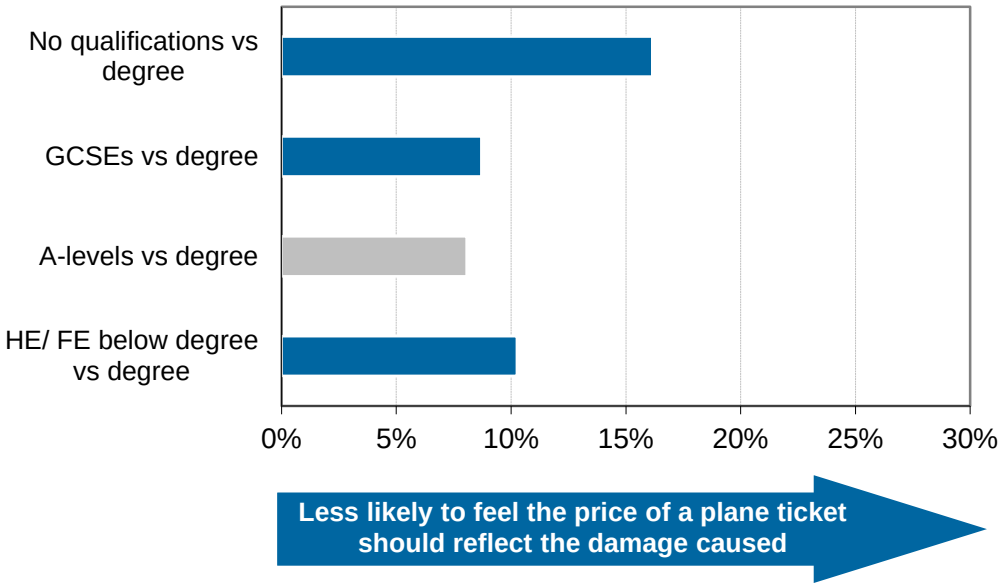


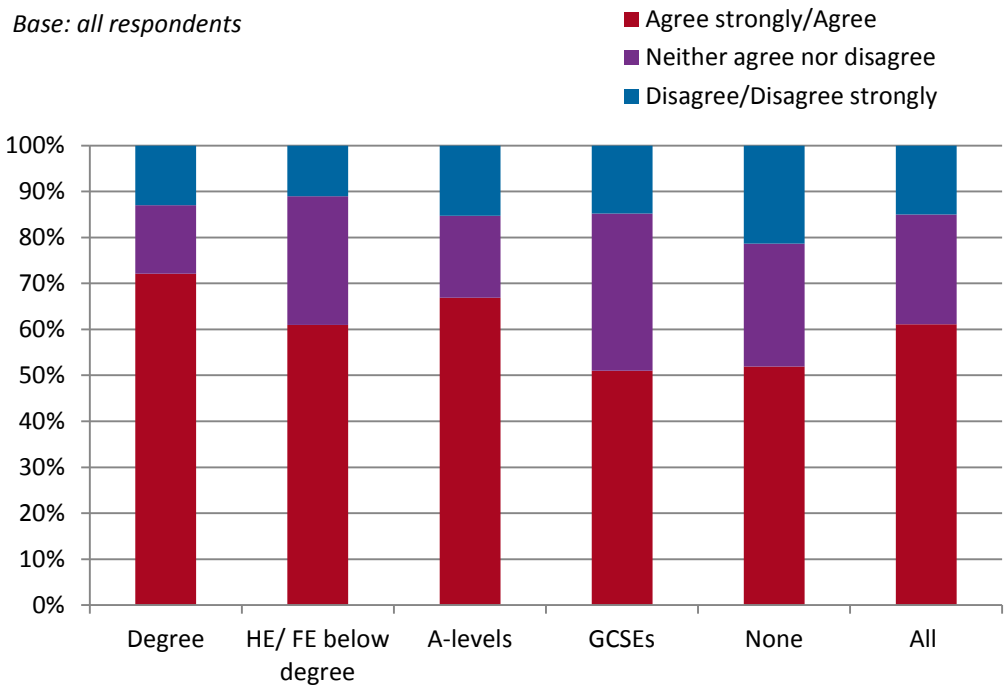
Figure 4.8 Effect of different educational levels on agreement with the statement 'the price of a plane ticket should reflect the environmental damage that flying causes': regression analysis



NB: Blue bars denote statistically significant coefficients; grey bars non-significant ones

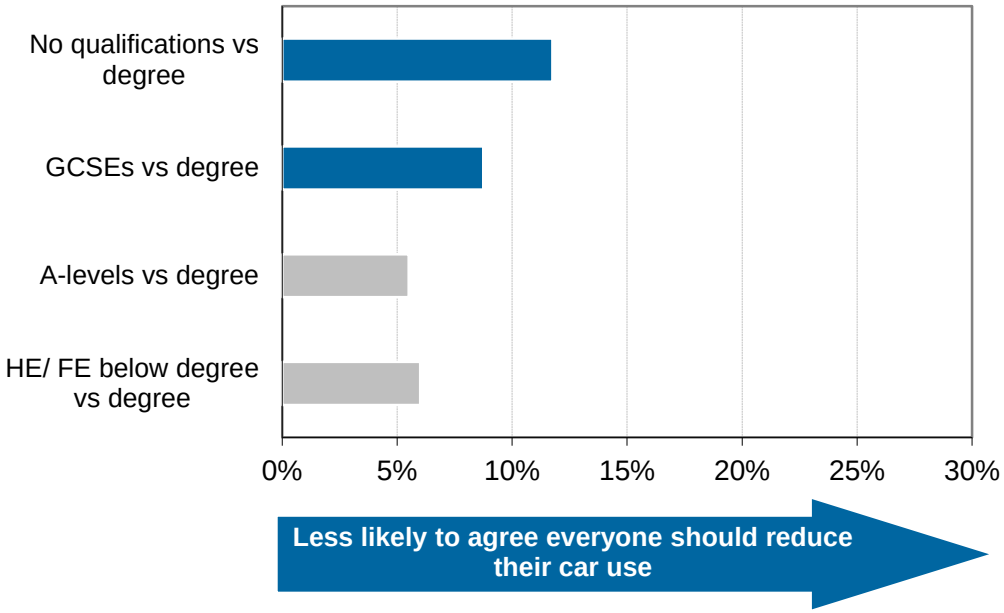
The second statement included under the heading 'environmental action', asked respondents about reducing car use. Again, Stage one cross-tabulation results showed statistically significant differences by educational level (see Figure 4.9). As with the first statement, levels of agreement were highest among those with degree level qualifications (72 per cent agreed or strongly agreed with the statement), followed by the A-level group (67 per cent). Those with GCSEs (rather than the no qualification group) showed the lowest levels of agreement at 51 per cent.

Figure 4.9 For the sake of the environment everyone should reduce how much they use their cars



Differences remained significant for just the GCSE and the no qualification groups when controlling for other background characteristics (see Figure 4.10). These differences were less pronounced than for other measures included in this section, with the no qualification group being approximately 12 per cent less likely to agree everyone should reduce their car use.

Figure 4.10 Effect of different educational levels on agreement with the statement 'For the sake of the environment everyone should reduce how much they use their car': regression analysis



NB: Blue bars denote statistically significant coefficients; grey bars non-significant ones

Agreement with the final statement in this section also varied significantly by educational level. Thirty-nine per cent of those with a degree level qualification disagreed or disagreed strongly that there was no point reducing their own car use unless others did the same, compared to 17 per cent of those without qualifications and 16 per cent of those with GCSEs (see Figure 4.11).

Figure 4.11 There is no point in reducing my car use to help the environment unless others do the same

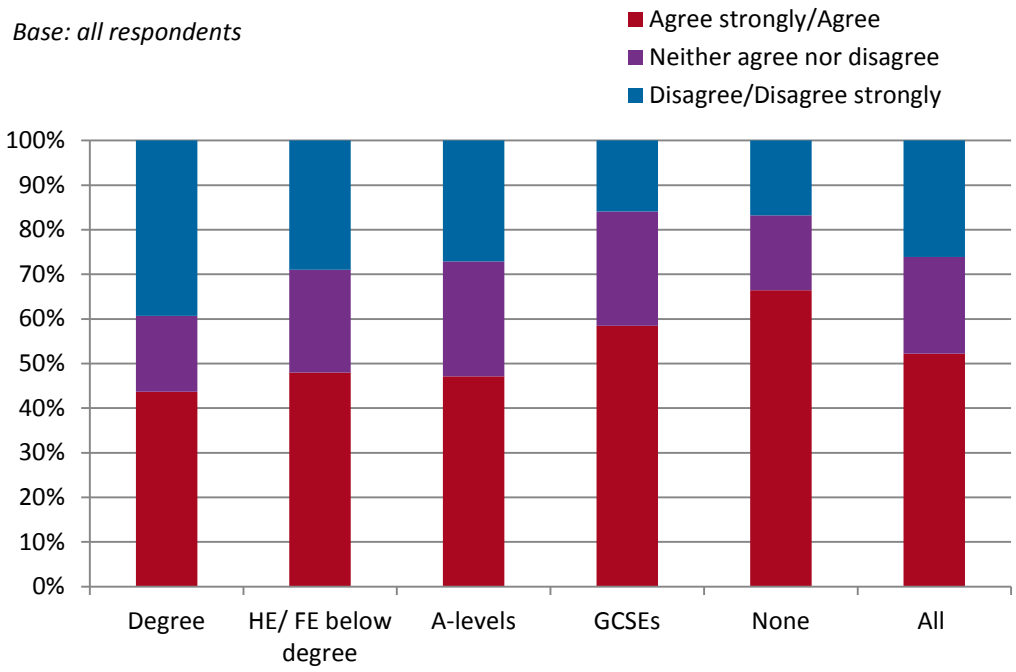
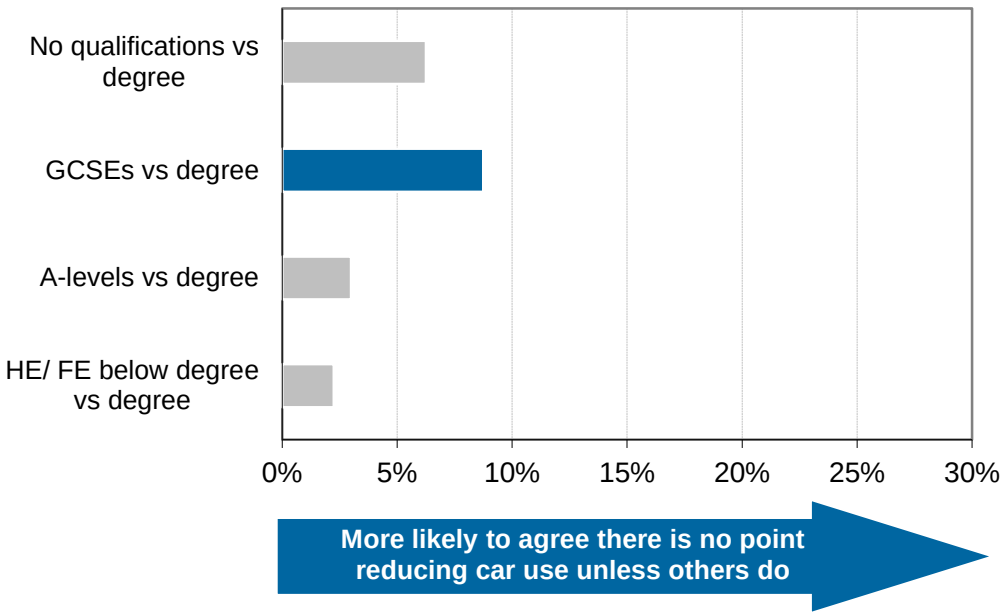


Figure 4.12 Effect of different educational levels on agreement with the statement 'There is no point reducing my car use to help the environment unless others do the same': regression analysis



NB: Blue bars denote statistically significant coefficients; grey bars non-significant ones

Although differences by educational level were significant in the stage one analysis, agreement with the final statement only showed a significant difference for the GCSE group once other characteristics were taken into account (see Figure 4.12). Those with GCSEs were approximately nine percentage points more likely to agree with the statement 'there is no point reducing my car use unless others do the same'.

Results from the environmental action section highlight interesting differences between attitudes to plane travel and car use, suggesting that educational level plays greater role in shaping differences in attitudes towards air travel. This is an area that might usefully be explored in further analysis.

4.4 Summary: environment

Overall, graduates were the most likely to express concern about the environment and the most willing to say they would make or accept changes to the way they used transport for environmental reasons, while those in the no qualifications group expressed the lowest levels of knowledge and concern about the environment. Generally speaking, those with A-levels expressed the second highest levels of concern (rather than the HE/FE below degree group). Therefore attitudes to the environment do not appear to increase incrementally with educational level.

Many of the significant associations identified at Stage one, remained significant once other background characteristics had been included in the analysis. The main exceptions to this related to general concern about the environment and environmental action in terms of reducing car use. On these points, those with A-levels and below degree level HE/FE qualifications did not differ significantly from graduates. Notably those with A-levels only showed a significant difference from university graduates on two of six the environment measures once other background characteristics had been taken into account. By contrast, differences between graduates and those in the lower educational groups remained significant for virtually all attitudinal measures. (Regression results are summarised in Table 4.1).

Table 4.1 Do the attitudes of graduates differ significantly from those with other levels of education when other factors are taken into account?: environment

Base: All adults				
	HE/FE below degree	A-levels	GCSEs	No quals
Environmental knowledge	✓	✓	✓	✓
Environmental concern 1 (how concerned)	**X**	**X**	✓	✓

Table 4.1 Do the attitudes of graduates differ significantly from those with other levels of education when other factors are taken into account?: environment				
Environmental concern 2 (worry too much about the environment)	✓	✓	✓	✓
Environmental action 1 (price of a plane ticket should reflect damage)	✓	X	✓	✓
Environmental action 2 (everyone should reduce car use)	X	X	✓	✓
Environmental action 3 (no point making changes unless others do)	X	X	✓	X

5 Gender roles and personal relationships

This next section considers the effects of a person's education on their attitudes to traditional gender roles and personal relationships. As with the previous sections, it brings together the results of the cross-tabulation analyses with the Stage two regression analyses. Here the broader topic has been divided into just two sub-themes, each represented by a small number of British Social Attitudes survey questions (see Table 2.1):

- Gender roles;
- Personal relationships.

Nine questions from the 2013 questionnaire and 25 from 2012 were included in the stage one analysis, originally grouped under the headings: sexuality and discrimination, family and gender roles and relationships (see Appendix B). Once recoded, all 2013 variables were found to be significantly related to a person's educational attainment (to the 0.05 level) and all bar one of the 2012 variables were significant. The one question that was not statistically significant asked:

> *How far do you agree with the following statement: One parent can bring up a child as well as two parents together?*

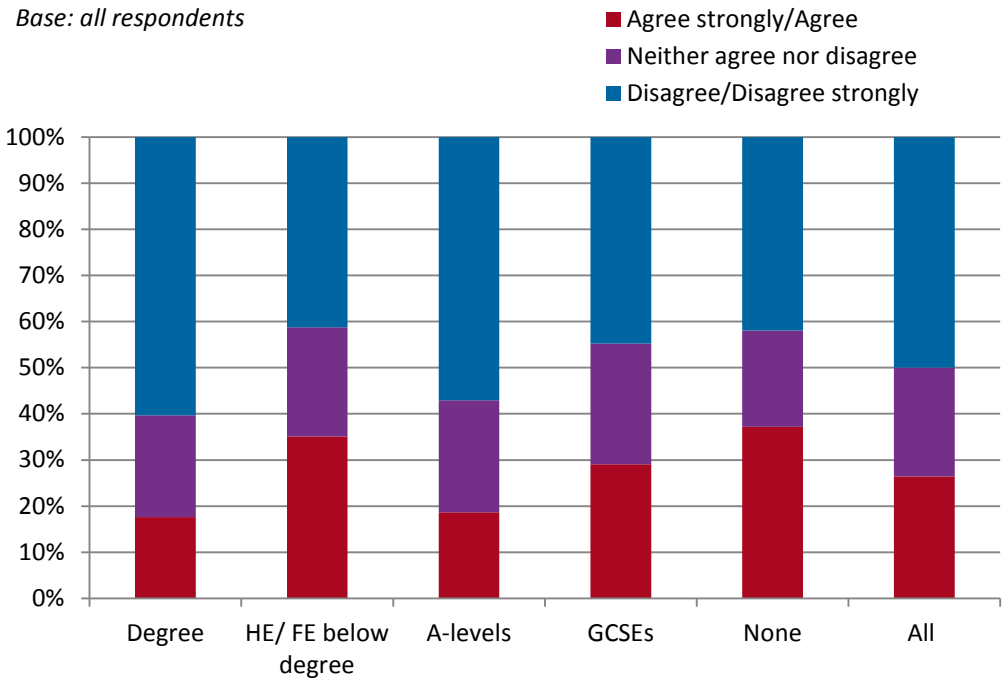
5.1 Gender roles

A range of questions from the 28 found to be statistically significant at Stage one were considered for the Stage two regression analysis and three brought forward to be included in the models. In the case of gender roles the following questions were felt to encapsulate the wider theme:

> *All in all, family life suffers when the woman has a full-time job… do you agree strongly, agree, neither agree nor disagree, disagree or disagree strongly?*
>
> *A job is all right, but what most women really want is a home and children… do you agree strongly, agree, neither agree nor disagree, disagree or disagree strongly?*

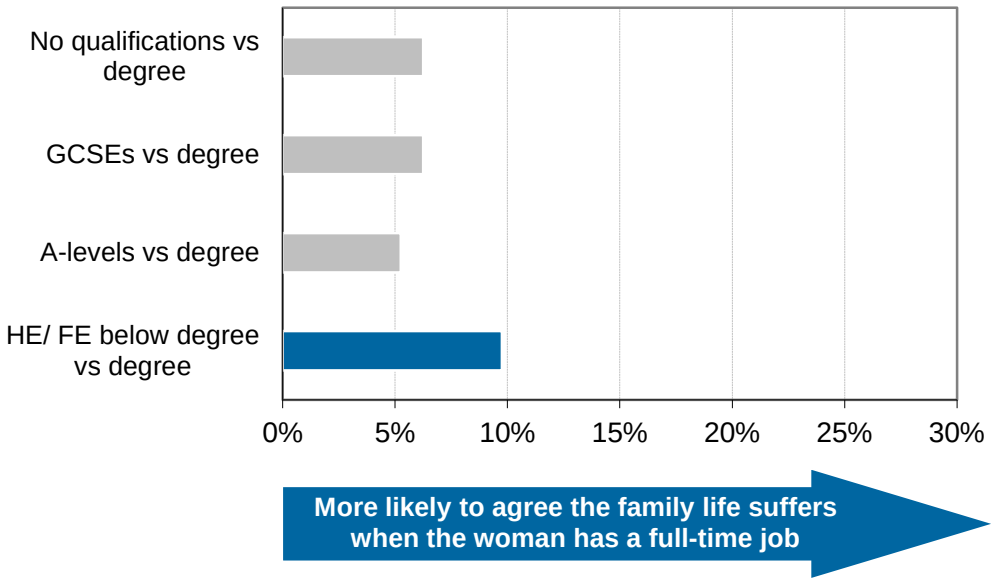
The results of the cross-tabulation analysis, displayed in Figure 5.1, show significant differences between respondents with different levels of education on the first of these measures. More than 60 per cent of those with a degree level qualification disagreed or disagreed strongly that 'family life suffers when women have a full-time job', compared to just over 40 per cent of those in the HE/FE below degree, GCSE and no qualification groups. The A-level group, however, showed a similar distribution of results to the graduates. These results contrast to those discussed in the politics section, where we tended to see an incremental increase with educational level.

Figure 5.1 All in all, family life suffers when the woman has a full-time job



Although the descriptive analysis found significant differences in attitudes by educational attainment, once other characteristics were taken into account this variation was no longer significant. Looking at the results for each of the educational groups individually, only the views of those with below degree level HE/FE qualifications varied significantly from those with a degree (see Figure 5.2). Respondents in the HE/FE below degree group were around 10 percentage points more likely than those with a degree to agree that 'family life suffers when the woman has a full-time job'.

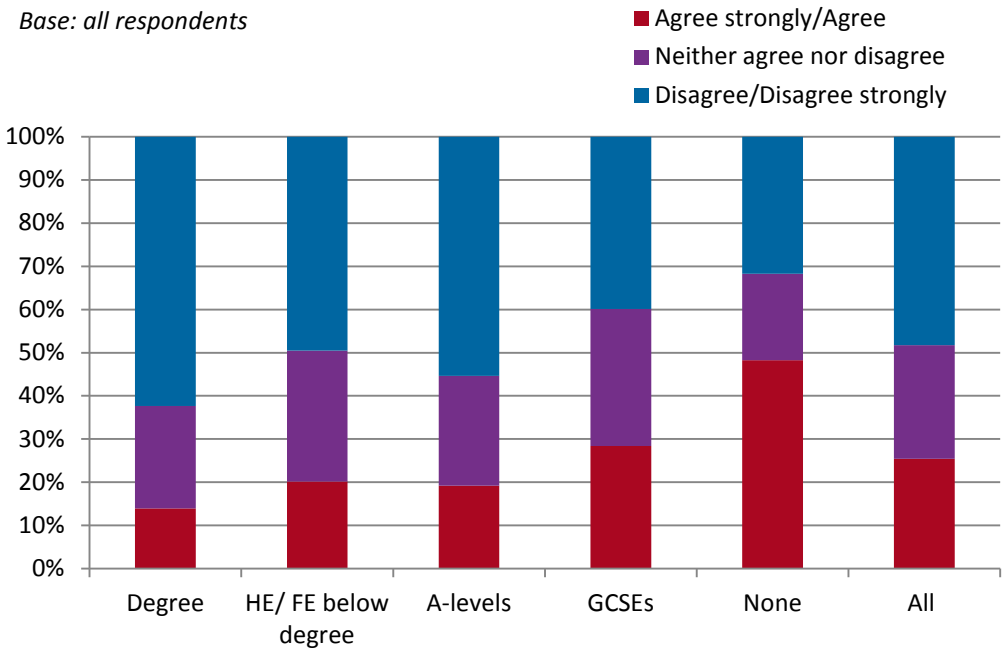
Figure 5.2 Effect of different educational levels on agreement that 'family life suffers when the woman has a full-time job': regression analysis



NB: Blue bars denote statistically significant coefficients; grey bars non-significant ones

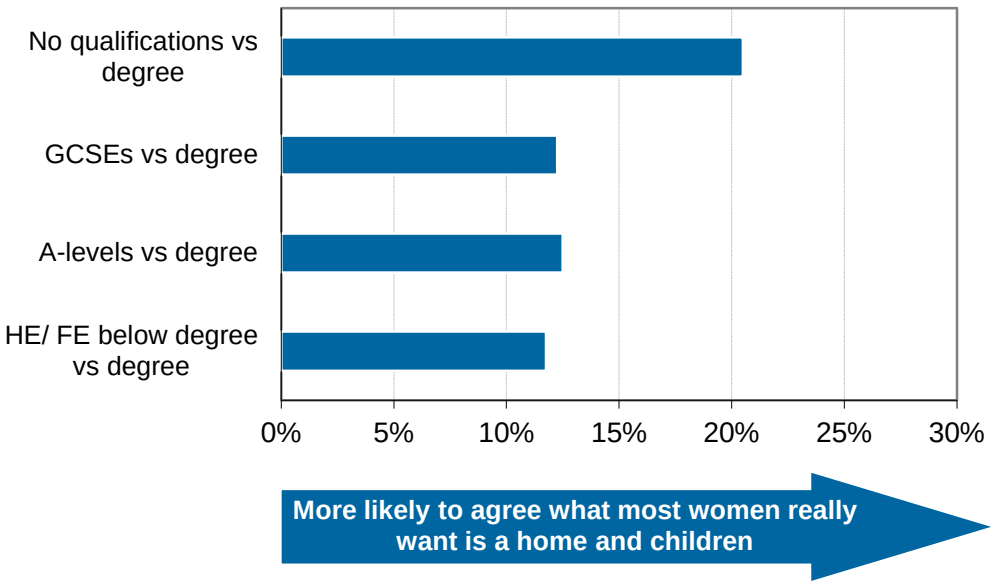
Cross-tabulation analysis showed significant differences between the educational groups on the second 'gender roles' measure (displayed in Figure 5.3). Overall, 45 per cent of adults disagreed or disagreed strongly with the statement: *A job is all right, but what most women really want is a home and children.* Levels of disagreement were highest amongst those with a degree (62 per cent) and lowest among those without qualifications (32 per cent).

Figure 5.3 A job is all right, but what most women really want is a home and children



Differences between the educational groups remained significant when controlling for other background characteristics. Specifically, when compared to those with a degree level qualification, respondents with HE/FE below degree qualifications, A-levels or GCSEs were approximately 12 percentage points more likely to agree that, 'what most women really want is a home and children'. Those in the no qualification group were more than 20 percentage points more likely to agree with the statement than those with a degree.

Figure 5.4 Effect of different educational levels on agreement that 'what most women really want is a home and children': regression analysis



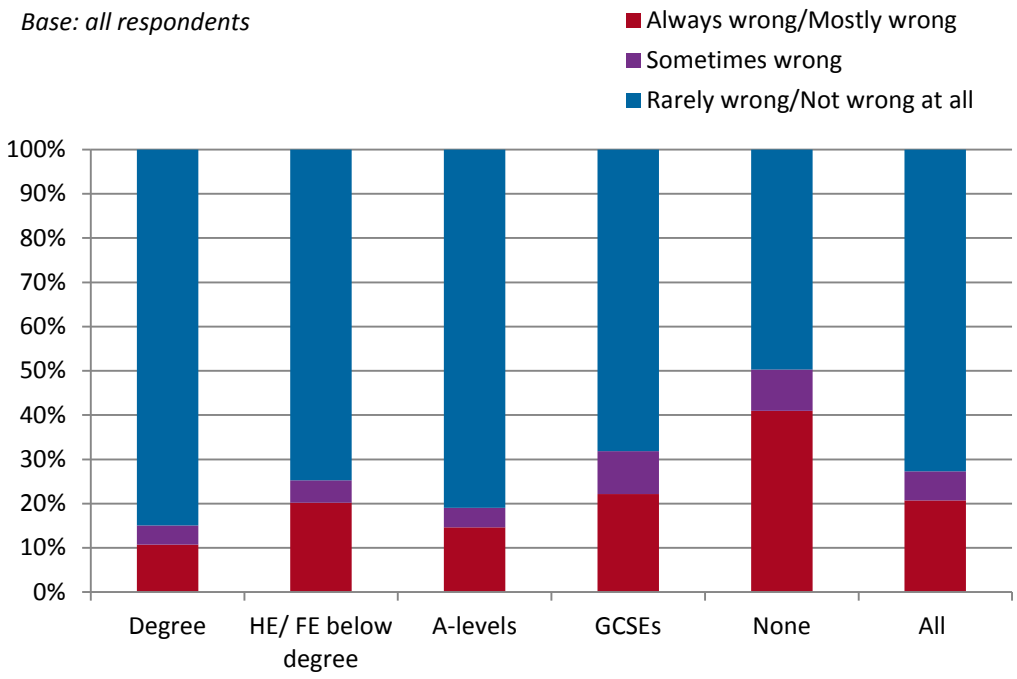
5.2 Personal relationships

As well as questions about attitudes to gender roles, the British Social Attitudes survey also asks a series of questions about sexual relationships, this includes the following:

> *What about sexual relations between two adults of the same sex… Are they always wrong, mostly wrong, sometimes wrong, rarely wrong, not wrong at all?*

The results of the Stage one cross-tabulation analysis are shown in Figure 5.5. Those with a degree were most likely to feel that sexual relations between two adults of the same sex were not wrong at all (73 per cent), followed by those with A-levels (72 per cent) and those with below degree level HE/FE qualifications (62 per cent). Just over a third of respondents without qualifications (35 per cent) thought same sex relationships were 'not wrong at all'. Thus we see a large difference (of 38 percentage points) between the graduate group at one end and the no qualification group at the other.

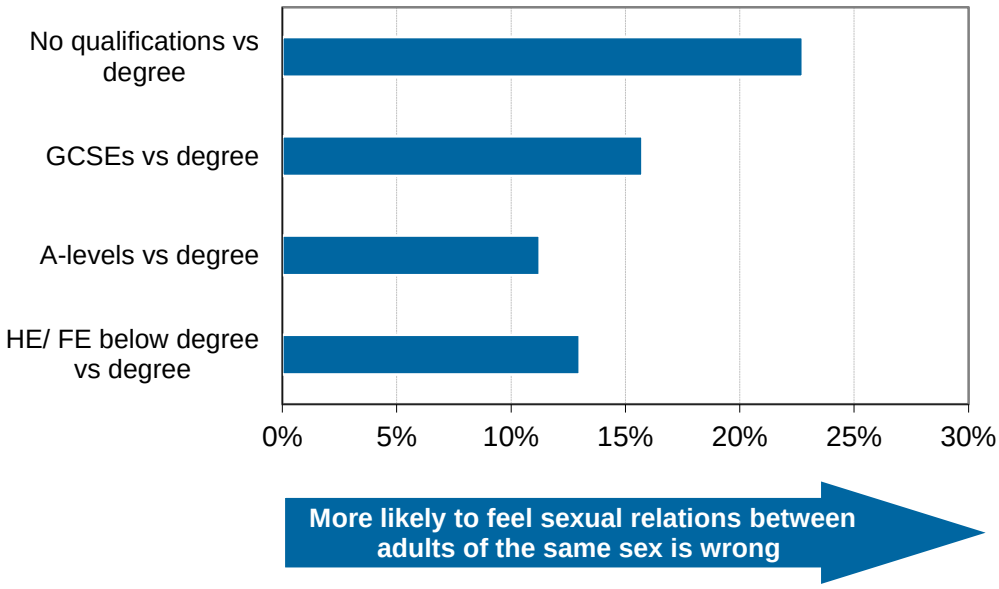
Figure 5.5 What about sexual relations between two adults of the same sex?



It is clear from other research that attitudes in this area are strongly related to age (Park and Rhead, 2013), opening up the possibility that it is age that accounts for this apparent association between qualification and attitudes (as older age groups are disproportionally more likely than others to have no qualifications).

However, regression analyses shows that the relationship between educational level and attitudes towards same sex relationships remains significant when controlling for other background characteristics, including age. Indeed Figure 5.6 shows differences of more than 10 percentage points for all groups when compared to those with a degree; with those in the no qualification group approximately 23 percentage points more likely feel sexual relations between two adults of the same sex are wrong.

Figure 5.6 Effect of different educational levels on whether respondent feels sexual relationships between same sex couples are wrong: regression analysis



5.3 Summary: gender roles and relationships

As with the previous sections, results suggest that people's attitudes to gender roles and relationships vary with their level of education. However, attitudinal differences did not always remain significant when other background characteristics were taken into account, suggesting that other factors (such as age) may lie behind some of the differences seen in the cross-tabulation results. This appears to be the case for the first indicator – the impact of women's full-time work on family life. Interestingly, differences remained significant for just one educational group (HE/FE below degree) on this particular measure. In other words, findings show that graduates and those with below degree (possibly vocational) HE/FE qualifications are significantly more likely to feel 'family life suffers when the woman has a full-time job'. (Table 5.1 summarises regression results and full results tables can be found in Appendix C).

Table 5.1 Do the attitudes of graduates differ significantly from those with other levels of education when other factors are taken into account?: Gender roles and personal relationships				
Base: All adults				
	HE/FE below degree	A-levels	GCSEs	No quals
Gender roles 1: family suffers if woman works FT	✓	**X**	**X**	**X**
Gender roles 2: women want home and family	✓	✓	✓	✓
Same sex relationships	✓	✓	✓	✓

6 Immigration

The following section presents findings from the cross-tabulation and regression analyses on the effect of educational level on attitudes to immigration. As with the previous sections the broader topic has been divided into sub-themes, each represented by a small number of British Social Attitudes survey questions. In this case questions have been selected to capture how people feel about the scale of immigration to the UK and the impact of immigration and of international students (a more distinct migrant group) on the economy and on cultural life (see Table 2.1). The subheadings are:

- Immigration control;
- Effects of immigration;
- International students.

Thirty-two questions from the 2013 questionnaire were included in the stage one analysis, originally grouped under the headings: immigration (25 questions) and international students (7 questions) (see Appendix B). Once recoded, all variables were found to be significantly related to a person's educational attainment (to the 0.05 level).

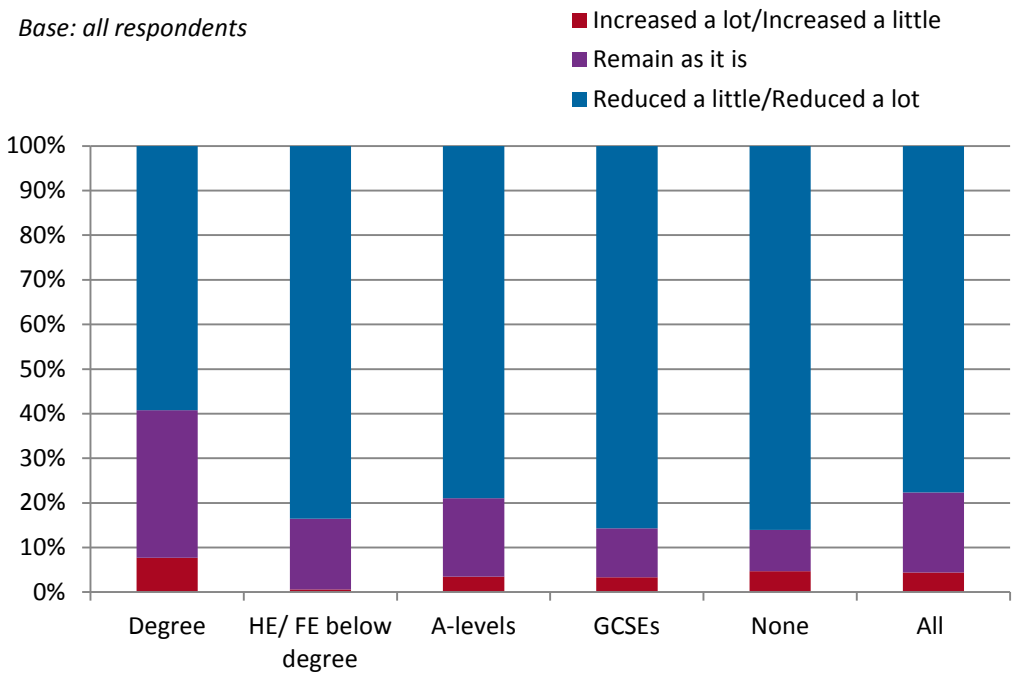
6.1 Immigration control

To assess attitudes towards the scale of immigration to Britain, the British Social Attitudes survey asks:

> *Do you think the number of immigrants to Britain nowadays should be increased a lot, increased a little, remain the same as it is, reduced a little or reduced a lot?*

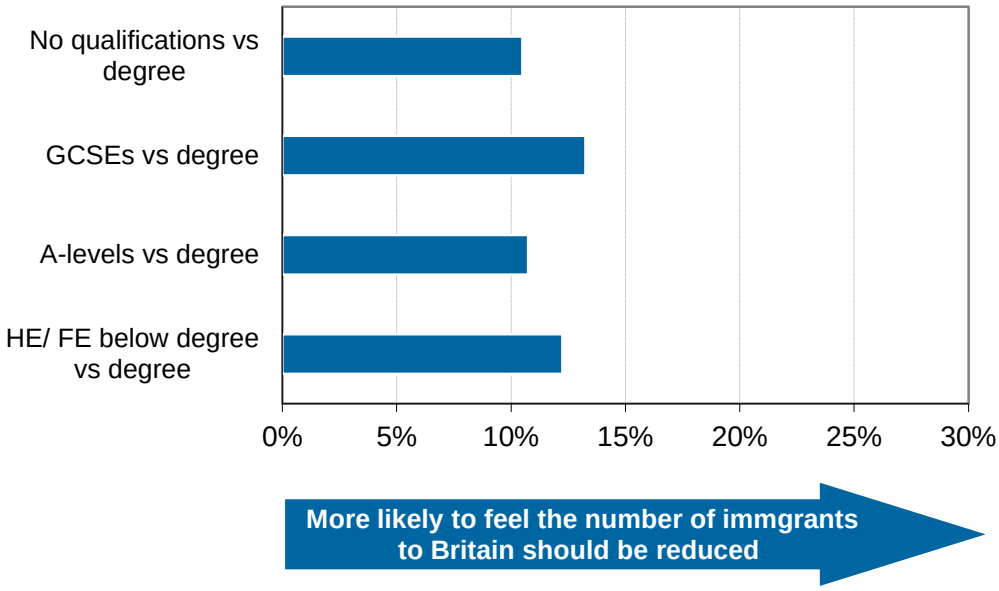
The majority view (held by 77 per cent) was that the number of immigrants coming to Britain should be reduced; with over half (56 per cent) believing it should be 'reduced a lot'. This view was more prevalent among those in the lower educational groups - 86 per cent of people with no qualifications and the same proportion of those with GCSEs felt the number of immigrants should be reduced (see Figure 6.1). The comparable figure for graduates (although still high) was considerably lower than all other educational groups at 59 per cent.

Figure 6.1 Do you think the number of immigrants to Britain nowadays should change?



This pattern of results remained significant after controlling for other background characteristics. Specifically, respondents in all other educational groups were significantly more likely than graduates to feel the number of immigrants to Britain should be reduced. This did not follow an incremental pattern; rather all groups were between 10 and 13 percentage points more likely than the degree level group to feel immigrant numbers should be restricted.

Figure 6.2 Effect of different educational levels on whether thinks the number of immigrants to Britain nowadays should change: regression analysis



6.2 Effect of Immigration

To supplement findings on attitudes to immigration control, we considered a large number of indicators (all shown to be significant in the Stage one analysis) designed to assess respondents' feelings towards the effect of immigration. Two indicators, thought to represent core dimensions of this topic, were selected for the Stage two regression analyses:

> *On a scale of 0 to 10, where 0 is extremely bad and 10 is extremely good, would you say it is generally bad or good for Britain's economy that migrants come to Britain from other countries?*
>
> *On a scale of 0 to 10, where 0 means cultural life is undermined, 5 means neither undermined nor enriched, and 10 means cultural life is enriched, would you say that Britain's cultural life is generally undermined or enriched by migrants coming to live here from other countries?*

In both cases attitudes were significantly related to educational level. In terms of the first measure, which asked about immigration's impact on the British economy, approximately twenty per cent of those with a degree level qualification felt that immigration generally had a negative impact on the economy compared to more than 60 per cent of the no qualification and GCSE groups. The pattern of results was extremely similar for the second measure – which asked about immigration's impact on Britain's cultural life (see Figures 6.3 and 6.4).

Figure 6.3 Would you say it is generally bad or good for Britain's economy that migrants come to Britain from other countries?

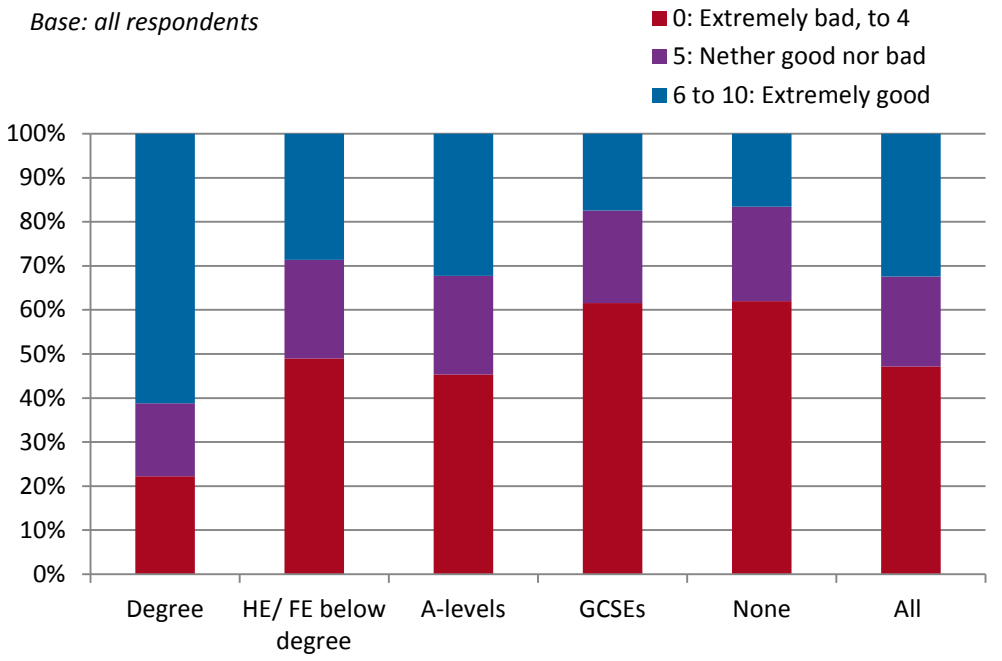
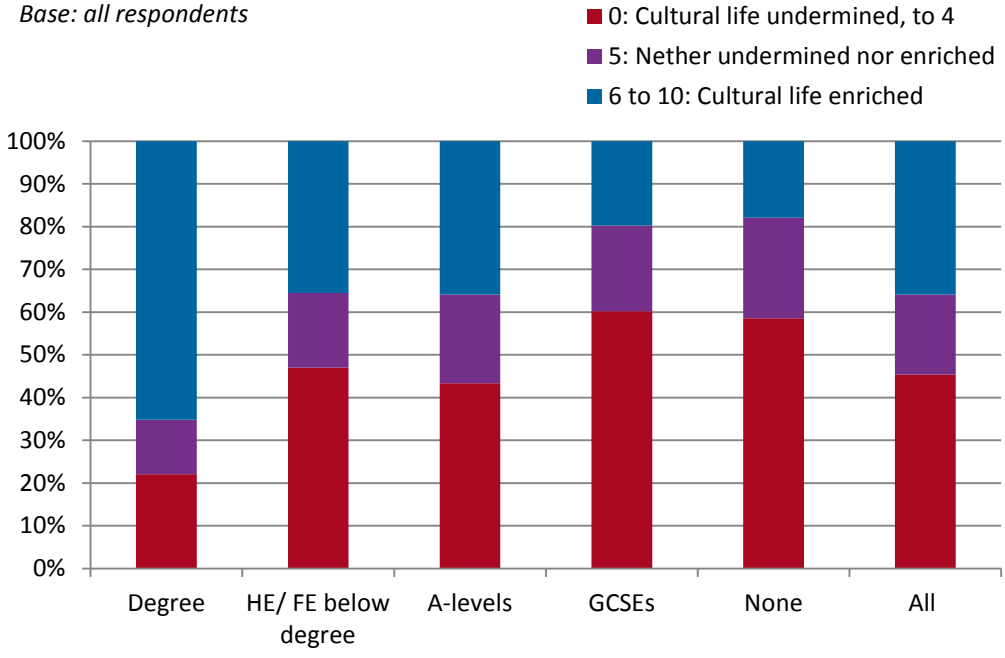


Figure 6.4 Would you say that Britain's cultural life is generally undermined or enriched by migrants coming to live here from other countries?



After controlling for other background characteristics, differences by educational level remained significant (see Figures 6.5 and 6.6). Those with A-levels or with below degree level HE/FE qualifications reported scores towards the negative end of each scale – being approximately 14 percentage points more likely than those with a degree to feel immigration was bad for Britain's economy, and that it undermined Britain's cultural life. However, those with GCSEs or no qualifications were the most likely to feel that immigration was bad for the country's economy and to undermine cultural life (a difference of approximately 20 percentage points when compared to graduates).

Further details of the way in which these questions vary by a range of socio-demographic factors can be found in Ford and Heath (2014).

Figure 6.5 Effect of different educational levels on whether felt immigration was bad or good for Britain's economy: regression analysis

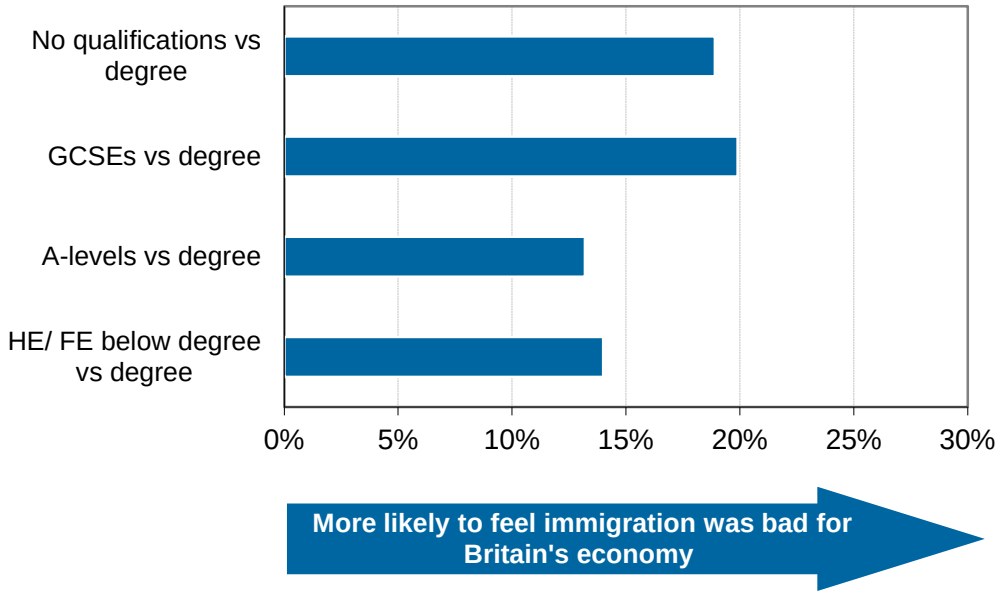
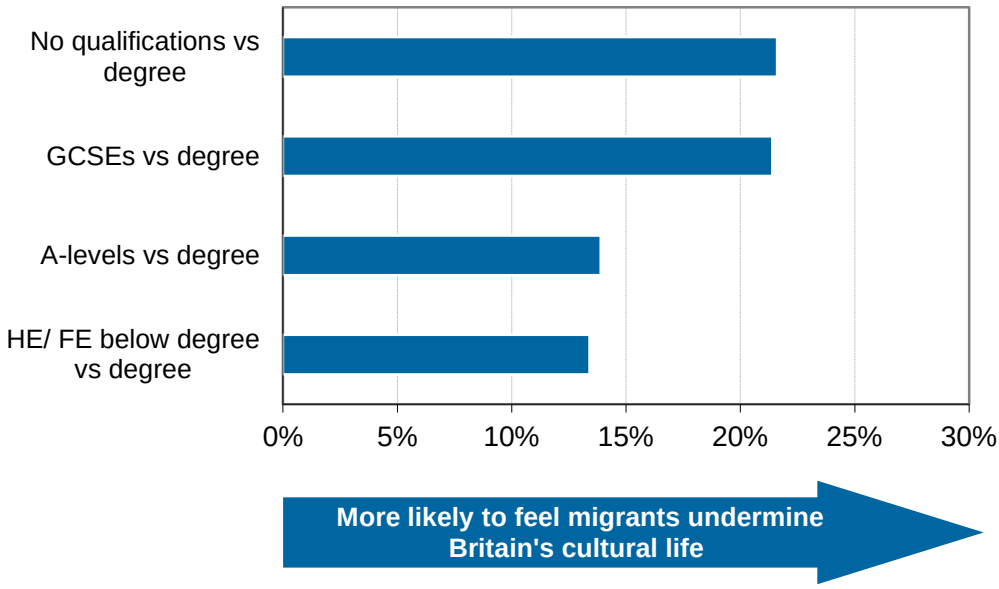


Figure 6.6 Effect of different educational levels on whether felt immigration undermined or enriched Britain's cultural life: regression analysis



6.3 International students

There were stark differences in people's views as to whether international students from outside the European Union impose significant costs on the British economy by educational level (see Figure 6.7). While the majority of those with a degree disagreed or strongly disagreed with the statement (61 per cent), approximately a fifth of those belonging to the no qualifications disagreed. Indeed, agreement with the statement was noticeably higher among all below degree educational levels.

Figure 6.7 International students from outside the European Union impose significant costs on the British economy

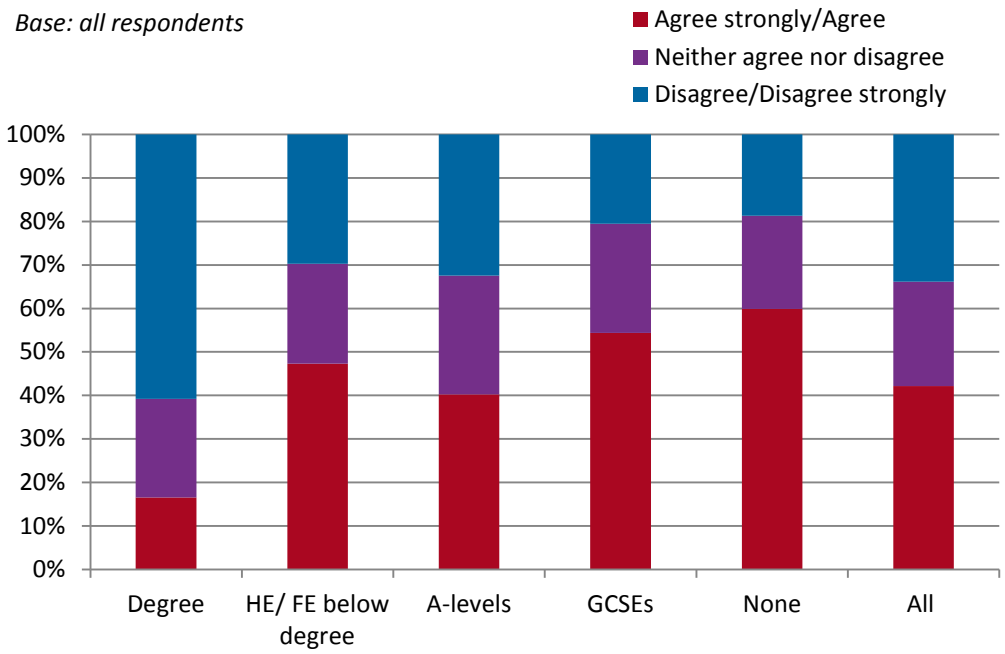
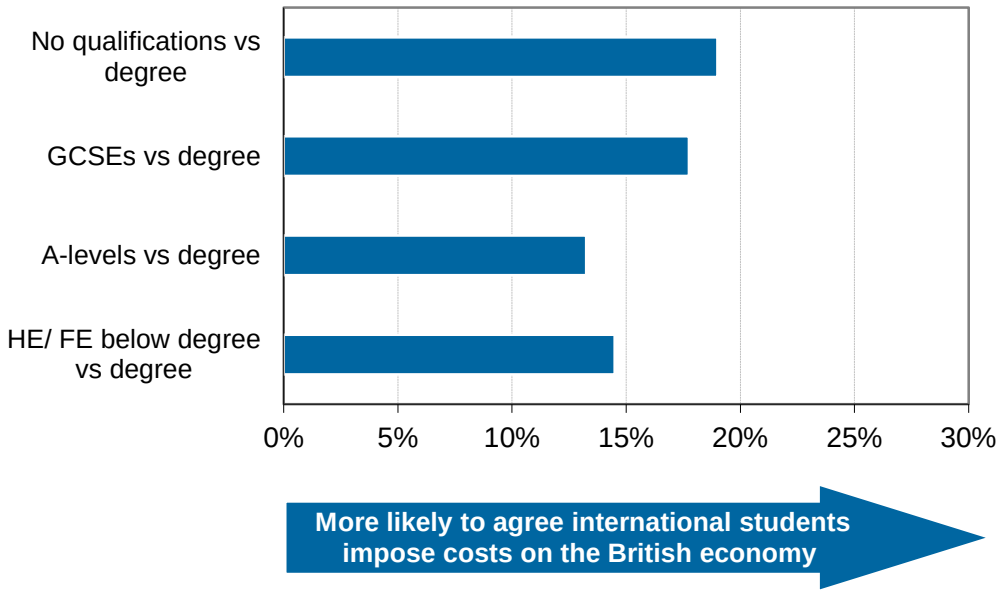


Figure 6.8 Effect of different educational levels on whether felt international students from outside the European Union impose significant costs on the British economy: regression analysis



Differences identified at Stage one remained significant after controlling for other background characteristics (see Figure 6.8). These differences were fairly pronounced for

all educational levels, but particularly for the no qualification group, who were 19 percentage points more likely to agree that international students from outside the European Union imposed significant costs on the British economy than the graduate group.

6.4 Summary: attitudes to immigration

The pattern of attitudes to immigration by educational level showed three distinct groups. Those with a degree were the least likely to feel immigration had a negative effect on Britain's economy or cultural life and the least likely to support a reduction in immigrant numbers; those with A-levels or with below degree level HE/FE qualifications had relatively similar mid-range attitudes and those with GCSEs only or no qualifications formed a third group with quite similar negative views towards immigration, and a desire for far stronger controls on migrant numbers. Importantly, all differences observed in the Stage one cross-tabulation analysis remained once a range of other background factors had been taken into account. This was true for all educational levels, suggesting a robust relationship between the having a degree and attitudes to immigration (see Table 6.1).

The majority of those with lower level educational qualifications or no qualifications at all felt that immigration should be reduced, and that its effects on the economy and Britain's cultural life were negative ones. By contrast, graduates are more welcoming and appreciative of immigration and immigrants. However, it is worth noting that over half (59 per cent) of graduates believed that the number of immigrants coming to Britain should be reduced.

Table 6.1 Do the attitudes of graduates differ significantly from those with other levels of education when other factors are taken into account?: Immigration

Base: All adults				
	HE/FE below degree	A-levels	GCSEs	No quals
Immigration control	✓	✓	✓	✓
Effects of immigration 1: economic impact	✓	✓	✓	✓
Effects of immigration 2: cultural life	✓	✓	✓	✓
International students	✓	✓	✓	✓

7 Welfare benefits

This next section brings together findings from the Stage one and Stage two analyses exploring the effects of educational level on attitudes to welfare benefits and those who receive them. Unlike the previous sections, attitudes to benefit claimants have not been divided into sub-themes, instead the small number of British Social Attitudes survey questions have been selected to encapsulate the broad topic (see Table 2.1). This reflects the smaller number of questions included in the initial analysis (see Appendix B).

Of the eleven questions selected from the 2013 British Social Attitudes survey under the 'benefit' heading,[9] all were found to be significantly related to a person's educational level (where p=0.05 or less).

7.1 Welfare benefits

Three key questions were selected from the 11 and taken forward to the Stage two regression analysis to signify attitudes towards welfare benefits and their recipients:

Many people who get social security don't really deserve any help;

Most people on the dole are fiddling it one way or another;

If welfare benefits weren't so generous, people would learn to stand on their own two feet.

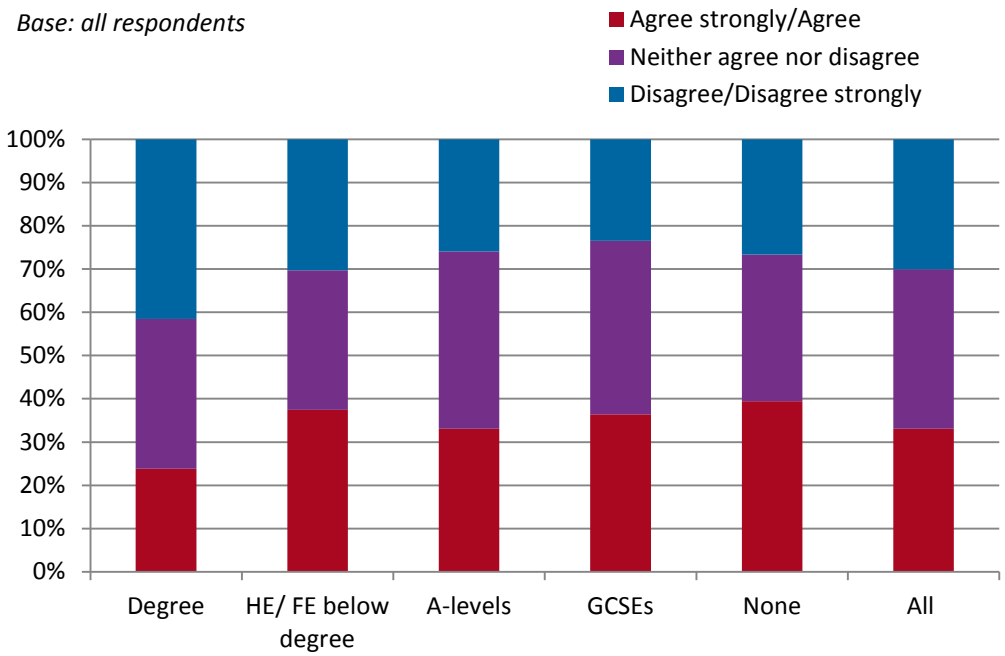
Respondents were asked to say how far they agreed with each statement from 1. Agree strongly to 5. Disagree strongly.

The results of the Stage one cross-tabulation analysis for the first of the statements are displayed in Figure 7.1. The chart shows significant differences between educational levels. Specifically, 42 per cent of respondents with a degree level qualification disagreed or disagreed strongly that people who get social security don't deserve help, compared to 30 per cent of those with HE/FE below degree qualifications and 24 per cent of those with GCSEs. In contrast to most other indicators explored as part of this study, figures for the 'no qualification' group were higher than for those in the A-level and GCSE groups (27 per cent).

It is possible that this finding reflects higher rates of benefit receipt among this group. Although it is not possible to control for benefit receipt as part of the regression analysis, the inclusion of both an economic activity (including unemployment) and income measure may operate as a partial proxy.

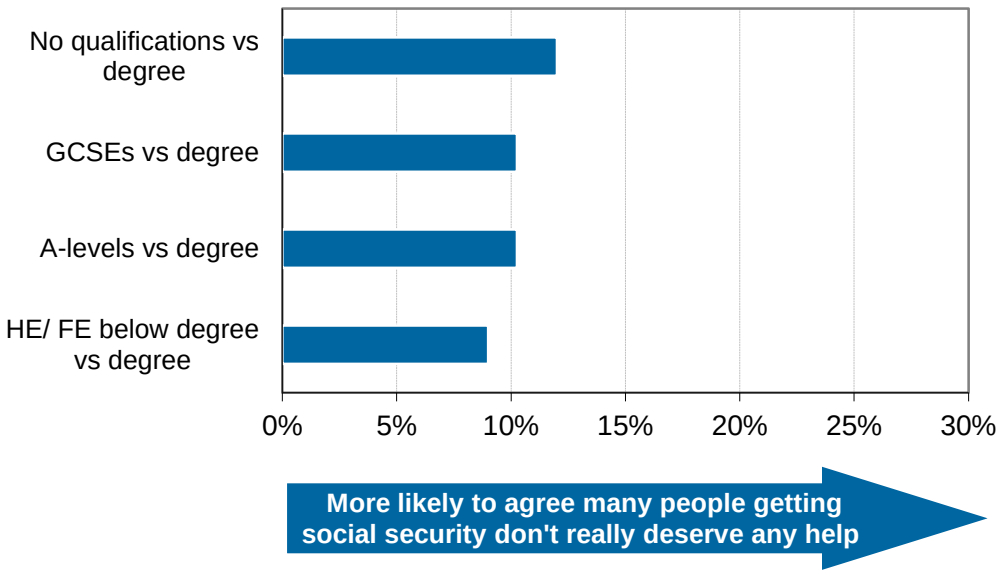
[9] For a full discussion of the different questions included in the British Social Attitudes survey see Baumberg, 2014.

Figure 7.1 Many people who get social security don't really deserve any help



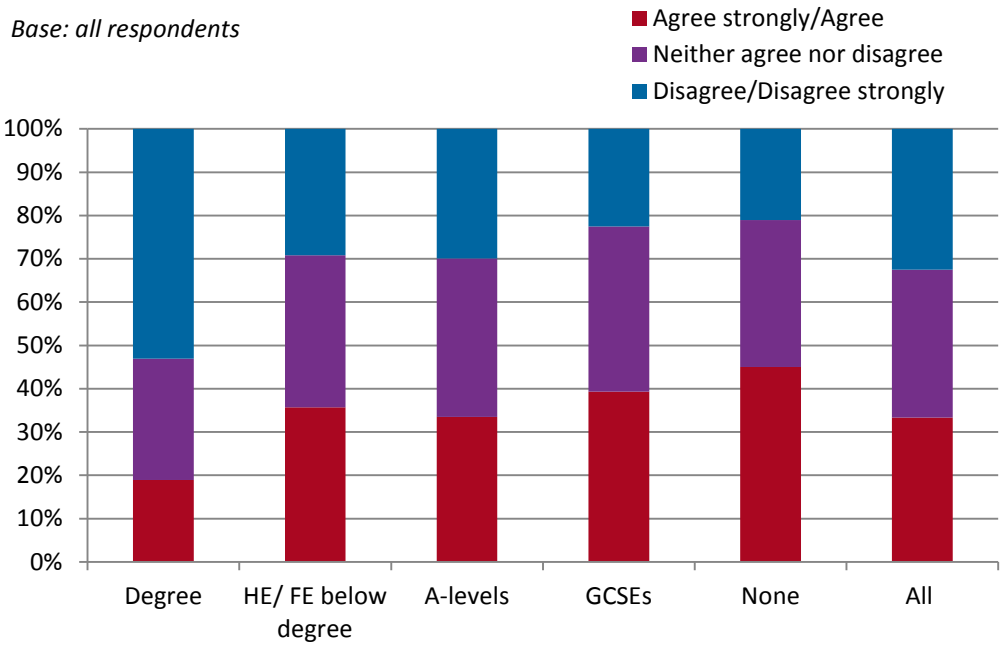
When controlling for other background characteristics, differences remained significant for all educational levels, including the 'no qualification' group (see Figure 7.2). Coefficients showed a broadly incremental increase with educational level. When compared to graduates those belonging to the no qualification group were approximately 12 percentage points more likely to agree those getting social security don't deserve any help.

Figure 7.2 Effect of different educational levels on whether thinks many people who get social security don't really deserve any help: regression analysis



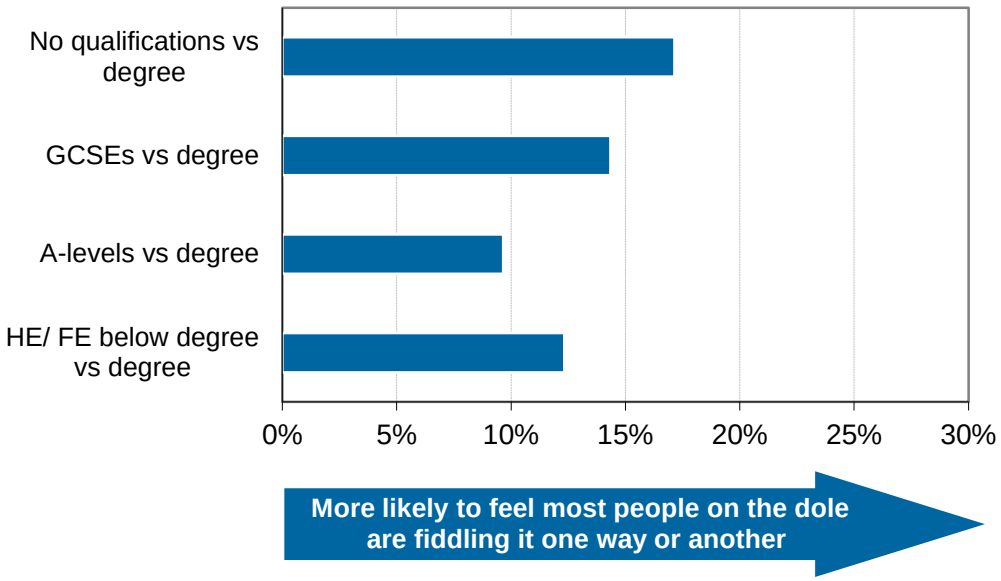
Respondents belonging to the graduate group were also the least likely to agree with the second statement (19 per cent), which asked about attitudes to benefit fraud (see Figure 7.3). The level of agreement with this statement increased to 33 per cent among those with A-levels, 36 per cent among those with below degree level HE/FE qualifications, 39 per cent among those with GCSEs and 45 per cent among those without qualifications.

Figure 7.3 Most people on the dole are fiddling it one way or another



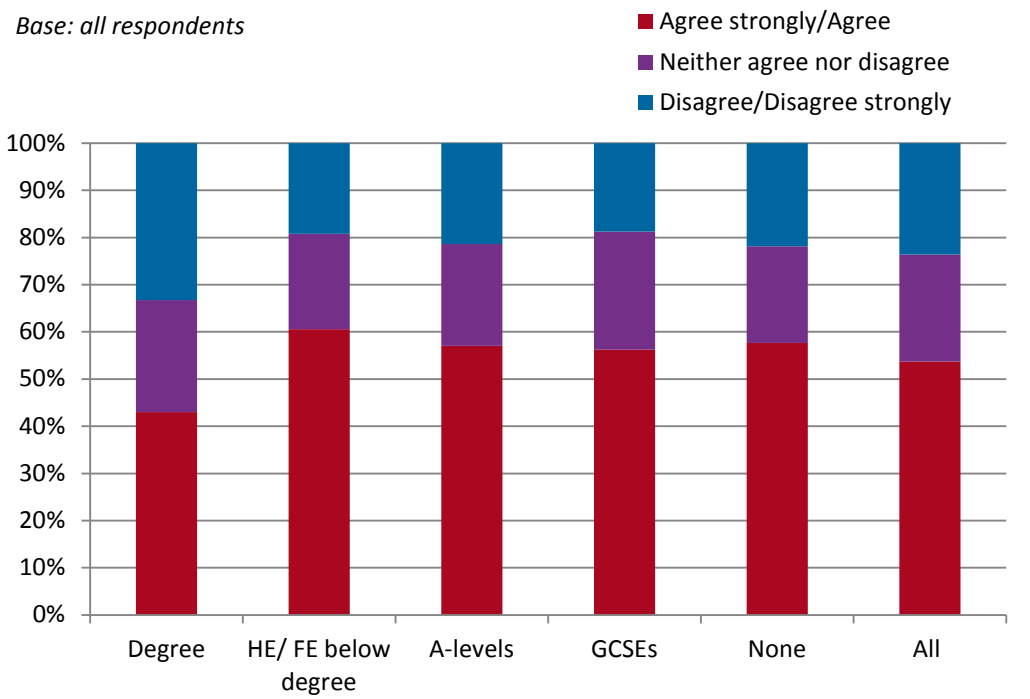
This pattern remained significant when controlling for other background characteristics (see Figure 7.4). Indeed, results of the regression analysis showed large significant differences by educational level. This was most pronounced for the 'no qualification' group, who were 17 percentage points more likely to agree 'most people on the dole were fiddling it one way or another'.

Figure 7.4 Effect of different educational levels on whether thinks most people on the dole are fiddling it one way or another: Regression analysis



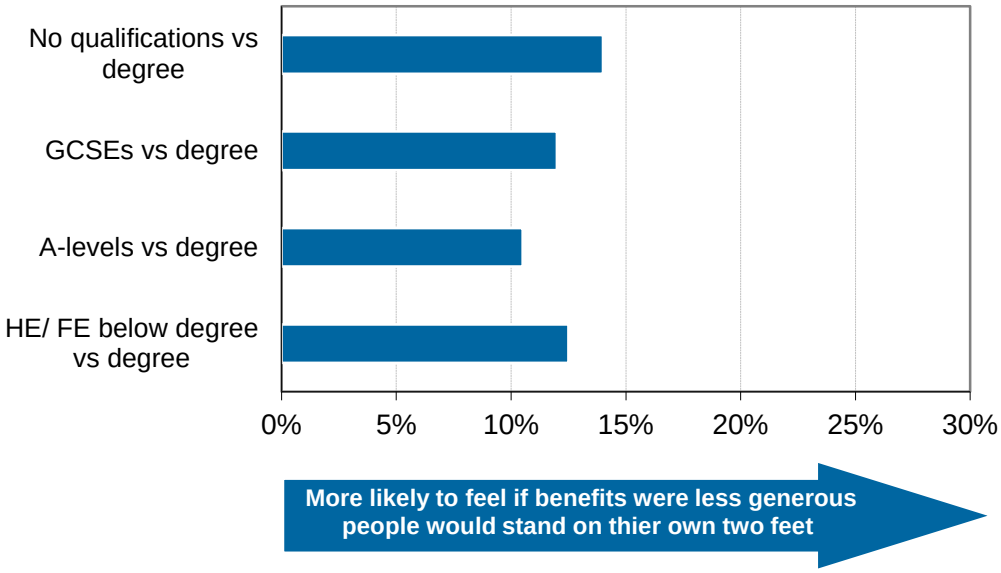
Although a large minority of respondents with a degree (43 per cent) agreed with the final statement about the generosity of the benefit system, this proportion was still considerably lower than among the other educational groups. Notably, levels of agreement were highest for those with an HE/FE below degree qualification (61 per cent) followed by those in the 'no qualification' group (see Figure 7.5).

Figure 7.5 If welfare benefits weren't so generous, people would learn to stand on their own two feet



Differences remained significant for all educational levels after controlling for other background characteristics (Figure 7.6). Compared to those with a degree level qualification those in the HE/FE below degree group were 12 per cent more likely to agree that 'if welfare benefits weren't so generous, people would learn to stand on their own two feet', and those in the 'no qualification' group were 14 per cent more likely to agree.

Figure 7.6 Effect of different educational levels on whether thinks if welfare benefits weren't so generous, people would learn to stand on their own two feet: regression analysis



7.2 Summary: welfare benefits

Overall graduates tended to express the most tolerant attitudes towards welfare benefits and their recipients and, when controlling for other background factors, those with no qualifications the least. Indeed, graduates stand out in this chapter - holding considerably more positive attitudes to benefit claimants than those in other educational groups (where differences tend to be less marked).

Beyond this the pattern of differences between attitudes and educational level varied. With regard to whether benefit claimants were 'deserving', those with below degree level HE/FE qualifications were the second most tolerant group - after those with a degree. However, this group also held the second most critical views - after those with no qualifications - towards the effect of welfare benefits on preventing recipients from 'standing on their own two feet'.

Findings from the Stage two analyses suggest that in terms of attitudes to benefits and benefit claimants, graduates hold significantly different views from respondents in other educational groups. In the case of the first and third measures - deservingness of claimants and generosity of benefits - non-graduate respondents appear to hold similar views to one another, being between 9 and 14 percentage points more likely to agree with the two statements. (Regression results are summarised in Table 7.1)

.

Table 7.1 Do the attitudes of graduates differ significantly from those with other levels of education when other factors are taken into account?: Welfare benefits				
Base: All adults				
	HE/FE below degree	A-levels	GCSEs	No quals
Welfare benefits 1: deservingness	✓	✓	✓	✓
Welfare benefits 2: fraud	✓	✓	✓	✓
Welfare benefits 3: Self-help	✓	✓	✓	✓

8 National Identity

In the following section we consider the effect of educational level on respondents' national identity, what they believe constitutes Britishness and the support they feel for their country (see Table 2.1), bringing together results from the cross-tabulation and regression analyses.

Eighteen questions from the 2013 questionnaire were included in the Stage one analysis under the 'national identity' heading (see Appendix B). Three variables were not significantly related to educational level:

- *How important is it to respect Britain's political institutions and laws;*
- *I am often less proud of Britain than I would like to be;*
- *The world would be a better place if the British acknowledged Britain's shortcomings.*

All remaining recoded variables were significantly related to a person's educational level (where p=0.05 or less).

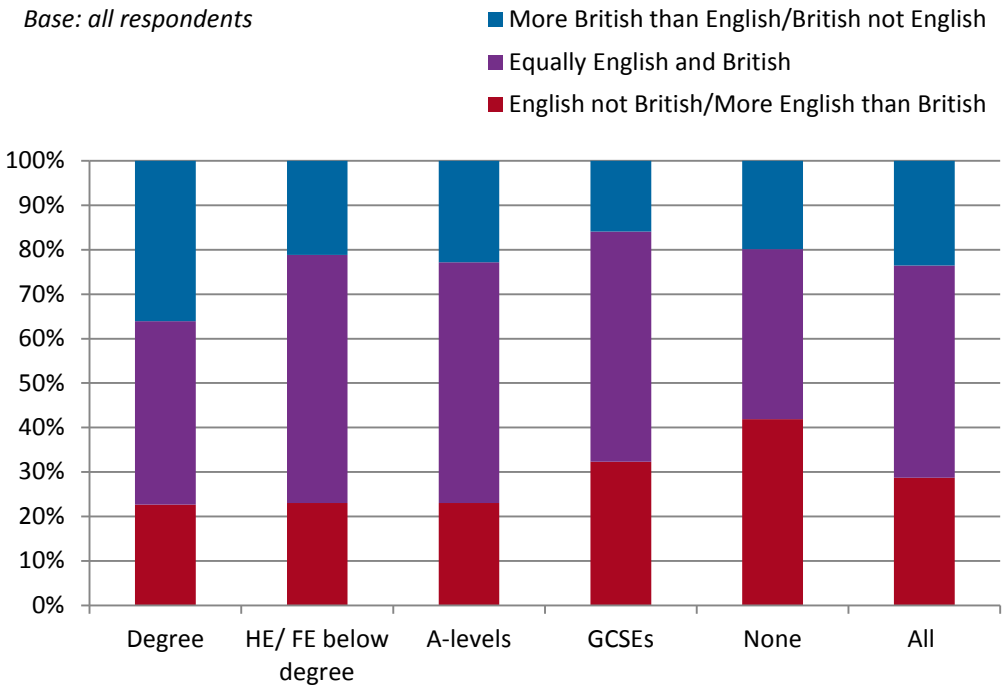
8.1 National Identity

Of the 15 significant variables identified in the cross-tabulation analysis one was brought forward to be included in the model to represent national identity. The selected question asked respondents living in England whether they considered themselves to be more English or more British (results are displayed in Figure 8.1):

> *Which of the following best describes how you see yourself? English not British, More English than British, Equally English and British, More British than English, British not English.*

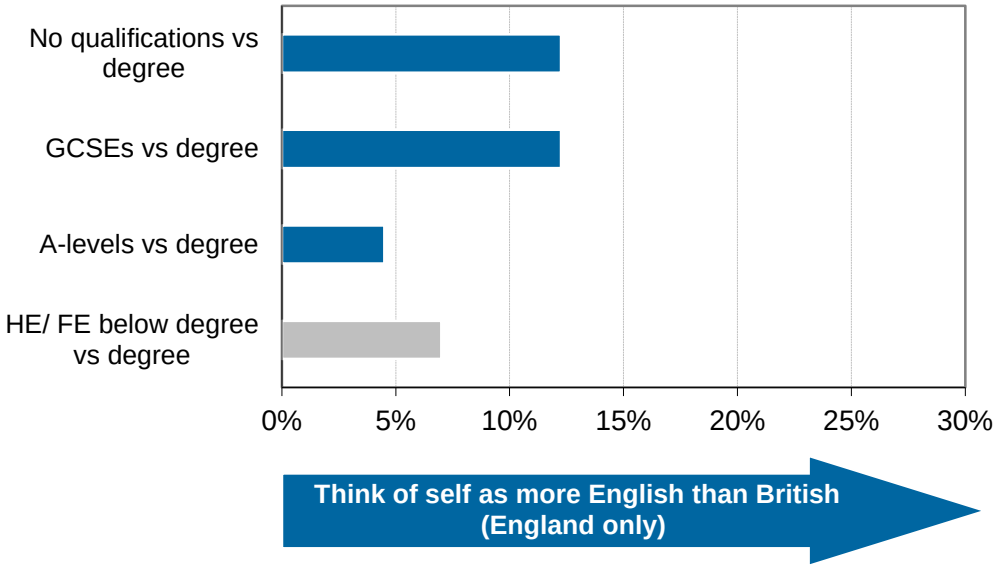
All those with below degree level qualifications were less likely than graduates to consider themselves 'more British than English' or 'British not English'. Thirty-six per cent of graduates fell into this category compared with 23 per cent of those with A-levels, 21 per cent of those with below degree level HE/FE qualifications, 20 per cent of those with no qualifications and 16 per cent of those with GCSEs or equivalent.

Figure 8.1 How you see yourself, more British than English, or more English than British? (England only)



Differences remained significant for all groups except HE/FE below degree when controlling for other background characteristics (see Figure 8.2). Those in the A-level group were slightly more likely to think of themselves as more English than British (less 5 percentage points) than those in the graduate group, whilst those with GCSEs and those without qualifications, showed a 12 percentage point difference.

Figure 8.2 Effect of different educational levels on whether respondent thinks as self as more English or British (England only)



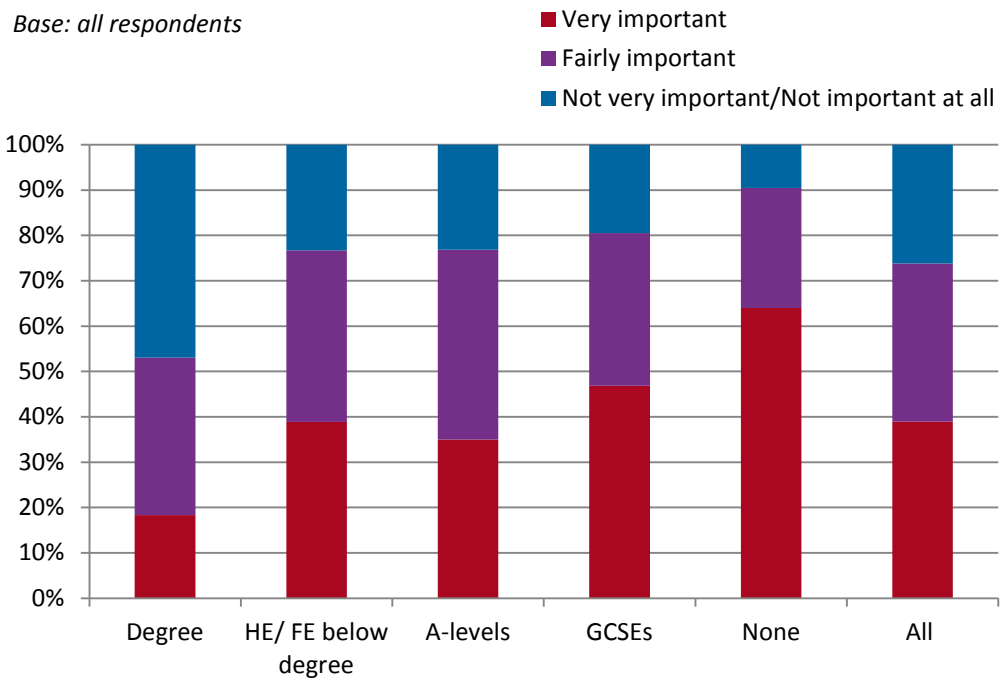
8.2 Britishness

The 2013 survey also asked people about a range of characteristics that might be considered important in defining a person's national identity, specifically for being considered 'truly British':

> *Some people say that the following things are important for being truly British. Others say that they are not important. How important do you think each of the following is… being born in Britain?*

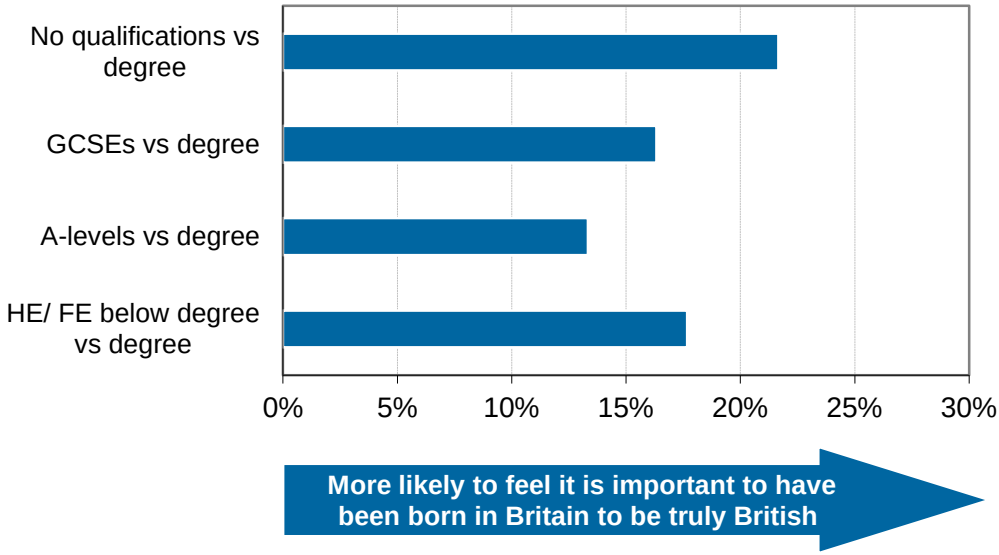
When asked about the importance of 'being born in Britain', graduates were relatively evenly divided - with 53 per cent viewing this as very or fairly important and 47 per cent seeing it as not very important or not important at all. Views on this statement also varied significantly by educational level; all the other educational groups saw being born in Britain as more important than graduates. For example, 18 per cent of graduates felt being born in Britain was very important compared to 64 per cent of those in the 'no qualification' group (see Figure 8.3). Further details about these questions, and their relationship with education, can be found in Park and Kiss (2014).

Figure 8.3 How important is being born in Britain for being truly British?



After controlling for other background factors differences remained significant: those with A-levels, GCSEs, below degree level HE/FE qualifications and without qualifications were all significantly more likely to feel it was important to have been born in Britain when compared to graduates. Respondents in the 'no qualification' group were the most likely to see this characteristic as important in determining whether or not someone can be considered 'truly British' – approximately 22 percentage points more likely than those in the degree level group.

Figure 8.4 Effect of different educational levels on agreement that it is important to have been born in Britain to be truly British



The second question selected from the 2013 survey under the sub-theme 'Britishness', asked about the importance of shared customs and traditions:

> *How much do you agree or disagree with the following statement? … It is impossible for people who do not share Britain's customs and traditions to become fully British.*

Figure 8.5 displays the results of the Stage one cross-tabulation analysis. This shows clear, although somewhat less pronounced, differences between educational levels. Once again the graduate group show the lowest levels of agreement (40 per cent), but here the HE/FE below degree, GCSE and no qualification groups show similar results – all demonstrating high levels of agreement (around 60 per cent).

Figure 8.5 It is impossible for people who do not share Britain's customs and traditions to become fully British

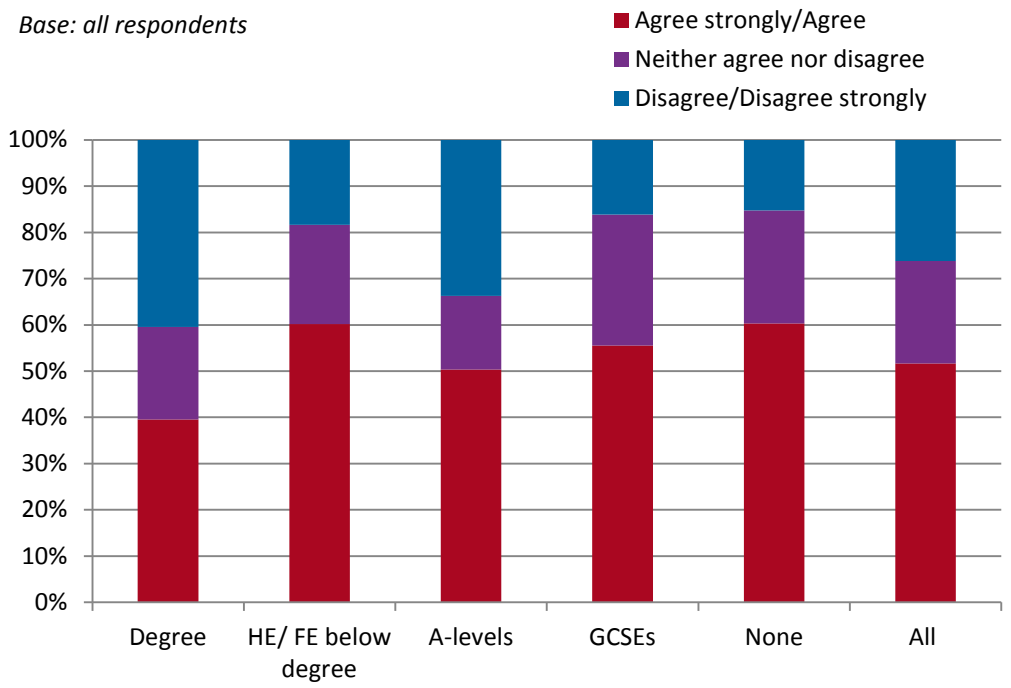
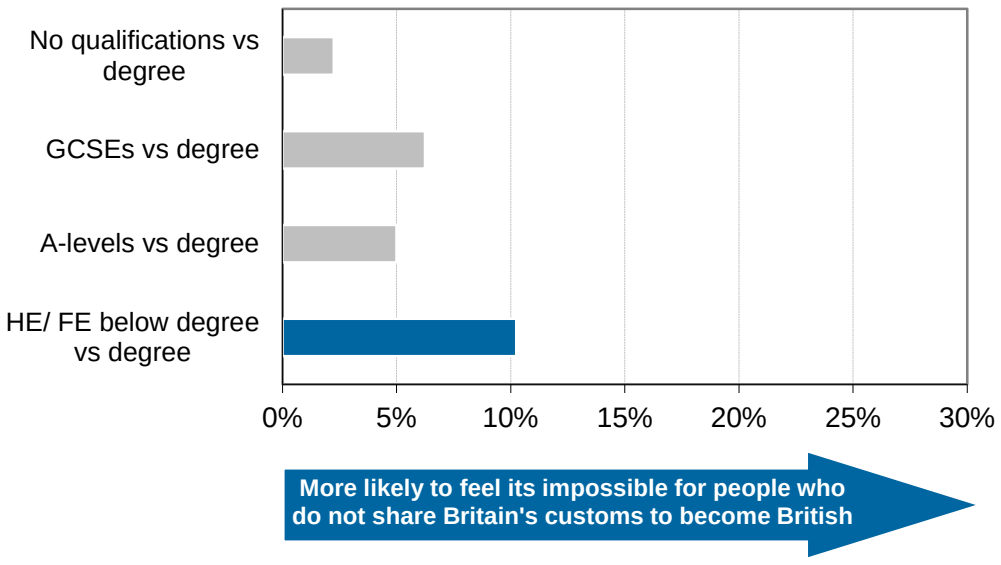


Figure 8.6 Effect of different educational levels on agreement that it is impossible for people who do not share Britain's customs and traditions to become fully British



NB: Blue bars denote statistically significant coefficients; grey bars non-significant ones

Overall, responses to this question did not vary significantly by educational level after controlling for other characteristics. However, when looking at each educational level there is a statistically significant difference between the graduate and the HE/FE below degree groups (see Figure 8.6). Specifically, those with a below degree level HE/FE qualification were 10 percentage points more likely to agree with the statement than those with a degree.

8.3 National support

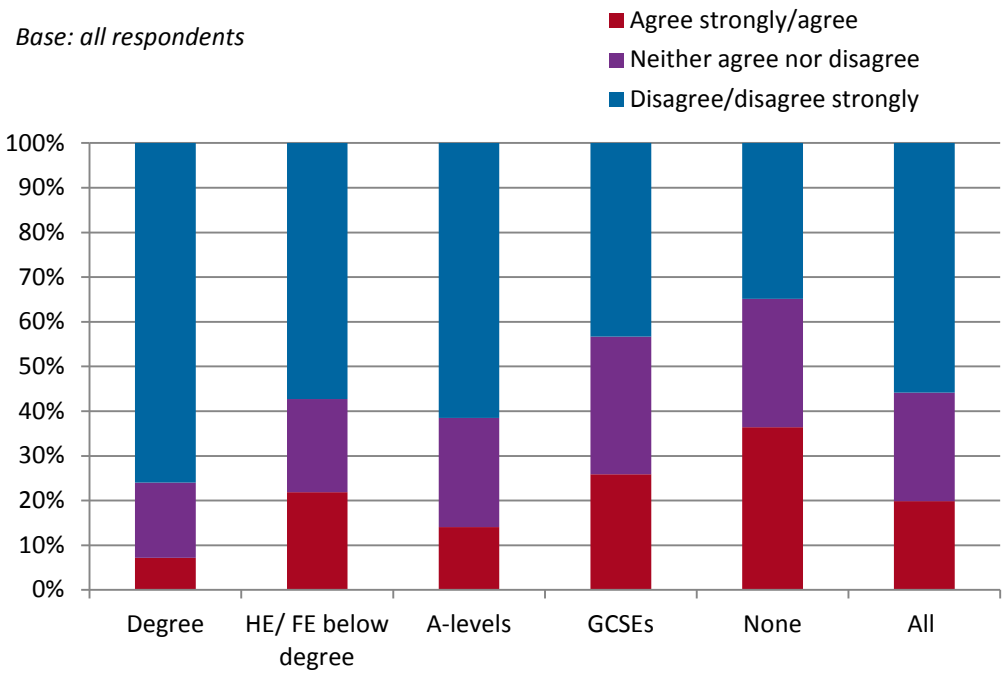
To assess 'national support', the 2013 British Social Attitudes survey presented respondents with a series of statements and asked them to what extent they agreed or disagreed with each of them. From the statements included in the cross-tabulation analysis two were selected as representative of this particular sub-theme:

People should support their country even if the country is in the wrong; and

Generally speaking, Britain is a better country than most other countries.

Support for one's country, in the form of agreement with the first statement varied significantly by educational level (see Figure 8.7). Those with a degree were least likely to agree that people should support their country unconditionally (7 per cent), followed by those with A-levels (14 per cent), those with below degree level HE/FE qualifications (22 per cent), those with GCSEs (26 per cent) and those without qualifications (36 per cent).

Figure 8.7 People should support their country even if the country is in the wrong



The relationship between unconditional national support and educational level remained significant when other background characteristics were controlled for (see Figure 8.8). Results showed notable differences between graduates and other educational groups, in particular, the 'no qualification' group were 16 percentage points more likely to feel that people should support their country even when it was wrong.

Figure 8.8 Effect of different educational levels on agreement that people should support their country even if it is in the wrong

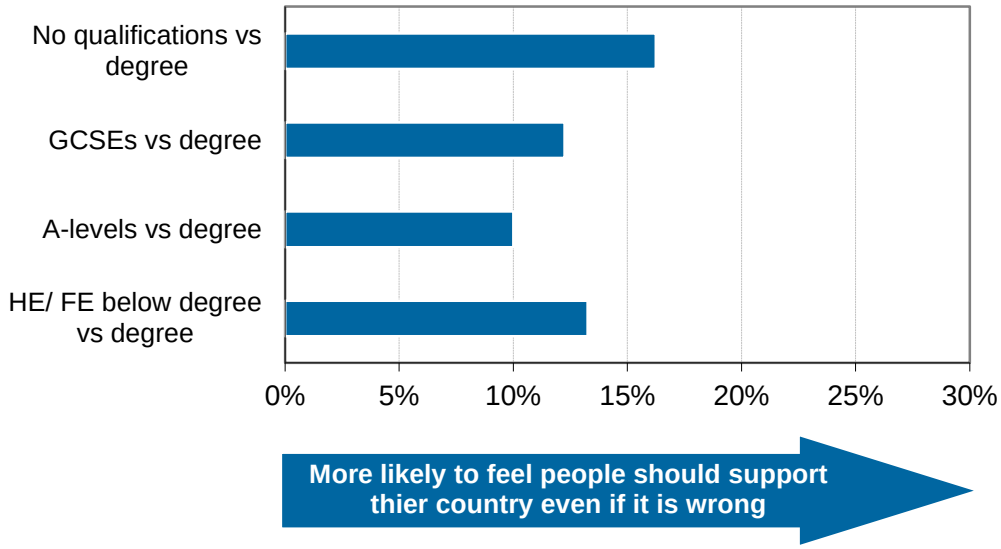
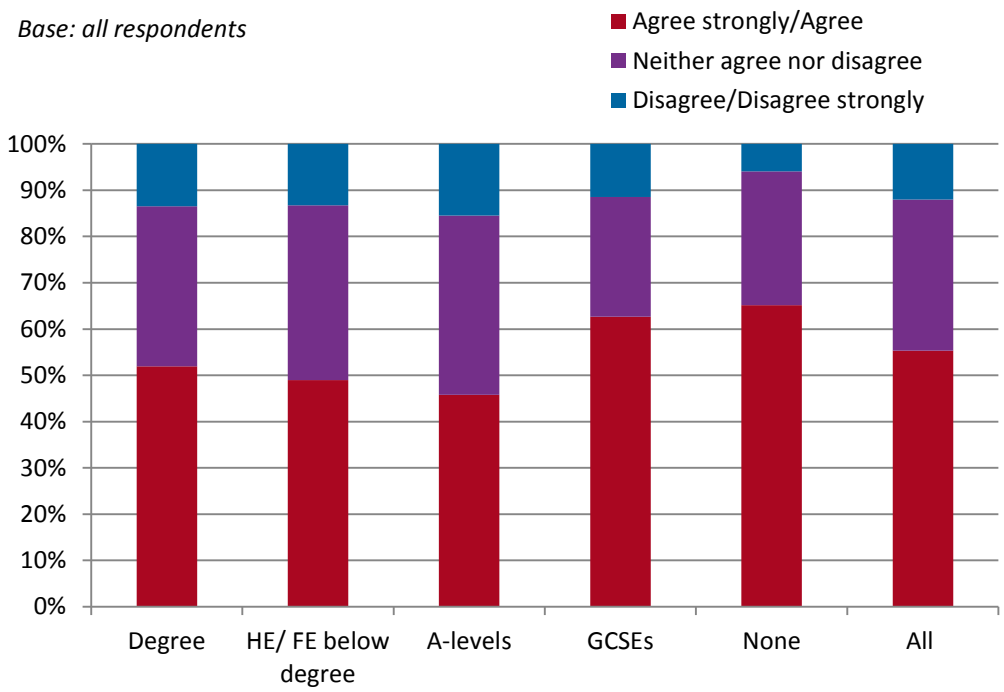


Figure 8.9 displays agreement with second statement, 'generally speaking, Britain is a better country than most other countries' by educational level. Here we see a different pattern of results, with the lowest level of agreement among those with A-levels (46 per cent), followed by the HE/FE below degree group (49 per cent), and the graduate group (52 per cent).

Figure 8.9 Generally speaking, Britain is a better country than most other countries



There were no significant differences for any educational group once other background characteristics had been controlled for; therefore no regression table has been included for this particular variable (full results are displayed in Appendix Table C26).

Summary: National identity and support

Graduates were the most likely to self-identify as British rather than English and to believe being born in Britain was relatively unimportant in determining whether someone was 'truly' British. They also had the lowest level of agreement with unconditional support for one's country. On two of the measures, however, differences between graduates and those in other educational groups did not remain significant once other background characteristics had been controlled for. This suggests that views on the importance of shared customs and traditions for 'Britishness' and on whether Britain is a better country than others may be influenced by other factors.

For most of the measures still significant in the regression analysis, the attitudes of the degree level group were followed by those with A-level qualifications. The attitudes of those in the no qualification group showed the greatest differences when compared to the graduate group.

Table 8.1 Do the attitudes of graduates differ significantly from those with other levels of education when other factors are taken into account?: National identity and support				
Base: All adults				
	HE/FE below degree	A-levels	GCSEs	No quals
National identity	**X**	✓	✓	✓
Being British 1: Need to be born in Britain	✓	✓	✓	✓
Being British 2: Need to share customs and traditions	✓	**X**	**X**	**X**
National support 1: Unconditional support	✓	✓	✓	✓
National support 2: Britain best	**X**	**X**	**X**	**X**

9 Entrepreneurship

This final section collates findings from the Stage one and Stage two analyses examining the effects of educational level on entrepreneurship. Like the benefits section, entrepreneurship has not been divided into sub-themes; instead it includes just two questions from the 2013 British Social Attitudes Survey (see Table 2.1). These two questions were selected from the five included in the Stage one cross-tabulation analysis (see Appendix B). All five of these questions were found to be significantly related to a person's educational level (where p=0.05 or less).

9.1 Starting a business

The two questions included in the regression analysis both belonged to the 'starting a business' topic in the 2013 British Social Attitudes survey, they were:

Have you ever or would you ever consider starting your business?

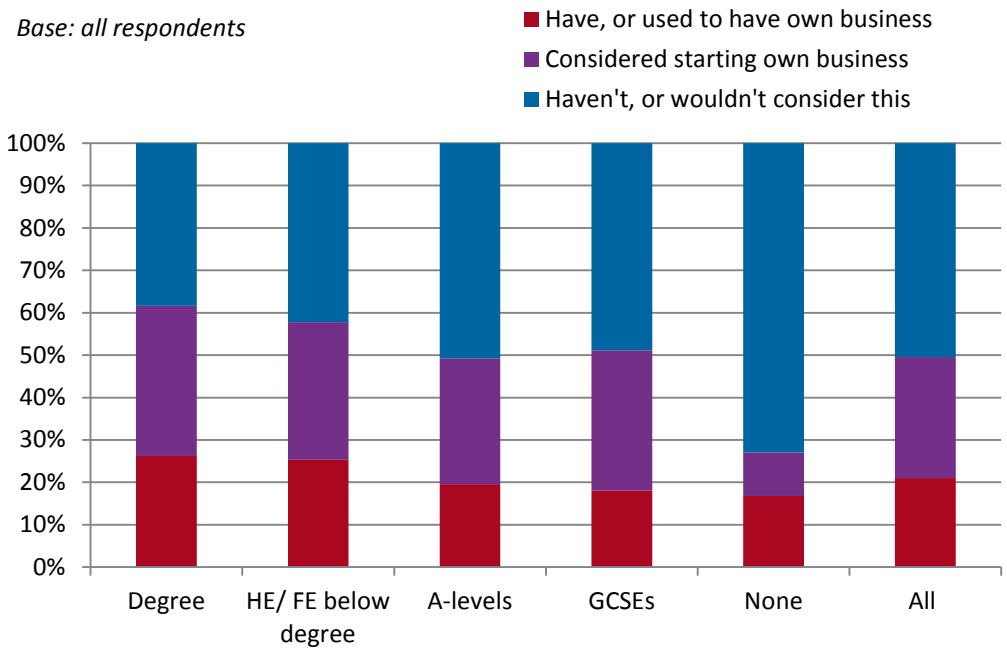
1. *I currently have my own business*
2. *I had my own business in the past*
3. *I have considered this but haven't done it yet*
4. *I have considered this but have decided not to do it*
5. *I haven't considered this but may do so in the future*
6. *I would never consider this*

Do you think starting your own business would be a realistic ambition for you to have, from 1 'very realistic' to 4 'not realistic at all'?

Responses to whether a respondent would consider starting a business were regrouped into three categories for the cross-tabulation analysis: those who already owned a business, or had done so in the past; those who had considered starting a business; and with those who stated either that they had not considered or would never consider this (results are displayed in Figure 9.1).

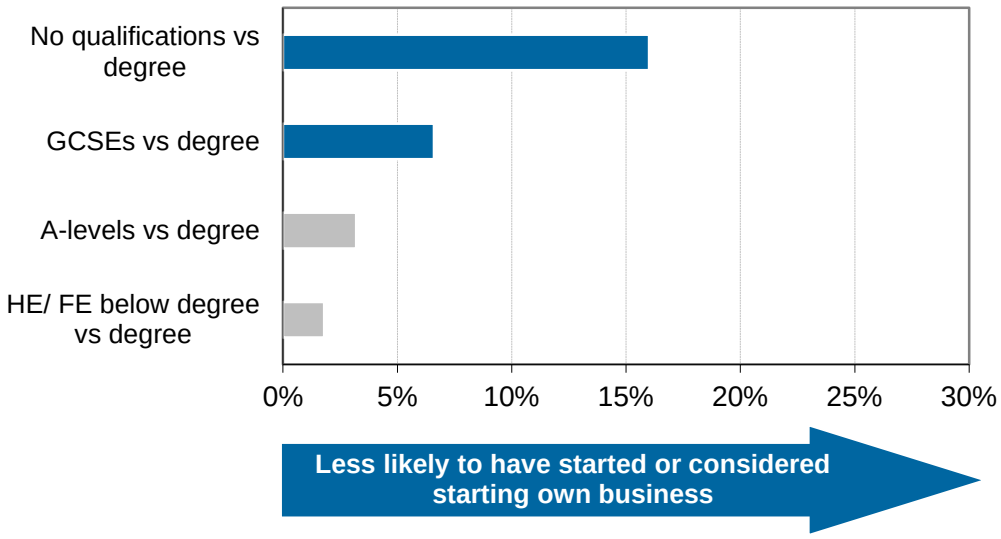
Compared to respondents with a degree, those with A-levels, GCSEs and those without qualifications were significantly less likely to have considered starting their own business. Those with below degree level HE/FE qualifications did not differ substantially from those with a degree in this regard. Smaller differences are evident in the figures for those who currently have, or used to have, their own business – although proportions are marginally higher for the graduate and HE/FE below degree groups: 26 per cent of those with a degree and 25 per cent of those with below degree level HE/FE qualifications, compared with around a fifth of those with A-levels and 17 per cent of those without qualifications.

Figure 9.1 Have you ever or would you ever consider starting your business?



Results for just the lower educational groups remained significant once other background characteristics had been controlled for (see Figure 9.2). Differences between graduates and those in the HE/FE below degree and A-level groups were no longer statistically significant. Those in the GCSE group were around 7 percentage points less likely to have considered starting their own business and those in the no qualification group, 16 percentage points less likely.

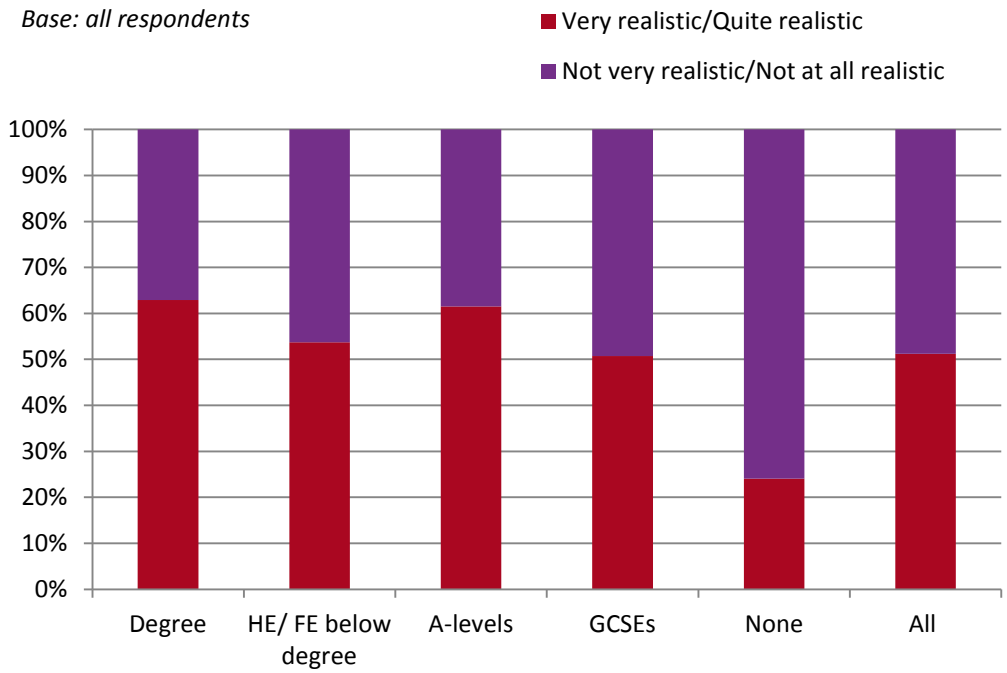
Figure 9.2 Effect of different educational levels on whether respondents would consider starting their own business: regression analysis



NB: Blue bars denote statistically significant coefficients; grey bars non-significant ones

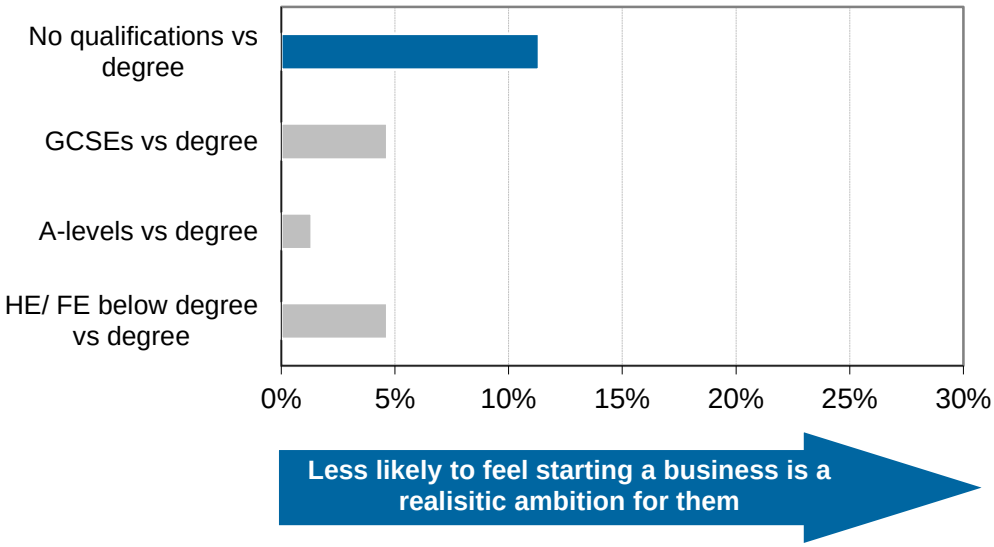
Figure 9.3 displays results for the cross-tabulation analysis for the second statement by educational level. This shows clear differences between some of the groups, with around two-thirds of graduates and of those with A-levels, viewing starting a business as a realistic ambition for them. Proportions were also high among the HE/FE below degree and GCSE groups (54 and 51 per cent respectively). The largest difference can be seen between the graduate and the no qualification group, where just 24 per cent of respondents felt starting a business was a realistic ambition (a difference of 39 percentage points).

Figure 9.3 Do you think starting your own business would be a realistic ambition for you to have?



Differences identified in the regression analysis only remained statistically significant for one of the educational groups once other characteristics were controlled for. The one remaining significant result - in this case an 11 percentage point difference - was between the graduate and the no qualification group (see Figure 9.4).

Figure 9.4 Effect of different educational levels on whether starting your own business is a realistic ambition to have: regression analysis



NB: Blue bars denote statistically significant coefficients; grey bars non-significant ones

9.2 Summary: entrepreneurship

The results in this particular section show that differences in entrepreneurship, in particular attitudes to starting a business, do not remain significant for all groups after controlling for other background characteristics. Instead findings suggest that whilst those in the higher educational groups (degree to A-level/ GCSEs) do not differ significantly from one another, those in the no qualifications group appear to hold significantly different attitudes to starting their own business.

Table 9.1 Do the attitudes of graduates differ significantly from those with other levels of education when other factors are taken into account?: Entrepreneurship

Base: All adults				
	HE/FE below degree	A-levels	GCSEs	No quals
Started/considered starting own business	**X**	**X**	✓	✓
Starting a business realistic	**X**	**X**	**X**	✓

10 Concluding comments

Education has been shown to be a strong predictor of a range of measurable outcomes; however, much of the attention to date has focused on its economic returns. This detailed secondary analysis of data from the British Social Attitudes survey sought to take this exploration one stage further, and to enhance our understanding of how (higher) education affects a wider set of attitudinal outcomes.

Findings indicated a clear association between education and attitudes across a range of attitudinal areas and sub-topics. The results suggest that educational level (in particular, having a degree) is associated with: interest and involvement in politics; political efficacy; environmental awareness and concern; perceptions of gender roles; attitudes to immigration and immigrants; perceptions of welfare benefits and benefit recipients; national identity and entrepreneurship.

In summary, the results show strong significant associations between educational level and attitudes even when taking into account other background characteristics. In many cases the attitudinal 'benefits' of education increase incrementally, with graduates displaying:

- The highest levels of political engagement and efficacy,
- The greatest degree of environmental knowledge, concern and willingness to take action for the sake of the environment;
- The most tolerant attitudes towards immigrants and benefit recipients.

Indeed having a degree appears to have a pronounced effect on a number of attitudinal measures, reflecting the results of earlier research in this area (see ESRC, 2014).

Regression results suggest that the relationship between someone's educational level and their attitudes is particularly robust in terms of immigration and welfare benefits, where we saw significant associations between all selected attitudinal indicators and all educational groups.

The multilevel modelling and mediation analysis set out in Appendix D took exploration of the relationship between educational level and attitudes a step further. Here results offer an indication of the effect of education on attitudes over time. Specifically, they show that the 'educational effect' has been farily stable since the early 1990s (and the expansion of higher education). Interestingly the mediation analysis (conducted on a small number of selected attitudinal variables), suggests that in some cases the effect of education is being 'channelled' through other variables, for example, that it is higher education's effect on a wider libertarianism which results in more tolerant attitudes to same sex relationships.

The mediation analysis moves us a step closer to being able to offer causal explanations for differences identified in the regression models. However, there are still a number of avenues which could usefully be explored in further analysis. For example, whether and what kind of differences we find on the basis of subject of study, institution attended and

whether the student lived at home while studying. Theory suggests these factors are likely to show interesting differences). Some of the US literature, for example (see Pascarella and Terenzini, 2005) has explored in considerable detail the factors which affect the impact of higher education on students, taking into account both academic and social factors in the experience of education.

A recent UK study (Brennan et al, 2010) drew on some of this literature to explore 'what is learned' in UK higher education. Among its conclusions was the importance of the increasingly different levels of engagement of students with their studies, and with the broader experience of higher education, producing an increasing diversity of outcomes.

The attitudinal differences between graduates and other groupings, though frequently statistically significant, are not always large. However, it is probable that the overall differences between the attitudes of graduates and non-graduates revealed by the analysis of data gathered by the British Social Attitudes survey hides larger differences within the expanding graduate population. This is partly related to both the academic and the social aspects of the higher education experience. Attitudes change because of the new knowledge and perspectives acquired from the academic content of courses. In some cases, these will be the first stages of socialisation into a profession and career and thus will reflect to some extent the values of that profession/career. But attitudes also change because of the new friends acquired and the changed lifestyles enjoyed, especially by those students who 'go away' to university. Three years spent living in a hall of residence on a campus university is very different from the experience of living at home, engaging with higher education alongside a part-time job. There are of course considerable variations in the student experience of higher education across the UK's increasingly differentiated higher education system and increasingly diverse student body and these are likely to be associated with differences in graduate attitudes. For some students, higher education confirms an existing attitude set while, for others, it is transformative. Recent changes in the funding of higher education may also lead to changes in perspectives and attitudes as students' concerns and priorities change with the changes occurring in their financial circumstances.

The British Social Attitudes survey tells us about the attitudes of individuals, but when a particular grouping of individuals, in this case graduates, expands significantly as a proportion of the whole population, their attitude set has a wider social significance. While much of the current discourse on higher education emphasises the need for graduates to possess skills required to meet current social and economic needs, the social attitudes of an expanding proportion of the population can be expected to lead to wider social changes, reflecting those attitudes. Higher education is expected to help students respond to the changing needs of society, but the expanding numbers of graduates, with their distinctive attitudes, may well be driving further changes in society.

11 References

Baumberg, B. (2014) 'Benefits and the cost of living: Pressures on the cost of living and attitudes to benefit claiming', in Park, A., Bryson, C. and Curtice, J. (eds.), *British Social Attitudes: the 31st Report*, London: NatCen.

BIS (2013a) *The Impact of University Degrees on the Lifecycle of Earnings: Some further analysis*, BIS Research Paper No. 112, London: BIS.

BIS (2013b) *Things we know and don't know about the wider benefits of Higher Education: A review of recent literature*, BIS Research Paper No. 133, London: BIS.

BIS (2013c) *The Benefits of Higher Education Participation for Individuals and for Society: Key findings and reports 'the quadrants'*, BIS Research Paper No. 146, London: BIS.

BIS (2011) *Supporting analysis for the Higher Education White Paper*, BIS Economics Paper No. 146, London: BIS.

Curtice, J. and Seyd, B. (2003) 'Is there a crisis of political participation?', in Park et al (Eds), *British Social Attitudes: the 20th Report*, London: Sage.

DeVellis, R. F. (2003) *Scale Development: Theory and Applications*, 2nd edition, Applied Social Research Methods Series, 26, Thousand Oaks, California: Sage

ESRC (2014) *The wellbeing effect of education*, ESRC Evidence Briefing, published July 2014.

Evans, L. (2002) *Reflective Practice in Educational Research: developing advanced skills*. London: Continuum.

Feinstein, L. (2002) *Quantitative Estimates of the Social Benefits of Learning, 1: Crime*. Wider Benefits of Learning Research Report. University of London Centre for Research on the Wider Benefits of Learning.

Ford, R. and Heath, A. (2014) 'Immigration: A nation divided?', in Park., A., Bryson, C. and Curtice, J. (eds.), *British Social Attitudes: the 31st Report*, London: NatCen.

Kiss, Z. and Park, A. (2014) 'National identify: Exploring Britishness', in Park, A., Bryson, C. and Curtice, J. (eds.), *British Social Attitudes: the 31st Report*, London: NatCen.

Lee, L. and Young, P. (2013) 'A disengaged Britain? Political interest and participation over 30 years', in Park, A., Bryson, C., Clery, E., Curtice, J. and Phillips, M. (eds.), *British Social Attitudes: the 30th Report*, London: NatCen.

Park, A. and Rhead, R. (2013) 'Changing attitudes towards sex, marriage and personal relationships', in Park, A., Bryson, C., Clery, E., Curtice, J. and Phillips, M. (eds.), *British Social Attitudes: the 30th Report*, London: NatCen.

Spector, P. E. (1992) *Summated Rating Scale Construction: An Introduction, Quantitative Applications in the Social Sciences*, 82, Newbury Park, California: Sage.

Taylor, E. (2011) 'Transport: How far will people go to tackle climate change?', in Park., A., Clery, E., Curtice, J., Phillips, M., and Utting, D. (eds.), *British Social Attitudes: the 29th Report*, London: NatCen.

Appendix A: Constructing the education variables

Both the binary variable used in the t-test analysis and five category education variable used in the remainder of the analysis were constructed using the British Social Attitudes survey variable HEdQual, which was itself derived from a number of different education questions included in the survey.

Within each of the British Social Attitudes survey questions concerned with educational attainment, respondents were first asked whether they had any of the school-level or post school-level qualifications listed on a specified show card, then to select the relevant qualifications from that show card (the content of each of these show cards is displayed in Appendix Tables A1 and A2 below).

Appendix Table A1: School-level educational qualifications - British Social Attitudes survey show card		
1	**Section 1:** GCSE Grades D-G Short course GCSE Vocational GCSE CSE Grades 2-5 GCE O-level grades D-E or 7-9 Scottish SCE Ordinary Bands D-E Scottish Standard Grades 4-7 SCOTVEC/SQA National Certificate modules Scottish School Leaving Certificate – no grade Scottish Access 1-3 Scottish Intermediate 1 at grades B-D	[EdQual1]
2	**Section 2:** GCSE Grades A*-C CSE Grade 1 GCE O-level Grades A-C or 1-6 School Certificate or Matriculation Scottish SCE Ordinary Bands A-C or Pass Scottish Standard Grades 1-3 or Pass Scottish School Leaving Certificate Lower Grade SUPE Ordinary Northern Ireland Junior Certificate SQA Intermediate 1 at Grade A SQA Intermediate 2 (any grade)	[EdQual2]
3	**Section 3:** GCE A-level, S-level, A2-level, AS-level International Baccalaureate Vocational A-level (AVCE) Scottish Higher Scottish SCE/SLC/SUPE at Higher Grade Scottish Higher School Certificate Certificate of Sixth Year Studies/ Advanced Higher Grades Northern Ireland Senior Certificate Welsh Baccalaureate	[EdQual3]
4	**Section 4:** Overseas school leaving exam or certificate	[EdQual4]
8	(Don't know)	
9	(Refusal)	

Note: This question was asked of all respondent who reported having at least one school-level qualification (i.e. if SchQual = 1)

If PSchQFW = 1. Yes, select all qualifications held

Appendix Table A2: Post-school educational qualifications, British Social Attitudes survey show card		
1	Univ/CNAA **first** degree	[EdQual38]
2	Univ/CNAA diploma / Foundation Degree	[EdQual39]
3	Postgraduate degree	[EdQual36]
4	Teacher training qualification	[EdQual12]
5	Nursing qualification	[EdQual13]
6	Foundation/advanced (modern) apprenticeship	[EdQual26]
7	Other recognised trade apprenticeship	[EdQual27]
8	OCR/RSA - (Vocational) Certificate	[EdQual28]
9	OCR/RSA - (First) Diploma	[EdQual29]
10	OCR/RSA - Advanced Diploma	[EdQual30]
11	OCR/RSA - Higher Diploma	[EdQual31]
12	Other clerical, commercial qualification	[EdQual32]
13	City&Guilds - Level 1/Part I	[EdQual22]
14	City&Guilds - Level 2/Craft/Intermediate/Ordinary/Part II	[EdQual23]
15	City&Guilds - Level 3/Advanced/Final/Part III	[EdQual24]
16	City&Guilds - Level 4/Full Technological/ Part IV	[EdQual25]
17	Edexcel/BTEC First Certificate	[EdQual33]
18	Edexcel/BTEC First/General Diploma	[EdQual34]
19	Edexcel/BTEC/BEC/TEC (General/Ordinary) National Certif or Diploma (ONC/OND)	[EdQual10]
20	Edexcel/BTEC/BEC/TEC **Higher** National Certificate (HNC) or Diploma (HND)	[EdQual11]
21	NVQ/SVQ Level 1/GNVQ/GSVQ Foundation level	[EdQual17]
22	NVQ/SVQ Level 2/GNVQ/GSVQ Intermediate level	[EdQual18]
23	NVQ/SVQ Level 3/GNVQ/GSVQ Advanced level	[EdQual19]

Appendix Table A2: Post-school educational qualifications, British Social Attitudes survey show card (continued)		
24	NVQ/SVQ Level 4	[EdQual20]
25	NVQ/SVQ Level 5	[EdQual21]
97	Other recognised academic or vocational qual (WRITE IN)	[EdQual37]
98	(Don't know)	
99	(Refusal)	

The logic behind the summary derived variables is shown below. This demonstrates, for example, that if a respondent has a nursing qualification (code 5 in Appendix Table A2) they have been coded as HE/FE below degree, if they have an OCR/RSA advanced diploma (code 10 in Appendix A2) they are classed as A-level or equivalent and if they have OCR/RSA first diploma (code 9 in Appendix A2) they are classed as GCSE or equivalent.

Appendix Table A3: Derived educational level				
		PSchQF	**SchQFW**	**SchQual** and **PSchQual**
1	Degree or equivalent	1, 3		
2	HE/FE below degree	2, 4, 5, 11, 16, 20, 24, 25		
3	A-level or equivalent	10, 15, 19, 23	3	
4	GCSE or equivalent (below A-level)	6, 7, 8, 9, 12, 13, 14, 17, 18, 21, 22	1, 2	
5	No qualifications			2, 2

Appendix B: List of indicators included in the Stage one analysis

The project sought to explore the link between higher education and people's attitudes on a number of key social and political issues. These included a person's sense of political efficacy, and their views about immigration, the environment, and same sex marriage. Therefore the BSA offered considerable opportunity to explore attitudes in a large number of different areas. Indeed, the number of potential indicators was too great to take wholesale into the analysis and it was necessary to choose both topics and questions that suited the project's aims.

Table B1 shows the range of topics the research looked at and the indicators chosen to represent a person's attitude at Stage one. This initial selection process began with a review of the content of the last ten years of the survey with a particular focus on data collected since 2009. However, the starting point was to use, wherever possible, data from the most recent survey in 2013. In cases where questions have been included regularly over the years there is a focus on the most recent data available.

The choice of individual questions was based on an assessment of how relevant and useful they were to addressing the study's aims. No statistical analysis took place until this initial list had been selected.

Appendix Table B1: List of indicators included in Stage one analysis

Topic area	Indicator
POLITICAL ENGAGEMENT AND TRUST 2013	Do you think of yourself as a supporter of any one political party?
	Which political party?
	Party political allegiance (recoded)
	How much interest to do you generally have in what is going on in politics?
	Would you say that most people can be trusted, all that you can't be too careful in dealing with people?
	What do you think Britain's long-term policy should be in terms of the EU?
	How much do you trust British governments of any party to place the needs of the nation above the interests of their own political party?
TRUST IN GOVERNMENT 2012	People like me have no say in what the government does.
	Voting is the only way people like me can have any say about how the government runs things.
	Sometimes politics and government seem so complicated that a person like me cannot really understand what is going on.
POLITICAL ENGAGEMENT AND TRUST 2011	Which of these statements best describes your opinion on the present system of governing Britain
	How much do you trust British governments of any party to place the needs of the nation above the interests of their own party?
	How much do you trust politicians of any party in Britain to tell the truth when they are in a tight corner?
	How much do you agree or disagree that generally speaking those we elect as MPs lose touch with people pretty quickly?

Appendix Table B1: List of indicators included in Stage one analysis	
POLITICAL ENGAGEMENT AND TRUST 2011 (continued)	How much do you agree or disagree that parties are only interested in people's votes, not in their opinions?
	How much do you agree or disagree that it doesn't t really matter which party is in power, in the end things go on much the same?
	How much do you agree or disagree that people like me have no say in what the government does?
	How much do you agree or disagree that voting is the only way people like me can have any say about how the government runs things?
	How much do you agree or disagree that sometimes politics and government seem so complicated that a person like me cannot really understand what is going on?
	How much do you trust Parliament at Westminster?
	How much do you trust British politicians in general?
	How much do you trust the police?
	How much do you trust British governments in general?
	Have you ever contacted your MP about a government action you felt was unjust or harmful?
	Have you ever spoken to an influential person about a government action you felt was unjust or harmful?
	Have you ever contacted a government department about a government action you felt was unjust or harmful?
	Have you ever contacted radio, TV or newspaper about a government action you felt was unjust or harmful?
	Have you ever signed a petition about a government action you felt was unjust or harmful?
	Have you ever raised an issue in an organisation you belong to about a government action you felt was unjust or harmful?
	Have you ever gone on a protest or demonstration about a government action you felt was unjust or harmful?
	Have you ever formed a group of like-minded people about a government action you felt was unjust or harmful?
	Have you never done any of these things about a government action you felt was unjust or harmful?
	Which of these statements comes closest to your view… General elections should be held on a fixed date every four or five years, or, the Prime Minister should be able to hold a general election whenever he or she decides?
	Voters should be able to force their MP to resign and fight a by-election if the MP has broken the rules?
	What if the MP had not broken any rules, but voters thought he or she was not doing a very good job? Should voters be able to force their MP to resign?
	Should UK House of Commons change the voting system for general elections and let smaller political parties get a fairer share of MPs?
	Which do you think would generally be better for Britain nowadays – a coalition or single party?
TRANSPORT 2013	How concerned are you about damage to the countryside from building roads?
	I would be willing to buy a car with lower CO2 emissions
	I am willing to reduce the amount I travel by car to help reduce the impact of climate change
	I'm willing to reduce the amount I travel by plane to help reduce the impact of climate change
	View on climate change and causes… I don t believe that climate change is taking place / I believe that climate change is taking place but not as a result of human actions / I believe that climate change is taking place and is, at least partly, a result of human actions?

Appendix Table B1: List of indicators included in Stage one analysis	
TRANSPORT 2013 (continued)	People should be able to travel by plane as much as they like, even if this harms the environment
	The price of a plane ticket should reflect the environmental damage caused, even if this makes air travel much more expensive
	For the sake of the environment, car users should pay higher taxes
	People should be allowed to use their cars as much as they like, even if it causes damage to the environment
	For the sake of the environment everyone should reduce how much they use their cars
	There is no point in reducing my car use to help the environment unless others do the same
	People who drive cars that are better for the environment should pay less to use the roads and people whose cars are more harmful to the environment
ENVIRONMENT 2010	How concerned are you about environmental issues?
	How much do you feel you know about the causes of environmental problems?
	How much do you feel you know about solutions to environmental problems?
	We worry too much about environmental future and not about prices and jobs today?
	All we do in modern life harms the environment?
	Britain needs economic growth to protect the environment?
	Earth cannot continue to support world population growth at this rate?
	We worry too much about human progress harming the environment?
	Economic growth always harms the environment?
	I would be willing to pay higher prices to protect the environment?
	I would be willing to pay higher taxes to protect the environment?
	I would be willing to accept cuts in my standard of living to protect environment?
	Britain's economic progress will slow down unless we look after environment better?
	Should the Government let people decide how to protect the environment or make laws to protect the environment?
	Should the Government let businesses decide how to protect the environment or make laws to protect environment?
	Is Britain doing enough to protect the world environment?
	Have you signed a petition about an environmental issue?
	Have you given money to an environmental group?
	Have you taken part in a protest/demonstration about an environmental issue in the last 5 years?
DISCRIMINATION 2013	Is it ever acceptable for men and women to be paid different amounts for doing the same work?
	Attempts to give equal opportunities to lesbians, gay men and bisexuals have gone too far or not gone far enough?
	How would you feel talking to someone in a formal setting who you knew or thought to be gay, lesbian or bisexual?
	How would you feel socialising with someone who you knew or thought to be gay, lesbian or bisexual?
SEXUALITY 2013	If a man and woman have sexual relations before marriage, what would your general opinion be?
	What about sexual relations between two adults of the same sex?
	A same sex couple are just as capable of being good parents as a man and a woman

Appendix Table B1: List of indicators included in Stage one analysis	
SEXUALITY 2013 (continued)	Is it acceptable to use negative language to refer to someone's sexuality when playing or watching sport?
	Gay or lesbian couples should have the right to marry one another if they want
GROUPS 2013	Do you feel positive or negative about… asylum seekers?
	Do you feel positive or negative about… Lesbian women?
	Do you feel positive or negative about… People over 70?
	Do you feel positive or negative about… Illegal immigrants?
	Do you feel positive or negative about… Gay men?
	Do you feel positive or negative about… People aged under 30?
	Do you feel positive or negative about… Men in general?
	Do you feel positive or negative about… Women in general?
FAMILY AND GENDER ROLES 2012	Having a job is the best way for a woman to be an independent person
	Because men and women are different, they can't be expected to play the same family roles
	Most mothers with young children would prefer having a male partner who is the main family earner rather than working full-time themselves
	A working mother can establish just as warm and secure a relationship with her children as a mother who does not work.
	A pre-school child is likely to suffer if his or her mother works.
	All in all, family life suffers when the woman has a full-time job.
	A job is all right, but what most women really want is a home and children.
	Being a housewife is just as fulfilling as working for pay.
	Both the man and woman should contribute to the household income.
	A man's job is to earn money; a woman's job is to look after the home and family.
	People who want children ought to get married.
	It is all right for a couple to live together without intending to get married.
	Divorce is usually the best solution when a couple can't seem to work out their marriage problems.
	One parent can bring up a child as well as two parents together.
RELATIONSHIPS 2012	Do you think that divorce in Britain should be relaxed?
	Do you think homosexual couples should be allowed to adopt a baby under the same conditions as other couples?
	A same sex female couple can bring up a child as well as a male-female couple.
	A same sex male couple can bring up a child as well as a male-female couple.
	Now I would like you to tell me whether, in your opinion, it is acceptable for a homosexual person. . . to hold a responsible position in public life ?
	Now I would like you to tell me whether, in your opinion, it is acceptable for a homosexual person. . . to be a teacher in a college or university ?
	Now I would like you to tell me whether, in your opinion, it is acceptable for a homosexual person . . . to be a teacher in a school?
	Abortion if… The woman decides on her own she does not wish to have a child
	Abortion if… The couple cannot afford any more children
	Abortion if… There is a strong chance of a defect in the baby
	Abortion if… The woman's health is seriously endangered by the pregnancy
IMMIGRATION	Do you think the number of immigrants to Britain nowadays should be

Appendix Table B1: List of indicators included in Stage one analysis	
2013	increased or reduced?
	Are migrants good or bad for Britain's economy?
	Do migrants enrich or undermine Britain's cultural life?
	Do you think that, on balance, migration to Britain reduces or increases pressure on the NHS across the whole of Britain?
	Do you think that, on balance, migration to Britain reduces or increases pressure on the schools across the whole of Britain?
	Do you think that, on balance, migration to Britain reduces or increases pressure on the NHS in your local area?
	Do you think that, on balance, migration to Britain reduces or increases pressure on the schools in your local area?
	Do you think that the benefits EU immigrants bring outweigh the costs they bring?
	Do you think that the benefits non-EU immigrants bring outweigh the costs they bring?
	Benefits of spouses from other countries outweigh the costs they bring?
	How soon should EU migrants be able to access the same welfare benefits?
	How soon should EU migrants be able to vote in a general election?
	How soon should non-EU migrants be able to access the same welfare benefits?
	How soon should non-EU migrants be able to vote in a general election?
	Asylum seekers who have suffered persecution in their own country should be able to stay?
	Do you have any friends living in Britain who were born outside of Britain?
PERCEPTIONS OF INTERNATIONAL STUDENTS 2013	How important do you think it is for UK students to be able to speak a foreign language
	International students from outside the European Union bring with them significant benefits the British economy
	International students from outside the European Union bring with them significant cultural benefits to Britain
	International students from outside the European Union strengthen relations with other countries
	International students from outside the European Union imposes significant costs on the British economy
	Do you think the benefits of Britain of international students from outside the European Union outweigh the costs they bring, or do the costs outweigh the benefits?
	Do you think international students from outside the European Union should have the right to work in the UK without restriction during their studies and after they complete their studies?
BENEFITS 2013	Which of these statements come closest to your own views about benefit levels (too high / too low)?
	Think of a 25-year-old unemployed woman living alone, only income from the state… Does she have enough?
	Thinking again about 25-year-old unemployed woman, after rent, her income is £72 a week. Does she have enough?
	The welfare state encourages people to stop helping each other
	The government should spend more money on welfare benefits for the poor even if it leads to higher taxes
	Around here, most unemployed people could find a job if they really wanted to
	Many people who get Social Security don't really deserve any help
	Most people on the dole are fiddling it one way or another

Appendix Table B1: List of indicators included in Stage one analysis	
BENEFITS 2013 (continued)	If welfare benefits weren't so generous people would learn to stand on their own two feet
	Cutting welfare benefits would damage to many people's lives
	The creation of the welfare state is one of Britain's proudest achievements
NATIONAL IDENTITY 2013	Respondent thinks of him/herself more as English/Scottish/Welsh (based on residence) or British?
	Respondent thinks of him/herself more as English or British (England only)?
	If you had to choose, which nationality best describes the way you think of yourself?
	It is impossible for people who do not share Britain's customs and traditions to be truly British
	How important is it to have been in born in Britain to be truly British?
	How important is it to have British citizenship to be truly British?
	How important is it to have lived in Britain for most of one's life to be truly British?
	How important is it to be able to speak English to be truly British?
	How important is it to be a Christian to be truly British?
	How important is it to respect Britain's political institutions and laws to be truly British?
	How important is it to feel British to be truly British?
	How important is it to have British ancestry to be truly British?
	I would rather be a citizen of Britain than of any other country in the world
	There are some things about Britain today that make me feel ashamed of Britain
	The world would be a better place if people from other countries were more like the British
	Generally speaking, Britain is a better country than most other countries
	People should support their country even if their country is in the wrong
	When my country does well in international sports, it makes me proud to be British
	I am often less proud of Britain than I would like to be
	The world would be a better place if the British acknowledged Britain's shortcomings
STARTING A BUSINESS 2013	Have you ever or would you ever consider starting your business?
	Do you think that starting your business would be realistic ambition?
	Which of the following would be the main obstacle in starting your business?
	Which would you say would be the most significant barrier to overcome for most people starting a business?
	Would you say that, in the last five years, it has become easier or more difficult for someone like you to start your own business?
HEALTH 2013	Satisfaction with the way in which the National Health Service runs nowadays
	Satisfaction with the NHS as regards local doctors or GPs
	Satisfaction with the NHS as regards National Health Service dentists
	Satisfaction with the NHS as regards being in hospital as an inpatient
	Satisfaction with the NHS as regards attending hospital as an out-patient
	Thinking about the general standard of care on the NHS, over the next five years.
	3rd most important area of the NHS
	4th most important area of the NHS

Appendix Table B1: List of indicators included in Stage one analysis	
HEALTH 2013 (continued)	5th most important area of the NHS
	In ten years' time, do you think the NHS will still be paid for by taxes and free
	The National Health Service should be available only to those with lower incomes
	If you were to consider your life in general these days, how happy or unhappy would you say you are, on the whole?
	How satisfied are you with your life as a whole nowadays
	Who should pay for regular help for older family member
	Do you support or oppose private companies or businesses running NHS hospitals?
	Do you support or oppose charities or other 'not for profit' organisations running NHS hospitals?
RELIGION 2013	Current religion (summary variable)
	What religion were you brought up in?
	How often do you attend Church?
INCOME AND POVERTY 2013	Would you say that the gap between those with high and low incomes is too large?
	Which of the phrases on this card would you say comes closest to your feelings about your household's income these days?
	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?
	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?
	Is someone in Britain 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?
	Is someone in Britain in poverty if they had enough to eat and live, but not enough to buy other things they needed?
	Is someone in Britain in poverty if they haven't enough to eat and live without getting into debt?
	Some working couples with children find it hard to make ends meet on low wages. Should the government top up wages?
	And what about working couples without children? If they find it hard to make ends meet on low wages should the government top up wages?
	And what about working lone parents? If they find it hard to make ends meet on low wages should the government top up wages?
	If the government tops up people's wages, it makes it easier for employers to get away with paying low wages
	The government should encourage people to provide something for their own retirement
	How knowledgeable do you feel about pension issues?
	Sometimes pensions seem so complicated that a person like me cannot really understand the best thing to do
SOCIAL EQUALITY 2013	A society can be equal without every person being treated the same
	How far do you trust employers to promote equality for everyone?
	How far do you trust the Government to promote equality for everyone?
	How far do you trust big businesses to promote equality for everyone?
	How far do you trust small businesses to promote equality for everyone?
APPEARANCE 2013	On a day-to-day basis, how satisfied do you feel about your appearance?
	Your own value as a person depends on how you look

Appendix Table B1: List of indicators included in Stage one analysis	
APPEARANCE 2013 (continued)	How you look affects what you can achieve in life
	Society puts too much pressure on girls and women to have a sexualised appearance
HIGHER EDUCATION FEES 2013	Who should pay for tuition fees for higher education
	Tuition fees for all universities and colleges should be the same / different depending on university
	Tuition fees for all universities and colleges should be the same / different depending on subject
	Should students get grants to help with living costs?
PERCEPTIONS OF HIGHER EDUCATION 2013	How important you think it is for a young person to go on to higher education?
	In the long run people who go to university end up being a lot better off financially than those who don't
	The cost of going to university leaves many students with debts that they can't afford to repay
	A university education just isn't worth the amount of time and money it usually takes
TAXATION AND SPENDING 2013	First priority for extra government spending
	Second priority for extra government spending
	If the government had to choose should it choose to cut tax or cut spending

NB: Indicators highlighted in blue are significantly related to educational level at the 0.05 level.

Appendix C: Regression tables

Appendix table C1 Political activity: regression analysis					
Variable	**Category**	**Coef.**	**Std. Error**	**T**	**Sig.**
Highest educational qualification	Degree*	-	-	-	-
	HE/FE below degree	-0.34	0.16	-2.18	0.03
	A-level	-0.44	0.14	-3.20	0.00
	GCSE	-0.85	0.12	-6.89	0.00
	No qualification	-1.23	0.14	-8.68	0.00
Sex	Male*	-	-	-	-
	Female	-0.04	0.08	-0.55	0.59
Respondent's age	16-29*	-	-	-	-
	30-44	0.23	0.11	2.15	0.03
	45-64	0.57	0.11	4.94	0.00
	65 years and over	0.60	0.18	3.24	0.00
Economic activity	Unemployed*	-	-	-	-
	Employed	-0.05	0.23	-0.21	0.83
	Full time education	-0.15	0.17	-0.92	0.36
	Retired	-0.03	0.21	-0.12	0.90
	Other	-0.20	0.18	-1.13	0.26
SEG Group	Never had a job*	-	-	-	-
	Professional	0.29	0.17	1.69	0.09
	Intermediate non-manual	0.48	0.16	3.05	0.00
	Junior non-manual	0.20	0.16	1.26	0.21
	Supervisor/skilled manual	0.14	0.16	0.87	0.38
	Semi-skilled manual	0.11	0.14	0.76	0.45

Appendix table C1 Political activity: regression analysis					
	Unskilled manual	0.11	0.17	0.67	0.51
Income	Less than £1,200 per month*	-	-	-	-
	£1,201 to £2,200 per month	0.08	0.10	0.80	0.42
	£2,201 to £3,700 per month	0.01	0.12	0.11	0.91
	£3,701 or more per month	-0.09	0.14	-0.68	0.50
Ethnicity	White*	-	-	-	-
	Non-white	-0.26	0.15	-1.73	0.08
Born in UK	Born in UK*	-	-	-	-
	Born outside UK	-0.19	0.15	-1.22	0.22
Region	London*	-	-	-	-
	North	-0.25	0.16	-1.56	0.12
	Midlands	-0.18	0.17	-1.07	0.29
	South	-0.11	0.16	-0.68	0.50
	Eastern	-0.21	0.17	-1.25	0.21
	Wales	-0.18	0.21	-0.85	0.40
	Scotland	-0.21	0.18	-1.20	0.23

Number of observations = 1501, R-squared = 0.48

Appendix table C2 Interest in politics: regression analysis					
Variable	**Category**	**Coef.**	**Std. Error**	**T**	**Sig.**
Highest educational qualification	Degree*	-	-	-	-
	HE/FE below degree	0.29	0.16	1.84	0.07
	A-level	0.46	0.14	3.19	0.00
	GCSE	0.49	0.13	3.83	0.00
	No qualification	0.70	0.19	3.66	0.00
Sex	Male*	-	-	-	-
	Female	0.16	0.09	1.75	0.08
Respondent's age	16-29*	-	-	-	-
	30-44	-0.22	0.16	-1.37	0.17
	45-64	-0.38	0.16	-2.44	0.02
	65 years and over	-0.78	0.20	-3.85	0.00
Economic activity	Unemployed*	-	-	-	-
	Employed	-0.33	0.32	-1.05	0.29
	Full time education	0.40	0.20	1.99	0.05
	Retired	0.36	0.23	1.53	0.13
	Other	0.11	0.23	0.48	0.63
SEG Group	Never had a job*	-	-	-	-
	Professional	-0.67	0.37	-1.82	0.07
	Intermediate non-manual	-0.61	0.37	-1.66	0.10
	Junior non-manual	-0.59	0.36	-1.62	0.11
	Supervisor/skilled manual	-0.68	0.36	-1.88	0.06
	Semi-skilled manual	-0.48	0.36	-1.34	0.18
	Unskilled manual	-0.65	0.43	-1.49	0.14
Income	Less than £1,200 per month*	-	-	-	-

	£1,201 to £2,200 per month	-0.12	0.13	-0.92	0.36
	£2,201 to £3,700 per month	-0.20	0.15	-1.36	0.18
	£3,701 or more per month	-0.49	0.17	-2.85	0.01
Ethnicity	White*	-	-	-	-
	Non-white	0.32	0.21	1.52	0.13
Born in UK	Born in UK*	-	-	-	-
	Born outside UK	-0.13	0.18	-0.70	0.48
Region	London*	-	-	-	-
	North	0.04	0.18	0.21	0.84
	Midlands	0.06	0.18	0.33	0.74
	South	-0.04	0.17	-0.22	0.83
	Eastern	0.02	0.20	0.11	0.91
	Wales	0.03	0.27	0.13	0.90
	Scotland	0.13	0.22	0.60	0.55

Number of observations = 781, R-squared = 0.16

Appendix table C3 Doesn't matter which party is in power: regression analysis					
Variable	**Category**	**Coef.**	**Std. Error**	**T**	**Sig.**
Highest educational qualification	Degree*	-	-	-	-
	HE/FE below degree	-0.14	0.12	-1.16	0.25
	A-level	-0.26	0.10	-2.62	0.01
	GCSE	-0.39	0.10	-3.94	0.00
	No qualification	-0.53	0.11	-4.86	0.00
Sex	Male*	-	-	-	-
	Female	0.04	0.06	0.58	0.56
Respondent's age	16-29*	-	-	-	-
	30-44	0.01	0.10	0.07	0.94
	45-64	0.04	0.10	0.44	0.66
	65 years and over	0.09	0.15	0.57	0.57
Economic activity	Unemployed*	-	-	-	-
	Employed	0.71	0.22	3.24	0.00
	Full time education	0.08	0.13	0.58	0.56
	Retired	0.19	0.17	1.09	0.28
	Other	0.06	0.14	0.45	0.65
SEG Group	Never had a job*	-	-	-	-
	Professional	0.03	0.17	0.19	0.85
	Intermediate non-manual	0.00	0.17	0.01	0.99
	Junior non-manual	0.01	0.17	0.06	0.95
	Supervisor/skilled manual	-0.24	0.17	-1.42	0.16
	Semi-skilled manual	-0.11	0.16	-0.67	0.50
	Unskilled manual	-0.16	0.18	-0.88	0.38

Appendix table C3 Doesn't matter which party is in power: regression analysis					
Income	Less than £1,200 per month*	-	-	-	-
	£1,201 to £2,200 per month	0.07	0.08	0.89	0.37
	£2,201 to £3,700 per month	0.12	0.09	1.33	0.18
	£3,701 or more per month	0.21	0.10	2.09	0.04
Ethnicity	White*	-	-	-	-
	Non-white	-0.03	0.12	-0.23	0.82
Born in UK	Born in UK*	-	-	-	-
	Born outside UK	-0.21	0.12	-1.72	0.09
Region	London*	-	-	-	-
	North	-0.27	0.12	-2.32	0.02
	Midlands	-0.12	0.13	-0.94	0.35
	South	-0.06	0.12	-0.55	0.58
	Eastern	-0.12	0.13	-0.93	0.35
	Wales	-0.14	0.15	-0.95	0.34
	Scotland	-0.21	0.14	-1.51	0.13

Number of observations = 1493, R-squared = 0.1

Appendix table C4 People like me have no say in what the government does: regression analysis					
Variable	**Category**	**Coef.**	**Std. Error**	**T**	**Sig.**
Highest educational qualification	Degree*	-	-	-	-
	HE/FE below degree	-0.14	0.11	-1.26	0.21
	A-level	-0.26	0.10	-2.70	0.01
	GCSE	-0.50	0.09	-5.28	0.00
	No qualification	-0.71	0.10	-6.99	0.00
Sex	Male*	-	-	-	-
	Female	0.13	0.06	2.21	0.03
Respondent's age	16-29*	-	-	-	-
	30-44	0.04	0.10	0.41	0.68
	45-64	0.00	0.10	-0.03	0.98
	65 years and over	0.06	0.15	0.40	0.69
Economic activity	Unemployed*	-	-	-	-
	Employed	0.06	0.20	0.29	0.77
	Full time education	0.01	0.14	0.07	0.94
	Retired	0.07	0.18	0.41	0.68
	Other	-0.03	0.14	-0.24	0.81
SEG Group	Never had a job*	-	-	-	-
	Professional	-0.06	0.19	-0.32	0.75
	Intermediate non-manual	0.00	0.18	0.02	0.99
	Junior non-manual	-0.16	0.18	-0.89	0.37
	Supervisor/skilled manual	-0.15	0.18	-0.84	0.40
	Semi-skilled manual	-0.10	0.18	-0.55	0.59
	Unskilled manual	-0.32	0.19	-1.69	0.09

Appendix table C4 People like me have no say in what the government does: regression analysis					
Income	Less than £1,200 per month*	-	-	-	-
	£1,201 to £2,200 per month	0.20	0.08	2.55	0.01
	£2,201 to £3,700 per month	0.10	0.09	1.17	0.24
	£3,701 or more per month	0.33	0.10	3.38	0.00
Ethnicity	White*	-	-	-	-
	Non-white	-0.06	0.11	-0.52	0.60
Born in UK	Born in UK*	-	-	-	-
	Born outside UK	-0.15	0.12	-1.26	0.21
Region	London*	-	-	-	-
	North	-0.17	0.11	-1.57	0.12
	Midlands	-0.12	0.12	-1.02	0.31
	South	0.01	0.11	0.06	0.96
	Eastern	0.16	0.12	1.31	0.19
	Wales	0.05	0.16	0.30	0.77
	Scotland	-0.06	0.13	-0.42	0.67

Number of observations = 1494, R-squared = 0.14

Appendix table C5 How much do you trust politicians to tell the truth when they are in a tight corner: regression analysis					
Variable	**Category**	**Coef.**	**Std. Error**	**T**	**Sig.**
Highest educational qualification	Degree *	-	-	-	-
	HE/FE below degree	-0.06	0.10	-0.60	0.55
	A-level	0.11	0.09	1.16	0.25
	GCSE	0.14	0.09	1.53	0.13
	No qualification	0.07	0.11	0.65	0.52
Sex	Male*				
	Female	-0.04	0.06	-0.71	0.48
Respondent's age	16-29*				
	30-44	0.11	0.11	1.05	0.30
	45-64	0.24	0.11	2.26	0.02
	65 years and over	0.13	0.15	0.89	0.38
Economic activity	Unemployed*				
	Employed	-0.09	0.18	-0.52	0.61
	Full time education	-0.31	0.13	-2.34	0.02
	Retired	-0.22	0.16	-1.34	0.18
	Other	-0.41	0.16	-2.60	0.01
SEG Group	Never had a job*				
	Professional	0.06	0.18	0.31	0.76
	Intermediate non-manual	0.17	0.18	0.95	0.34
	Junior non-manual	0.12	0.18	0.65	0.52
	Supervisor/skilled manual	0.21	0.18	1.17	0.24
	Semi-skilled manual	0.01	0.18	0.06	0.95
	Unskilled manual	0.08	0.21	0.39	0.70

Appendix table C5 How much do you trust politicians to tell the truth when they are in a tight corner: regression analysis					
Income	Less than £1,200 per month*				
	£1,201 to £2,200 per month	0.09	0.08	1.13	0.26
	£2,201 to £3,700 per month	-0.02	0.09	-0.23	0.82
	£3,701 or more per month	-0.09	0.10	-0.89	0.37
Ethnicity	White*				
	Non-white	-0.36	0.13	-2.78	0.01
Born in UK	Born in UK*				
	Born outside UK	-0.11	0.13	-0.85	0.39
Region	London*				
	North	0.20	0.12	1.70	0.09
	Midlands	0.21	0.12	1.67	0.10
	South	0.14	0.12	1.18	0.24
	Eastern	0.12	0.14	0.89	0.37
	Wales	0.22	0.16	1.36	0.17
	Scotland	0.35	0.13	2.69	0.01

Number of observations = 777, R-squared = 0.15

Appendix table C6 Knows about causes of environmental problems: regression analysis					
Variable	**Category**	**Coef.**	**Std. Error**	**T**	**Sig.**
Highest educational qualification	Degree*	-	-	-	-
	HE/FE below degree	-0.37	0.13	-2.82	0.01
	A-level	-0.43	0.13	-3.46	0.00
	GCSE	-0.47	0.12	-4.04	0.00
	No qualification	-0.64	0.14	-4.46	0.00
Sex	Male*	-	-	-	-
	Female	-0.31	0.08	-3.91	0.00
Respondent's age	16-29*	-	-	-	-
	30-44	-0.30	0.13	-2.31	0.02
	45-64	-0.25	0.12	-2.02	0.04
	65 years and over	-0.11	0.21	-0.51	0.61
Economic activity	Unemployed*	-	-	-	-
	Employed	0.40	0.36	1.10	0.27
	Full time education	0.12	0.19	0.64	0.53
	Retired	-0.03	0.24	-0.13	0.89
	Other	0.03	0.21	0.13	0.90
SEG Group	Never had a job*	0.36	0.33	1.09	0.27
	Professional	-	-	-	-
	Intermediate non-manual	0.29	0.33	0.88	0.38
	Junior non-manual	0.14	0.33	0.42	0.68
	Supervisor/skilled manual	0.02	0.32	0.05	0.96
	Semi-skilled manual	0.13	0.32	0.42	0.68
	Unskilled manual	0.06	0.40	0.14	0.89

Appendix table C6 Knows about causes of environmental problems: regression analysis					
Income	Less than £1,200 per month*	-	-	-	-
	£1,201 to £2,200 per month	0.06	0.11	0.53	0.59
	£2,201 to £3,700 per month	0.02	0.14	0.13	0.90
	£3,701 or more per month	0.00	0.14	0.01	0.99
Ethnicity	White*	-	-	-	-
	Non-white	-0.24	0.20	-1.19	0.24
Region	London*	-	-	-	-
	North	0.07	0.13	0.56	0.58
	Midlands	-0.22	0.13	-1.68	0.09
	South	0.02	0.13	0.12	0.91
	Eastern	-0.11	0.15	-0.74	0.46
	Wales	0.06	0.19	0.30	0.77
	Scotland	-0.25	0.15	-1.64	0.10

Number of observations = 689, R-squared = 0.17

Appendix table C7 How concerned are you about environmental issues?: regression analysis					
Variable	**Category**	**Coef.**	**Std. Error**	**T**	**Sig.**
Highest educational qualification	Degree*	-	-	-	-
	HE/FE below degree	-0.04	0.13	-0.33	0.74
	A-level	-0.18	0.15	-1.19	0.23
	GCSE	-0.40	0.14	-2.87	0.00
	No qualification	-0.40	0.18	-2.24	0.03
Sex	Male*	-	-	-	-
	Female	0.02	0.09	0.21	0.83
Respondent's age	16-29*	-	-	-	-
	30-44	0.05	0.15	0.31	0.76
	45-64	0.19	0.15	1.29	0.20
	65 years and over	-0.06	0.23	-0.26	0.80
Economic activity	Unemployed*	-	-	-	-
	Employed	0.58	0.43	1.36	0.18
	Full time education	-0.02	0.23	-0.09	0.93
	Retired	0.18	0.27	0.67	0.50
	Other	0.26	0.24	1.08	0.28
SEG Group	Never had a job*	-	-	-	-
	Professional	0.72	0.39	1.84	0.07
	Intermediate non-manual	0.66	0.39	1.70	0.09
	Junior non-manual	0.65	0.38	1.70	0.09
	Supervisor/skilled manual	0.42	0.39	1.08	0.28
	Semi-skilled manual	0.66	0.37	1.78	0.08
	Unskilled manual	0.53	0.48	1.11	0.27

Appendix table C7 How concerned are you about environmental issues?: regression analysis					
Income	Less than £1,200 per month*	-	-	-	-
	£1,201 to £2,200 per month	-0.09	0.13	-0.70	0.48
	£2,201 to £3,700 per month	0.00	0.15	0.02	0.99
	£3,701 or more per month	-0.07	0.15	-0.50	0.62
Ethnicity	White*	-	-	-	-
	Non-white	0.15	0.20	0.76	0.45
Region	London*				
	North	-0.25	0.16	-1.61	0.11
	Midlands	-0.19	0.16	-1.17	0.24
	South	-0.15	0.15	-1.01	0.31
	Eastern	-0.25	0.18	-1.40	0.16
	Wales	0.48	0.23	2.10	0.04
	Scotland	-0.04	0.18	-0.20	0.84

Number of observations = 695, R-squared = 0.08

Appendix table C8 We worry too much about the future of the environment, not about prices and jobs today?: regression analysis					
Variable	**Category**	**Coef.**	**Std. Error**	**T**	**Sig.**
Highest educational qualification	Degree*	-	-	-	-
	HE/FE below degree	-0.44	0.14	-3.15	0.00
	A-level	-0.45	0.16	-2.90	0.00
	GCSE	-0.74	0.13	-5.61	0.00
	No qualification	-1.05	0.17	-6.16	0.00
Sex	Male*	-	-	-	-
	Female	0.06	0.10	0.60	0.55
Respondent's age	16-29*	-	-	-	-
	30-44	0.24	0.16	1.48	0.14
	45-64	0.33	0.16	2.10	0.04
	65 years and over	0.20	0.26	0.78	0.44
Economic activity	Unemployed*	-	-	-	-
	Employed	0.57	0.42	1.33	0.18
	Full time education	-0.16	0.20	-0.77	0.44
	Retired	-0.04	0.26	-0.16	0.87
	Other	0.04	0.22	0.17	0.86
SEG Group	Never had a job*	-	-	-	-
	Professional	0.25	0.33	0.75	0.45
	Intermediate non-manual	0.32	0.33	0.97	0.33
	Junior non-manual	0.21	0.31	0.66	0.51
	Supervisor/skilled manual	0.07	0.32	0.23	0.82
	Semi-skilled manual	0.30	0.32	0.93	0.35
	Unskilled manual	0.30	0.47	0.63	0.53

Appendix table C8	We worry too much about the future of the environment, not about prices and jobs today?: regression analysis				
Income	Less than £1,200 per month*	-	-	-	-
	£1,201 to £2,200 per month	-0.01	0.14	-0.06	0.95
	£2,201 to £3,700 per month	0.31	0.15	2.01	0.04
	£3,701 or more per month	0.25	0.16	1.57	0.12
Ethnicity	White*	-	-	-	-
	Non-white	-0.32	0.21	-1.56	0.12
Region	London*	-	-	-	-
	North	-0.09	0.17	-0.50	0.62
	Midlands	-0.17	0.19	-0.88	0.38
	South	0.07	0.17	0.42	0.67
	Eastern	-0.08	0.19	-0.42	0.68
	Wales	-0.06	0.23	-0.25	0.80
	Scotland	-0.27	0.19	-1.45	0.15

Number of observations = 695 R-squared = 0.21

Appendix table C9 The price of a plane ticket should reflect the environmental damage caused: regression analysis					
Variable	**Category**	**Coef.**	**Std. Error**	**T**	**Sig.**
Highest educational qualification	Degree*	-	-	-	-
	HE/FE below degree	0.41	0.17	2.34	0.02
	A-level	0.31	0.17	1.88	0.06
	GCSE	0.34	0.14	2.38	0.02
	No qualification	0.65	0.19	3.51	0.00
Sex	Male*	-	-	-	-
	Female	0.01	0.11	0.13	0.90
Respondent's age	16-29*	-	-	-	-
	30-44	-0.18	0.19	-0.94	0.35
	45-64	-0.15	0.18	-0.81	0.42
	65 years and over	-0.24	0.27	-0.91	0.37
Economic activity	Unemployed*	-	-	-	-
	Employed	-0.44	0.37	-1.19	0.24
	Full time education	-0.20	0.25	-0.82	0.42
	Retired	-0.33	0.31	-1.07	0.29
	Other	-0.39	0.27	-1.43	0.15
SEG Group	Never had a job*	-	-	-	-
	Professional	0.47	0.40	1.16	0.25
	Intermediate non-manual	0.48	0.39	1.24	0.22
	Junior non-manual	0.40	0.40	0.98	0.33
	Supervisor/skilled manual	0.70	0.40	1.75	0.08
	Semi-skilled manual	0.44	0.39	1.12	0.26
	Unskilled manual	-0.38	0.44	-0.87	0.39

Appendix table C9 The price of a plane ticket should reflect the environmental damage caused: regression analysis					
Income	Less than £1,200 per month*	-	-	-	-
	£1,201 to £2,200 per month	0.18	0.14	1.28	0.20
	£2,201 to £3,700 per month	0.27	0.16	1.68	0.09
	£3,701 or more per month	0.30	0.17	1.74	0.08
Ethnicity	White*	-	-	-	-
	Non-white	-0.03	0.21	-0.13	0.90
Born in UK	Born in UK*	-	-	-	-
	Born outside UK	0.62	0.20	3.07	0.00
Region	London*	-	-	-	-
	North	0.41	0.19	2.14	0.03
	Midlands	0.31	0.21	1.52	0.13
	South	0.20	0.20	1.02	0.31
	Eastern	0.21	0.22	0.94	0.35
	Wales	0.15	0.27	0.54	0.59
	Scotland	0.45	0.23	2.00	0.05

Number of observations = 653, R-squared = 0.1

Appendix table C10 For the sake of the environment everyone should reduce how much they use their car: regression analysis					
Variable	**Category**	**Coef.**	**Std. Error**	**T**	**Sig.**
Highest educational qualification	Degree*	-	-	-	-
	HE/FE below degree	0.24	0.14	1.68	0.09
	A-level	0.22	0.14	1.66	0.10
	GCSE	0.35	0.12	2.97	0.00
	No qualification	0.47	0.17	2.70	0.01
Sex	Male*	-	-	-	-
	Female	0.01	0.10	0.07	0.95
Respondent's age	16-29*	-	-	-	-
	30-44	0.07	0.14	0.52	0.60
	45-64	0.01	0.15	0.06	0.95
	65 years and over	0.11	0.20	0.56	0.58
Economic activity	Unemployed*	-	-	-	-
	Employed	-0.10	0.33	-0.32	0.75
	Full time education	-0.02	0.22	-0.08	0.94
	Retired	-0.09	0.25	-0.35	0.72
	Other	-0.01	0.25	-0.03	0.97
SEG Group	Never had a job*	-	-	-	-
	Professional	0.28	0.36	0.77	0.44
	Intermediate non-manual	0.27	0.35	0.77	0.44
	Junior non-manual	0.41	0.35	1.15	0.25
	Supervisor/skilled manual	0.45	0.36	1.24	0.22
	Semi-skilled manual	0.28	0.35	0.78	0.44
	Unskilled manual	-0.03	0.44	-0.08	0.94

Appendix table C10 For the sake of the environment everyone should reduce how much they use their car: regression analysis					
Income	Less than £1,200 per month*	-	-	-	-
	£1,201 to £2,200 per month	-0.08	0.12	-0.63	0.53
	£2,201 to £3,700 per month	0.03	0.13	0.25	0.81
	£3,701 or more per month	0.11	0.15	0.75	0.45
Ethnicity	White*	-	-	-	-
	Non-white	0.05	0.18	0.26	0.79
Born in UK	Born in UK*	-	-	-	-
	Born outside UK	-0.02	0.17	-0.13	0.90
Region	London*	-	-	-	-
	North	0.00	0.15	0.03	0.97
	Midlands	0.00	0.15	0.02	0.99
	South	0.00	0.16	-0.02	0.98
	Eastern	0.22	0.17	1.27	0.21
	Wales	-0.03	0.26	-0.13	0.90
	Scotland	0.07	0.18	0.38	0.70

Number of observations = 665, R-squared = 0.05

Appendix table C11 There is no point in reducing my car use to help the environment unless others do the same: regression analysis					
Variable	**Category**	**Coef.**	**Std. Error**	**T**	**Sig.**
Highest educational qualification	Degree*	-	-	-	-
	HE/FE below degree	-0.09	0.18	-0.51	0.61
	A-level	-0.12	0.16	-0.73	0.47
	GCSE	-0.35	0.15	-2.39	0.02
	No qualification	-0.25	0.18	-1.36	0.18
Sex	Male*	-	-	-	-
	Female	0.01	0.11	0.13	0.90
Respondent's age	16-29*	-	-	-	-
	30-44	0.29	0.19	1.58	0.12
	45-64	0.12	0.18	0.66	0.51
	65 years and over	0.27	0.25	1.08	0.28
Economic activity	Unemployed*	-	-	-	-
	Employed	0.04	0.32	0.13	0.90
	Full time education	0.18	0.25	0.71	0.48
	Retired	-0.22	0.29	-0.77	0.44
	Other	0.05	0.27	0.18	0.86
SEG Group	Never had a job*	-	-	-	-
	Professional	-0.12	0.40	-0.30	0.76
	Intermediate non-manual	-0.03	0.39	-0.07	0.94
	Junior non-manual	-0.13	0.40	-0.32	0.75
	Supervisor/skilled manual	-0.01	0.39	-0.02	0.99
	Semi-skilled manual	-0.09	0.38	-0.24	0.81
	Unskilled manual	-0.10	0.42	-0.24	0.81

Appendix table C11 There is no point in reducing my car use to help the environment unless others do the same: regression analysis					
Income	Less than £1,200 per month*	-	-	-	-
	£1,201 to £2,200 per month	0.01	0.13	0.08	0.93
	£2,201 to £3,700 per month	-0.04	0.15	-0.23	0.82
	£3,701 or more per month	-0.02	0.17	-0.14	0.89
Ethnicity	White*	-	-	-	-
	Non-white	-0.23	0.21	-1.08	0.28
Born in UK	Born in UK*	-	-	-	-
	Born outside UK	0.31	0.21	1.47	0.14
Region	London*	-	-	-	-
	North	0.02	0.20	0.10	0.92
	Midlands	-0.12	0.20	-0.59	0.55
	South	0.16	0.20	0.77	0.44
	Eastern	-0.07	0.22	-0.32	0.75
	Wales	0.23	0.30	0.77	0.44
	Scotland	-0.15	0.22	-0.68	0.50

Number of observations = 665, R-squared = 0.07

Appendix table C12 All in all, family life suffers when the woman has a full-time job: regression analysis					
Variable	**Category**	**Coef.**	**Std. Error**	**T**	**Sig.**
Highest educational qualification	Degree*	-	-	-	-
	HE/FE below degree	-0.39	0.16	-2.41	0.02
	A-level	-0.21	0.14	-1.56	0.12
	GCSE	-0.25	0.14	-1.79	0.07
	No qualification	-0.25	0.16	-1.50	0.14
Sex	Male*	-	-	-	-
	Female	0.14	0.10	1.47	0.14
Respondent's age	16-29*	-	-	-	-
	30-44	-0.41	0.15	-2.76	0.01
	45-64	-0.63	0.14	-4.43	0.00
	65 years and over	-0.67	0.22	-3.00	0.00
Economic activity	Unemployed*	-	-	-	-
	Employed	0.10	0.32	0.32	0.75
	Full time education	-0.15	0.24	-0.64	0.52
	Retired	-0.13	0.30	-0.45	0.66
	Other	-0.28	0.27	-1.06	0.29
SEG Group	Never had a job*	-	-	-	-
	Professional	0.32	0.35	0.91	0.36
	Intermediate non-manual	0.68	0.35	1.93	0.05
	Junior non-manual	0.23	0.36	0.63	0.53
	Supervisor/skilled manual	0.38	0.36	1.05	0.30
	Semi-skilled manual	0.19	0.36	0.53	0.59
	Unskilled manual	0.64	0.46	1.39	0.16

Appendix table C12 All in all, family life suffers when the woman has a full-time job: regression analysis					
Income	Less than £1,200 per month*	-	-	-	-
	£1,201 to £2,200 per month	-0.47	0.14	-3.39	0.00
	£2,201 to £3,700 per month	-0.15	0.14	-1.05	0.29
	£3,701 or more per month	-0.18	0.16	-1.16	0.25
Ethnicity	White*	-	-	-	-
	Non-white	-0.52	0.20	-2.56	0.01
Region	London*	-	-	-	-
	North	-0.21	0.17	-1.22	0.22
	Midlands	-0.26	0.18	-1.48	0.14
	South	-0.26	0.17	-1.50	0.13
	Eastern	-0.46	0.19	-2.41	0.02
	Wales	0.00	0.24	0.01	0.99
	Scotland	-0.15	0.20	-0.77	0.44

Number of observations = 701, R-squared = 0.14

Appendix table C13 A job is all right, but what most women really want is a home and children: regression analysis					
Variable	**Category**	**Coef.**	**Std. Error**	**T**	**Sig.**
Highest educational qualification	Degree*	-	-	-	-
	HE/FE below degree	-0.47	0.15	-3.08	0.00
	A-level	-0.50	0.15	-3.32	0.00
	GCSE	-0.49	0.15	-3.37	0.00
	No qualification	-0.82	0.17	-4.70	0.00
Sex	Male*				
	Female	0.21	0.10	2.12	0.03
Respondent's age	16-29*				
	30-44	0.14	0.16	0.84	0.40
	45-64	0.02	0.16	0.15	0.88
	65 years and over	-0.08	0.20	-0.39	0.70
Economic activity	Unemployed*				
	Employed	0.85	0.41	2.09	0.04
	Full time education	0.05	0.22	0.22	0.82
	Retired	-0.04	0.25	-0.16	0.87
	Other	-0.20	0.25	-0.80	0.42
SEG Group	Never had a job*				
	Professional	0.99	0.42	2.34	0.02
	Intermediate non-manual	1.29	0.41	3.13	0.00
	Junior non-manual	0.96	0.42	2.30	0.02
	Supervisor/skilled manual	1.15	0.42	2.76	0.01
	Semi-skilled manual	1.06	0.41	2.56	0.01
	Unskilled manual	1.78	0.46	3.83	0.00

Income	Less than £1,200 per month*				
	£1,201 to £2,200 per month	-0.06	0.14	-0.45	0.65
	£2,201 to £3,700 per month	0.34	0.14	2.50	0.01
	£3,701 or more per month	0.10	0.15	0.64	0.52
Ethnicity	White*				
	Non-white	-0.95	0.20	-4.86	0.00
Born in UK	Born in UK*				
	Born outside UK	-0.38	0.16	-2.35	0.02
Region	London*	-0.26	0.18	-1.46	0.15
	North	-0.32	0.17	-1.89	0.06
	Midlands	-0.27	0.18	-1.48	0.14
	South	-0.23	0.23	-0.99	0.32
	Eastern	-0.13	0.18	-0.73	0.47
	Wales	-0.47	0.15	-3.08	0.00
	Scotland	-0.50	0.15	-3.32	0.00

Number of observations = 687, R-squared = 0.20

Appendix table C14 Sexual relationships between adults of the same sex – how wrong: regression analysis					
Variable	**Category**	**Coef.**	**Std. Error**	**T**	**Sig.**
Highest educational qualification	Degree*	-	-	-	-
	HE/FE below degree	-0.52	0.19	-2.79	0.01
	A-level	-0.45	0.17	-2.64	0.01
	GCSE	-0.63	0.18	-3.56	0.00
	No qualification	-0.91	0.23	-3.94	0.00
Sex	Male*	-	-	-	-
	Female	0.54	0.11	4.98	0.00
Respondent's age	16-29*	-	-	-	-
	30-44	0.11	0.16	0.65	0.52
	45-64	-0.38	0.17	-2.16	0.03
	65 years and over	-1.23	0.32	-3.90	0.00
Economic activity	Unemployed*	-	-	-	-
	Employed	0.77	0.32	2.42	0.02
	Full time education	0.21	0.25	0.84	0.40
	Retired	0.36	0.35	1.03	0.30
	Other	0.35	0.28	1.23	0.22
SEG Group	Never had a job*	-	-	-	-
	Professional	0.29	0.40	0.72	0.47
	Intermediate non-manual	0.23	0.39	0.59	0.55
	Junior non-manual	0.52	0.38	1.35	0.18
	Supervisor/skilled manual	0.37	0.40	0.93	0.36
	Semi-skilled manual	0.22	0.37	0.59	0.55
	Unskilled manual	0.17	0.49	0.35	0.73

Appendix table C14 Sexual relationships between adults of the same sex – how wrong: regression analysis					
Income	Less than £1,200 per month*	-	-	-	-
	£1,201 to £2,200 per month	-0.11	0.17	-0.66	0.51
	£2,201 to £3,700 per month	0.08	0.17	0.46	0.65
	£3,701 or more per month	-0.09	0.18	-0.51	0.61
Ethnicity	White*	-	-	-	-
	Non-white	-0.55	0.21	-2.58	0.01
Born in UK	Born in UK*	-	-	-	-
	Born outside UK	-1.20	0.24	-5.03	0.00
Region	London*	-	-	-	-
	North	-0.12	0.19	-0.64	0.52
	Midlands	-0.37	0.22	-1.71	0.09
	South	-0.39	0.20	-1.93	0.05
	Eastern	-0.40	0.26	-1.53	0.13
	Wales	-0.37	0.30	-1.21	0.23
	Scotland	-0.13	0.21	-0.62	0.54

Number of observations = 760, R-squared = 0.27

Appendix table C15 Do you think the number of immigrants to Britain nowadays should change?: regression analysis					
Variable	**Category**	**Coef.**	**Std. Error**	**T**	**Sig.**
Highest educational qualification	Degree*	-	-	-	-
	HE/FE below degree	0.49	0.07	6.95	0.00
	A-level	0.43	0.07	6.08	0.00
	GCSE	0.53	0.07	7.64	0.00
	No qualification	0.42	0.09	4.88	0.00
Sex	Male*	-	-	-	-
	Female	0.00	0.05	0.06	0.95
Respondent's age	16-29*	-	-	-	-
	30-44	0.17	0.08	2.09	0.04
	45-64	0.27	0.08	3.33	0.00
	65 years and over	0.26	0.12	2.21	0.03
Economic activity	Unemployed*	-	-	-	-
	Employed	-0.18	0.15	-1.15	0.25
	Full time education	-0.02	0.12	-0.15	0.88
	Retired	0.14	0.14	0.99	0.32
	Other	0.11	0.13	0.89	0.37
SEG Group	Never had a job*	-	-	-	-
	Professional	-0.29	0.15	-1.99	0.05
	Intermediate non-manual	-0.31	0.14	-2.20	0.03
	Junior non-manual	-0.34	0.14	-2.44	0.02
	Supervisor/skilled manual	-0.18	0.14	-1.26	0.21
	Semi-skilled manual	-0.30	0.14	-2.17	0.03
	Unskilled manual	-0.20	0.18	-1.13	0.26

Appendix table C15 Do you think the number of immigrants to Britain nowadays should change?: regression analysis					
Income	Less than £1,200 per month*	-	-	-	-
	£1,201 to £2,200 per month	-0.08	0.06	-1.23	0.22
	£2,201 to £3,700 per month	0.03	0.07	0.49	0.63
	£3,701 or more per month	-0.06	0.07	-0.89	0.37
Ethnicity	White*	-	-	-	-
	Non-white	-0.34	0.10	-3.51	0.00
Born in UK	Born in UK*	-	-	-	-
	Born outside UK	-0.18	0.09	-1.97	0.05
Region	London*	-	-	-	-
	North	0.27	0.09	2.97	0.00
	Midlands	0.25	0.10	2.58	0.01
	South	0.22	0.10	2.30	0.02
	Eastern	0.27	0.10	2.67	0.01
	Wales	0.32	0.12	2.77	0.01
	Scotland	0.08	0.11	0.70	0.49

Number of observations = 2309, R-squared = 0.15

Appendix table C16 Bad or good for Britain's economy that migrants come to Britain (from 0 extremely bad to 10 extremely good): regression analysis					
Variable	**Category**	**Coef.**	**Std. Error**	**T**	**Sig.**
Highest educational qualification	Degree*	-	-	-	-
	HE/FE below degree	-1.40	0.19	-7.29	0.00
	A-level	-1.32	0.17	-7.66	0.00
	GCSE	-1.99	0.16	-12.21	0.00
	No qualification	-1.89	0.22	-8.74	0.00
Sex	Male*	-	-	-	-
	Female	-0.13	0.12	-1.13	0.26
Respondent's age	16-29*	-	-	-	-
	30-44	-0.03	0.21	-0.15	0.88
	45-64	-0.32	0.21	-1.52	0.13
	65 years and over	-0.08	0.30	-0.25	0.80
Economic activity	Unemployed*	-	-	-	-
	Employed	1.01	0.39	2.59	0.01
	Full time education	0.08	0.27	0.28	0.78
	Retired	0.17	0.34	0.51	0.61
	Other	-0.25	0.32	-0.79	0.43
SEG Group	Never had a job*	-	-	-	-
	Professional	0.12	0.45	0.26	0.80
	Intermediate non-manual	0.02	0.45	0.04	0.96
	Junior non-manual	0.10	0.44	0.22	0.83
	Supervisor/skilled manual	-0.25	0.45	-0.55	0.58
	Semi-skilled manual	-0.21	0.44	-0.48	0.63
	Unskilled manual	-0.47	0.59	-0.80	0.43

Appendix table C16 Bad or good for Britain's economy that migrants come to Britain (from 0 extremely bad to 10 extremely good): regression analysis					
Income	Less than £1,200 per month*	-	-	-	-
	£1,201 to £2,200 per month	0.10	0.16	0.64	0.52
	£2,201 to £3,700 per month	0.23	0.19	1.23	0.22
	£3,701 or more per month	0.49	0.19	2.56	0.01
Ethnicity	White*	-	-	-	-
	Non-white	0.88	0.22	3.98	0.00
Born in UK	Born in UK*	-	-	-	-
	Born outside UK	0.52	0.21	2.48	0.01
Region	London*	-	-	-	-
	North	-0.79	0.21	-3.75	0.00
	Midlands	-0.68	0.23	-3.02	0.00
	South	-0.59	0.21	-2.79	0.01
	Eastern	-0.36	0.24	-1.53	0.13
	Wales	-1.05	0.29	-3.61	0.00
	Scotland	-0.39	0.25	-1.59	0.11

Number of observations = 2318 R-squared = 0.22

Appendix table C17 Migrants enrich or undermine Britain's cultural life (from 0 undermined to 10 enriched): regression analysis					
Variable	**Category**	**Coef.**	**Std. Error**	**T**	**Sig.**
Highest educational qualification	Degree*				
	HE/FE below degree	-1.34	0.21	-6.45	0.00
	A-level	-1.39	0.19	-7.37	0.00
	GCSE	-2.14	0.18	-12.10	0.00
	No qualification	-2.16	0.23	-9.24	0.00
Sex	Male*				
	Female	-0.03	0.13	-0.23	0.82
Respondent's age	16-29*				
	30-44	0.09	0.21	0.41	0.68
	45-64	-0.38	0.21	-1.78	0.08
	65 years and over	-0.27	0.30	-0.90	0.37
Economic activity	Unemployed*				
	Employed	1.24	0.42	2.98	0.00
	Full time education	0.14	0.28	0.49	0.62
	Retired	0.29	0.35	0.83	0.41
	Other	0.18	0.32	0.58	0.56
SEG Group	Never had a job*				
	Professional	0.71	0.50	1.43	0.15
	Intermediate non-manual	0.61	0.49	1.24	0.21
	Junior non-manual	0.43	0.49	0.89	0.37
	Supervisor/skilled manual	0.22	0.49	0.44	0.66
	Semi-skilled manual	0.54	0.49	1.11	0.27
	Unskilled manual	-0.01	0.62	-0.02	0.99

Appendix table C17 Migrants enrich or undermine Britain's cultural life (from 0 undermined to 10 enriched): regression analysis					
Income	Less than £1,200 per month*	-	-	-	-
	£1,201 to £2,200 per month	0.22	0.18	1.25	0.21
	£2,201 to £3,700 per month	0.06	0.19	0.31	0.76
	£3,701 or more per month	0.29	0.20	1.44	0.15
Ethnicity	White*	-	-	-	-
	Non-white	0.62	0.23	2.71	0.01
Born in UK	Born in UK*	-	-	-	-
	Born outside UK	0.73	0.23	3.22	0.00
Region	London*	-	-	-	-
	North	-0.66	0.23	-2.86	0.00
	Midlands	-0.54	0.24	-2.23	0.03
	South	-0.72	0.23	-3.07	0.00
	Eastern	-0.65	0.26	-2.51	0.01
	Wales	-1.36	0.31	-4.39	0.00
	Scotland	-0.26	0.26	-1.00	0.32

Number of observations = 2318, R-squared = 0.21

Appendix table C18 International students impose significant costs on the British economy: regression analysis					
Variable	**Category**	**Coef.**	**Std. Error**	**T**	**Sig.**
Highest educational qualification	Degree*	-	-	-	-
	HE/FE below degree	-0.58	0.10	-5.75	0.00
	A-level	-0.53	0.09	-5.81	0.00
	GCSE	-0.71	0.09	-8.10	0.00
	No qualification	-0.76	0.11	-7.10	0.00
Sex	Male*	-	-	-	-
	Female	-0.08	0.06	-1.31	0.19
Respondent's age	16-29*	-	-	-	-
	30-44	-0.16	0.09	-1.83	0.07
	45-64	-0.14	0.09	-1.50	0.13
	65 years and over	-0.27	0.14	-1.96	0.05
Economic activity	Unemployed*	-	-	-	-
	Employed	0.29	0.19	1.47	0.14
	Full time education	-0.02	0.13	-0.15	0.88
	Retired	0.18	0.16	1.10	0.27
	Other	-0.05	0.15	-0.32	0.75
SEG Group	Never had a job*	-	-	-	-
	Professional	0.55	0.19	2.93	0.00
	Intermediate non-manual	0.45	0.18	2.51	0.01
	Junior non-manual	0.37	0.17	2.10	0.04
	Supervisor/skilled manual	0.37	0.19	1.99	0.05
	Semi-skilled manual	0.26	0.18	1.49	0.14
	Unskilled manual	0.24	0.24	1.01	0.31

Appendix table C18 International students impose significant costs on the British economy: regression analysis					
Income	Less than £1,200 per month*	-	-	-	-
	£1,201 to £2,200 per month	0.06	0.08	0.71	0.48
	£2,201 to £3,700 per month	0.19	0.09	2.16	0.03
	£3,701 or more per month	0.33	0.09	3.58	0.00
Ethnicity	White*	-	-	-	-
	Non-white	-0.01	0.09	-0.06	0.95
Born in UK	Born in UK*	-	-	-	-
	Born outside UK	0.20	0.10	1.97	0.05
Region	London*	-	-	-	-
	North	-0.27	0.11	-2.58	0.01
	Midlands	-0.29	0.12	-2.44	0.02
	South	-0.33	0.11	-3.05	0.00
	Eastern	-0.19	0.12	-1.61	0.11
	Wales	-0.37	0.14	-2.69	0.01
	Scotland	-0.22	0.13	-1.73	0.08

Number of observations = 1505, R-squared = 0.20

Appendix table C19 Many people who get Social Security don't really deserve any help: regression analysis					
Variable	**Category**	**Coef.**	**Std. Error**	**T**	**Sig.**
Highest educational qualification	Degree*	-	-	-	-
	HE/FE below degree	-0.36	0.09	-4.16	0.00
	A-level	-0.41	0.08	-5.15	0.00
	GCSE	-0.41	0.08	-5.39	0.00
	No qualification	-0.48	0.10	-4.66	0.00
Sex	Male*	-	-	-	-
	Female	-0.02	0.05	-0.40	0.69
Respondent's age	16-29*	-	-	-	-
	30-44	-0.05	0.09	-0.61	0.54
	45-64	0.07	0.09	0.79	0.43
	65 years and over	-0.09	0.13	-0.68	0.50
Economic activity	Unemployed*	-	-	-	-
	Employed	-0.07	0.18	-0.40	0.69
	Full time education	-0.38	0.12	-3.07	0.00
	Retired	-0.42	0.15	-2.75	0.01
	Other	-0.12	0.14	-0.89	0.38
SEG Group	Never had a job*	-	-	-	-
	Professional	0.21	0.21	1.04	0.30
	Intermediate non-manual	0.21	0.20	1.01	0.31
	Junior non-manual	0.19	0.20	0.96	0.34
	Supervisor/skilled manual	0.12	0.20	0.57	0.57
	Semi-skilled manual	0.07	0.20	0.33	0.74
	Unskilled manual	0.26	0.28	0.94	0.35

Appendix table C19 Many people who get Social Security don't really deserve any help: regression analysis					
Income	Less than £1,200 per month*	-	-	-	-
	£1,201 to £2,200 per month	-0.14	0.07	-1.90	0.06
	£2,201 to £3,700 per month	-0.15	0.08	-1.90	0.06
	£3,701 or more per month	-0.25	0.08	-3.02	0.00
Ethnicity	White*	-	-	-	-
	Non-white	-0.15	0.09	-1.70	0.09
Born in UK	Born in UK*	-	-	-	-
	Born outside UK	0.14	0.10	1.44	0.15
Region	London*	-	-	-	-
	North	-0.09	0.10	-0.86	0.39
	Midlands	-0.12	0.10	-1.18	0.24
	South	-0.12	0.10	-1.18	0.24
	Eastern	-0.13	0.11	-1.16	0.25
	Wales	-0.29	0.14	-2.06	0.04
	Scotland	0.03	0.12	0.29	0.77

Number of observations = 2063, R-squared = 0.07

Appendix table C20 Most people on the dole are fiddling it one way or another: regression analysis					
Variable	**Category**	**Coef.**	**Std. Error**	**T**	**Sig.**
Highest educational qualification	Degree*	-	-	-	-
	HE/FE below degree	-0.49	0.08	-6.05	0.00
	A-level	-0.39	0.08	-4.76	0.00
	GCSE	-0.57	0.08	-7.45	0.00
	No qualification	-0.69	0.10	-6.8	0.00
Sex	Male*	-	-	-	-
	Female	-0.02	0.05	-0.46	0.65
Respondent's age	16-29*	-	-	-	-
	30-44	0.05	0.09	0.54	0.59
	45-64	0.41	0.09	4.53	0.00
	65 years and over	0.22	0.13	1.65	0.10
Economic activity	Unemployed*	-	-	-	-
	Employed	0.18	0.17	1.04	0.30
	Full time education	-0.38	0.12	-3.17	0.00
	Retired	-0.34	0.16	-2.12	0.03
	Other	-0.13	0.14	-0.9	0.37
SEG Group	Never had a job*	-	-	-	-
	Professional	0.44	0.21	2.09	0.04
	Intermediate non-manual	0.44	0.21	2.14	0.03
	Junior non-manual	0.38	0.21	1.87	0.06
	Supervisor/skilled manual	0.18	0.21	0.88	0.38
	Semi-skilled manual	0.21	0.21	1	0.32
	Unskilled manual	0.25	0.28	0.91	0.36

Appendix table C20 Most people on the dole are fiddling it one way or another: regression analysis					
Income	Less than £1,200 per month*	-	-	-	-
	£1,201 to £2,200 per month	-0.08	0.08	-1.01	0.31
	£2,201 to £3,700 per month	-0.14	0.08	-1.73	0.08
	£3,701 or more per month	-0.06	0.09	-0.73	0.47
Ethnicity	White*	-	-	-	-
	Non-white	-0.11	0.09	-1.25	0.21
Born in UK	Born in UK*	-	-	-	-
	Born outside UK	-0.09	0.10	-0.87	0.38
Region	London*	-	-	-	-
	North	-0.07	0.10	-0.68	0.50
	Midlands	-0.07	0.11	-0.7	0.49
	South	-0.15	0.10	-1.44	0.15
	Eastern	-0.20	0.11	-1.75	0.08
	Wales	-0.28	0.14	-2.00	0.05
	Scotland	-0.07	0.12	-0.60	0.55

Number of observations = 2069, R-squared = 0.12

Appendix table C21 If welfare benefits weren't so generous people would learn to stand on their own two feet: regression analysis					
Variable	**Category**	**Coef.**	**Std. Error**	**T**	**Sig.**
Highest educational qualification	Degree*	-	-	-	-
	HE/FE below degree	-0.50	0.09	-5.39	0.00
	A-level	-0.42	0.09	-4.83	0.00
	GCSE	-0.48	0.08	-5.88	0.00
	No qualification	-0.56	0.10	-5.32	0.00
Sex	Male*	-	-	-	-
	Female	0.01	0.06	0.15	0.88
Respondent's age	16-29*	-	-	-	-
	30-44	0.26	0.10	2.65	0.01
	45-64	0.45	0.10	4.62	0.00
	65 years and over	0.20	0.14	1.44	0.15
Economic activity	Unemployed*	-	-	-	-
	Employed	-0.21	0.21	-0.99	0.32
	Full time education	-0.49	0.14	-3.48	0.00
	Retired	-0.41	0.16	-2.50	0.01
	Other	0.04	0.16	0.26	0.79
SEG Group	Never had a job*	-	-	-	-
	Professional	0.16	0.23	0.71	0.48
	Intermediate non-manual	0.28	0.22	1.24	0.21
	Junior non-manual	0.20	0.23	0.91	0.36
	Supervisor/skilled manual	0.12	0.23	0.53	0.60
	Semi-skilled manual	0.03	0.22	0.11	0.91
	Unskilled manual	0.19	0.27	0.69	0.49

Appendix table C21 If welfare benefits weren't so generous people would learn to stand on their own two feet: regression analysis					
Income	Less than £1,200 per month*	-	-	-	-
	£1,201 to £2,200 per month	-0.14	0.08	-1.69	0.09
	£2,201 to £3,700 per month	-0.21	0.09	-2.46	0.01
	£3,701 or more per month	-0.43	0.09	-4.66	0.00
Ethnicity	White*	-	-	-	-
	Non-white	-0.06	0.10	-0.57	0.57
Born in UK	Born in UK*	-	-	-	-
	Born outside UK	-0.10	0.11	-0.95	0.34
Region	London*	-	-	-	-
	North	-0.13	0.11	-1.22	0.22
	Midlands	-0.29	0.11	-2.68	0.01
	South	-0.28	0.10	-2.71	0.01
	Eastern	-0.32	0.12	-2.75	0.01
	Wales	-0.28	0.14	-2.03	0.04
	Scotland	0.01	0.13	0.09	0.93

Number of observations = 2070, R-squared = 0.11

Appendix table C22 Think of yourself as more English or British? (England only): regression analysis					
Variable	**Category**	**Coef.**	**Std. Error**	**T**	**Sig.**
Highest educational qualification	Degree*	-	-	-	-
	HE/FE below degree	-0.28	0.11	-2.58	0.01
	A-level	-0.18	0.10	-1.84	0.07
	GCSE	-0.49	0.10	-5.04	0.00
	No qualification	-0.49	0.13	-3.86	0.00
Sex	Male*	-	-	-	-
	Female	0.14	0.07	2.15	0.03
Respondent's age	16-29*	-	-	-	-
	30-44	0.03	0.09	0.35	0.72
	45-64	0.02	0.10	0.21	0.83
	65 years and over	-0.15	0.17	-0.89	0.37
Economic activity	Unemployed*	-	-	-	-
	Employed	0.00	0.19	-0.01	1.00
	Full time education	0.06	0.16	0.35	0.73
	Retired	0.09	0.14	0.62	0.53
	Other	-0.01	0.11	-0.05	0.96
SEG Group	Never had a job*	-	-	-	-
	Professional	0.04	0.09	0.39	0.70
	Intermediate non-manual	0.16	0.11	1.49	0.14
	Junior non-manual	-0.03	0.11	-0.32	0.75
	Supervisor/skilled manual	0.02	0.11	0.17	0.87
	Semi-skilled manual	-0.16	0.22	-0.72	0.47
	Unskilled manual	-0.08	0.28	-0.30	0.77

Appendix table C22 Think of yourself as more English or British? (England only): regression analysis					
Income	Less than £1,200 per month*				
	£1,201 to £2,200 per month	0.05	0.09	0.55	0.59
	£2,201 to £3,700 per month	0.07	0.10	0.69	0.49
	£3,701 or more per month	0.16	0.10	1.51	0.13
Ethnicity	White*				
	Non-white	0.24	0.13	1.78	0.08
Born in UK	Born in UK*				
	Born outside UK	0.53	0.12	4.46	0.00
Region	London*				
	North	-0.12	0.12	-1.03	0.30
	Midlands	-0.23	0.13	-1.81	0.07
	South	-0.16	0.12	-1.28	0.20
	Eastern	-0.18	0.14	-1.31	0.19
	Wales	0.00	(omitted)		
	Scotland	0.00	(omitted)		

Number of observations = 1859, R-squared = 0.10

Appendix table C23 How important is it to have been in born in Britain to be truly British: regression analysis					
Variable	**Category**	**Coef.**	**Std. Error**	**T**	**Sig.**
Highest educational qualification	Degree*	-	-	-	-
	HE/FE below degree	-0.53	0.12	-4.48	0.00
	A-level	-0.40	0.11	-3.59	0.00
	GCSE	-0.49	0.11	-4.37	0.00
	No qualification	-0.65	0.13	-5.09	0.00
Sex	Male*	-	-	-	-
	Female	0.11	0.08	1.44	0.15
Respondent's age	16-29*	-	-	-	-
	30-44	0.14	0.12	1.22	0.22
	45-64	0.04	0.11	0.33	0.75
	65 years and over	-0.13	0.17	-0.78	0.43
Economic activity	Unemployed*	-	-	-	-
	Employed	0.48	0.25	1.89	0.06
	Full time education	0.09	0.16	0.54	0.59
	Retired	-0.02	0.20	-0.11	0.91
	Other	0.09	0.20	0.45	0.65
SEG Group	Never had a job*	-	-	-	-
	Professional	0.13	0.27	0.50	0.62
	Intermediate non-manual	0.05	0.27	0.17	0.86
	Junior non-manual	-0.02	0.27	-0.07	0.94
	Supervisor/skilled manual	0.09	0.28	0.33	0.74
	Semi-skilled manual	0.01	0.26	0.02	0.98
	Unskilled manual	0.18	0.33	0.56	0.58

Appendix table C23 How important is it to have been in born in Britain to be truly British: regression analysis					
Income	Less than £1,200 per month*	-	-	-	-
	£1,201 to £2,200 per month	-0.02	0.10	-0.25	0.81
	£2,201 to £3,700 per month	-0.07	0.11	-0.62	0.54
	£3,701 or more per month	-0.13	0.12	-1.09	0.28
Ethnicity	White*	-	-	-	-
	Non-white	0.47	0.17	2.81	0.01
Born in UK	Born in UK*	-	-	-	-
	Born outside UK	0.49	0.17	2.83	0.01
Region	London*	-	-	-	-
	North	-0.18	0.15	-1.23	0.22
	Midlands	-0.13	0.15	-0.86	0.39
	South	-0.26	0.15	-1.79	0.07
	Eastern	-0.16	0.16	-1.02	0.31
	Wales	-0.33	0.20	-1.68	0.09
	Scotland	0.17	0.18	0.95	0.34

Number of observations = 691, R-squared = 0.27

Appendix table C24 It is impossible for people who do not share Britain's customs and traditions to become fully British: regression analysis					
Variable	**Category**	**Coef.**	**Std. Error**	**T**	**Sig.**
Highest educational qualification	Degree*	-	-	-	-
	HE/FE below degree	-0.41	0.17	-2.37	0.02
	A-level	-0.20	0.16	-1.20	0.23
	GCSE	-0.25	0.15	-1.66	0.10
	No qualification	-0.09	0.19	-0.50	0.62
Sex	Male*	-	-	-	-
	Female	0.31	0.10	2.99	0.00
Respondent's age	16-29*	-	-	-	-
	30-44	0.03	0.16	0.21	0.83
	45-64	-0.13	0.16	-0.79	0.43
	65 years and over	-0.30	0.24	-1.22	0.22
Economic activity	Unemployed*	-	-	-	-
	Employed	0.17	0.39	0.44	0.66
	Full time education	-0.14	0.27	-0.50	0.61
	Retired	-0.30	0.31	-0.95	0.34
	Other	-0.55	0.28	-1.95	0.05
SEG Group	Never had a job*	-	-	-	-
	Professional	0.38	0.39	0.97	0.33
	Intermediate non-manual	0.27	0.39	0.70	0.48
	Junior non-manual	0.14	0.38	0.36	0.72
	Supervisor/skilled manual	0.29	0.38	0.75	0.45
	Semi-skilled manual	0.10	0.36	0.29	0.78
	Unskilled manual	0.52	0.42	1.25	0.21

Appendix table C24 It is impossible for people who do not share Britain's customs and traditions to become fully British: regression analysis					
Income	Less than £1,200 per month*	-	-	-	-
	£1,201 to £2,200 per month	0.02	0.14	0.16	0.87
	£2,201 to £3,700 per month	-0.22	0.16	-1.38	0.17
	£3,701 or more per month	0.17	0.18	0.97	0.33
Ethnicity	White*	-	-	-	-
	Non-white	-0.06	0.19	-0.33	0.75
Born in UK	Born in UK*	-	-	-	-
	Born outside UK	0.37	0.19	1.92	0.06
Region	London*	-	-	-	-
	North	-0.23	0.20	-1.17	0.24
	Midlands	-0.32	0.20	-1.56	0.12
	South	-0.38	0.20	-1.91	0.06
	Eastern	-0.52	0.22	-2.37	0.02
	Wales	-0.48	0.27	-1.75	0.08
	Scotland	0.00	0.23	0.01	0.99

Number of observations = 669, R-squared = 0.14

Appendix table C25 People should support their country even if their country is in the wrong: regression analysis					
Variable	**Category**	**Coef.**	**Std. Error**	**T**	**Sig.**
Highest educational qualification	Degree*	-	-	-	-
	HE/FE below degree	-0.53	0.12	-4.48	0.00
	A-level	-0.40	0.11	-3.59	0.00
	GCSE	-0.49	0.11	-4.37	0.00
	No qualification	-0.65	0.13	-5.09	0.00
Sex	Male*	-	-	-	-
	Female	0.11	0.08	1.44	0.15
Respondent's age	16-29*	-	-	-	-
	30-44	0.14	0.12	1.22	0.22
	45-64	0.04	0.11	0.33	0.75
	65 years and over	-0.13	0.17	-0.78	0.43
Economic activity	Unemployed*	-	-	-	-
	Employed	0.48	0.25	1.89	0.06
	Full time education	0.09	0.16	0.54	0.59
	Retired	-0.02	0.20	-0.11	0.91
	Other	0.09	0.20	0.45	0.65
SEG Group	Never had a job*	-	-	-	-
	Professional	0.13	0.27	0.50	0.62
	Intermediate non-manual	0.05	0.27	0.17	0.86
	Junior non-manual	-0.02	0.27	-0.07	0.94
	Supervisor/skilled manual	0.09	0.28	0.33	0.74
	Semi-skilled manual	0.01	0.26	0.02	0.98
	Unskilled manual	0.18	0.33	0.56	0.58

Appendix table C25 People should support their country even if their country is in the wrong: regression analysis					
Income	Less than £1,200 per month*	-	-	-	-
	£1,201 to £2,200 per month	-0.02	0.10	-0.25	0.81
	£2,201 to £3,700 per month	-0.07	0.11	-0.62	0.54
	£3,701 or more per month	-0.13	0.12	-1.09	0.28
Ethnicity	White*	-	-	-	-
	Non-white	0.47	0.17	2.81	0.01
Born in UK	Born in UK*	-	-	-	-
	Born outside UK	0.49	0.17	2.83	0.01
Region	London*	-	-	-	-
	North	-0.18	0.15	-1.23	0.22
	Midlands	-0.13	0.15	-0.86	0.39
	South	-0.26	0.15	-1.79	0.07
	Eastern	-0.16	0.16	-1.02	0.31
	Wales	-0.33	0.20	-1.68	0.09
	Scotland	0.17	0.18	0.95	0.34

Number of observations = 699, R-squared = 0.15

Appendix table C26 Generally speaking, Britain is a better country than most other countries: regression analysis					
Variable	**Category**	**Coef.**	**Std. Error**	**T**	**Sig.**
Highest educational qualification	Degree*	-	-	-	-
	HE/FE below degree	-0.03	0.13	-0.27	0.79
	A-level	0.00	0.13	-0.01	0.99
	GCSE	-0.23	0.12	-1.93	0.05
	No qualification	-0.23	0.14	-1.62	0.11
Sex	Male*	-	-	-	-
	Female	0.31	0.08	3.75	0.00
Respondent's age	16-29*	-	-	-	-
	30-44	0.13	0.12	1.09	0.28
	45-64	0.02	0.12	0.17	0.86
	65 years and over	-0.27	0.21	-1.30	0.19
Economic activity	Unemployed*	-	-	-	-
	Employed	0.19	0.29	0.65	0.51
	Full time education	0.33	0.20	1.62	0.11
	Retired	0.23	0.26	0.90	0.37
	Other	0.09	0.21	0.41	0.68
SEG Group	Never had a job*	-	-	-	-
	Professional	-0.36	0.25	-1.43	0.15
	Intermediate non-manual	-0.33	0.24	-1.37	0.17
	Junior non-manual	-0.42	0.25	-1.72	0.09
	Supervisor/skilled manual	-0.17	0.26	-0.64	0.52
	Semi-skilled manual	-0.33	0.24	-1.41	0.16
	Unskilled manual	-0.39	0.30	-1.30	0.19

Appendix table C26 Generally speaking, Britain is a better country than most other countries: regression analysis					
Income	Less than £1,200 per month*	-	-	-	-
	£1,201 to £2,200 per month	-0.16	0.12	-1.36	0.18
	£2,201 to £3,700 per month	-0.02	0.13	-0.12	0.91
	£3,701 or more per month	-0.11	0.14	-0.74	0.46
Ethnicity	White*	-	-	-	-
	Non-white	0.09	0.16	0.57	0.57
Born in UK	Born in UK*	-	-	-	-
	Born outside UK	-0.37	0.16	-2.38	0.02
Region	London*	-	-	-	-
	North	0.09	0.18	0.52	0.60
	Midlands	0.21	0.18	1.13	0.26
	South	0.22	0.19	1.18	0.24
	Eastern	-0.02	0.20	-0.08	0.94
	Wales	0.11	0.23	0.50	0.62
	Scotland	0.00	0.21	0.02	0.99

Number of observations = 676, R-squared = 0.11

Appendix table C27 Have you ever or would you ever consider starting your business?: regression analysis					
Variable	**Category**	**Coef.**	**Std. Error**	**T**	**Sig.**
Highest educational qualification	Degree*	-	-	-	-
	HE/FE below degree	0.09	0.17	0.51	0.61
	A-level	0.16	0.16	1.04	0.30
	GCSE	0.33	0.15	2.18	0.03
	No qualification	0.80	0.18	4.52	0.00
Sex	Male*	-	-	-	-
	Female	0.21	0.10	2.09	0.04
Respondent's age	16-29*	-	-	-	-
	30-44	0.00	0.15	0.02	0.98
	45-64	-0.24	0.17	-1.42	0.16
	65 years and over	-0.46	0.26	-1.77	0.08
Economic activity	Unemployed*	-	-	-	-
	Employed	-0.01	0.23	-0.03	0.98
	Full time education	-0.11	0.18	-0.60	0.55
	Retired	1.08	0.27	4.04	0.00
	Other	-0.08	0.23	-0.33	0.74
SEG Group	Never had a job*	-	-	-	-
	Professional	0.56	0.27	2.07	0.04
	Intermediate non-manual	0.14	0.15	0.96	0.34
	Junior non-manual	0.67	0.17	3.90	0.00
	Supervisor/skilled manual	-0.28	0.19	-1.44	0.15
	Semi-skilled manual	0.71	0.17	4.11	0.00
	Unskilled manual	0.87	0.26	3.37	0.00

Appendix table C27 Have you ever or would you ever consider starting your business?: regression analysis					
Income	Less than £1,200 per month*	-	-	-	-
	£1,201 to £2,200 per month	0.07	0.13	0.58	0.56
	£2,201 to £3,700 per month	0.10	0.14	0.68	0.50
	£3,701 or more per month	0.10	0.15	0.66	0.51
Ethnicity	White*	-	-	-	-
	Non-white	-0.27	0.16	-1.71	0.09
Born in UK	Born in UK*	-	-	-	-
	Born outside UK	0.17	0.16	1.06	0.29
Region	London*	-	-	-	-
	North	-0.16	0.18	-0.91	0.37
	Midlands	0.02	0.19	0.10	0.92
	South	-0.14	0.18	-0.76	0.45
	Eastern	-0.21	0.21	-0.98	0.33
	Wales	0.05	0.24	0.22	0.83
	Scotland	0.51	0.20	2.53	0.01

Number of observations = 1556, R-squared = 0.16

Appendix table C28 Do you think that starting your own business would be realistic ambition for you to have?: regression analysis					
Variable	**Category**	**Coef.**	**Std. Error**	**T**	**Sig.**
Highest educational qualification	Degree*	-	-	-	-
	HE/FE below degree	0.14	0.11	1.34	0.18
	A-level	0.04	0.10	0.36	0.72
	GCSE	0.14	0.09	1.52	0.13
	No qualification	0.34	0.12	2.70	0.01
Sex	Male*	-	-	-	-
	Female	0.04	0.06	0.69	0.49
Respondent's age	16-29*	-	-	-	-
	30-44	0.16	0.10	1.56	0.12
	45-64	0.40	0.11	3.68	0.00
	65 years and over	0.71	0.17	4.29	0.00
Economic activity	Unemployed*	-	-	-	-
	Employed	-0.02	0.18	-0.11	0.91
	Full time education	-0.04	0.13	-0.32	0.75
	Retired	0.43	0.17	2.49	0.01
	Other	-0.06	0.16	-0.37	0.71
SEG Group	Never had a job*	-	-	-	-
	Professional	-0.06	0.22	-0.27	0.79
	Intermediate non-manual	0.06	0.08	0.65	0.51
	Junior non-manual	0.25	0.11	2.30	0.02
	Supervisor/skilled manual	-0.06	0.12	-0.49	0.62
	Semi-skilled manual	0.32	0.11	2.86	0.00
	Unskilled manual	0.41	0.20	2.08	0.04

Appendix table C28 Do you think that starting your own business would be realistic ambition for you to have?: regression analysis					
Income	Less than £1,200 per month*	-	-	-	-
	£1,201 to £2,200 per month	-0.06	0.09	-0.66	0.51
	£2,201 to £3,700 per month	-0.09	0.10	-0.97	0.33
	£3,701 or more per month	-0.13	0.10	-1.27	0.21
Ethnicity	White*	-	-	-	-
	Non-white	-0.15	0.11	-1.43	0.15
Born in UK	Born in UK*	-	-	-	-
	Born outside UK	-0.06	0.12	-0.49	0.63
Region	London*	-	-	-	-
	North	0.03	0.11	0.25	0.80
	Midlands	0.06	0.12	0.51	0.61
	South	0.07	0.11	0.64	0.52
	Eastern	-0.02	0.13	-0.12	0.91
	Wales	-0.05	0.14	-0.39	0.70
	Scotland	0.30	0.13	2.32	0.02

Number of observations = 1547, R-squared = 0.21

Appendix D: The changing effect of higher education over time

11.1 Introduction

The analyses presented in the previous sections assessed the effect of being in higher education on attitudes using the most recent British Social Attitudes survey data available. However, there is reason to believe that the size, and possibly the direction, of the effect that education (and in particular, higher education) has on attitudes might have changed over time. Higher education has expanded significantly in recent decades and with expansion has come increasing differentiation of provision and a greater diversity of the student body and their experiences within higher education. With differentiation and diversity comes the question of whether there have also been changes in the effects, or impacts, of higher education.

The final analysis stage of this project used two more advanced multivariate techniques, multilevel modelling and path analysis, to explore these issues in more detail.

We used multilevel regression modelling to explore how education level affects attitudes and how this changes over time. This allows us to examine if education has an incremental, step-like impact on particular attitudes, or whether degree level higher education has a disproportionate impact. It also allows us to calculate the effect of a particular educational level on a person's attitudes in a given year and then compare this with the effect it had in another year. The analysis was intended as a starting point to explore whether the effect of education had changed over time. The analysis described here is based on a novel methodological approach; hence the results should be treated with some caution.

We used path analysis to unpick the relationship between educational attainment and a small number of attitudinal indicators. While path analysis is not a test of causality, this technique does bring us closer to being able to offer causal explanations than less sophisticated methods.

We used these analysis techniques on three of the attitudinal measures explored earlier in the report, all of which were found to have a significant relationship with education level in the Stage two regression analysis. The selection of these measures was based on two criteria: first, substantive interest and social importance, second, availability of data across time. The measures chosen were:

1 How much interest do you generally have in what is going on in politics … a great deal, quite a lot, some, not very much, or, none at all?

2 What about sexual relations between two adults of the same sex… Is it: always wrong, mostly wrong, sometimes wrong, rarely wrong, not wrong at all?

3 Many people who get social security don't really deserve any help… do you agree strongly, agree, neither agree nor disagree, disagree, disagree strongly?

The table below illustrates the years in which each of these attitudes was measured.

Table D1: Selected questions and years they were included in the British Social Attitudes survey

Sub-topic	Question	Years asked
Interest in politics	How much interest do you generally have in what is going on in politics?	1986; 1989; 1990; 1991; 1994; 1995; 1996; 1997; 1998; 1999; 2000; 2001; 2002; 2003; 2004; 2005; 2006; 2007; 2008; 2009; 2010; 2011; 2012; 2013
Same sex relationships	What about sexual relations between two adults of the same sex?	1983; 1984; 1985; 1987; 1989; 1990; 1993; 1995; 1998; 1999; 2000; 2003; 2005; 2006; 2007; 2010; 2012; 2013
Welfare benefits	Many people who get social security don't really deserve any help.	1987; 1989; 1991; 1993; 1994; 1995; 1996; 1998; 1999; 2000; 2001; 2002; 2003; 2004; 2005; 2006; 2007; 2008; 2009; 2010; 2011; 2012; 2013

11.2 Methodology

11.2.1 Explanatory variables

Both outcome and explanatory variables were cleaned and recoded to be consistent with the Stage two regression analyses. Efforts were also made to ensure the largest possible sample sizes for each stage of the analysis.

In the case of the education variable, we recoded each category as a dummy variable to make interpretation of the models easier; in other words, to be able to compare each educational level (below degree) to those with a degree. As was the case with the regression analyses, control variables were treated as dummy variables. However, the multilevel models include a smaller number of control variables than the single year regression analyses. This is because not all the questions used in the regression analysis were asked in the same way each year, or included in all years. The control variables included here are: age; gender; country (England, Scotland and Wales) and socio-economic status (or social class).

In addition to these measures, the path analysis also included two attitude scales which have been used in the British Social Attitudes survey since 1986, the Left-Right scale and the Libertarian-authoritarian scale.[10] These scales were designed to measure where

[10] Due to methodological experiments on scale development, the exact items detailed in this section have not been asked on all versions of the questionnaire each year.

respondents stood on certain underlying value ('latent') dimensions. Essentially each of these measures are additive indexes (Spector, 1992; DeVellis, 2003) which summarise answers to a number of questions in a single score. Each of the scales consists of a number of statements to which the respondent is invited to 'agree strongly', 'agree', 'neither agree nor disagree', 'disagree' or 'disagree strongly'. The statements are:

Left–Right scale:

- *Government should redistribute income from the better off to those who are less well off. [Redistrb]*
- *Big business benefits owners at the expense of workers. [BigBusnN]*
- *Ordinary working people do not get their fair share of the nation's wealth. [Wealth]*
- *There is one law for the rich and one for the poor. [RichLaw]*
- *Management will always try to get the better of employees if it gets the chance. [Indust4]*

Libertarian–authoritarian scale:

- *Young people today don't have enough respect for traditional British values [TradVals]*
- *People who break the law should be given stiffer sentences [StifSent]*
- *For some crimes, the death penalty is the most appropriate sentence [DeathApp]*
- *Schools should teach children to obey authority [Obey]*
- *The law should always be obeyed, even if a particular law is wrong [WrongLaw]*
- *Censorship of films and magazines is necessary to uphold moral standards [Censor].*

11.2.2 Multilevel analysis

The British Social Attitudes Survey has taken place almost every year since 1983, with a question exploring educational level included since 1985. As such, as well as allowing us to understand how people's educational level affects their attitudes in the present – or more specifically 2011-2013 (as in the *regression* analysis) it also allows us to explore how the educational effect has changed across time, and, to a limited extent, what drove that change. Multilevel modelling techniques are used to identify this change over time.

Multilevel modelling is an appropriate advanced modelling technique when data is 'layered' – that is, when it has a hierarchical (or nested) structure with the individual at the bottom of the hierarchy and other units above them. These units are often spatial and examples

include households, local authorities and countries. However, for the purpose of this analysis, survey years have been used as the second level in the hierarchy.[11] The goal of multilevel modelling is to account for variance in an outcome at the individual level by taking into account the information measured at all levels (both individual and year). Such an approach has strong theoretical and statistical justifications. Multilevel modelling makes it possible to run the analysis in a single comprehensive model as opposed to having to implement an individual regression for each year of interest (although we have implemented this approach to confirm our results).

In implementing the analysis we used Stata (Version 12), and performed the yearly checks in R. The analyses used a random slope and intercept model which allows the effect for each of the dummy educational level variables to vary across the years, making it possible to compute year-specific coefficients. In essence, this model allows the mean of the dependent variable (in this case the attitudinal measure) to vary across years but it also allows the effect of educational level to vary by year. Random slopes were included for all the educational level variables, allowing us to compute the estimated impact each educational level has on the attitude in each year, compared to having a degree.[12] In this report we have generally excluded graphs which show no difference between a particular educational level and HE across time; this is the case for some graphs illustrating GCSEs (which include O-levels and CSE qualifications) versus HE, and A-levels versus HE.

11.2.3 Path analysis

Social survey data is often highly endogenous, meaning that variables are not independent of one other. So a relationship observed between two variables could in fact be masking the effect of a third variable. This is very important when exploring how education influences different attitudes. Is it the case that education has a direct effect on a particular attitude? Or might it be that there is an indirect relationship: that the effect of educational level is conveyed through a mediating variable? Path analysis is an advanced statistical technique that helps us to understand causality by unpicking the dependencies between variables. It does this by estimating several regression equations simultaneously, permitting us to test recursive and bi-directional relationships.[13] We used two types of statistical model:

---

[11] Strictly speaking this sort of analysis is not often performed due to the fact that measurements taken in the different clusters (in our case, years – British Social Attitudes survey is an annual cross-sectional survey) are not entirely independent of each other. It could be the case that attitudes measured in one year might influence attitudes measured in subsequent years. Such a lack of independence could, in principle, be problematic. This is why we put in place a second analytical framework which tested our results: running separate regression models for each individual year. Results obtained from this second (checking) analysis reinforced findings from the multilevel models.

[12] These estimated coefficients (and their 95% Confidence Intervals) were computed on the regression coefficient for each educational level dummy variable, to which we summed the estimated level-2 error term computed using the Empirical Bayes estimation method.

[13] Not using simultaneous estimation would lead to a Type I error as the individual regression equations would result in an overestimation of the effect of either one variable or the other. Systems of two equations were used in the welfare benefits model and systems of three equations were used in the attitudes to same sex relationships and interest in politics models.

- **Mediation analysis** was used to test whether the effect of education on selected attitudinal variables was a direct one, or whether the effect was mediated (or channelled) through another variable. For example, is the apparent relationship between education and attitudes towards the deservingness of benefit recipients in reality a reflection of the fact that education affects people's views about benefit fraud – and it is a person's views on this issue that really shape how they feel about benefit recipients? For each attitude examined, the first model estimated attitudinal outcomes based on education variables and mediating variables. The second (and third) models used mediating variables as the dependent variables, and educational level as dummy independent variables. In the case of welfare benefits, the first model used attitudes towards the deservingness of benefit recipients as the dependent variable and education and attitudes towards benefit fraud as independent variables. The second model used attitudes to benefit fraud as the dependent variable and educational level as the independent variable. All models also included the same range of control variables used in the Stage two regression models. The models and results have been depicted in the report using path diagrams. Full results tables can be found in the report Appendix.

- **Moderation analysis** was used to ascertain if the effect of education changed for different higher education cohorts (e.g. those who graduated in the 60s versus those who graduated in the 80s). It was implemented by introducing interaction terms into simple multivariate models. Essentially, this moderation model multiplied the values of variables measuring the time period in which a person finished higher education with each educational level dummy variable. The coefficients indicate whether the impact of educational level changes when the time variable increases or decreases.

11.3 Findings: Multilevel modelling analysis

11.3.1 Interest in politics (1985 to 2013)

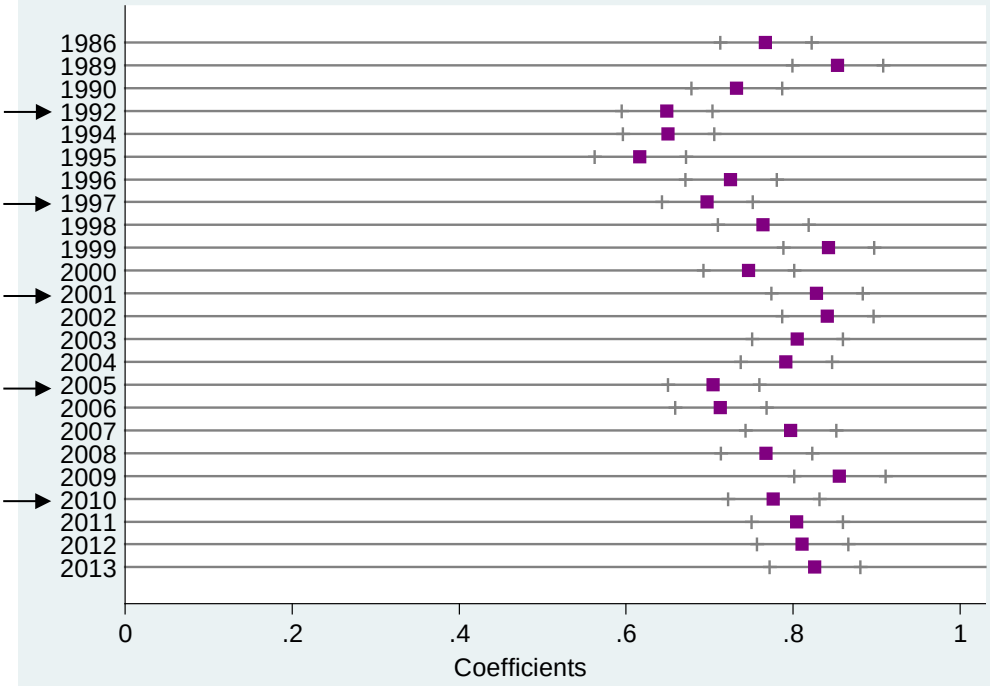
We considered self-reported interest in politics a key attitudinal measure because an interest in politics lies at the heart of political participation – which, in turn is considered one of the cornerstones of democracy. In contrast, a lack of interest and participation in politics is thought to have a negative impact on the quality of public life. Theories of political behaviour suggest that interest and participation in politics increase with levels of education, and this is borne out by the earlier analysis we undertook as part of this project - as well as other work using British Social Attitudes data (for example, Lee and Young, 2013). At different times and in different places, universities have been 'troublesome institutions' as politically active students have taken to the streets to 'protest' against some aspects of contemporary political thinking and policy.

Given this, we might expect that increasing participation in higher education would also lead to an increased interest in politics. However, over the lifetime of the British Social Attitudes survey, levels of political interest have not changed significantly. In 1986, for instance, 29 per cent of people said they had a great deal or quite a lot of interest in politics; so too did 32 per cent in 2013. Over the same period the proportion saying they had not much interest, or none at all, remained fairly constant, at 39 per cent in 1986 and 37 per cent in 2013.

The following analysis used multilevel modelling techniques to explore the effect having a degree had on interest in politics over time. The first 'level' within the model included the 5-category educational variable used in Stages one and two, with controls for gender; age; socio-economic classification group (NS-SEC) and UK country. The second level defined the year the measurement was taken (1985 to 2013).

Figure D1 displays the results of this analysis, comparing those with no qualifications and those with a degree. It shows, for each year, the extent to which those with no qualifications differ in their levels of political interest to those with a degree. A positive value indicates a lower level of interest when compared to those with a degree; 0 means there is no difference. The graph indicates that, in every year, those without any qualifications were less interested in politics than graduates. It is notable that the coefficients do not vary very much from one year to the next, showing that there has been little change over time in the different levels of political interest shown by those with no qualifications and graduates.

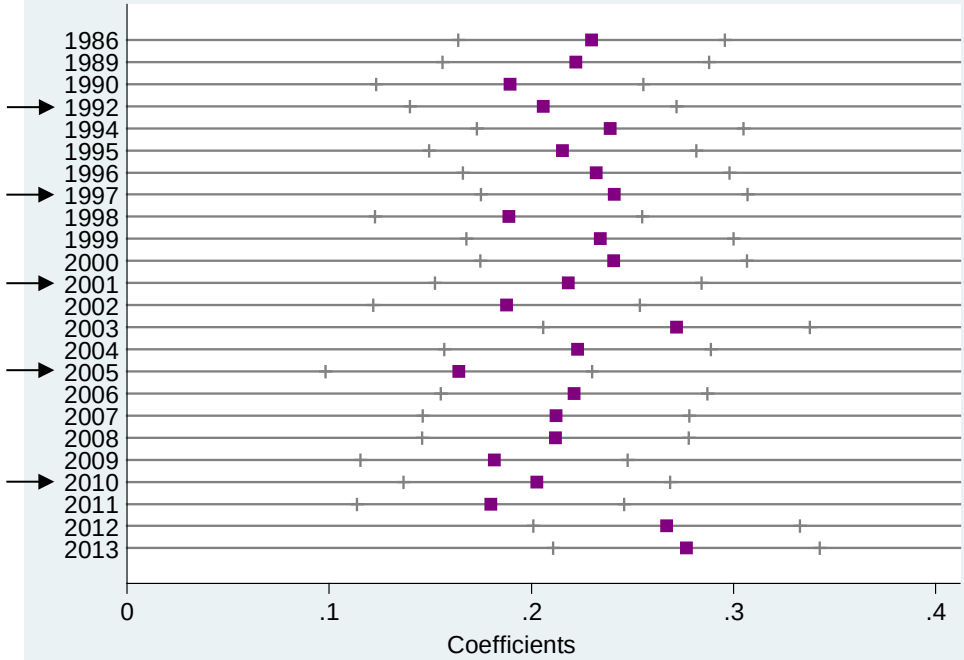
Figure D1 The effect of not having qualifications compared to having a degree on not being interested in politics



Similar findings emerge when comparing those with higher education qualifications below degree level to graduates, as shown in Figure D2. However, the difference here is less than was the case between the no qualification and graduate group.[14]

[14] For ease of interpretation, Figures D1 and D2 use different scales (from 0.0-1.0 for Figure D1 and from 0.0 – 0.4 in Figure D2).

Figure D2 The effect of having been in HE/FE below degree compared to having a degree on not being interested in politics



Looking across all multilevel model results, it is clear that interest in politics does increase incrementally with educational level. In other words, interest in politics appears to increase in 'steps' with educational level. This finding reinforces the results of the Stage one and two cross-tabulation and regression analyses (discussed in the main body of the report). The results also indicate that the size of the effect of education on political interest has not notably increased or decreased over time.

So even though there are more graduates now than in the mid-1980s, the gap between their views and those held by people with other qualifications has barely changed once the other factors in are model are taken into account. Although there is some variation in the strength of the effect across the years, this variation does not consistently run in the same direction. However this does not mean that the variation is random. Figures D1 and D2 indicate the years in which there was a UK general election (marked by an arrow against the relevent year), and this shows peaks in interest in politics among the HE/FE below degree group in or after election years, meaning that the size of the difference between the HE/FE below degree and degree level group is smaller in those years. This suggests that contextual factors, such as an election, may have a greater impact on people's interest in politics[15] among some lower educational groups. Overall, however, we can conclude that

[15] However, these variations are not statistically significant.

the difference between graduates and those in other educational groups hasn't shifted with the growth in the graduate population.

11.3.2 Attitudes towards same sex relationships (1985 to 2013)

Attitudes to same sex relationships have changed considerably over the last three decades. When the British Social Attitudes survey began in 1983, 50 per cent of people thought that sexual relations between two adults of the same sex were 'always wrong', and only 17 per cent that they were 'not wrong at all' (Park and Rhead, 2013). Attitudes then hardened over that decade, peaking in 1987 when 64 per cent thought same sex relationships were 'always wrong'. But from that point on opinion gradually softened, to the extent that by 2012 nearly half (47 per cent) thought same sex relationships were 'not wrong at all' and 22 per cent that they were 'always wrong'.

The earlier results of the cross-tabulation and regression analysis presented in Section 5.2 show clear differences between educational level and attitudes to same sex relationships. Specifically, those with a degree were the most likely to think same sex relationships are 'not wrong at all', followed by those with A-levels and those with below degree level HE/FE qualifications. Now we consider whether the relationship between educational level and attitudes has changed over time.

Results for the multilevel model are displayed in Figures D3-D6. Each graph indicates the effect of having different educational qualifications on respondents' attitudes to same sex relationships, compared to having a degree. As before, 0 means there is no difference between educational levels; here negative values indicate higher levels of agreement that same sex relationships are wrong.[16]

In keeping with earlier analyses, the largest differences are seen between university graduates and people with no qualifications, with the no qualification group being considerably less likely to feel same sex relationships are 'not wrong at all'. The gap between the views of these two groups has varied over time; it was at its greatest in the early 1990s, and has since shrunk.

In Section 5.2 we saw that people with GCSE level and A-level qualifications are less likely than university graduates to feel same sex relationships are 'not wrong at all'. This is confirmed in Figures D4 and D5. However, the difference between those with A-levels and graduates appears to be shrinking as time passes, illustrated by the diagonal pattern in Figure D5.

[16] As before, each graph uses a different scale to ensure patterns of association are as clear as possible. Figure D3 runs from -1.5 to 0 while Figure D4 runs from -0.6 to 0.

Figure D3 **The effect of having no qualifications compared to having a degree on agreeing that same sex relationships are not wrong.**

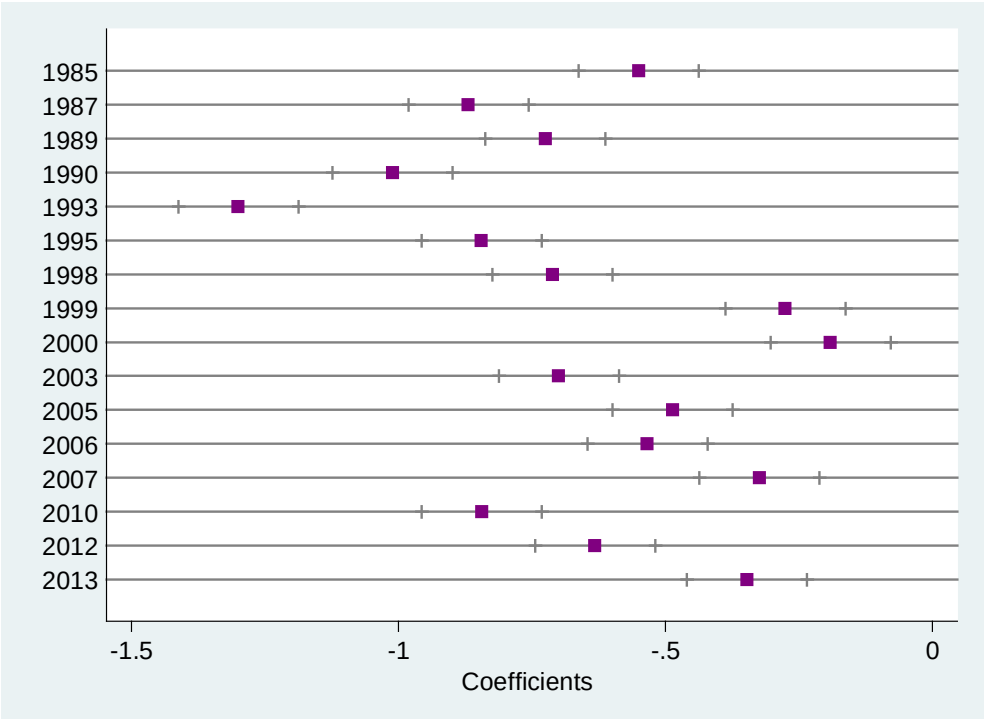


Figure D4 **The effect of having completed GCSE level qualifications compared to having a degree on agreeing that same sex relationships are not wrong.**

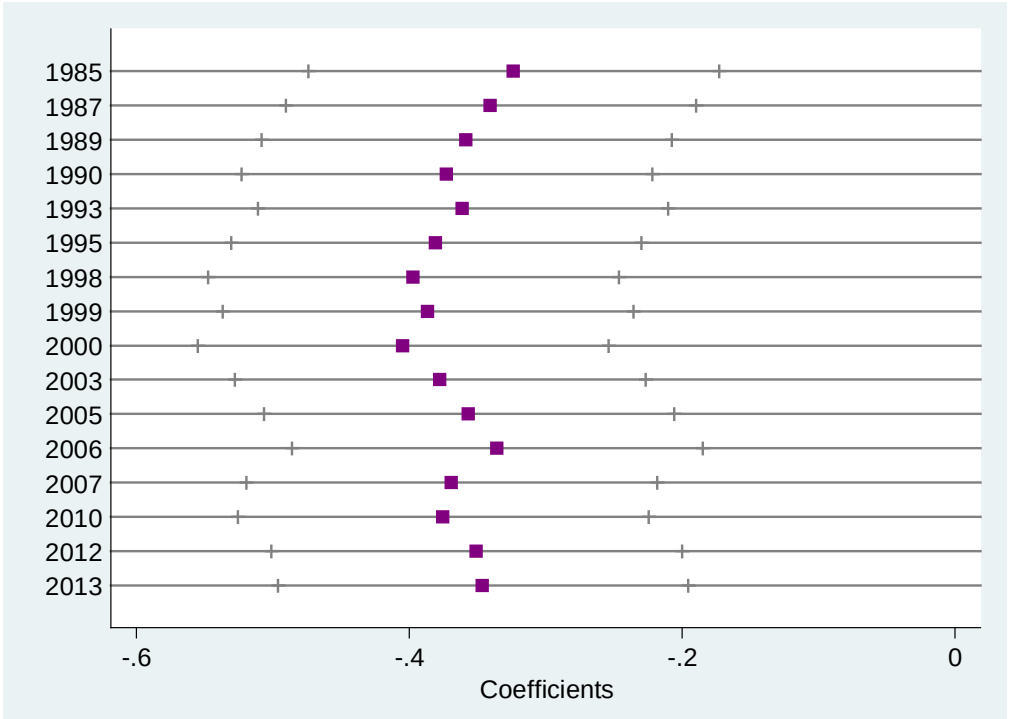


Figure D5 **The effect of having completed A-levels compared to having a degree agreeing that same sex relationships are not wrong.**

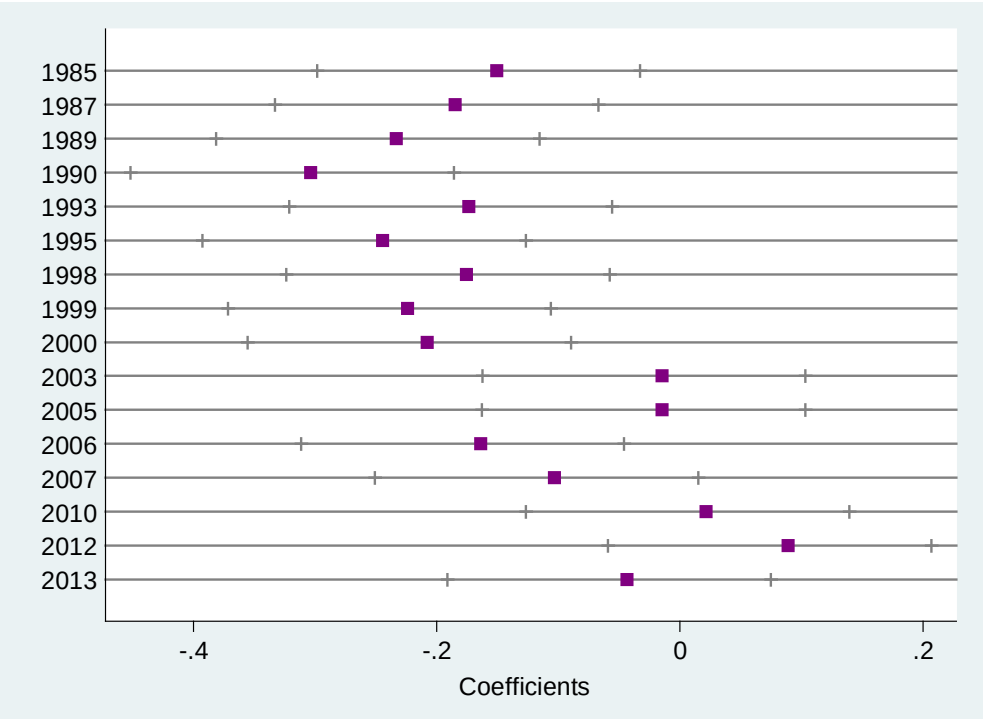


Figure D6 **The effect of having been in HE/FE below degree compared to having a degree on agreeing that same sex relationships are not wrong.**

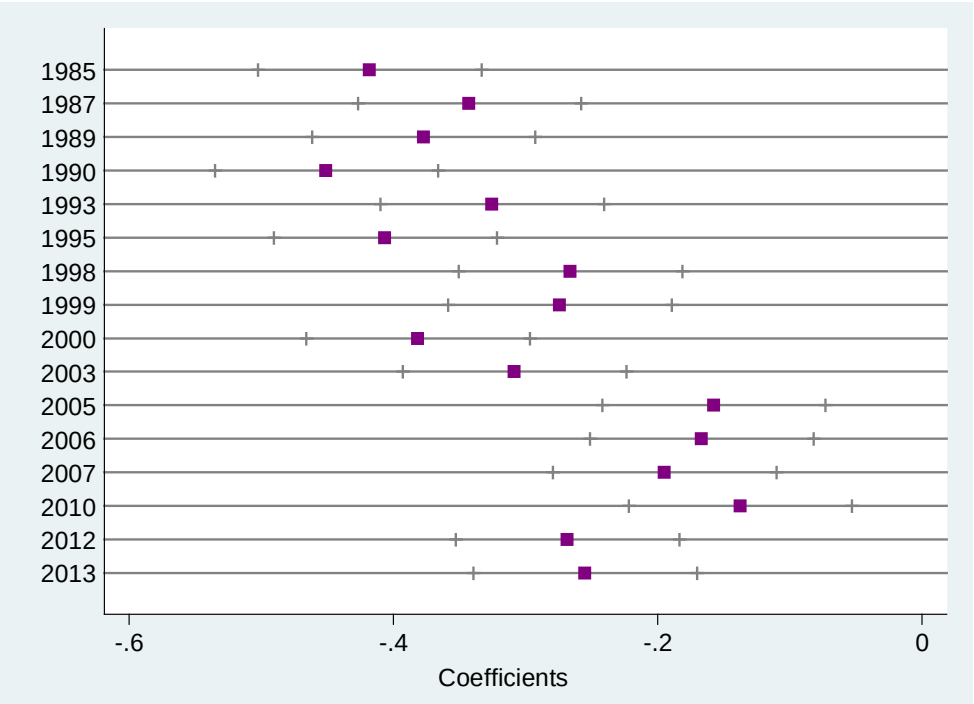


Figure D6 shows that those with below degree level HE qualifications (HE/FE below degree) are less likely than graduates to think that same sex relationships are 'not wrong at all'. However, as was the case with those with no qualifications or with A-levels, the difference between those with a degree and those with below degree level HE/FE qualifications appears to be shrinking over time, illustrated by the diagonal pattern in Figure D6.

Comparing Figures D5 and D6 also shows that the difference between university graduates and those with A-levels is actually smaller than that between university graduates and those with below degree level HE/FE qualifications, reinforcing findings from the cross-tabulation and regression analysis (discussed in Section 5.2, above).

Overall these findings suggest that the difference in attitudes between university graduates and those with other educational qualifications has become less pronounced over time. Whereas once graduates had very distinct views, and were less censorious than those with other qualifications, there is now less of a difference between how they and the rest of the population think about same sex relationships. These changes are likely to reflect broader attitudinal change among the population as a whole, rather than a change in the specific impact that education has on people's attitudes.

11.3.3 Attitudes towards benefit claimants (1985 to 2013)

The third indicator included in this stage of the analysis relates to attitudes to welfare benefits, specifically whether respondents agreed that 'many people who get social security don't really deserve any help'. Regression analysis showed that, when controlling for other factors, graduates were most likely to disagree with this statement. Disagreement was lower among those with HE/FE below degree, and lower still among those with A-levels, decreasing with qualification level.

These findings are useful in understanding how education influences attitudes towards welfare benefits in a static way, in reference to a particular year. However, it is also important to try and understand how the effect of education on attitudes to welfare benefits has changed over time.

Overall, attitudes to welfare benefits have changed considerably over the last three decades. Generally, since the mid-1990s the public has come to see benefit recipients as less deserving of help and become more concerned about benefits acting as a disincentive to finding work (Baumberg, 2014). In 1993, 24 per cent agreed with the statement 'many people who get social security don't deserve help'. This proportion gradually rose over the next decade, peaking at 40 per cent in 2005, and in 2013 stood at 33 per cent. Although there is some evidence that attitudes have softened as a result of the recent recession, overall there has been a long-term decline in the perceived deservingness of benefit recipients.

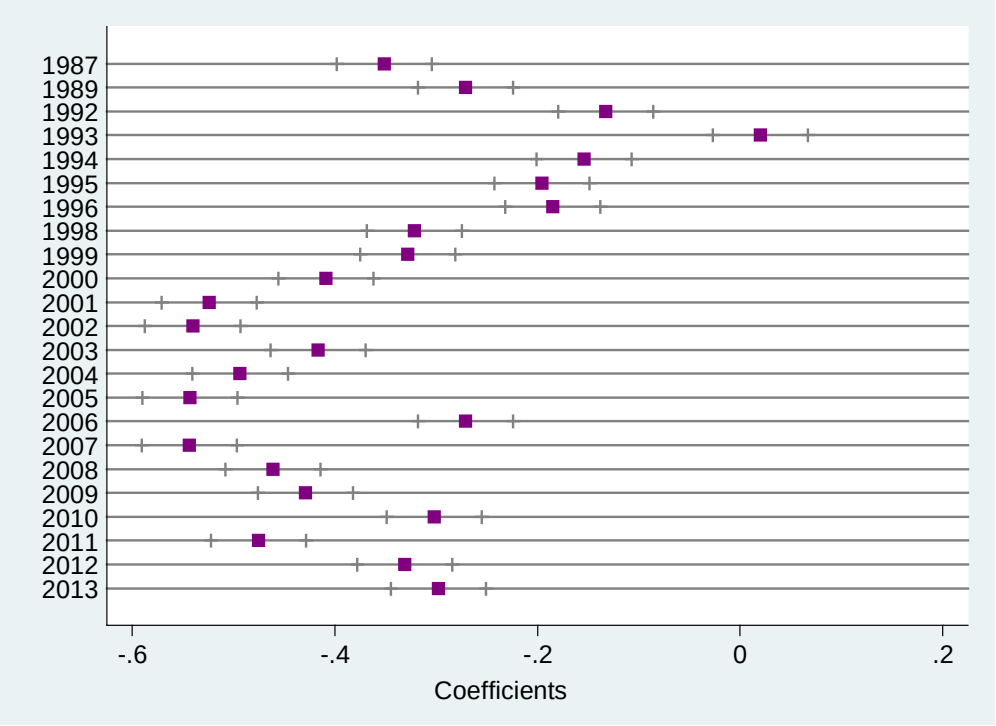
In this section we use the same multilevel modelling techniques to consider change over time. Once again results for the different educational groups - compared to those with a degree - are displayed in the graphs below. Each graph indicates the effect of different educational levels versus having a degree when it comes to attitudes to welfare benefits. As before, 0 means there is no difference between the specified educational level and

having a degree; negative values indicate higher levels of agreement that 'many people who get social security don't really deserve any help'.[17]

Figure D7 compares those with a degree level qualification to those with no qualifications and produces an interesting pattern of results. Here the difference between the two educational groups changes a number of times, declining and increasing in turn. Figures swing from a notable difference of around -0.4 in 1987 to 0 (i.e. no difference at all) in 1993 only to widen again (to a more pronounced -0.5) between 2001 and 2007.

This suggests that in the early 1990s there was little difference between the views of graduates and people with no qualifications, but that as that decade progressed (and overall societal attitudes towards benefit recipients began to harden), the gap between their views widened. Since 2007 the gap between the two has started to narrow, but is still wider than it was in the early 1990s.

Figure D7 The effect of having no qualifications compared to having a degree on disagreeing people on social security deserve no help



[17] As before, each graph uses a different scale ensure patterns of association are as clear as possible. For example, Figure D7 runs from -0.6 to 0.2 while Figures D8 and D9 run from -0.3 to 0.

Figures D8 and D9 display results for the A-level and HE/FE below degree groups. In both cases, these groups are less likely than graduates to disagree with the statement ‘many people who get social security don’t really deserve any help’. Despite differences between the educational groups in individual years there is no apparent change in results across time, meaning that although the strength of the relationship varies from year to year, it does not change substantively. We can therefore conclude that the effect of different educational levels on this particular attitudinal measure has not varied over time.

Figure D8 The effect of A-levels compared to having a degree on disagreeing that people on social security deserve no help

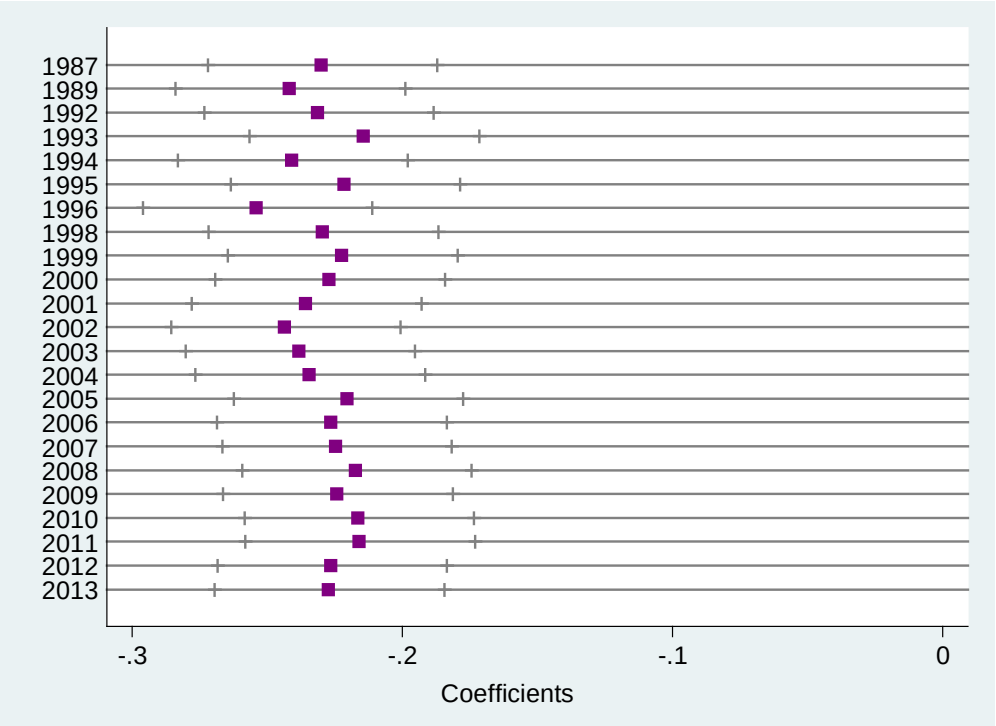
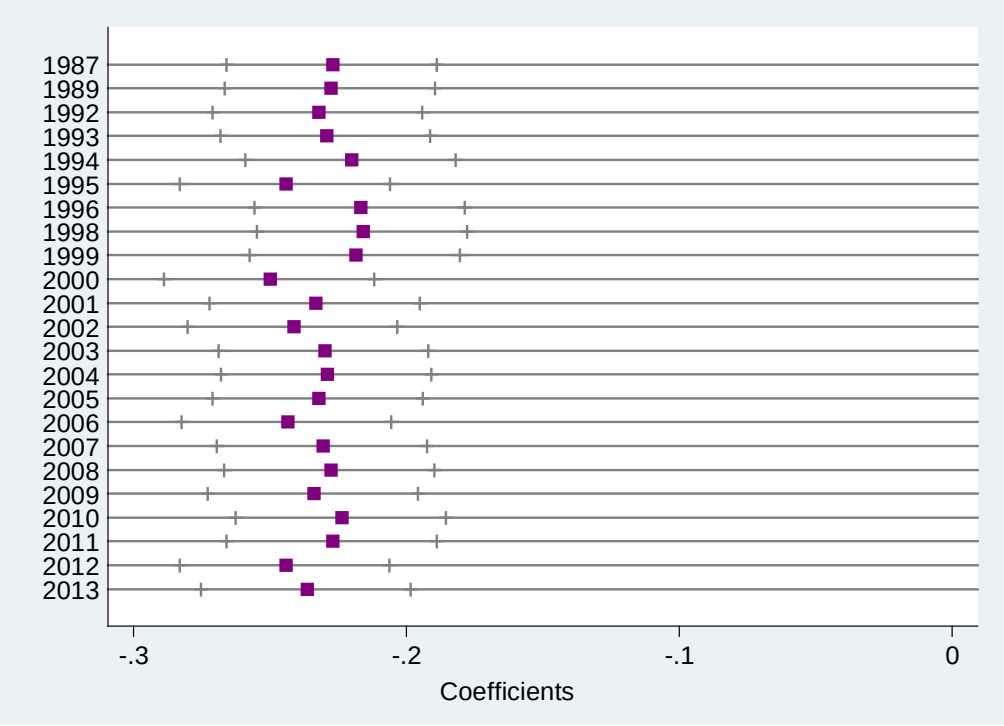


Figure D9 The effect of HE/FE below degree compared to having a degree on disagreeing that people on social security deserve no help



These findings show that, overall, graduates have always been the most likely qualification group to disagree with the view that many of those receiving social security 'don't deserve any help'. With one exception, the effect of different educational levels on attitudes has not varied over time, that exception being those with no qualifications. Whereas their views were once similar to those held by graduates, they diverged during the 1990s and have started to narrow since then. There is no simple explanation for this pattern of results, though it is notable that graduates have changed their views more than those with other qualifications. For instance, in 1987, 74 per cent of graduates disagreed with the view that people on social security deserve no help – compared with 42 per cent in 2013. The views of those with no qualifications have also changed, but not to the same degree, falling from 36 to 27 per cent over the same period.

11.4 Findings: Path analysis

This final stage of the analysis focuses on the same sub-topics explored in the previous section: political interest; attitudes towards same sex relationships; and attitudes towards welfare benefits. As outlined in the introduction to this section, we carried out two types of path analysis:

- Mediation analysis: which indicates the path through which education affects the attitudes of interest;
- Moderation analysis: which allows us to understand if the effect of education varies for different groups (e.g. HE cohort).

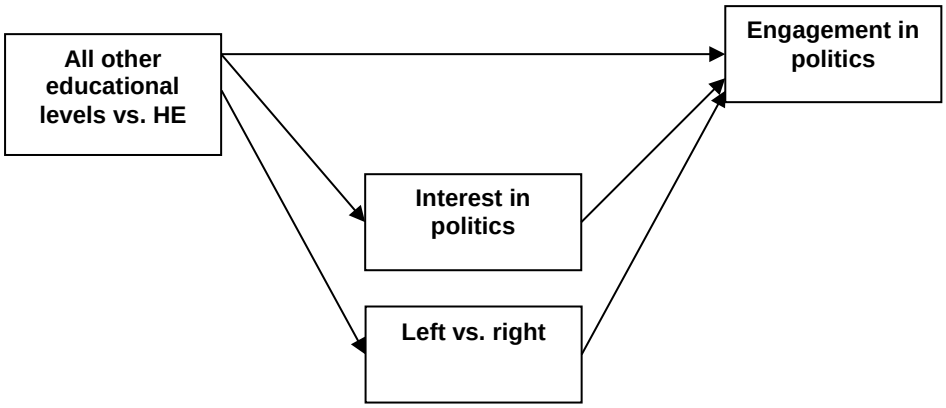
Both models used the following control variables: age; gender; country; socio-economic status; the 'Left-Right' scale; and the 'Libertarian-authoritarian' scale. These are described in more detail in the introduction to this appendix.

11.4.1 Interest in politics

- Our analysis earlier in this section clearly shows that having been in higher education is associated with political interest and that this has remained fairly constant over time. We know too from Stage two of this project that being in higher education also influences the extent to which a person is engaged in politics – graduates are, for example, more likely than other groups to have signed a petition or contacted their MP.[18] In this section we use path analysis to tease out how interest in politics relates to political engagement and ideological position (i.e. whether a person is to the left or right of the political spectrum). This allows us to establish whether, for instance, having a degree has a direct effect on political engagement (as shown by the first, horizontal arrow in Figure D10), or whether this relationship is indirect – that is, mediated by an interest in politics or a person's political ideology (shown by the lower diagonal arrows).

[18] Political engagement was measured in the 2011 British Social Attitudes survey. Respondents were asked the following questions: Have you ever done any of the things on this card about a government action which you thought was unjust and harmful? 1. Contact my MP or MSP; 2. Speak to an influential person; 3. Contact a government department; 4. Contact radio, TV or a newspaper; 5. Sign a petition; 6. Raise the issue in an organization I already belong to; 7, Go on a protest or demonstration; 8. Form a group of like-minded people. Here we combined responses create a scale to show how many activities people had ever done, ranging from 0 (if a respondent had done nothing on the list) to 8.

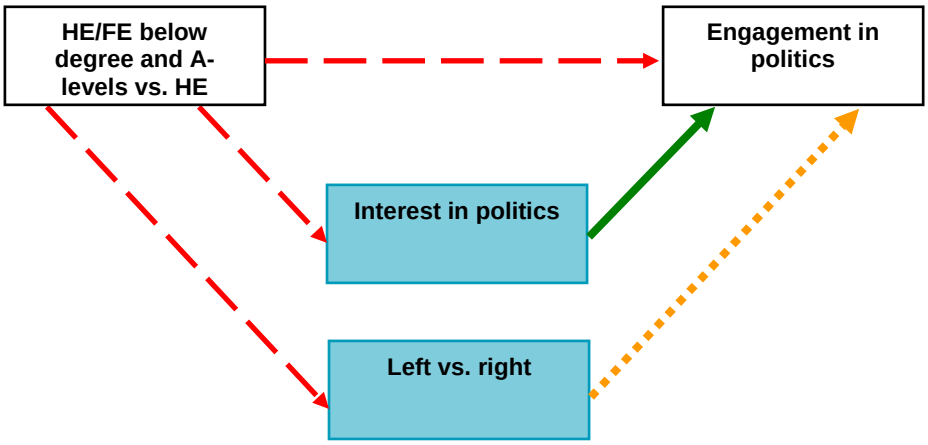
Figure D10 Political interest: mediation model



The results of the mediation analysis are displayed in the following charts. Interpreting the findings is more complex than in earlier stages of the analysis. While previously the differences between those with a degree compared to those in other educational groups were significant and operated in the same direction, when it comes to political engagement (mediated by an interest in politics), results differ by educational level. Therefore, it is necessary to consider the results for the HE/FE below degree, A-level and GCSE and no qualification groups separately.

When taking into account and controlling for all relationships specified in Figure D11, there are no clear differences between graduates and those with below degree level HE/FE qualifications or those with A-levels. These groups do not differ in their interest in politics, their placement on the left-right ideological spectrum or their engagement in politics (the direct relationship) - all denoted in Figure D11 by a red dashed line. For all, interest in politics has a strong effect on engagement in politics (the green line) and placement on the left-right ideological spectrum has a moderate effect on political engagement (the orange line) – with those towards the left of the spectrum showing higher levels of engagement-. This ultimately means that at these levels, education has no direct or indirect effect on engagement in politics or political interest.

Figure D11 Mediation analysis: political interest (HE/FE below degree/ A-levels against having a degree)

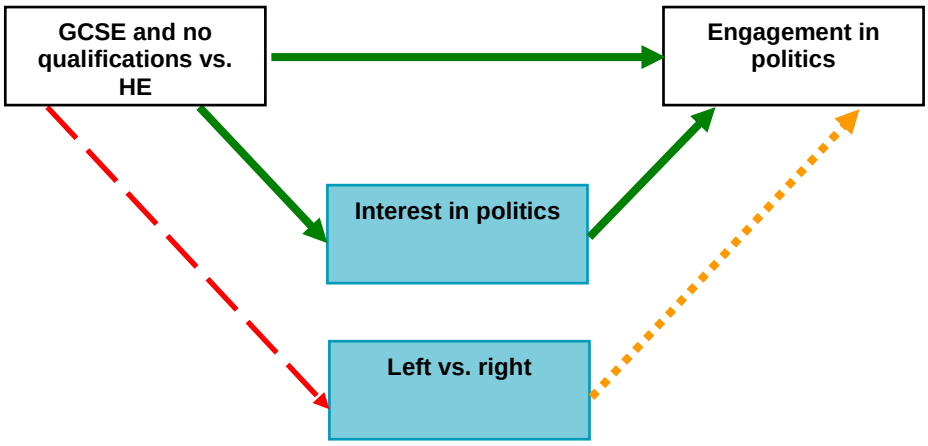


Key: Solid green lines indicate a strong and statistically significant relationship; dotted amber lines a significant but weaker relationship; and dashed red lines – no statistically significant relationship.

In contrast, Figure D12 shows that there are significant differences between those with a degree level qualification and the GCSE/ no qualification groups. These effects appear to be both direct and indirect, channelled through interest in politics (as depicted by the solid green lines).

This 'direct effect' means that people with a degree are likely to be more engaged in politics than those with GCSEs/ no qualifications. It also means that the effect of education on engagement can be independent from an interest in politics (in other words, graduates are more engaged in politics than those with GCSEs or no qualifications, even if they might have similar levels of interest in politics). However, the same education variables also have an impact on interest in politics, which in turn affects political engagement. So when it comes to political engagement, the effect of having a degree versus GCSEs or no qualifications at all is amplified by an interest in politics. This means that while higher education influences interest and engagement in politics, its effect is enhanced by an interest in politics.

Figure D12 Mediation analysis: political interest (GCSE/ no qualifications against having a degree)



Key: Solid green lines indicate a strong and statistically significant relationship; dotted amber lines a significant but weaker relationship; and dashed red lines – no statistically significant relationship.

This analysis suggests that when comparing graduates with those who have much lower qualification levels (that is, GCSEs only or no qualifications) there are significant differences in the relationship between political interest and engagement. However, these differences are not evident when comparing graduates with people who have A-levels or an HE/FE below degree level qualification.

The second part of the path analyses, moderation analysis, aimed to test whether the difference between people with a degree versus other educational groups (i.e. HE/FE below degree, A-levels, etc.) on attitudes was consistent across year groups. In particular, whether the period in which a person completed their degree affected how that degree influenced his or her attitudes towards interest in politics and engagement. Given that changes in higher education policy since the 1990s mean that both the size and diversity of HE student population has grown, it is possible to hypothesise that the graduate population may also have changed in terms of their interest in politics and/or engagement in politics.

In order to test this theory people were divided into several groups based on their age in a way we believed would be indicative of the period they attended university. The age groups used were:

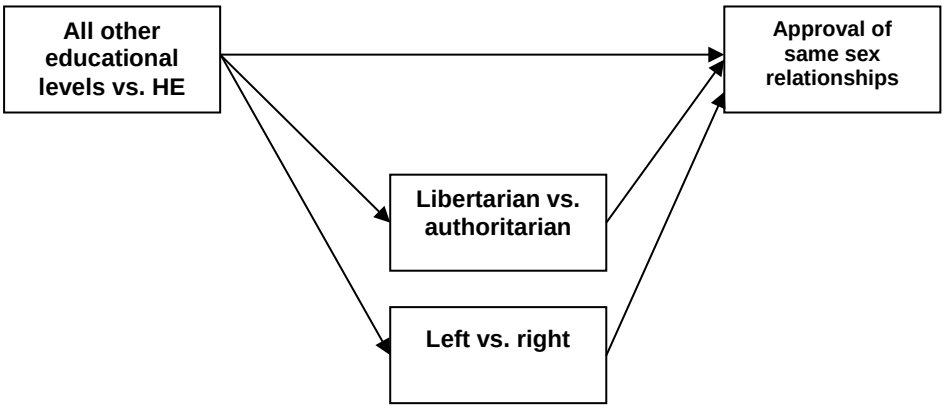
- 16 to 29 year olds (born after 1984, and started higher education after 2001);
- 30 to 44 year olds (born between 1969 and 1983, and started education between 1987 and 2001);
- 45 to 64 year olds (born between 1949 and 1968, and started education between 1967 and 1986);
- Over 65 year olds (born before 1948 and started higher education before 1967).

The moderation analysis allowed us to assess whether the effects of educational level differed by age group (i.e. the period a person went to university). The results suggest that age (and therefore educational cohort) is **not** connected to the effect of educational level on political engagement. Therefore we can tentatively conclude that widening participation in higher education has not had an effect on how higher education affects attitudes in this particular area.

11.4.2 Attitudes towards same sex relationships

The second attitudinal variable considered in this stage of the analysis looked attitudes to same sex relationships. Here the analysis sought to establish whether there was a direct and/or mediated relationship between educational level and someone's opinion of same sex relationships. In this case the mediating variables were libertarianism and political ideology. There is reason to believe that someone's education can influence whether they are classed as being on the 'left' or 'right' of the political spectrum and whether they are 'libertarian' or 'authoritarian'. A person's placement on the left/right, libertarian/authoritarian scale could, in turn, influence a person's attitude towards same sex relationships. Figure D13 illustrates this hypothesis.

Figure D13 Same sex relationships: mediation model

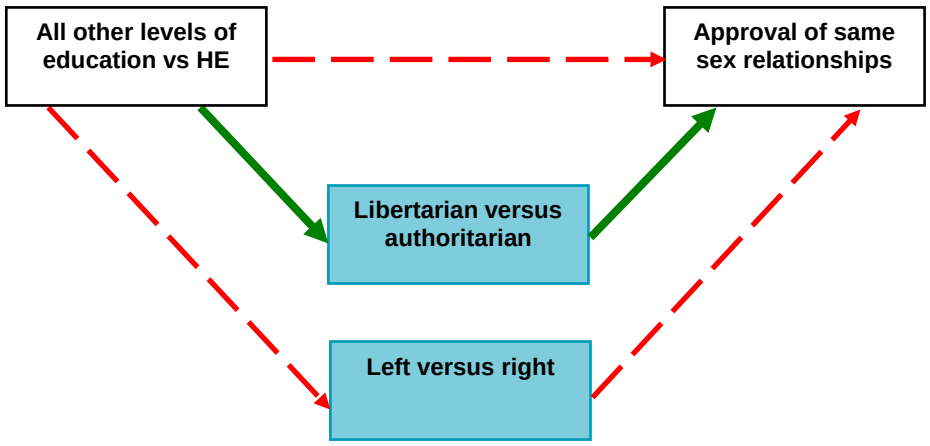


Results of the mediation analysis are displayed in Figure D14. In sum, it appears that the association between views about same sex relationships and education is a reflection of the fact that having a degree makes a person more likely to be libertarian, which in turn affects their view of same sex relationships.

Specifically, the results show that, when controlling for other variables, there is no (direct) difference between those with a degree and those with lower educational levels. Similarly, the effect of education on attitudes to same sex relationships does not appear to be mediated by whether someone is oriented to the right or left of the political spectrum. However, people who have been in higher education are more likely to be more libertarian,

that is to be more inclined to exhibit values and ways of thinking which are more consistent with libertarianism. And, in turn, people who are more libertarian are more likely to be approving of same sex relationships. As such, we can conclude that while educational level (i.e. having a degree or not) does not directly influence attitudes towards same sex relationships, it does so indirectly, through the effect it has on libertarian versus authoritarian views. Put simply, the effect having a degree on attitudes to same sex relationships disappears once graduates more libertarian views are taken into account.

Figure D14 Mediation analysis: same sex relationships (all other educational levels vs. having a degree)



Key: Solid green lines indicate a strong and statistically significant relationship; dotted amber lines a significant but weaker relationship; and dashed red lines – no statistically significant relationship.

As discussed in reference to political engagement in the previous section, we used moderation analysis to test whether the period in which a person completed their degree affected how that degree influenced his or her attitudes towards same sex relationships. As before, it is reasonable to hypothesise that the growing and diversifying student (and graduate) population of the 1990s may differ in its libertarian/ authoritarian perspectives and in its attitudes to same sex relationships.

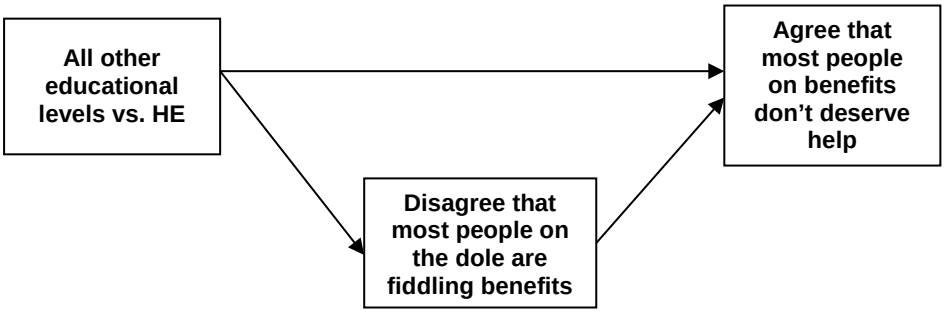
Results from this moderation analysis showed that educational level (having a degree versus all other levels) does not have an effect on people's attitudes towards same sex relationships when considering different university cohorts (i.e. the period in which they attended university). Overall, findings suggest that the changes in the higher education sector (e.g. increasing and widening participation) have had little direct impact on attitudes towards same sex relationships.

11.4.3 Attitudes towards benefit claimants

Finally, in the last model we test the effect of having a degree on attitudes towards welfare benefits. In this instance, we explore whether this effect is mediated by people's beliefs

about benefit claimants – in this case, by their beliefs about benefit fraud.[19] This model (illustrated in Figure D15) uses data from the 2013 British Social Attitudes survey.

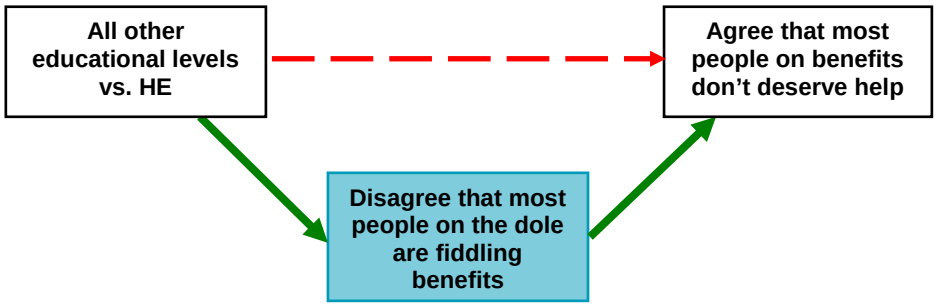
Figure D15 Attitudes to benefit claimants: mediation model



Results of the mediation analysis, illustrated in Figure D16, show that educational level (i.e. having a degree versus all other educational groups) does not have a direct impact on attitudes towards welfare benefits. However, there is an indirect relationship between education and attitudes – one which is mediated by a person's beliefs about benefit fraud. In sum, it appears that with increasing levels of education people are more likely to be sceptical about benefit fraud, and, in consequence, have more a positive attitude towards welfare benefit recipients. In other words, graduates are the most likely to disagree with the statement 'most people on the dole are fiddling it one way or another' (as shown in Figures 7.3 and 7.4 above); it is this variable which drives the view that people on benefits don't deserve any help, so once it has been taken into account there is no longer a significant relationship between educational level and deservingness.

[19] This was measured by using responses to the following agree/disagree statement: 'Most people on the dole are fiddling in one way or another'.

Figure D16 Mediation analysis: attitudes to benefit claimants (all other educational levels vs. having a degree)



Key: Solid green lines indicate a strong and statistically significant relationship; dotted amber lines a significant but weaker relationship; and dashed red lines – no statistically significant relationship.

Finally, looking at the moderation analysis, the findings are similar to those of the previous two analyses; with little indication of any difference between the effects for different age groups.

11.5 Findings summary

This appendix brings together findings from multilevel models and path analyses, looking at the effect of educational level on attitudes on three key measures:

- Interest and engagement in politics
- Attitudes to same sex relationships
- Deservingness of benefit claimants.

Findings from the multilevel models reinforced findings from the Stage two regression analysis demonstrating that:

1) Interest in politics increases incrementally with educational level. Additionally that the size of the effect of education has not notably increased or decreased since the mid-1980s;
2) Graduates are more likely than those in other educational groups to feel same sex relationships are 'not wrong at all'. However, the difference in attitudes between university graduates and those with other educational qualifications does appear to have become less pronounced over time (a change which is likely to reflect broader attitudinal shift among the population as a whole).
3) Those with a degree are more likely to disagree or disagree strongly that people who get 'social security don't deserve any help'. The effect of different educational levels on this particular attitudinal measure does not appear to have changed over time.

Path analysis sought to explore whether the effect of education on selected attitudinal variables was a direct one, or whether the effect was mediated through another variable. In sum, the findings revealed that:

- Educational level has no direct or indirect effect on engagement in politics or political interest. However, interest in politics has a strong effect on engagement in politics, and placement on the left-right ideological spectrum a moderate effect (specifically, those towards the left of the spectrum are more likely to be 'politically engaged').
- Differences in attitudes towards same sex relationships appear to be driven by respondents' placement on the libertarian/ authoritarian spectrum. Therefore the effect having a degree has on attitudes to same sex relationships disappears once graduates more libertarian views are taken into account.
- As educational level increases, so does scepticism about benefit fraud, and, in consequence, attitudes towards welfare benefit recipients (which appear more positive). In other words, when taking account of responses to 'most people on the dole are fiddling it one way or another' (the variable which drives the view that people on benefits don't deserve any help) there is no longer a significant relationship between educational level and deservingness.

In addition, the results of the moderation analysis suggest that age (i.e. educational cohort) is not connected to the effect of educational level on either political engagement or attitudes to same sex relationships. This leads us to tentatively conclude that widening participation in higher education has not influenced the effect having a degree has in these two particular areas.

Appendix D: Findings tables – moderation analysis

Appendix table D1 Attitudes towards engagement in politics: moderation analysis				
Independent variables	**Regression coefficient**	**Standard Error**	**95% Confidence Interval**	
30 to 44 year olds versus 16 to 29 year olds	0.21	(0.20)	-0.18	0.60
45 to 64 year olds versus 16 to 29 year olds	0.63**	(0.20)	0.24	1.02
65+ year olds versus 16 to 29 year olds	0.25	(0.24)	-0.22	0.73
HE/FE below degree versus HE	0.02	(0.44)	-0.84	0.89
A-levels versus HE	-0.02	(0.26)	-0.54	0.49
GCSEs versus HE	-0.17	(0.25)	-0.67	0.33
No qualifications versus HE	0.42	(0.40)	-0.37	1.21
Interaction: 30-44 with HE/FE below degree	0.07	(0.49)	-0.89	1.04
Interaction: 45-64 with HE/FE below degree	-0.37	(0.48)	-1.32	0.57
Interaction: 65+ with HE/FE below degree	0.21	(0.53)	-0.83	1.25
Interaction: 30-44 with A-levels	-0.23	(0.31)	-0.84	0.38
Interaction: 45-64 with A-levels	-0.33	(0.32)	-0.95	0.29
Interaction: 65+ with A-levels	0.31	(0.39)	-0.46	1.07
Interaction: 30-44 with GCSEs	-0.17	(0.30)	-0.75	0.42
Interaction: 45-64 with GCSEs	-0.59**	(0.29)	-1.15	-0.03
Interaction: 65+ with GCSEs	0.25	(0.33)	-0.40	0.89
Interaction: 30-44 with no qualifications	-0.74	(0.47)	-1.66	0.18
Interaction: 45-64 with no qualifications	-1.22**	(0.43)	-2.07	-0.38
Interaction: 65+ with no qualifications	-0.80	(0.43)	-1.65	0.05
Interest in politics	-0.32***	(0.03)	-0.38	-0.25
Men versus women	0.03	(0.07)	-0.12	0.17

In work versus being in FT education	-0.17	(0.27)	-0.69	0.35
Unemployed versus being in FT education	-0.18	(0.31)	-0.78	0.42
Retired versus being in FT education	-0.25	(0.29)	-0.82	0.31
Other economic status versus being in FT education	-0.38	(0.28)	-0.93	0.17
Intermediate non-manual versus professional	0.23**	(0.10)	0.04	0.43
Junior non-manual versus professional	-0.09	(0.12)	-0.33	0.16
Skilled manual versus professional	-0.30**	(0.12)	-0.53	-0.08
Semi-skilled manual versus professional	-0.19	(0.12)	-0.43	0.05
Unskilled manual versus professional	-0.31	(0.19)	-0.68	0.07
Income	-0.01	(0.04)	-0.08	0.06
Born outside the UK versus born in the UK	-0.39**	(0.14)	-0.66	-0.12
Non-white ethnicity versus white ethnicity	-0.10	(0.15)	-0.39	0.19
Midlands versus the North	0.15	(0.11)	-0.06	0.35
South versus the North	0.25**	(0.10)	0.06	0.44
Eastern versus the North	0.16	(0.12)	-0.07	0.39
London versus the North	0.31*	(0.14)	0.03	0.58
Wales versus the North	0.23	(0.16)	-0.08	0.54
Scotland versus the North	0.07	(0.13)	-0.18	0.32
Left-right ideological scale	-0.17***	(0.03)	-0.24	-0.10
Intercept	2.39***	(0.36)	1.68	3.09
Number of respondents	*672*			
R^2 (measuring model fit)	*0.291*			

Appendix table D2 Attitudes towards same sex relationships: moderation analysis				
Independent variables	**Regression coefficient**	**Standard Error**	**95% Confidence Interval**	
30 to 44 year olds versus 16 to 29 year olds	0.18	(0.35)	-0.50	0.87
45 to 64 year olds versus 16 to 29 year olds	-0.07	(0.34)	-0.72	0.59
65+ year olds versus 16 to 29 year olds	-0.72	(0.49)	-1.68	0.24
HE/FE below degree versus degree	-0.70	(0.90)	-2.47	1.07
A-levels versus degree	-0.12	(0.40)	-0.91	0.66
GCSEs versus degree	0.20	(0.43)	-0.65	1.05
No qualifications versus degree	-1.61	(1.07)	-3.70	0.48
Interaction: 30-44 with HE/FE below degree	0.69	(0.92)	-1.12	2.51
Interaction: 30-44 with A-levels	0.02	(0.44)	-0.85	0.89
Interaction: 30-44 with GCSEs	-0.48	(0.48)	-1.42	0.46
Interaction: 30-44 with no qualifications	1.17	(1.15)	-1.09	3.43
Interaction: 45-64 with HE/FE below degree	0.15	(0.94)	-1.70	2.00
Interaction: 45-64 with A-levels	-0.32	(0.48)	-1.27	0.63
Interaction: 45-64 with GCSEs	-0.98*	(0.48)	-1.94	-0.03
Interaction: 45-64 with no qualifications	1.17	(1.10)	-0.99	3.32
Interaction: 65+ with HE/FE below degree	0.20	(1.02)	-1.81	2.20
Interaction: 65+ with A-levels	0.08	(0.69)	-1.27	1.43
Interaction: 65+ with GCSEs	-0.70	(0.64)	-1.95	0.55
Interaction: 65+ with no qualifications	0.43	(1.12)	-1.76	2.63
Men versus women	0.56***	(0.12)	0.33	0.78
In work versus being in FT education	-0.47	(0.25)	-0.97	0.02
Unemployed versus being in FT education	-0.61	(0.37)	-1.33	0.11

Retired versus being in FT education	-0.34	(0.38)	-1.09	0.40
Other economic status versus being in FT education	-0.37	(0.31)	-0.98	0.24
Intermediate non-manual versus professional	-0.21	(0.16)	-0.52	0.10
Junior non-manual versus professional	0.16	(0.20)	-0.23	0.56
Skilled manual versus professional	0.07	(0.24)	-0.41	0.54
Semi-skilled manual versus professional	-0.10	(0.21)	-0.52	0.32
Unskilled manual versus professional	-0.26	(0.38)	-1.01	0.49
Income	0.01	(0.06)	-0.10	0.13
Born abroad versus born in the UK	-0.76***	(0.24)	-1.23	-0.30
Non-white ethnicity versus white ethnicity	-0.84***	(0.26)	-1.36	-0.32
Midlands versus the North	-0.15	(0.17)	-0.48	0.18
South versus the North	-0.11	(0.16)	-0.42	0.20
Eastern versus the North	-0.39	(0.24)	-0.87	0.08
London versus the North	0.04	(0.21)	-0.38	0.46
Wales versus the North	-0.34	(0.29)	-0.90	0.23
Scotland versus the North	-0.09	(0.18)	-0.44	0.26
Left-right ideological scale	-0.04	(0.07)	-0.18	0.10
Libertarian versus authoritarian	-0.27***	(0.09)	-0.44	-0.10
Intercept (constant)	6.03***	(0.55)	4.96	7.11
Number of respondents	*672*			
R^2 (measuring model fit)	*0.291*			

Appendix table D3 Attitudes towards benefits claimants: moderation analysis				
Independent variables	**Regression coefficient**	**Standard Error**	**95% Confidence Interval**	
30 to 44 year olds versus 16 to 29 year olds	-0.20	(0.14)	-(0.48)	(0.08)
45 to 64 year olds versus 16 to 29 year olds	-0.03	(0.15)	-(0.32)	(0.25)
65+ year olds versus 16 to 29 year olds	-0.08	(0.18)	-(0.43)	(0.27)
HE/FE below degree versus degree	-0.08	(0.20)	-(0.48)	(0.32)
A-levels versus degree	-0.19	(0.17)	-(0.53)	(0.14)
GCSEs versus degree	-0.02	(0.17)	-(0.35)	(0.31)
No qualifications versus degree	-0.24	(0.35)	-(0.92)	(0.45)
Interaction: 30-44 with HE/FE below degree	0.23	(0.23)	-(0.22)	(0.68)
Interaction: 30-44 with A-levels	0.23	(0.19)	-(0.15)	(0.60)
Interaction: 30-44 with GCSEs	0.01	(0.19)	-(0.36)	(0.39)
Interaction: 30-44 with no qualifications	0.67	(0.38)	-(0.07)	(1.42)
Interaction: 45-64 with HE/FE below degree	-0.22	(0.23)	-(0.67)	(0.22)
Interaction: 45-64 with A-levels	-0.12	(0.20)	-(0.52)	(0.28)
Interaction: 45-64 with GCSEs	-0.20	(0.19)	-(0.57)	(0.17)
Interaction: 45-64 with no qualifications	-0.07	(0.36)	-(0.77)	(0.63)
Interaction: 65+ with HE/FE below degree	-0.12	(0.26)	-(0.62)	(0.39)
Interaction: 65+ with A-levels	-0.25	(0.22)	-(0.69)	(0.19)
Interaction: 65+ with GCSEs	-0.19	(0.21)	-(0.61)	(0.22)
Interaction: 65+ with no qualifications	0.03	(0.37)	-(0.69)	(0.75)
Men versus women	-0.01	(0.04)	-(0.09)	(0.08)
In work versus being in FT education	0.00	(0.13)	-(0.26)	(0.25)
Unemployed versus being in FT education	0.15	(0.16)	-(0.17)	(0.46)

Retired versus being in FT education	-0.07	(0.15)	-(0.37)	(0.22)
Other economic status versus being in FT education	0.12	(0.14)	-(0.16)	(0.40)
Intermediate non-manual versus professional	0.00	(0.06)	-(0.12)	(0.12)
Junior non-manual versus professional	0.02	(0.08)	-(0.13)	(0.17)
Skilled manual versus professional	0.06	(0.07)	-(0.09)	(0.20)
Semi-skilled manual versus professional	-0.02	(0.07)	-(0.16)	(0.13)
Unskilled manual versus professional	0.10	(0.14)	-(0.18)	(0.39)
Income	-0.07**	(0.02)	-(0.11)	-(0.02)
Born abroad versus born in the UK	-0.04	(0.07)	-(0.19)	(0.10)
Non-white ethnicity versus white ethnicity	0.15*	(0.08)	(0.00)	(0.31)
Midlands versus the North	-0.03	(0.06)	-(0.15)	(0.10)
South versus the North	0.01	(0.06)	-(0.11)	(0.12)
Eastern versus the North	0.00	(0.07)	-(0.13)	(0.14)
London versus the North	0.05	(0.08)	-(0.10)	(0.21)
Wales versus the North	-0.09	(0.10)	-(0.29)	(0.11)
Scotland versus the North	0.10	(0.08)	-(0.05)	(0.25)
Fiddling the dole	0.56**	(0.02)	(0.52)	(0.60)
Intercept (constant)	1.63	(0.21)	(1.21)	(2.05)
Number of respondents	2,019			
R^2 *(measuring model fit)*	0.375			

This publication available from www.gov.uk/bis

Any enquiries regarding this publication should be sent to:

Department for Business, Innovation and Skills
1 Victoria Street
London SW1H 0ET
Tel: 020 7215 5000

If you require this publication in an alternative format, email enquiries@bis.gsi.gov.uk, or call 020 7215 5000.

BIS/15/89