2010 Ethnic Minority British Election Study

Technical Report

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Content

1. Introduction

The British Election Study (BES) is one of the longest running social surveys in Britain. Begun in 1963 it has now accumulated data over a period of more than 45 years, covering the last 12 general elections. The purpose is to understand why people vote, and how and why they vote the way they do. It is a well-established and important research tool used by both the academic and non-academic communities, and has made a major contribution to the understanding of political attitudes and behaviour.

However, while the main survey is a source of robust data at the national level, it cannot provide substantial interview numbers for some subgroups. In particular it has not been possible to conduct a thorough investigation of the political views and behaviours of Britain's ethnic minority populations through the main survey alone. A boost of ethnic minority respondents was carried out as part of the 1997 BES but nothing since that point. As a result of this the ESRC agreed to fund a survey of ethnic minorities to be conducted immediately after the 2010 general election. The primary focus was on the five main EM groups – people of Indian, Pakistani, Bangladeshi, Black Caribbean and Black African background.

Unlike in 1997 the ethnic minority survey in 2010 was not administered as a boost within the main study but rather it was a distinct survey with a separate sample and fieldwork. However the research was intended to be complementary to the main BES and a large number of items are shared between the two surveys to enable comparative analysis.

The study team for the survey consists of Anthony Heath, Stephen Fisher and Maria Sobolewska from the Universities of Oxford and Manchester together with David Sanders, who is also Principal Investigator on the Essex team conducting the main BES, and Gemma Rosenblatt of the Electoral Commission (which is a partner organization in the research). The fieldwork and data preparation for the study was carried out by TNS-BMRB who were also responsible for the fieldwork and data preparation for the face to face component of the main BES.

This report covers the technical details from the 2010 ethnic minority survey and is arranged as follows:

- Chapter 2 gives an overview of the **questionnaire development**
- Chapter 3 describes the **sample design**
- Chapter 4 covers **fieldwork** including response rates
- Chapter 5 provides information on **the data** including weighting

2. Questionnaire development

The questionnaire comprised a number of core questions taken from the main post-election study, and some survey specific questions taken either from the 1997 Ethnic Minority study or newly developed. Before piloting the questionnaire, cognitive testing was used to test the newly developed questions.

For the cognitive testing, 25 respondents were recruited to take part. Five respondents were recruited from each of the five ethnic backgrounds eligible for the main survey. In addition to this recruiters were given quotas so that within each ethnic group there was a good mix of genders and ages.

Cognitive interviews were conducted by members of the TNS-BMRB research team, and took place in the TNS-BMRB offices in London and in a central location in Manchester. Interviews lasted roughly an hour and respondents were offered an incentive of £30 for their time.

In addition to adapting and improving newly developed questions, the cognitive testing also allowed questions which had been taken from international studies to be tested in a British context. As a result of the cognitive testing some of the newly designed questions, or those taken from international studies were revised or removed from the questionnaire.

2.1 Piloting

Following the cognitive testing stage, a full pilot using the same design approach as implemented at the main stage was conducted. The purpose of the pilot was firstly to test the questionnaire in field, and secondly to test the fieldwork procedures, such as screening, and administering interviews using translators. The pilot was also used to test the average length of the questionnaire. 31 pilot interviews were conducted over a 4 week fieldwork period starting on 16th February 2010. All interviewers working on the pilot were given a full day briefing prior to starting work. TNS-BMRB researchers and members of the academic team accompanied interviewers in the field to observe some interviews being conducted. In addition to this, interviewers were provided with feedback forms which they were required to complete during their assignments, and they also attended a debrief session with TNS-BMRB researchers to feedback any observations from the pilot.

As part of the pilot an experiment was conducted to see whether offering cash incentives instead of gift vouchers made any difference to response. As such half of interviewers were provided with cash incentives and half with gift vouchers. Opinion amongst interviewers was divided over which type of incentive they preferred; however on the whole it was decided that cash incentives were the most effective and therefore this was the approach used for the main fieldwork.

The average interview length at the pilot was 84 minutes, meaning a substantial amount of the questionnaire was cut out in order to reduce the length for the main stage.

2.2 The Questionnaires

There were three main components of the questionnaires: the main questionnaire administered by computer-assisted personal interview (CAPI) and a mail-back questionnaire. Within the main CAPI questionnaire there was also a self-completion module where the interviewee entered his or her answers direct into the computer without going through the interviewer.

The final CAPI questionnaire covered the following topic areas and had the following broad structure:

- Classification (Part 1)
- Outcomes
- Attitudes towards political issues in the election
- Ethnic and religious identity and group consciousness
- Attitudes to integration, integration policies and multiculturalism
- Self-completion – Voting, war in Afghanistan, traditional dress
- Discrimination, prejudice and social distance
- Ethnic social capital and mobilisation
- Classification (Part 2)

The mail back questionnaire covered the following topic areas and had the following broad structure:

- Who the parties look after
- Views on elections
- Women and ethnic minorities in politics
- Left-right scale
- Social attitudes
- Attitudes to democracy
- Immigration
- Discuss politics
- View on neighbourhood
- Freedom, equal rights and discrimination
- Immigrants learning the English language
- Attitudes towards integration and equality
- Religion and politics
- Radical Islamists

The full questionnaires and showcards can be found in accompanying documents to this technical report.

3. Sample design

The sample design for the ethnic minority British Election Study differs considerably from the main British Election Study. As ethnic minorities account for only a small proportion of the population most households will be ineligible for the survey. Therefore without exact prior knowledge of where these individuals live any survey will involve going to a large amount of addresses to find the small number of households that are eligible.

Rather than looking at all ethnic minority groups in Britain, the ethnic minority British Election Study focused on the main five biggest groups. These were Black Caribbean, Black African, Indian, Pakistani and Bangladeshi. As such the survey only aims to be representative of these groups.

The sample design aimed to efficiently yield the target number of interviews in each ethnic group using a random probability approach allowing for a representative survey of each group. As such addresses were selected and a screening exercise was first carried out on the doorstep to identify eligibility before interviews took place. This chapter describes the sample design in detail.

3.1 Target and survey populations

More precisely the target population was defined as: adults aged 18+ resident in Great Britain who would self-classify into one of five Census ethnic groups:

- Black Caribbean
- Black African
- Indian
- Pakistani
- Bangladeshi

However, the survey population is only an approximation of the target population in two key respects:

1. a small proportion (c10-15% of each group) was excluded because these individuals lived in areas where the eligible population was too thinly spread to be efficiently surveyed;
2. sampled addresses were (usually) screened on the basis of information provided by one resident; it is likely that some eligible individuals will have been erroneously screened out.

3.1.1 Target sample sizes

The objective was to achieve c600 interviews each with Black Caribbean, Black African, Indian and Pakistani respondents and c350-400 interviews with Bangladeshi respondents, leading to a total of 2,750 to 2,800 interviews.

3.2 General sample design

A brief overview of the sample design comprises three stages:

1. a stratified random sample of 715 primary sampling units (PSUs) with a random subset of 119 allocated to the reserve pool (leaving 596 to be issued in the first instance);
2. a systematic random sample of 25-75 addresses in each sampled PSU;
3. one individual randomly sampled within each household from among those eligible for the survey.

The Residential Postal Address File (PAF) was used to provide a sample frame of addresses.

In the vast majority of cases only one household was found at each sampled address. However, in other cases, more than one dwelling unit was identified and, occasionally, more than one household was identified within a single dwelling unit. (The variable qdwell gives the number of dwelling units.) In these circumstances, the interviewer was instructed to sample one dwelling unit and, if necessary, one household within the sampled dwelling unit. The interviewer used a pre-printed Kish grid to ensure this selection was random. The same grid was used to sample the individual from among those listed as eligible. The number of people eligible within each household is given by the variable noelHH.

In addition to the core sample, a **Bangladeshi-only boost sample** was drawn, comprising 29 PSUs (with 5 allocated to the reserve pool, leaving 24 to be issued in the first instance) and between 40 and 75 sampled addresses in each one.

Each of the stages are looked at in more detail in the following sections.

3.2.1 Sampling of PSUs – the core sample

In England and Wales, Lower Level Super Output Areas (LSOAs) were used as PSUs and, in Scotland, Data Zones (DZs) were used as PSUs. The PSUs are identified anonymously by the variable PSUcode.

The master database of PSUs was filtered before the sample was drawn to include the minimum required to achieve an *80% coverage target for all five ethnic groups*. This was done by ranking the PSUs in terms of

(a) % of adult population classified as 'Black Caribbean' in the 2001 census,

(b) % of adult population classified as 'Black African' in the 2001 census,

(c) % of adult population classified as 'Indian' in the 2001 census,

(d) % of adult population classified as 'Pakistani' in the 2001 census, and

(e) % of adult population classified as 'Bangladeshi' in the 2001 census.

When the database is ranked, a running population proportion for the relevant ethnic group can be computed and attached to each PSU. All PSUs with a value <80% for *any* of the five ethnic groups were included in the filtered database. This method led to the estimated coverage levels shown in Table 3.1.

Table 3.1 Estimated survey coverage levels

Ethnic group	Coverage
Black Caribbean	88%
Black African	89%
Indian	85%
Pakistani	91%
Bangladeshi	90%
Total	**88%**

The (core) sampling probability of each PSU was determined by

(a) the number of addresses expected to contain *any* of the target ethnic groups, and

(b) the expected ethnic mix.

General sampling theory shows that the most efficient screening design is one in which the PSU sampling probability is proportional to the square root of the expected eligibility rate. However, with five separate sample targets, empirical (iterative) methods were used instead to determine how (b) – the expected ethnic mix - should affect the PSU sampling probability.

Before this stage, the expected ethnic mix needed to be calculated for each PSU. This was not a simple case of analysing the Census data. Instead a 'Citizenship survey' adjustment was applied by comparing the ethnic distribution of 'direct screen' interviews[1] from the most recent year of the CLG Citizenship Survey with what would have been expected if the number of interviews was proportionate to the Census count in the sampled PSUs. This adjustment allowed for both population change since 2001 as well as between-group variation in survey response propensity. The adjustment was necessarily 'rough' but simulation analysis carried out by the survey contractors suggested that an adjustment of this type was more likely to mean that sample targets were met. The adjustments applied are shown in table 3.2.

[1] The Citizenship Survey contains a large boost sample of ethnic minority individuals, carried out using the same methods as EMBES.

Table 3.2 Citizenship Survey adjustments

Ethnic group	Citizenship Survey adjustment
Black Caribbean	Census count * 1.07
Black African	Census count * 1.57
Indian	Census count * 0.79
Pakistani	Census count * 0.84
Bangladeshi	Census count * 1.03

The size measure for each PSU was determined after an iterative process and which resulted in the following formula[2]:

$(BC_{psu} * 3.26) + (BA_{psu} * 0.24) + (I_{psu} * 0.69) + (P_{psu} * 1.56) + (B_{psu} * 1.85)$

BC_{psu} = Citizenship Survey adjusted number of Black Caribbeans in the PSU

BA_{psu} = Citizenship Survey adjusted number of Black Africans in the PSU

I_{psu} = Citizenship Survey adjusted number of Indians in the PSU

P_{psu} = Citizenship Survey adjusted number of Pakistanis in the PSU

B_{psu} = Citizenship Survey adjusted number of Bangladeshis in the PSU

Before finalising the design, the contractors estimated the reduction in sampling efficiency introduced by disproportionate sampling within each ethnic group. Efficiency was estimated at c90% for each ethnic group although this was reduced to c75-80% for the Bangladeshi group once the boost sample was factored in. By 'efficiency' we mean the effective sample size yielded by a *dis*proportionate design (such as this) expressed as a proportion of the effective sample size yielded by a proportionate design."

715 PSUs were sampled with a probability proportionate to this size measure. 119 of these were (systematically) allocated to the reserve pool which, in the event, was not activated.

3.2.2 Stratification of PSUs

Before drawing the sample, the master database of PSUs was explicitly and implicitly stratified to minimise sample variance. The primary stratification was by ethnic mix. The contractors developed 'ethnic mix' strata to maximise the probability of achieving the target interview numbers.

[2] The numbers in the formula are simply the results of the iterative process. This was the combination most likely to lead to even interview numbers in each of the four main ethnic categories.

These strata were constructed using the *k*-means clustering method which produces *k* clusters that are as different from each other as possible in terms of five input variables (% of population in each of the five target ethnic groups).

Simulation samples produced only minor variation in the expected interview numbers per ethnic group, limiting sample variance significantly. Each ethnic mix stratum is described in table 3.3 and is identified in the data set by the variable EthnicMixStratum.

Table 3.3 Ethnic mix strata (% of total Census population in eligible PSUs)

Ethnic group mix stratum	Not eligible	Black Caribbeans	Black Africans	Indians	Pakistanis	Bangladeshis
1	94%	1%	1%	2%	1%	1%
2	34%	3%	2%	53%	8%	1%
3	81%	2%	1%	3%	12%	1%
4	49%	3%	4%	2%	2%	40%
5	76%	9%	7%	4%	2%	2%
6	30%	2%	1%	5%	58%	5%
7	86%	2%	2%	8%	2%	1%
8	57%	5%	3%	25%	7%	2%
9	53%	4%	1%	6%	31%	5%
10	63%	12%	19%	3%	2%	2%

Within each ethnic mix stratum PSUs were explicitly stratified by combinations of NUTS1[3] regions and within these lowest level strata (39 in all, identified by the variable FinalStratum), PSUs were sorted by population density. Population density of the PSU is identified by the variable Popdensity. The ordering of PSUs within strata is identified by the variable StratOrder.

3.2.3 Sampling of PSUs – the boost sample

There was no way of achieving a large sample of Bangladeshis while also targeting equal sample numbers in the other four ethnic groups. Consequently, the contractors recommended that (a) the core sample design should focus primarily on the four larger ethnic groups, and (b) a small boost survey should be carried out in which only those self-identifying as Bangladeshis were eligible. The objective was to increase the Bangladeshi sample size by c100 to c350-375.

The database of generally eligible PSUs was reduced to include only those required to deliver a 55% coverage of the Bangladeshi population. The sort order from the core sample design was retained but new PSU sampling probabilities were computed with the size measure proportional to B_{psu}. As before, a systematic sample of PSUs was drawn with probability

[3] NUTS1 is the top level in the geographic hierarchy and is equivalent to the old government office region

proportionate to the size measure. 29 were sampled with 5 allocated to the reserve pool. PSUs that had been sampled for the core survey were also eligible for the boost survey. In the event, only one PSU was activated for both surveys.

Analyses of Bangladeshi data includes cases from both the core and boost sample surveys. Sample weights have been produced that compensate for the higher sampling probability of those living in PSUs eligible for the boost survey. Bangladeshi boost cases are identified by the variable Boost.

3.2.4 Address sampling

Within each sampled PSU, the total number of addresses to sample was initially calculated using this formula:

5 / (0.5 * 0.91 * expected eligibility rate)

The target number of interviews for each PSU was set at 5. 0.5 represents the expected conversion rate among eligible addresses and 0.91 represents the expected proportion of addresses that are residential. The 'expected eligibility rate' was simply the Citizenship-adjusted Census sum of eligible individuals in the PSU as a proportion of the total Census population in the PSU.

Pre-sample simulations showed that in many PSUs this would result in either too few or (more typically) too many addresses to issue[4]. A practical range of 25-75 was set and PSUs with target address samples below 25 were given a target of 25 and PSUs with target address samples above 75 were given the target 75. To compensate for these adjustments the PSU sampling probability was raised or lowered as appropriate to maintain the same address sampling probability. The average expected number of interviews per PSU was reduced from 5 to c4.5 and the target number of PSUs to sample was adjusted upwards to ensure that the overall sample size targets continued to be met. All of these adjustments were made before the final sample was drawn.

This process was repeated for the Bangladeshi boost survey although the practical address range was narrowed to 40-75 to avoid assignments with a high likelihood of yielding only a very small number of interviews. Despite this, the average expected number of interviews per PSU was a little lower at c4.3.

The selection probability of PSUs for the core survey and boost survey is identified by the variables AdjustedPSUSamplingProbability and BoostAdjustedPSUSamplingProbability. The final address selection probabilities for non-Bangladeshis and Bangladeshis are identified by the variables NonBangFinalSamplingProbability and BangFinalSamplingProbability.

[4] Too few and the interview assignment leads to very low numbers of interviews which is problematic when a substantial proportion of payment is per interview achieved. Too many and there is a risk of not achieving minimum contact efforts per address within a reasonable timeframe.

3.2.5 Sampling individuals

At each sampled address, the interviewer sought to establish eligibility by presenting the first contacted adult member of the household with a card listing the eligible ethnic groups and asking if any adult resident *could be* categorised into any one of the groups. If so, the interviewer recorded brief details of each and randomly sampled one for interview with the help of a pre-printed Kish grid. Inevitably, some respondents self-classified outside of the five categories (e.g. into a mixed ethnic category) once answering the questionnaire. These individuals are set aside from the primary analysis below.

4. Fieldwork

The Ethnic Minority British Election Study involved a large scale face to face survey with over 31,000 addresses selected of which over 83% were screened[5]. Interviewing took place all over England, Scotland and Wales resulting in one of the largest scale ethnic minority surveys in recent times.

4.1 Main stage fieldwork

Fieldwork was carried out in home by interviewers from TNS-BMRB. Interviewing began the day after the election (May 7th 2010) and was complete by 31st August 2010. The survey consisted of a face-to-face computer-assisted personal interview (including a self-completion module) and a mail-back paper questionnaire. Interviewers on this survey came from a diverse range of backgrounds; this is broken down for the 200 interviewers who carried out fieldwork on this study in table 4.1. Interviewer ethnicity is identified in the dataset by the variable Inteth and interviewer gender is identified by the variable Intsex.

Table 4.1 Ethnicity of interviewers

Ethnicity	Number of interviewers
White	133
Indian	19
Pakistani	12
Bangladeshi	1
Other Asian	17
Black African	12
Black Caribbean	6

4.1.1 Interviewing procedures

Interviewers received a full day briefing which familiarised them with the questionnaire, selection procedure and screening. They were also reminded about cultural sensitivity and how to administer translated versions of the questionnaire.

Given the large number of addresses to screen advance letters were not posted out to households. This was based on the assumption that a higher cash incentive would be more efficient at obtaining co-operation than receiving advance letters, and the financial saving from not sending out a large number of letters allowed for a significant increase in the cash incentive. Respondents received £20 in cash as a thank-you for taking part in the survey. As

[5] The remaining 17% consisted of deadwood, some households refusing screening questions and no contact with any individual

mentioned in section 2.1 evidence from the pilot suggested that a cash incentive was better at gaining co-operation than gift vouchers.

Although advance letters were not sent out interviewers did have letters on them that they could leave at households or give to respondents to help convince them to take part. These letters can be found in accompanying documents to this technical report.

The mean interview length was 47 minutes and median interview length was 45 minutes.

In the vast majority of cases the respondent had no difficulty conducting the interview in English. Interviewers were also instructed to speak to an English speaker within the household where possible while conducting the screening. Interviewers had doorstep translation cards at their disposal explaining the intent of the survey and asking for an English speaker. These translation cards were available in:

- Punjabi (Urdu script)
- Punjabi (Gurmukhi script)
- Urdu
- Hindi
- Gujarati
- Bengali

Even where screening was successfully carried out it was still possible that the selected individual did not speak English. If the selected individual spoke one of the six languages above then the interviewer attempted to find a member of the household that could be used as a translator. If the interviewer themselves could speak and read the relevant language then they could act as the household translator themselves. Translated versions of the questionnaire were available in the six languages listed above and the household translator could then read the script and translate answers back to the interviewer to type into the CAPI machine as normal.

Copies of the translated questionnaires can be found in accompanying documents to this technical report. The variable ‘trans’ identifies whether a translator was used and the variable trans2 gives the language of the interview. For cases where the respondent spoke a language other than the six listed above, interviewers still attempted to find a member of the household that could be used as a translator and in these cases they translated the questions into the relevant language from the English questionnaire script for the respondent.

4.1.2 Screening

As only respondents from one of the five ethnic backgrounds of interest were eligible for the survey, interviewers needed to screen households on the doorstep. Respondents were presented with a card with the five ethnicities displayed and asked if anyone from the household was from one of these backgrounds. If the household was eligible for the survey the interviewer would then list out all eligible respondents in the household (if more than one)

and a Kish Grid was used to make a random selection of an individual. Interviewers were briefed to make no assumptions about individuals' ethnicity and it was entirely up to respondents to self-select themselves into an ethnicity.

Mixed race respondents were not intentionally included, and respondents who classified themselves as mixed race at the doorstep and not into one of the specific ethnic groups on the screening card were not eligible for the survey.

Despite this, in certain cases individuals chose a different ethnicity in the survey (in response to question BQ101) than during the screener. This only occurred in 5% of cases, most commonly where an individual had selected one of the five ethnicities on the screening card and then chose 'mixed race' when presented with the full census ethnicity question during the survey.

There were 47 cases where the ethnicity given in the survey did not obviously correspond with one of the five ethnicities on the screening card, e.g. 'other' was selected. For these cases one of the 5 eligible ethnicities was derived (identified in the variable ScreenEthQairre) based on the respondent's country of birth, their mother's country of birth or their father's country of birth in order to replicate the answer they would have given at the screening stage.

As the selected individual in the household was not necessarily the person who completed the doorstep screening, interviewers first reconfirmed ethnicity with the selected individual before carrying out the survey. In cases where the selected individual disagreed a re-selection process was carried out using a Kish Grid.

4.1.3 Mail-back questionnaire

At the end of the interview a 10 page questionnaire was left with all respondents together with a reply-paid envelope. This questionnaire consisted of 28 questions and the topics covered are noted in section 2.2. If necessary, up to three postal reminders were sent to obtain the mail-back supplement. The second reminder was accompanied by a further copy of the questionnaire. Copies of the reminder letters can be found in accompanying documents to this technical report.

A prize draw was used to encourage response, with a first prize of £500, three prizes of £100, ten prizes of £10, and twenty prizes of £5. The winners were drawn from mail-backs returned by 31st August 2010.

4.2 Response rates

Table 4.2 gives a brief breakdown of the final sample outcomes at the end of fieldwork.

Table 4.2 Response rates

	N	%
Total Addresses issued	31324	100
Out of scope (deadwood)	1502	5
Unknown eligibility	3810	12
Total screened	26012	100
Ineligible ethnicity	21788	84
Total eligible	4224	100
No interview: Refused No contact with selected person Other unproductive	1437 974 48 415	34 23 1 10
Full interviews	2787	66
Mail-back returned	975	23 (35% of those completing f2f survey)

All PAF (postal address file) samples include a proportion of addresses that are ineligible, often referred to as deadwood, these are excluded from response rate calculations and fall into the out of scope category.

The vast majority of households were ineligible for the survey due to no-one from the specified ethnic backgrounds living there. However there was also a further small proportion of cases where it was not possible to determine whether the household was eligible. This may be because contact was never made with any individual in the household after frequent attempts, or the household refused to give initial information on ethnicity.

Calculating response rates becomes more problematic when large scale screening is involved because of households where eligibility cannot be determined. To calculate a response rate one approach would be to assume everyone who was not screened was in fact ineligible. This approach hinges on a very unrealistic assumption and as such, we feel is not an appropriate way of calculating response. Alternatively we could assume that all households that were not screened were in fact eligible. This however is overly punitive (particularly on a survey such as this where the vast majority of households will be ineligible).

An optimal approach for dealing with these cases is to assume the eligibility rate was the same amongst the unscreened households as among the screened households. This means

that a proportion of the unscreened households are included in the response rate calculation. Using this approach gives a response rate of 58%.

A mail-back questionnaire was then left at all addresses that completed a face to face interview and in total 975 of these were returned.

5. The Data

5.1 Data cleaning and editing

Data was checked for errors by researchers and data processors. A small amount of editing also took place primarily to cap very high answers on numerical questions.

Where questions are open ended or respondents mention something that is not on the answer list[6] the coding team review, clean up and categorise answers. Coders looked at all questions where an "other – specify" had been given as an answer. The aim of this exercise, commonly known as back coding, was to see whether the answer given could actually be coded into one of the original pre-coded response options.

Code frames were also created for open ended questions. Standard coding procedures were applied to both "other – specify" and open ended questions. After coding, the data was analysed to examine the proportion of answers that were remaining in the 'other' category.

5.2 Variables

The dataset includes variables for all questions in both the face to face to survey and mail-back survey, as well as a number of banded IMD scores (Index of multiple deprivation), variables identifying the country and region of interview, the press association constituency number, and a number of variables used for the sample design and administration of the survey, including interviewer characteristics. Also included is the outcome from the vote validation exercise undertaken alongside the main British Election Study. For details please see the main British Election Study technical report.

5.3 Variable names

In the dataset the default for the variable name is the question name from the questionnaire. When a question allows for multiple responses it is split into multiple binary variables and follows the question name with a letter attached. For instance "question nameA, question nameB....question nameZ".
The questionnaires can be found in accompanying documents to this technical report.

In general the question/variable names start bq and eq if the questions are from the face to face survey and cq and ecq if the questions are from the mail-back. Those starting bq and cq are in fact questions that also appear on the main BES survey, while those starting eq and ecq are those that only appear on the EMBES.

5.4 Special codes

[6] Known as "other – specify"

Throughout the dataset “Don’t know” responses have been coded as -1 and “Refused” responses have been coded as -2 for all single coded variables.

5.5 Weighting

Weighting was used to ensure survey respondents are representative of the population to which they are generalising.

Weighting has been carried out in two stages. Firstly design weights were created to account for unequal selection probabilities, and secondly non response weighting has been applied to account for differential response among groups and bring these key measures back in line with population estimates.

5.5.1 Design weights

The address probabilities of selection for each ethnic group were recorded during the sampling phase reported in chapter 3. However, there are further causes of unequal selection probabilities which need to be accounted for when calculating a complete design weight. This is because only one person is selected for interview at an address even though an address may have multiple dwelling units or there may be many eligible people in the household. Hence this would give people in small households or single dwelling units a higher probability of selection than those in large households or multiple dwelling unit addresses.

Therefore the final selection probability is calculated by multiplying the following three selection probabilities:

i. The address selection probability
ii. 1/ number of dwelling units at the address
iii. 1/ number of eligible individuals at the selected dwelling unit

The design weight is simply 1/final selection probability. Caps were applied to the number of dwelling units and eligible household members to reduce excessive weights. The design weight has also been trimmed to ensure the factor of largest to smallest weight is not too extreme[7]. These weights are in the variable Weight_trimmedDESIGN.

5.5.2 Non response weighting

Rim weights were created for each ethnicity to bring the population of that ethnicity back into line on the following demographic dimensions:

- Age
- Sex

[7] Weights were trimmed for each ethnicity independently, at approximately 5 times the median of the untrimmed weight (around the 99th percentile). This resulted in less than one per cent of weights being trimmed.

- Region[8]

These population targets were taken from the April to June 2009 LFS (Labour Force Survey) and the Office of National Statistics (ONS) mid-year population estimates from 2007. These weights are in the Weight_trimmedF2F variable.

Since the sample design had five different target sample sizes, one for each ethnic group, and these bare no relation to the actual sizes of the five groups in the population, an optional weight was also created for analysing all 5 groups together as one population. This was created by reweighting the different ethnic minority groups to represent their correct proportion of the ONS mid-year population estimates. The variable Weight_trimmedF2FALL5 contains these weights.

5.5.3 Non response weights for mail-back

Unfortunately not all respondents return the mail-back postal questionnaire and as such some further non response weighting needs to be applied. This can be likened to a panel survey and hence assumed that sample attrition has not occurred randomly. Therefore bias may result from certain individuals being less likely to return the mail-back. However as we have data from the face-to-face survey, non response weights can be calculated using far richer information than simple demographics.

Various variables from the face-to-face survey were compared for mail-back respondents and non-respondents. These were then entered into a logistic regression model with response as the dependent variable. The predictor variables were entered via a forward stepwise procedure with the final optimal model consisting of the following variables[9]:

- Age-group of respondent;
- Gender;
- Ethnicity;
- Region;
- Interest in the general election;
- Whether has volunteered to get involved in politics or community affairs;
- How much has in common with British people in general;
- How, and if cast vote in 2010 election;
- Level of comfort with being asked directions from picture of woman in Niqab;
- Whether place of worship encouraged members to vote;
- Whether British citizen;

[8] Due to limited base sizes region was grouped into four categories:

1. London & South East
2. Midlands & East of England
3. North West & Yorkshire
4. South West, North East, Scotland and Wales

[9] The first four variables, as demographics, were included in the model regardless of significance tests and so were not subject to the stepwise selection procedure.

- Whether got information about the election and recent issues in Britain from newspapers;
- Whether got information about the election and recent issues in Britain from television;
- Whether got information about the election and recent issues in Britain from the radio

The predicted response probabilities from the final optimal model were converted into a non-response weight by calculating their reciprocal. These non-response weights were then combined with the face-to-face non-response weights, which in turn also reflect the design weights. To avoid extreme weights having a large influence on the estimates the non-response weight was trimmed at the 1st and 99th percentiles. These weights are in the variable Weight_trimmedMAILBACK. For analysis of all five groups combined, the mailback weights were further adjusted to reflect the relative sizes of the five groups in the population. The variable Weight_trimmedMAILBACKALL5 gives these weights.

5.6 Weights in the dataset

The dataset contains five weights. These are:

- Design weight (Weight_trimmedDESIGN)
- Final weight for face to face survey (within ethnicity) (Weight_trimmedF2F)
- Final weight for face to face survey with all 5 groups together (Weight_trimmedF2FALL5)
- Final weight for postal mail back survey (Weight_trimmedMAILBACK)
- Final weight for postal mail back survey with all 5 groups together (Weight_trimmedMAILBACKALL5)

The face to face weights are for use when analysing questions from the face to face survey and the mail-back weights should only be applied when analysing questions from the mail-back.

The 'within ethnicity' weight is representative of the specific ethnic minority group, and as such is used for analysis within each ethnicity. If all 5 groups are being combined to analyse as one group then the 'all 5 groups together' weight is used as this reweights the different ethnic minority groups to represent their correct proportion of the ONS mid-year population estimates.

5.7 Design Effects

The standard errors of survey estimates are affected by the sample design, particularly by the effect of sampling weights, clustering, and stratification. It is important to take these factors into account when calculating correct estimates of standard errors and confidence intervals. Ignoring the sample design (i.e. assuming a simple random sample and taking into account only sample size and population variance) results in estimated standard errors that will be too small.

The Design Factor is the standard error of the complex design divided by the standard error of a simple random design, and the Design Effect can be calculated as simply the square of this. Then the actual sample size divided by the Design Effect gives the effective sample size which can be used for significance testing.

Table 5.1 details the design effects for a number of key questions in the survey. These are displayed for the total sample answering each question as well as for individual ethnicities. The Design effects reported below are calculated using the final weight for the face to face survey for all 5 groups combined (Weight_trimmedF2FALL5).

Table 5.1 Design Effects

Variable[10]	Total sample	Black Caribbeans	Black Africans	Indians	Pakistanis	Bangla-deshis
Voted at 2012 general election (bq12_1)	1.81	1.53	1.39	1.44	1.65	1.60
Party voted for (bq12_2)	1.67	1.39	1.29	1.39	1.62	1.23
Volunteered in politics or community affairs (bq54_2)	1.70	1.62	1.45	1.48	1.34	1.60
See themselves more as British or own ethnicity (eq16a)	2.10	1.72	1.71	1.72	1.66	1.64
See themselves more as British or own religion (eq16c)	1.92	1.59	1.54	1.60	1.83	1.62
Agrees that respondent's ethnicity should mix with other groups in UK (eq22_2)	2.05	1.36	1.66	1.61	1.89	1.54
Agrees there is a big gap between what people of respondent's ethnicity expect out of life and actually get (eq18_2a)	1.85	1.47	1.48	1.58	1.53	1.55
Approve of Britain's involvement in the war in Afghanistan (bq45)	1.89	1.56	1.44	1.50	1.65	1.49

[10] For simplicity, the Design Effects quoted here for each variable are the weighted mean of response categories (i.e. if 30% of respondents at a question said 'Yes', 60% said 'No', and 10% said 'Don't Know', then the Design Effect for 'Yes' would be multiplied by 0.3, No by 0.6 and DK by 0.1 and then summed together to give a weighted Design Effect for the question.)

6. Vote Validation Exercise

As an extension to the British Election Study and the Ethnic Minority British Election Study, TNS-BMRB conducted a vote validation exercise on the respondents who took part in the main British Election Study and the Ethnic Minority British Election Study.

The aim of this exercise was to validate the answers respondents gave to the question on whether or not they voted in the general election during the CAPI interview against official electoral records.

On the day of the general election, an electoral register is marked at each polling station to record which people turned out to vote[11]. These registers are then kept within local authorities for a period of 12 months after the general election and they are available for inspection on request by members of the public.

6.1 The sample

The sample of names and addresses was taken from the names and addresses recorded at the end of the CAPI interview in main BES and the EMBES. A total of 6249 names and addresses were issued for the vote validation exercise[12]. The Local Authority was matched to the respondents' addresses based on postcode, and in total the sample covered 218 local authorities. On average there were 29 names and addresses to be validated at each local authority, although this varied significantly from 1 to 389.

6.2 Fieldwork

6.2.1 The pilot

A small scale pilot was carried out by members of the research team amongst 3 local authorities. The purpose of the pilot was firstly to establish how easy it would be to gain access to the marked registers and whether there were any particular procedures that interviewers would need to follow in order to gain cooperation of local authorities. Secondly, the pilot was used to become familiar with the markings and the organisation of the marked electoral registers in order to be able to give interviewers more detailed instructions.

6.2.2 Main fieldwork

Fieldwork was carried out by TNS-BMRB interviewers who were issued with one or more local authorities and a list of names and addresses to validate. Interviewers were provided

[11] This register only records details of whether the named person turned out on the day of the election, it does not record details of which party the person voted for, or whether or not their electoral paper was valid and their vote counted

[12] A small number of cases who took part in the CAPI interviews were not issued for the vote validation exercise due to the contact details being incomplete

with telephone numbers and addresses for local authorities and they were required to make contact with the council to arrange a convenient time to visit their offices in person to inspect the marked electoral registers. Interviewers were provided with copies of letters to give to electoral officers at local authorities, explaining more about the research and what they would like to do. Some local authorities required a request in writing before granting permission to inspect the marked electoral register.

Once access had been negotiated, interviewers looked up each name and address on the marked electoral registers and recorded on a data collection sheet whether or not each respondent had voted in the general election.

All interviewers received a video briefing recorded by the TNS-BMRB research team, which they watched before starting work. The video briefing covered the procedures for making contact with local authorities and gaining their cooperation (along with lessons learnt from the pilot), and the procedures for searching for names and addresses on the register, explanations of what different markings mean and how to record outcomes. Interviewers were also provided with further more detailed written instructions which they were able to refer to when they were at the local authority offices.

All 218 local authorities were visited by an interviewer. Once each assignment was complete, interviewers returned their completed data collection sheets to head office by recorded delivery.

6.3 The data

The information recorded on data collection sheets was entered by a data entry team. There were 6 possible outcomes recorded on the data file for the validated vote:

- Voted in person
- Postal/proxy vote
- Not eligible to vote – the named person appeared on the marked register and so had registered to vote, but was not eligible to vote in the general election e.g. the person was a citizen of another European country.
- Eligible but did not vote - the named person appeared on the marked register and therefore had registered to vote, and they were eligible to vote in the general election, but did not
- Name not registered at this address – either the address appeared on the marked register but the named person was not listed as registered to vote at the address given, or the given address did not appear on the register at all (i.e. no-one at the address is registered to vote)
- Name/address details not sufficient to identify on register - if the details given by the respondent at the end of the CAPI interview were not full enough to identify them on the marked register

For a small number of cases (11 for the main BES and 16 for EMBES) the data collection sheet was returned without an outcome recorded. These cases have been labelled as 'missing' in the dataset.

6.4 Data imputation

At the end of the CAPI surveys consent to link data from the survey with publicly available information from the electoral register was asked of all respondents. Data from the vote validation exercise was not used for those who declined consent; instead outcomes for these respondents were randomly assigned using imputation.

6.4.1 Data imputation variable

OutcomeW is the imputed vote validation variable. The original variable OutcomeNoImputation has the full set of outcomes as described at the start of section 6.3, but only for those respondents that consented to the data linking. OutcomeW gives everyone (bar the 16 missing cases) an outcome, but to impute whether voted accurately, other categories were combined so they did not need to form part of the imputation. Therefore the OutcomeW only has three categories:

- Voted – whether in person, postal or proxy
- Not vote – these were people who were eligible
- Other – this category includes people who were not eligible to vote, the name was not registered at the address given, or the address details were insufficient to find the respondent/ address on the register.

6.4.2 The imputation process

Firstly, a subset of the individuals that declined datalinking consent but did vote according to the electoral register were randomly selected and their outcomes were 'flipped' from 'voted' to 'not-voted'. Then an equal number of non-voters were randomly selected (who had also declined datalinking consent) and their outcomes were 'flipped' to 'vote'.

Individuals in the 'other' category did not have their answers 'flipped' as the 'other' category is an amalgamation of various outcomes and so it is not clear whether we were even able to identify the individual on the register.

In this way the marginal proportions of voters and non-voters would be accurate even though a small percentage of individuals had been 'flipped'. As it is unknown which individuals had been randomly 'flipped' it is not possible to indentify whether or not *any* particular individual who declined consent to datalinking actually voted or not. As only a small proportion of individuals actually declined the datalinking and a subset of these had their answers 'flipped' the overall accuracy of the total sample is still very high (97%).