2008-09 British Crime Survey (England and Wales)

Technical Report Volume I

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1. Background

1.1 Introduction to the British Crime Survey

The British Crime Survey (BCS) is a well-established study and one of the largest social research surveys conducted in England and Wales. The survey was first conducted in 1982 and ran at roughly two yearly intervals until 2001, when it became a continuous survey[1]. The survey is carried out for the Home Office, and is managed by a team of researchers in the Home Office Statistics Unit. They develop each survey in collaboration with an external research organisation. Since 2001 *BMRB Social Research* has been the sole contractor for the survey.

The 2008-09 survey was similar in many respects to previous years but it also introduced a number of new elements. The total sample size was the same as in the previous year, with approximately 46,000 core adult interviews being conducted across the year, and an additional boost of approximately 2,000 interviews with young adults aged 16-24. The survey was designed to achieve a minimum of around 1,000 core interviews in each Police Force Area in England and Wales. This was also similar to the previous year of the survey.

The 2008-09 survey differed in two respects from the previous year. First, it involved a new sample design, with the introduction of a partially unclustered sample, which replaced the clustered design used on all previous surveys. A second important development was the extension of the survey to include interviews with 10-15 year olds during the course of the 2008-09 survey year. This is covered in more detail in section 2.11 below.

The BCS is primarily a **victimisation** survey, in which respondents are asked about the experiences of **property crimes** of the household (e.g. burglary) and **personal crimes** (e.g. theft from a person) which they themselves have experienced. Following the move to continuous interviewing in 2001 the reference period for all interviews has related to the last 12 months before the date of interview. Although there have been changes to the design of the survey over time, the wording of the questions that are asked to elicit victimisation experiences, have been held constant throughout the life of the survey.

[1] Previous British Crime Surveys were carried out in 1982, 1984, 1988, 1992, 1994, 1996, 1998 and 2000.

Respondents are asked directly about their experience of crime, irrespective of whether or not they reported these incidents to the police. As such the BCS provides a record of peoples' experiences of crime which is unaffected by variations in reporting behaviour of victims or variations in police practices of recording crime. The BCS and police recorded figures should be seen as a complementary series, which together provide a better picture of crime than could be obtained from either series alone.

The scope of the BCS goes well beyond the counting of criminal incidents, although it is for this estimate that it has become established as a definitive source of information. In order to classify incidents, the BCS collects extensive information about the victims of crime, the circumstances in which incidents occur and the behaviour of offenders in committing crimes. In this way, the survey provides information to inform crime reduction measures and to gauge their effectiveness.

As well as providing estimates of victimisation, another use of the survey has been to collect information to measure a number of performance targets, both at national and at individual police force level. Between 2005 and 2008 the BCS was the main source used by the Home Office to measure progress against two of its Public Service Agreement (PSA) targets (PSA1 and PSA2)[2]. Additionally, the BCS was used as part of the Police Performance and Assessment Framework (PPAF) to measure individual forces progress against a number of Statutory Performance Indicators (SPIs)[3]. This latter requirement has been a major influence on the design of the survey since it requires a minimum number of interviews to be achieved in each Police Force Area every year (see section 2.3).

A new set of PSA targets have been developed for the period 2008-2011[4]. The number of targets has been reduced and each PSA is underpinned by a Delivery Agreement, with a small number of performance indicators against which to measure progress. The BCS is currently used to measure a number of specific performance indicators at a national level, namely:

- To increase public confidence in local agencies involved in tackling crime and anti-social behaviour (indicator 3 of PSA 23);

[2] For details of PSA targets from 2004-2008 see http://www.homeoffice.gov.uk/documents/autumn-performance-report-08

[3] For details on the PPAF see http://police.homeoffice.gov.uk/performance-and-measurement/performance-assessment

[4] For details of PSA targets from 2008-2011 see http://www.hm-treasury.gov.uk/ pbr_csr/psa /pbr_csr07 psaindex.cfm

- To reduce the proportion of people perceiving anti-social behaviour to be a problem (indicator 4 of PSA 23);
- To increase the levels of public confidence in the fairness and effectiveness of the Criminal Justice System (indicator 2 of PSA24);d
- To reduce the proportion of people who perceive drug use or dealing to be a problem in their local area (indicator 4 of PSA 25); and
- To reduce the proportion of people who perceive drunk or rowdy behaviour to be a problem in their local area (indicator 5 of PSA 25).

Additionally, as a result of changes announced in March 2009 the Home Office created a single national target for police forces to increase public confidence that the local police and local partners are addressing the crime and anti-social behaviour issues that matter to people. The BCS will be used to measure each police forces progress against this new single national target.

To reflect this change in the performance management targets a small number of changes took place in the content of the survey between 2007-08 and 2008-09, with some long-standing questions being dropped and some new questions being added to measure the new targets. In fact, many of these new questions were added to the survey in 2007-08 in order to provide baseline measures for the targets.

1.2 Outputs from the BCS

The data arising from the BCS are mainly reported by the Home Office's Statistics Unit. These reports include:

- A full statistical bulletin based on BCS interviews carried out in the last financial year, which is published in the summer following the end of each financial year. This bulletin contains estimates from both the BCS and police-recorded crime figures. The latest of these reports covering the period 2008-09 was published in July 2009[5], and can be found at: http://www.homeoffice.gov.uk/rds/pdfs09/hosb1109vol1.pdf

- Shorter statistical updates produced on a quarterly basis, focusing specifically on victimisation rates and trend patterns

[5] Walker, A *et. al.* (eds.) Crime in England and Wales 2008/09 Home Office Statistical Bulletin 11/09

- Supplementary bulletins covering topics in the annual volume in more detail. Three supplementary volumes covering topics such as perceptions of anti-social behaviour, intimate violence, home security, mobile phone theft and stolen goods, have been published based on the 2007-08 BCS and can be found at:
  http://www.homeoffice.gov.uk/rds/pdfs09/hosb1009.pdf
  http://www.homeoffice.gov.uk/rds/pdfs08/hosb1508.pdf
  http://www.homeoffice.gov.uk/rds/pdfs97/hosb0209.pdf

- An annual bulletin covering drug misuse as reported on the BCS. The most recent bulletin for the period 2008-09 can be found at:
  http://www.homeoffice.gov.uk/rds/pdfs09/hosb1209.pdf

The above references are intended only to illustrate the types of reports and findings that are produced from the BCS. For more details on all RDS publications associated with the BCS see http://www.homeoffice.gov.uk/rds/bcs1.html

As well as published reports the BCS data is made available through the UK Data Archive at the University of Essex (http://www.data-archive.ac.uk/). Since considerable emphasis is given in the course of conducting the interview to assure respondents that the information they provide will be held in confidence the data set does not identify the location of the sampled areas and this information is not released to the Home Office by the survey organisation.

The BCS is a complex study with data organised at different levels (households, individuals, and incidents) and it has numerous sub-samples that are asked specific questions. Accordingly considerable effort and expertise is required to analyse the data and to interpret it in a valid manner. Some of the analysis routines that play a key role in the published estimates are implemented after the data have been handed over to the Home Office, and are not documented in this report.

The Home Office produces a user guide for those interested in analysing BCS data which contain further detail on the content and structure of the data and guidance on analysis. This is also available from the UK Data Archive[6].

[6] For the most recent User Guide see http://www.data-archive.ac.uk /doc/6066/mrdoc/pdf /6066userguide.pdf

1.2 Structure of the technical report

This report documents the technical aspects of the 2008-09 BCS carried out in England and Wales. The analysis in this report relates to the total sample that was issued in the financial year 2008-09, irrespective of when interviews actually took place. The distinction between issued sample and achieved sample is explained in more detail in section 4.3 of the report.

The sample design is set out in Chapter 2, showing how the Home Office's requirements were translated into a detailed specification. Data collection is the major task for the organisation commissioned to conduct the BCS and forms the central part of this report. Chapter 3 covers the content and development of the questionnaire, while Chapter 4 examines the fieldwork. Chapter 5 and 6 give details of the tasks that are involved in preparing the data for analysis, including the coding and offence classification and the preparation of the BCS data files. Chapter 7 outlines the weighting required for analysis of the data. Chapter 8 provides the results of some checks on the profile of the BCS achieved sample against estimates for the population that the BCS aims to represent.

2. Sample design

2.1 Introduction

The sample design of the British Crime Survey remained largely unchanged between 2001-02, when the survey moved to a continuous fieldwork design, and 2007-08. The key features of the design were as follows:

- A sample size of approximately 46,000 interviews per year with adults aged 16+ living in private residential households in England and Wales;
- A minimum of around 1,000 interviews per year in each of the 42 Police Force Areas[7]. This required a degree of over sampling in less populous Police Force Areas;
- A fully-clustered sample with postcode sectors being used as the primary sampling units (PSUs);
- A three-stage sampling process involving:
  - Disproportionate sampling of PSUs from a list of postcode sectors stratified by Police Force Area, population density, and proportion of adults aged 16-74 in non-manual occupations PSUs were selected with probability proportional to size;
  - Selection of 32 addresses from each PSU, with addresses being selected from the small-users Postcode Address File
  - Random selection of one adult in each household for interview. This last selection task was carried out in the field by interviewers
- Fieldwork was conducted on a continuous basis with sample being allocated to provide nationally representative estimates on a quarterly basis and issued evenly across all months of the year.

Fuller details of the previous BCS sample design can be found in earlier Technical Reports[8].

In 2007, BMRB put forward a proposal for a revised sample design to be implemented from 2008-09. Under this new design a number of the broad parameters of the survey remained unchanged. These were:

[7] For sampling purposes the City of London Police are combined with the Metropolitan Police
[8] See for example Bolling, K. et. al. (2008) 2007-08 British Crime Survey (England and Wales) Technical Report Volume I (London: BMRB)

- A sample of approximately 46,000 interviews per year with adults aged 16+ living in private households in England and Wales;
- A minimum of around 1,000 interviews per year within each of the 42 Police Force Areas in England and Wales;
- A sample design that provided nationally representative estimates on a quarterly and annual basis; and
- One adult in each household selected at random for interview.

Within these existing parameters the new features of the BCS design were as follows:

- Adopting a partially clustered design with different levels of clustering being used in different population density strata in an effort to reduce PSU-level cluster effects;
- Using ONS Super Output Areas as the Primary Sampling Units in the strata where the sample was clustered;
- Using new stratification variables based on an analysis of BCS data from 2004-2007; and
- Allocating sample between quarters to ensure the sample was nationally representative on a quarterly basis but front loading the sample within each quarter to reduce the spill over of cases which are issued in one year but are interviewed in the next.

2.2 Rationale for the new sample design

Any sample design has to consider the trade-off between statistical precision on the one hand and fieldwork efficiency and costs on the other. While a clustered design reduces sample efficiency, it is necessary on most national surveys because of cost considerations. Clustered samples help to reduce interviewer travel time and costs to a level where it is feasible for interviewers to make repeated calls to the same addresses in order to maximise the contact rate.

The size of clusters also impact on fieldwork efficiency and costs. With the previous BCS sample design, PSUs were selected with probability proportional to size and then an equal number of addresses (32) were issued in each PSU. This approach ensured that the assignments were as standardised as possible for all interviewers in terms of workload. Issuing fewer addresses in each PSU (for example, 24 addresses) is one way to improve statistical precision because larger clusters tend

to be associated with larger design effects[9], but again there is a trade-off with efficiency and cost. If clusters are too small then interviewers are likely to visit the area on fewer occasions and so response rates may be adversely affected.

While the sample design used on previous surveys did ensure a degree of standardisation in terms of the number of addresses issued per cluster, it ignored the varying geographical size of clusters. Since addresses were selected from across the whole PSU, the geographical size of a PSU clearly had an impact on interviewer travel time and cost. In proposing the new design, BMRB started by examining the impact of geography on the existing survey design.

The 2005-06 BCS sample was used to examine the variation in the geographical size of the primary sampling units. Within the 2005-06 issued sample of PSUs it was found that across the whole sample the average number of selected addresses per square kilometre was 10.6. However, this ranged from 0.08 selected addresses per square kilometre in the largest (most sparsely populated) PSU to 154.4 selected addresses per square kilometre in the smallest (most densely populated) PSU. Table 2.1 shows the range of selected addresses per square kilometre by population density deciles.

Table 2.1 Average number of selected addresses per square kilometre by population density deciles, 2005-06 BCS

Population density decile	Average addresses per sq. km.
Least densely populated decile	0.35
2nd	0.88
3rd	2.02
4th	3.89
5th	5.94
6th	8.37
7th	10.76
8th	13.76
9th	18.90
Most densely populated decile	40.86
ALL	**10.59**

This enormous range in the average number of addresses per square kilometre clearly highlights the differences in travel distances experienced by interviewers

[9] The design effect due to clustering can be calculated as 1 + (b-1) * roh, where b is the cluster size and roh is the intra-class correlation for the clusters.

working in the least and most densely populated PSUs. It suggested that had some more densely populated areas been subject to no clustering at all, the travel time and costs encountered by interviewers working in these areas would still have been much lower than those of interviewers working in more sparsely populated areas.

Based on these preliminary investigations BMRB decided to investigate a hybrid design that was much less clustered – or even unclustered – in densely populated areas but more tightly clustered in sparsely populated areas. The goals of any revised design were threefold:

- To deliver an improvement in statistical precision at the national level over the exiting BCS design;
- To ensure no negative impact on fieldwork quality or delivery in terms of coverage of work, contact rates, or response rates; and
- To be cost neutral in relation to the existing BCS design.

The next few sections describe how the sample design was put into practice.

2.3 Selection of Primary Sampling Units

The first decision concerned what level of geography to use as the Primary Sampling Units (PSUs). Previously on the BCS whole postcode sectors had been used as the primary sampling units, with 32 addresses being issued in each PSU.

To be consistent with previous surveys it would have been possible to produce a partially clustered (or hybrid) design based on postcode sectors. However, it was decided to base the new sample design on Super Output Areas, and to use these as the primary sampling units in the clustered part of the sample.

The decision to switch to Super Output Areas (SOAs) was based on a number of factors. First, postcode sectors are highly variable in terms of their population size, ranging from less than 100 addresses to more than 9,000 addresses. By contrast, Super Output Areas are statistical creations that were specifically designed to be consistent in terms of population size. This is important because it means that cluster effects will be reasonably consistent across a survey which uses SOAs as the primary sampling unit. Second, postcode sectors are subject to boundary changes on an ongoing basis. By contrast, the boundaries of SOAs are intended to be fixed, which makes then better for comparisons over time. Finally, since SOAs are built around Census Output Areas, Census and other administrative data is more easily

matched to the primary sampling units. By contrast, postal geography is independent of most administrative geography, meaning that all Census or administrative geography has to be constructed for the primary sampling units[10].

Super Output Areas are built from groups of 2001 Census Output Areas (OAs) and have a number of different layers. The two layers used for the BCS design were as follows:

- Lower Super Output Areas (LSOAs) are typically built from about 5 OAs and have a minimum population of 1,000 (400 households) and a mean population of 1,500. There are 34,378 LSOAs in England and Wales; and
- Middle Super Output Areas (MSOAs) are typically built from around 5 LSOAs and have a minimum population of 5,000 (2,000 households) and a mean population of 7,500. There are 7,193 MSOAs in England and Wales.

2.4 Target issued and achieved sample in Police Force Areas

A core requirement of the design was to achieve around a minimum of 1,000 interviews in each Police Force Area. The design which meets this requirement at minimum cost is one which delivers an equal sample of 1,000 interviews in each of the 42 Police Force Areas, giving an overall national sample of 42,000 interviews per year. However, such a design would result in a large range of sampling fractions (and hence design weights) within PFAs, leading to a reduction in the precision of whole sample estimates. It was therefore decided to adopt a design that boosted the sample size in smaller PFAs but without reducing it in the larger Areas compared to what it had been on previous surveys.

This broad approach to over sampling in less populous Police Force Areas is the same one that has been adopted on the BCS since 2004-5 when the survey increased in sample size from 37,000 to 46,000. In 2008-09 the process was made slightly more systematic by allocating issued sample to the larger Areas in proportion to their population. With this approach the overall design effect was calculated at 1.17 using the standard formula that ignores between strata differences in element variance[11].

[10] A good example of this is the fact that postcode sector boundaries do not match with Police Force Area boundaries. This meant that on previous surveys some primary sampling units crossed PFA boundaries.

[11] Formula is $(\Sigma n_h W_h)^2 / \Sigma n_h W^2_h$, where n_h = target sample size in PFA *h* and W_h = number of PAF delivery points in PFA *h* as a proportion of the total number of PAF delivery points in England and Wales

Table 2.2 shows the result of this allocation process in terms of the target number of interviews by PFA. The table also shows the target achieved sample in each PFA if the sample had been selected in proportion to the population. This gives some idea of the extent of over sampling, with the largest over sampling being in Dyfed Powys, Warwickshire and Cumbria.

The actual number of interviews achieved and the response rate for each PFA in 2008-09 is shown in Table 4.11.

Table 2.2 Target achieved sample by Police Force Area, 2008-09 BCS

	Number of interviews	
PFA	**Target – minimum of 1,000 per PFA**	**Target – proportional to population**
	N	***N***
Avon & Somerset	1,000	1,308
Bedfordshire	1,000	480
Cambridgeshire	1,000	635
Cheshire	1,000	878
Cleveland	1,000	476
Cumbria	1,000	459
Derbyshire	1,000	865
Devon & Cornwall	1,000	1,452
Dorset	1,000	654
Durham	1,000	540
Dyfed Powys	1,000	452
Essex	1,000	1,431
Gloucestershire	1,000	505
Greater Manchester	1,425	2,255
Gwent	1,000	482
Hampshire	1,000	1,558
Hertfordshire	1,000	893
Humberside	1,000	786
Kent	1,000	1,391
Lancashire	1,000	1,245
Leicestershire	1,000	795
Lincolnshire	1,000	605
Merseyside	1,000	1,186
Metropolitan	3,900	6,102
Norfolk	1,000	749
North Wales	1,000	600
North Yorkshire	1,000	677
Northamptonshire	1,000	568
Northumbria	1,000	1,256
Nottinghamshire	1,000	921
South Wales	1,000	1,075
South Yorkshire	1,000	1,124
Staffordshire	1,000	917
Suffolk	1,000	620
Surrey	1,000	907
Sussex	1,000	1,351
Thames Valley	1,125	1,771
Warwickshire	1,000	458
West Mercia	1,000	1,009
West Midlands	1,375	2,173
West Yorkshire	1,175	1,840
Wiltshire	1,000	550
Total sample size	**46,000**	**46,000**

Having calculated the target number of achieved interviews in each PFA the next stage was to estimate the number of addresses which needed to be issued in each

PFA. The amount of sample that needs to be issued to achieve a target number of interviews is dependent upon both the deadwood rate and the response rate - both of which vary from area to area.

Historical BCS fieldwork data from 2004-2007 was used to compute the final sampling fractions for each PFA. Since response rates vary from year to year at PFA level it was felt that using a measure averaged across 3 years would provide a more stable estimate compared with simply using data from the most recent year. Examination of the long-term fieldwork data also showed that the deadwood rates varied within PFA from year to year. Because of this it was decided to apply sampling fractions for each PFA that were inversely proportional to the long-term conversion rate[12].

The final PFA-level sampling was therefore[13]:

$(n_h / N_h) * (ni0407_h / n0407_h)$ where

- n_h = target sample size in PFA *h*
- N_h = number of PAF delivery points in PFA *h*
- $ni0407_h$ = total number of issued addresses in PFA *h* 2004-07
- $n0407_h$ = total number of adult interviews in PFA *h* 2004-07

2.5 A partially clustered sample

The overall objective of the new design was to balance the introduction of unclustered sampling in the most densely populated areas with a tighter degree of clustering in the least densely populated areas. It was decided to develop different sampling plans for each of three population density strata in an effort to reduce PSU-level cluster effects. The sample plan was defined as follows:

- In the ***most densely populated*** areas of each PFA an unclustered sample of addresses would be drawn (Stratum A);
- In areas of ***medium population density*** a two-stage design would be employed, first sampling Medium Layer Super Output Areas (MSOAs) as the primary sampling units and then selecting 32 addresses within each PSU (Stratum B); and

[12] The conversion rate is simply the total number of achieved interviews/total number of issued addresses within each PFA averaged across 3 years
[13] The sampling fraction was adjusted slightly to provide whole assignments of 32 addresses in Strata B and C

- In areas of ***low population density*** a three-stage design would be employed by first sampling Medium Layer Super Output Areas (MSOAs), then selecting 2 Lower Level Super Output Areas (LSOAs) within each sampled MSOA as the primary sampling units, and finally selecting 16 addresses within each PSU (Stratum C);

In terms of operationalising this design the first task was to allocate all MSOAs in England and Wales to one of the three population density strata outlined above. In seeking to do this the overall aim was to achieve a density of 10 issued addresses per square kilometre across the whole sample, which would roughly match the average density of issued addresses on previous surveys (see section 2.2 above). This was important to ensure that the final design was cost neutral.

In essence this was done using an iterative process, whereby all MSOAs were initially allocated to one of the density strata and the overall number of addresses per square kilometre was calculated. The rules used to allocate MSOAs to the density strata were then repeatedly adjusted until a solution was found that represented the best fit to deliver a density of 10 issued addresses per square kilometre across the whole sample.

Using this process of iteration the best fit was achieved as follows:

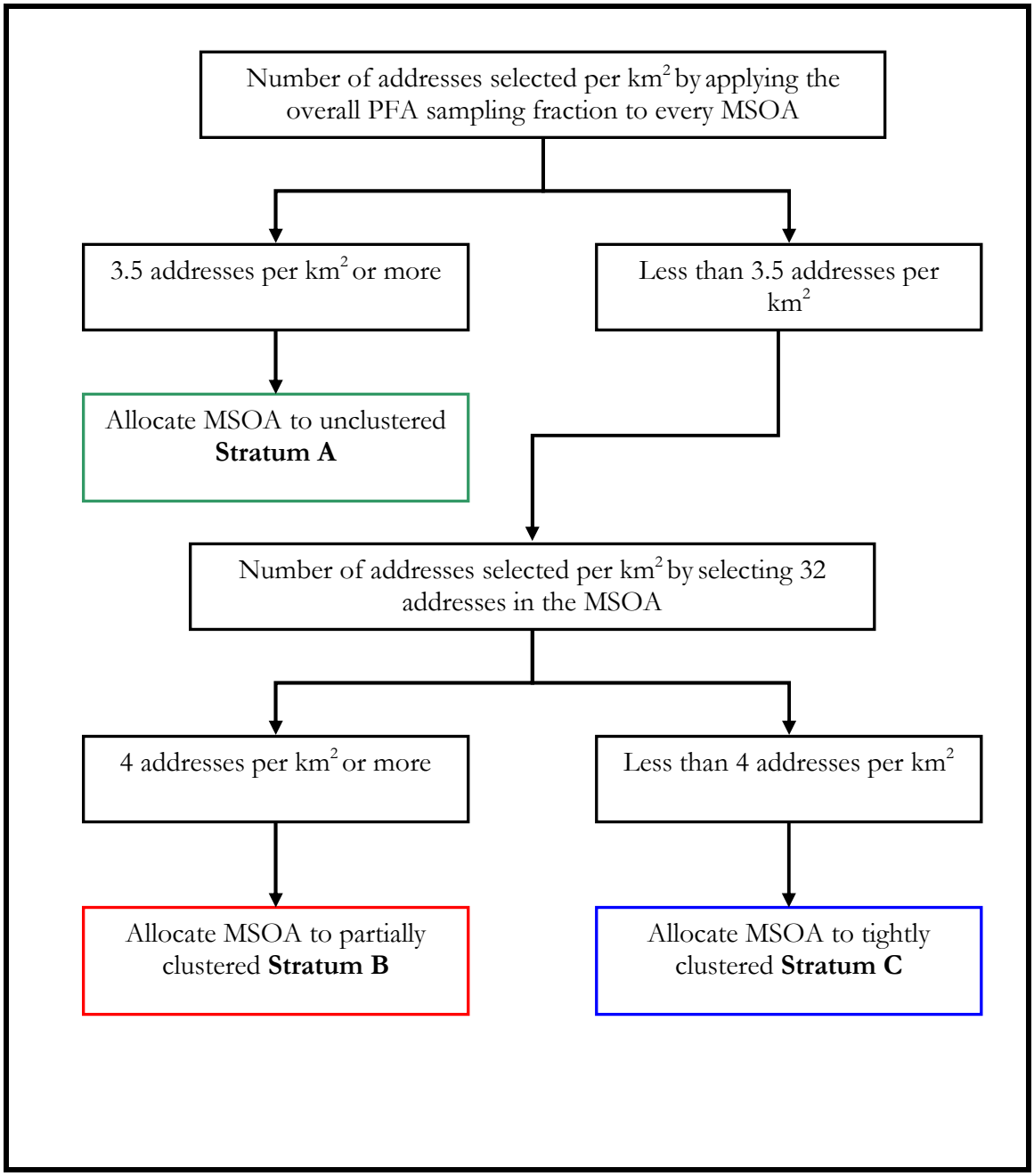
- If the application of the general PFA sampling fraction (as described in section 2.4) resulted in an average of 3.5 or more selected addresses per km^2 in $MSOA_x$ then all of the addresses in $MSOA_x$ were placed in the unclustered stratum A;

- Of the remaining MSOAs, the sampling fraction at the level of each individual MSOA was calculated based on a selection of 32 addresses. If the average number of selected addresses in $MSOA_y$ resulted in 4 or more selected addresses per km^2 in $MSOA_y$ then all of the addresses in $MSOA_y$ were placed in the mid-clustered stratum B; and

- The addresses in the remaining MSOAs were placed in the tightly-clustered stratum C.

This process is summarised in Figure 2.1 below.

Figure 2.1 Rules for allocating each MSOA to each density strata



For the sake of simplicity, it was decided to set a minimum allocation for each cluster stratum at the level of the PFA. Thus, if less than 10% of addresses in a PFA fell into a particular stratum, these addresses were re-allocated to the neighbouring stratum. Where there was a choice between two neighbouring strata, the stratum with the larger original allocation was selected.

In 16 PFAs the initial allocation in at least one stratum was switched to a neighbouring stratum because less than 10% of total addresses within the PFA fell into it. There was no obvious pattern to this re-allocation with upward re-allocation

taking place in 10 PFAs (e.g. from stratum C to stratum B) and downward re-allocation taking place in 6 PFAs (e.g. from stratum A to stratum B).

Using the process outlined above the final result was that 33% of addresses in 2008-09 were allocated to unclustered stratum A, 26% were in mid-clustered stratum, and 41% were in the tightly clustered stratum C. The distribution of issued sample by Police Force Area is shown in Table 2.3.

It should be noted that during 2008-9 it was discovered that because of a matching error in the data file used for drawing the initial sample, about a third of MSOAs were allocated to the wrong cluster stratum. This worked in both directions, meaning that some MSOAs were allocated to a less clustered stratum than they should have been, while others were allocated to a more clustered stratum than they should have been. This allocation error affected all PFAs to some degree, although Cumbria, Durham and South Wales had the highest proportion of areas wrongly allocated to a more clustered stratum, while North Wales and West Mercia had the highest proportion of areas wrongly allocated to a less clustered stratum. Allocation within the large metropolitan areas was broadly correct.

While this error did not introduce any bias into the survey design it does mean that the intended benefits of the design (i.e. the improvement in the precision of national estimates) will not have been fully realised. However, it is impossible to actually quantify the full impact of this error since levels of precision can only be calculated based on the actual design that was implemented. We cannot calculate the levels of precision of the intended design (i.e. if this error had not occurred).

Preliminary analysis of the 2008-09 data indicates that the new design (even with the above error) did result in an overall improvement in precision at the national level compared with the 2007-08. Further analysis is currently being undertaken and the results will be published at a later date.

Table 2.3 Proportion of addresses issued in each density stratum by Police Force Area, 2008-09 BCS

	Proportion of total addresses allocated to each strata[1]:		
PFA	**Stratum A**	**Stratum B**	**Stratum C**
	%	**%**	**%**
Avon & Somerset	18	45	37
Bedfordshire	65	0	35
Cambridgeshire	33	12	55
Cheshire	22	21	57
Cleveland	61	10	29
Cumbria	0	0	100
Derbyshire	11	13	76
Devon & Cornwall	0	42	58
Dorset	40	0	60
Durham	13	0	87
Dyfed Powys	12	10	78
Essex	11	41	48
Gloucestershire	27	0	73
Greater Manchester	37	63	0
Gwent	20	11	68
Hampshire	13	43	45
Hertfordshire	28	23	49
Humberside	59	21	20
Kent	18	46	36
Lancashire	19	44	37
Leicestershire	20	22	58
Lincolnshire	28	0	72
Merseyside	35	65	0
Metropolitan	72	28	0
Norfolk	25	13	61
North Wales	66	0	34
North Yorkshire	18	13	69
Northamptonshire	60	0	40
Northumbria	36	40	24
Nottinghamshire	44	25	30
South Wales	0	29	71
South Yorkshire	20	48	33
Staffordshire	35	24	41
Suffolk	34	11	55
Surrey	27	39	34
Sussex	14	36	50
Thames Valley	15	49	36
Warwickshire	53	0	47
West Mercia	31	32	37
West Midlands	31	69	0
West Yorkshire	12	72	16
Wiltshire	58	0	42

1 In 16 Police Force Areas the initial allocation of addresses was switched to a neighbouring stratum where less than 10% of the total addresses within the PFA fell into the stratum.

2.6 Sampling of addresses

A different procedure for sampling addresses was adopted in each density stratum. All addresses were selected from the small-user Postcode Address File (PAF).

Sampling of addresses in the unclustered Stratum A

Within each PFA all the addresses allocated to unclustered stratum A were sorted using the ONS reference for the associated LSOA. Addresses were then sampled systematically using the PFA-level sampling fraction and a random start.
A geographic software system was then used to 'batch' together sampled addresses into efficient fieldwork assignments. In doing this certain parameters were set concerning the maximum geographic diameter of a batch area and the number of addresses per batch. The aim was to achieve assignments of a manageable geographical size that contained as close as possible to 32 addresses.

Census-derived and other government data were added to each batch using a weighted average of component LSOAs. This is best illustrated using an example. If a batch contained 8 addresses from LSOA 1, 16 from LSOA 2, and 9 addresses from LSOA 3 and the crime index values for each LSOA were 20, 30, and 40 respectively, the batch level crime index value would be:

(20*(8/33)) + (30*(16/33)) + ((40*(9/33)) or 30.3

These batch-level data allowed a representative sample of batches to be allocated to each fieldwork quarter using standard stratification methods.

Sampling addresses in mid-clustered Stratum B

Before sampling, MSOAs in mid-cluster stratum B areas were stratified in the master database to ensure a representative sample. In England, mid-cluster MSOAs in each PFA were sorted by the crime and disorder deprivation index and split into three equal-sized sub-strata. In Wales, mid-cluster MSOAs in each PFA were sorted by population density and split into three equal-sized sub-strata.

These variables were selected after an analysis of BCS data from 2003-06 (see section 2.7 for further details).

MSOAs were sampled with a probability proportionate to the number of PAF delivery points[14], using a systematic method and a random start.

32 addresses were selected from each sampled MSOA. Addresses were sorted by postcode before a systematic 1 in *n* sample was drawn with a random start.

Sampling addresses in tightly clustered Stratum C

A sample of MSOAs was drawn in each tight-clustered stratum C as described for the mid-clustered strata. However, instead of a sample of addresses being drawn within each sampled MSOA, a pair of LSOAs was first selected.

Within each sampled MSOA, the component LSOAs were sorted using the ONS reference number. Two LSOAs were sampled in each MSOA with a probability proportionate to the number of PAF delivery points, using a systematic method and a random start.

Sixteen addresses were selected from each sampled LSOA. Addresses were sorted by postcode before a systematic 1 in *n* sample was drawn with a random start.

2.7 Stratification

The selection of PSU-level stratification variables was refined after an analysis of BCS data from April 2003 through to March 2006. The sample design for 2008-09 required PSUs to be stratified by PFA (level 1) and 'density cluster type' (level 2). Consequently, the additional analysis focused on the best combination for the third and fourth levels of stratification.

The analysis suggested that a three-band version of the 'crime and disorder' deprivation index should be used as the level 3 stratification variable in England and a three-band population density variable should be used as the level 4 stratification variable. In Wales – where no crime index existed at the time – the study recommended the use of population density (level 3) followed by mode ACORN category (level 4). In the event, it was decided only to use a third level of stratification in the design as outlined in the previous section. A variable

Both linear and logistic regression methods were used. The former method was mainly employed to find the most appropriate banding points for the continuous crime index and population density variables. The latter method was employed to

[14] In England and Wales, one delivery point equals one address in 97% of cases.

simulate each potential design on historical data. In each case, a simple summary measure of personal or household-level crime was used as the dependent variable. Since most other key metrics are highly correlated with these values so a stratification design that works for one metric should also work for the remainder.

2.8 Allocation of sample to fieldwork quarters and months

Primary sampling units (mid and tight clustered strata) and fieldwork batches (unclustered strata) were systematically allocated to each fieldwork quarter to ensure that each quarter was a representative sample of the whole.
The sampled PSUs/batches in each cluster stratum were sorted using their original stratification values and tagged with a 'fieldwork quarter' label via the 'snaked' allocation system: Q1-Q2-Q3-Q4-Q4-Q3-Q2-Q1-Q1-Q2 etc. but with a random start (e.g. 'Q3').

A similar system was used to allocate sampled PSUs/batches to a specific issue month within the relevant quarter. However, rather than allocating PSUs/batches equally between months within each quarter it was decided to slightly frontload the sample within each quarter. This was done to try and increase the proportion of interviews that are actually carried out during the quarter of issue, rather than being carried out in the quarter after issue. It was decided not to completely frontload the sample (i.e. issue all sample at the start of each quarter) in order to maintain a reasonably even volume of interviews throughout the whole year. Thus, approximately 40% of the sample was allocated to month 1 of each quarter, 35% to month 2 and 25% to month 3.

2.9 Sampling of individuals

At each sampled address, interviewers were asked to randomly sample one dwelling unit in those rare cases where more than one is associated with a single address.
Once the dwelling unit was selected, interviewers were asked to randomly sample one normally resident[15] individual aged 16+. This was done by listing all eligible people in the household in alphabetical order of first name and then selecting one for interview by a random (Kish grid based) approach. Once the selection of an individual had been made no substitutes were permitted.

[15] An individual is 'normally resident' if this is his/her only residence or he/she spent more than six of the last twelve months living at this address.

2.10 Young adult boost sample

As part of the 2008-09 survey a boost of young adults aged 16-24 years was carried out, primarily to enable more precise estimates of illicit drug use amongst young people. The aim was to achieve a boost sample of 2,000 respondents aged 16 to 24 years. Screening was conducted at 68.75% of core sample addresses from April 2008 to March 2009.

The 'young adult questionnaire' covered fewer topics than the main questionnaire and consequently average interview length was considerably shorter.
A separate screening exercise was carried out to generate sample for this age group. Interviews were only sought with eligible respondents at addresses that had been selected as part of the core sample.

Since such screening could involve conducting two interviews in a single household, the selection for the core sample always took place first. This was to ensure that all adults (aged 16 years and over) in the household were included in the main selection process. If the person selected as the core sample respondent was aged 16 to 24 years, a young adult boost interview was not conducted, regardless of whether an interview was achieved with a core sample respondent or not. This was to ensure that no more than one 16 to 24 year old was ever interviewed in the same household.

After selecting one adult for interview in the core sample, interviewers then screened for 'young adult sample' by asking whether there was anybody living at the address aged 16-24 years old. If more than one 16-24 year old was identified at the address, the same random selection procedure was applied as with the core sample to identify one person for interview.

Details of the young adult screening and response rate for 2008-09 can be found in section 4.8.

2.11 10 to 15 year old sample

A requirement of the new BCS contract was for a survey of under 16s to be carried out alongside the main BCS. The extension of the survey to this age group followed recommendations made by the Smith Review[16]. The main rationale for extending the coverage of the BCS is to provide estimates of victimisation levels

[16] http://www.homeoffice.gov.uk/rds/pdfs06/crime- statistics-independent-review-06.pdf

among under 16s so that their needs can be part of policy consideration and service delivery.

As part of its response to the Smith Review the Home Office commissioned a detailed methodological study to examine the feasibility of interviewing under 16s and to outline different options for obtaining nationally representative estimates of crimes against this group[17]. The issues considered as part of the methodological study included what sample frame to use; the appropriate age range and its implications for question design; the relative advantages and disadvantages of different survey modes; practical and ethical issues when interviewing children; and sample size.

The main recommendations of the methodological review in terms of survey design was that a sample of children should be obtained through identifying children in households already selected for the core BCS. The field procedures to be used would be broadly similar to those already used for the young adult boost, with screening being carried out after the core sample interview had been completed.

Other key recommendations from the methodological review were that the age range for the survey should be 10-15; that the number of children interviewed in each household should be limited to one; that the pros and cons of paper-based questionnaires and CAPI should be considered; and that the questionnaire needed to be specifically written for the age group.

Once the broad recommendations about the survey design had been accepted by the Home Office, BMRB were asked to put together a programme of work during 2008-09 to help develop all aspects of the new survey and to pilot and test the questionnaire and field procedures. This work included conducting qualitative research with 10 to 15 year olds, cognitive testing and piloting of the questionnaire and field documents, and a small-scale field trial, using experienced interviewers.

Following this development work an extensive field trial was carried out over three months to ensure that the introduction of the new survey did not have any impact on the core survey. Only once this had been established was the survey launched live in the field in January 2009.

Since most of the 2008-09 survey year involved development and testing work for the new survey no further information on the 10 to 15 year old survey is included in

this Technical Report. A full report on the development and testing work carried out by BMRB is available on the Home Office website[18]. Full questionnaire and fieldwork details of the first full year of the 10 to 15 survey will be published in the 2009-10 BCS Technical Report when the data are incorporated with the main dataset.

[17] http://www.homeoffice.gov.uk/rds/pdfs08/horr06c.pdf
[18] Fitzpatrick A. *et. al.* (2009) Extending the British Crime Survey to children: a report on the methodological and development work' on http://www.homeoffice.gov.uk/rds/bcs-methodological.html

3. Questionnaire Content and Development

3.1 Structure and coverage of the questionnaire

The BCS questionnaire has a complex structure, consisting of a set of core modules asked of the whole sample, a set of modules asked only of different sub-samples, and self-completion modules asked of all 16-59 year olds[19]. Within some modules there is often further filtering so that some questions are only asked of even smaller sub-samples. The precise modules asked on the survey vary from year to year as do the exact modules asked of the core and young adult boost samples.

The 2008-09 BCS questionnaire consisted of the following sections:

- Household Grid
- Perceptions of crime
- Screener questionnaire
- Victimisation Modules for incidents identified at the screeners (up to a maximum of six)
- Mobile phone and second home crime
- Performance of the Criminal Justice System
- Contact with and attitudes to the police (Module A)
- Contact with and attitudes to the Criminal Justice System (Module B)
- Crime prevention and security (Module C)
- Ad-hoc crime topics (Module D)
- Night time economy and alcohol disorder
- Anti social behaviour
- Plastic card and identity fraud
- Demographics and media consumption
- Self-completion module on drug use and drinking
- Self-completion module on inter-personal violence

The basic structure of the core questionnaire is shown in Figure 3.1, while the sub-set of respondents who were asked each module of the questionnaire is shown in Table 3.1. The complete questionnaire is documented in Appendix D of Volume 2. In this chapter a brief description of each section or module of the questionnaire is outlined.

[19] See section 3.1.11 for discussion about the age range of the self-completion modules during 2008-09

Figure 3.1 Flow Diagram of the 2008-09 BCS Core Questionnaire

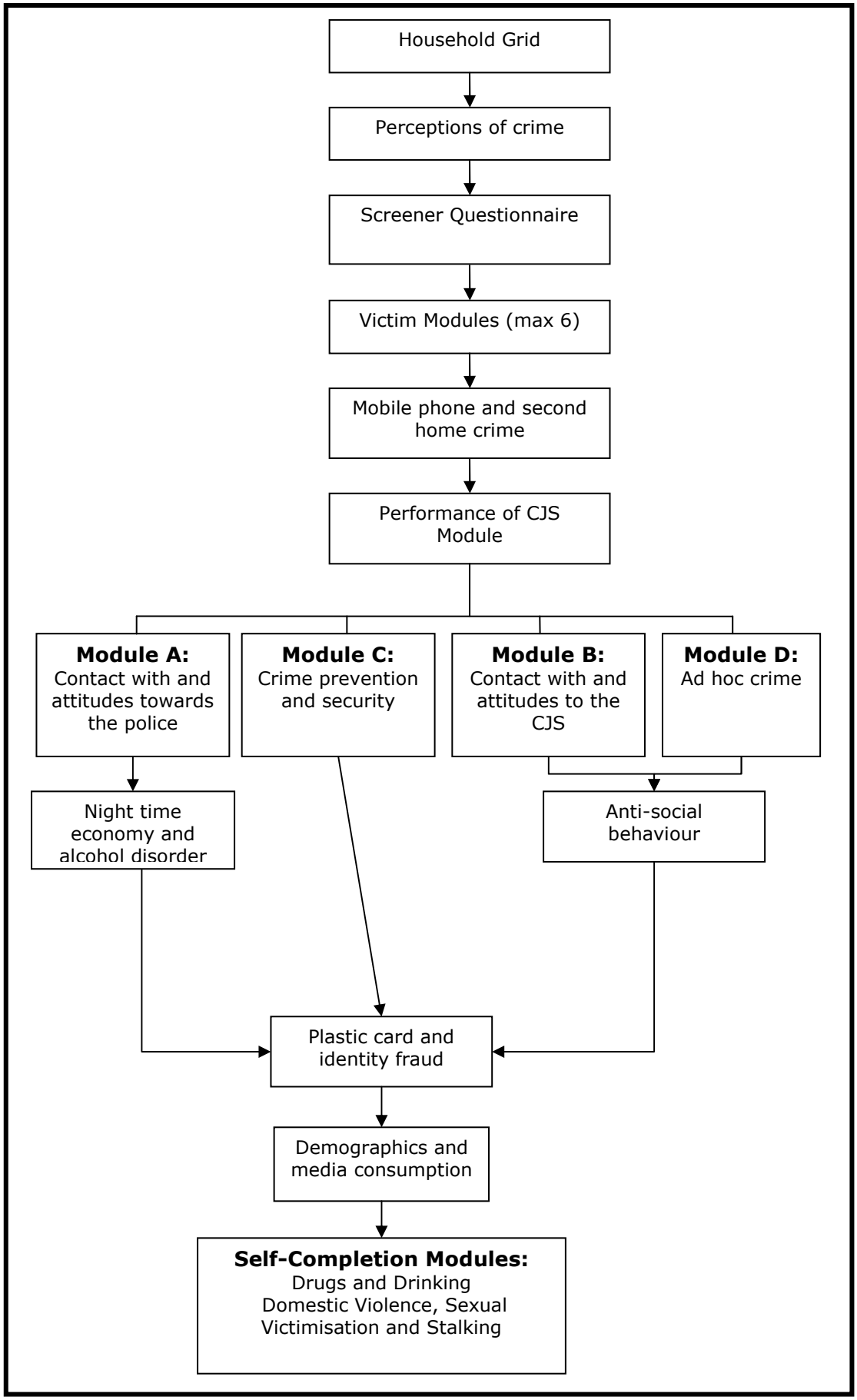


Table 3.1 Modules of the 2008-09 BCS questionnaire and sub-set of respondents who were asked each module

Questionnaire module	Core sample	Young adult boost sample
Household box	All	All
Perceptions of crime	All	All[1]
Screener questionnaire	All	All[1]
Victimisation Modules	All victims	All victims
Mobile phone and second home crime	All	No
Attitudes to the Criminal Justice System	All	No
Module A	Random 25%	No
Module B	Random 25%	No
Module C	Random 25%	No
Module D	Random 25%	No
Night time economy	Random 25%	No
Anti social behaviour	Random 50%	No
Plastic card and identity fraud	All	No
Demographics and media consumption	All	All
Drugs and Drinking	All aged 16-59[2]	All
Inter-Personal Violence	All aged 16-59[2]	No

[1] Respondents to the young adult boost are asked only some of the questions in the perceptions of crime module and only the screener questions relating to personal crimes.
[2] The upper age for the self-completion was 69 for all interviews conducted between the 1st April and the 1st October 2009

3.1.1 Household Grid

Basic socio-demographic details (age, sex, marital status, ethnicity, etc.) were collected in the Household Grid for every adult in the household. Additionally, demographic details of all children under 16 years were collected.

The Household Grid was also used to establish the Household Reference Person[20]. Household Reference Person (HRP) is the standard classification used on all government surveys and is based on the following criteria:

- The HRP is the member of the household in whose name the accommodation is owned or rented, or is otherwise responsible for the accommodation. In households with a *sole* householder that person is the HRP.
- In households with *joint* householders the person with the *highest income* is taken as the HRP.
- If both householders have exactly the same income, the *older* is taken as the HRP.

[20] Prior to 2001 all previous surveys collected details of the Head of Household.

3.1.2 Perceptions of crime

The Household Grid was followed by a series of attitudinal questions which asked respondents their perceptions about particular aspects of crime and anti-social behaviour. This module of questions included both long-standing questions, as well as questions newly developed for the 2008-9 survey.

Long-standing topics covered in this module included:

- How long respondents had lived in their local area;
- What respondents felt were the main causes of crime (Module B respondents only);
- How much crime and fear or crime affected respondents quality of life (Module D respondents only);
- How safe respondents felt when walking in their local area and when at home;
- How worried they were about being the victim of particular types of crime (Module C respondents only);
- How respondents thought crime rates in their local area had changed over time (Module C respondents only);
- How much of a problem they perceived particular aspects of anti-social behaviour to be;
- How often their home was left unoccupied and how often they went out; and
- How often they visited a pub or bar

Additionally, a number of new questions were developed to try and better understand how respondents perceive changing crime levels. For many years the survey has asked respondents whether they think crime has gone up, gone down, or stayed the same over the last two years, both in the country as a whole and in their local area. Results from previous surveys have shown that the majority of people believe that crime has gone up (either a lot or a little) in the last two years, both in the country as a whole and in their local area.

To try and better understand what is driving these perceptions, a new set of questions were developed to ask people whether they thought particular **types** of crime had gone up or down in the past few years. People were asked what they thought had happened both in the country as a whole, as well as in their local area.

Questions about nine different types of crime were asked:

- bank and credit card fraud
- gun crime
- knife crime
- homes being broken into
- cars being stolen
- cars being broken into
- muggings or street robberies
- vandalism
- people getting beaten up

However, each individual respondent was asked about only four different types of crime out of the possible nine, with the order in which the crime types were asked being randomised.

3.1.3 Screener questions

Following the questions on perceptions of crime, all respondents were asked whether they had experienced certain types of crimes or incidents within a specified reference period, namely the last 12 months from the date of interview. To try and encourage respondents to recall events accurately, a life event calendar was offered to all respondents to act as a visual prompt when answering the screener questions (see section 3.2).

Depending upon individual circumstances a maximum of 25 screener questions were asked relating to particular types of crime. These can be grouped into four main categories:

- All respondents who lived in households with a vehicle or bicycle were asked about experience of vehicle-related crimes (e.g. theft of vehicle, theft from vehicle, damage to vehicle, bicycle theft);
- All respondents who had moved in the reference period were asked about experience of property-related crimes in their previous residence(s) (e.g. whether anything was stolen, whether the property was broken into, whether any property was damaged);
- All respondents were asked about experience of property-related crimes in their current residence; and
- All respondents were asked about experience of personal crimes (e.g. whether any personal property was stolen, whether any personal property was damaged, whether they had been a victim of force or violence or threats).

The wording of the screener questions has been kept consistent since the BCS began to ensure comparability across surveys. They are designed to ensure that all incidents of crime within the scope of the BCS, including relatively minor ones, are mentioned. The screener questions deliberately avoid using terms such as 'burglary', 'robbery', or 'assault', all of which have a precise definition that many respondents might not be expected to know.

The questions are also designed to ensure that the respondent does not mention the same incident more than once. At the end of the screener questions, the interviewer is shown a list of all incidents recorded and is asked to check with the respondent that all incidents have been recorded and nothing has been counted twice. If this is not the case, the respondent has an opportunity to correct the information before proceeding.

Within the screener questions a crucial distinction exists between household incidents and personal incidents.

All vehicle-related and property-related crimes are considered to be household incidents, and respondents are asked about whether anyone currently residing in the household has experienced any incidents within the reference period. A typical example of a household incident is criminal damage to a car. It is assumed that the respondent will be able to recall these incidents and provide information even in cases where he/she was not the owner or user of the car. For respondents who have moved within the last 12 months, questions on property-related crimes are asked both in relation to the property they are now living in, as well as other places they have lived in the last 12 months.

Personal incidents refer to all crimes against the individual and only relate to things that have happened to the respondent personally, but not to other people in the household. An example of a personal incident would be a personal assault. An assault against other household members would not be recorded, unless the respondent was also assaulted in the course of the incident. In such cases, the offence would be coded according to the crime experienced by the respondent (which may not be the same as the experience of another household member).

3.1.4 Victimisation Modules

All incidents identified at the screener questions are followed through in more detail in the Victimisation Module. Incidents are covered in a specific priority order as explained below, which has been kept consistent since the start of the BCS.

Identification and ordering of incidents for Victimisation Modules

In 2008-09, 76% of core sample respondents did not report any victimisation over the reference period, meaning that no Victimisation Modules had to be completed as part of the interview. This is exactly the same proportion of respondents who did not report any victimisation in the 2007-08 survey.

Where a respondent had experienced one or more incidents in the reference period, the CAPI programme automatically identified the order in which the Victimisation Modules were asked. This meant that the interviewer had no discretion about the selection or order of the modules[21].

If six or fewer incidents were identified at the screener questions then a Victim Module was completed for all of the incidents reported. The priority ordering used by the computer was as follows:

- According to the type of crime. Victimisation Modules were asked in reverse order to the screener questions. Broadly speaking this means that all personal incidents were asked before property-related incidents, which were asked before vehicle-related incidents.
- Chronologically within each type of crime. If a respondent reported more than one incident of the same type of crime, Victim Modules were asked about the most recent incident first and worked backwards chronologically.
- The first three Victimisation Modules were long modules, which contain all the detailed questions relating to each incident. The second three Victim Modules were short modules, a cut down version of the questions that are much quicker to complete.

If the respondent had experienced more than six incidents in the reference period, only six Victimisation Modules were asked using the above priority ordering. The priority ordering means that the survey does not collect details or only collects limited details (through the short Victim Module) for the crimes or incidents that tend to be more common (e.g. criminal damage to vehicles).

[21] In the case of the incidents of sexual victimisation or domestic violence, the interviewer had an option to suspend the Victimisation Module, as this might embarrass or endanger the respondent in some situations. The interviewer would then attempt to arrange a revisit at a time that would be more convenient (in particular when other household members would not be present).

In the 2008-09 survey, a total of 15,711 Victim Modules were completed on the core sample and 23.8% of all respondents reported at least one incident (see Table 3.2). Respondents in the young adult boost sample were as likely as those in the core sample to report at least one incident (23.5%). However, since young adult boost respondents were only asked about personal crimes (and not about household crimes) the proportion of young adult boost respondents experiencing personal crime was actually higher.

Table 3.2 shows that 17% of all core respondents completed one Victimisation Module, while only 1% of all respondents completed four or more modules. Among respondents who reported at least one crime, seven in ten (71%) had experienced only one crime in the reference period and so had completed a single Victimisation Module. Only 4% of respondents who had been the victim of crime completed four or more Victim Modules.

Table 3.2 Number of respondents who completed Victimisation Modules by sample type, 2008-09 BCS

	Core sample			Young adult boost sample		
	N	**% of all respondents**	**% of victims**	**N**	**% of all respondents**	**% of victims**
Non victims	34,674	76.2		1,303	76.5	
Victims[1]	10,845	23.8		401	23.5	
No. of Victim Modules[2]						
1	7,709	16.9	71.1	291	17.1	72.6
2	2,074	4.6	19.1	71	4.2	17.7
3	659	1.4	6.1	15	0.9	3.7
4	225	0.5	2.1	10	0.6	2.5
5	91	0.2	0.8	6	0.4	1.5
6	87	0.2	0.8	8	0.5	2.0
Bases:		*45,519*	*10,845*		*1,704*	*401*

1 Victims refers to the number of respondents who completed at least **one** Victimisation Module
2 The number of Victimisation Modules is shown both as a percentage of all respondents who were victims of crime and as a percentage of all respondents.

Defining a series of incidents

Most incidents reported represent one-off crimes or single incidents. However, in a minority of cases a respondent may have been victimised a number of times in succession. At each screener question where a respondent reported an incident, they were asked how many incidents of the given type had occurred during the reference period. If more than one incident had been reported, the respondent was

asked whether they thought that these incidents represented a 'series' or not. A series was defined as "*the same thing, done under the same circumstances and probably by the same people*". Where this was the case, only one Victimisation Module was completed in relation to the most recent incident in the series.

There are two practical advantages to this approach of only asking about the most recent incident where a series of similar incidents has occurred. First, since many (although not all) incidents classified as a series tend to be petty or minor incidents (e.g. vandalism) it avoids the need to ask the same questions to a respondent several times over. Secondly, it avoids 'using up' the limit of six Victimisation Modules on incidents which tend to be less serious.

In 2008-09, 82% of all Victimisation Modules related to single incidents and 18% related to a series of incidents. This split between single and series incidents was broadly the same as previous surveys.
In the rare cases where a respondent has experienced a mixture of single incidents and a series of incidents the interview program has a complex routine which handles the sequence of individual and series incidents and allows the priority ordering of the Victimisation Modules to be decided.

In terms of estimating the victimisation rates, series incidents receive a weight corresponding to the number of incidents up to a maximum of five (see section 7).

Content of Victimisation Module

The Victimisation Module is the key to the estimate of victimisation and collects three vital bits of information:

- The exact month(s) in which the incident or series of incidents occurred. In a few cases, respondents may have reported an incident, which later turned out to have been outside the reference period. In such cases, the Victimisation Module was simply by-passed by the computer. If respondents were unsure about the exact month in which something happened, they were asked to narrow it down to a specific quarter. For incidents that were part of a series, respondents were asked how many incidents occurred in each quarter and the month in which the most recent incident had occurred.

- In the questionnaire program reference dates were automatically calculated based on the date of interview and appropriate text substitution was used to ensure that the questions always referred to the correct reference period. Because the 12 month reference period changed throughout the fieldwork year, this meant that some date-related questions in the Victimisation Module had different text each month to reflect this changing reference period. Details of these questions and the appropriate reference periods used for each month of the 2008-09 survey can be found in Appendix F of Volume 2.

- An open-ended description of the incident where the respondent describes exactly what happened in their own words. The open-ended description is vital to the accurate coding of offences that takes place back in the office. Short, ambiguous or inconsistent descriptions can often make offence coding difficult. At the end of each Victimisation Module, the original open-ended description that the interviewer had entered at the start of the Victimisation Module is re-capped, along with the answers to some of the key pre-coded questions. By presenting this information on a single screen, interviewers have the chance to confirm with respondents that the information was correct and consistent. If the respondent and/or interviewer wish to add or clarify any information they then have the opportunity to do this.

- A series of key questions used to establish important characteristics about the incident. Examples of the sort of information collected includes where and when the incident took place; whether there was a racial element to the incident; whether anything was stolen or damaged and, if so, what; the costs of things stolen or damaged; whether force or violence was used and, if so, the nature of the force used and any injuries sustained; and whether the police were informed or not.

The key questions within the Victimisation Module have remained largely unchanged from previous years of the survey to ensure comparability over time.

3.1.5 Mobile phone and second home crime

Although mobile phones stolen from the respondent should be identified in the Victimisation Module, thefts from other members of the household are not covered.

Consequently, in this module all respondents were asked who in the household (if anyone) used a mobile phone, whether anyone in the household had had a mobile phone stolen in the last 12 months and, if so, who the phone had been stolen from. Respondents were asked to include incidents where mobile phones stolen had been stolen from children in the household.

Data from these questions should be analysed using the household weights to generate victimisation rates per household. These are discussed in greater detail in Chapter 7.

The survey does not pick up crimes that affect second homes since respondents are only interviewed at their main address, and are asked about their main property. In 2008-9 some questions were added to ask respondents whether they owned a second home in England and Wales

For respondents who did have a second property (or properties) there were then a number of follow-up questions asking them whether this property has been broken into or suffered any form of criminal damage in the last 12 months.

3.1.6 Performance of the Criminal Justice System

All respondents were asked a number of questions about the performance of both the Criminal Justice System as a whole, as well as about the individual agencies that make up the CJS. Some of the questions within this module are used to measure progress at a national level towards some of the 2008-11 PSA Delivery Agreements.

The first set of questions in this module relate to respondents' perceptions about the effectiveness and fairness of the CJS. Individual questions relating to the police, the courts, the CPS, the probation service and the prison service were asked, as well as questions about the CJS as a whole. These questions were added to the survey in October 2007 after being extensively tested[22].

The second set of questions is about confidence in the local police. As well as a general question about perceptions of how good a job the local police are doing, there are also questions related to specific aspects of local policing.

[22] Maxwell C. *et. al*. (2008) Fairness and effectiveness in the Criminal Justice System: development of questions for the BCS at http://www.homeoffice.gov.uk/rds/pdfs08/doqbcs.pdf

Finally, the module includes a number of questions related to respondents' confidence in the different local agencies involved in tackling crime and anti-social behaviour. These questions are used to measure progress at a national level towards PSA Delivery Agreement 23 which aims to make communities safer. The questions are also used to measure the performance of individual police forces in England and Wales and their progress towards a 2012 target that 60% of the public are confident that their local police are addressing the crime and anti-social behaviour issues that matter to them.

3.1.7 Part-sample modules (A-D)

Respondents were randomly allocated to one of four modules (see section 3.5. for how this was done). Core sample respondents were allocated equally to each module, meaning that approximately 11,500 respondents were asked each module.

Module A: Contact with and attitudes towards the police

In 2008-09, Module A included questions that had all been asked in previous years. Some of the topics covered in this module included:

- whether or not respondents knew anyone in the police or had any contact with the police;
- whether or not they had been stopped by the police either in a vehicle or on foot;
- if so, the reason given for being stopped and the nature of the contact;
- whether respondents had made a complaint about the police and if so how they felt their complaint had been dealt with; and
- where respondents felt they got most information about the police from.

Module B: Contact with and attitudes to the Criminal Justice System

Again, this module included questions that had mainly been asked in previous years, although there were some new questions about the types of sentences that respondents thought appropriate for different types of offenders under particular circumstances. Topics covered in this module included:

- priorities of the Criminal Justice System;
- where people get information about the Criminal Justice System
- knowledge of sentencing practices;
- attitudes to the type of sentence appropriate for different types of offenders under particular circumstances;
- attitude to sentencing policy, including what respondents thought sentences should be for particular crimes and what they thought they actually were;
- recent contact with different parts of the Criminal Justice System; and
- attitudes to aspects of the Youth Justice System.

Module C: Crime prevention and security

Topics covered in this module vary from year to year. In 2008-09 the main focus was on vehicle security measures. Questions on witness intimidation that have been included in Module C in previous years were not asked in 2008-09:

- home security measures and reasons for lack of home security measures; and
- vehicle security measures and reasons for lack of such measures

Questions on vehicle security included some new questions on satellite navigation systems and security measures taken by drivers who had such devices.

Module D: Ad hoc crime

This module was broadly similar to previous surveys and contained a wide variety of questions. These included:

- awareness of Victim Support and the Witness Service;
- worry about gun crime and terrorism; and
- concerns about being the victim of certain crimes

3.1.7 Night time economy and alcohol disorder module

This module remained largely the same as on previous surveys. The main areas covered by this were:

- frequency of use of high streets and town centres in the evening;
- purpose of use of high streets and town centres in the evening;
- feelings of safety when out in high streets and town centres in the evening; and
- experience of drunk and rowdy behaviour

3.1.8 Plastic card and identity fraud

This module was developed to try and provide a measure of the extent of both card and identity fraud. These crimes are not currently included in incidents covered in the Victimisation modules (though the physical theft of any plastic card would be covered). The module was first put on the survey in August 2007, meaning that 2008-09 was the first time the questions had been on the survey for a full year.

The topics covered in the module included:

- whether respondent has had a plastic card used without their permission;
- whether respondent has had money taken from a bank or building society account without their permission;
- circumstances under which any fraud occurred;
- who fraud was reported to
- measures taken to try and prevent card or bank fraud;
- whether respondent has had their personal details used in any way that indicated identity fraud;
- circumstances under which identity fraud occurred; and
- who identity fraud was reported to

3.1.9 Anti-social behaviour module

For many years the survey has asked people about how common they perceive a range of 'problem' behaviours (such as vandalism, rubbish and litter, abandoned vehicles, etc.) to be in their local area. These questions are part of the perceptions of crime module and are asked of all respondents.

Follow up questions on anti-social behaviour were asked of a sub-sample of respondents. Since 2003-04 the supplementary questions on anti social behaviour

have changed slightly every year, with some questions being dropped or a particular focus on a different type of anti social behaviour.

From April 2008 only a few general questions on anti-social behaviour were asked on the survey. These related to how effective respondents felt the authorities were in tacking anti-social behaviour, how informed respondents felt about what was being done locally to tackle problems, and some of the possible underlying causes of anti-social behaviour.

From October 2008 some new questions on anti-social behaviour were put on the survey after a round of testing and piloting. These questions related to three specific types of anti-social behaviour:

- teenagers hanging around;
- people using or dealing drugs; and
- people being drunk or rowdy in public

The main aim of these new questions is to try and get a better understand of the relationship between respondents perceptions of anti-social behaviour in their local area and their actual experiences.

3.1.10 Demographics and media consumption

This section collected additional information on the respondent and the Household Reference Person (where this was not the same as the respondent). Questions included:

- general health, including smoking and drinking behaviour;
- employment details;[23]
- educational attainment and qualifications;
- nationality, country of birth and religion (of respondent and HRP);
- housing tenure; and
- household income

A new set of questions were added in 2008-09 covering media consumption habits. The survey has contained a question on newspaper readership for a number of years which has shown a relationship between type of newspaper read and perceptions of crime. Additional media questions were added to try and gain a

[23] Where the respondent was not the Household Reference person occupation details were also collected about the HRP

more detailed understanding of how perceptions of crime relate to media consumption, especially news.

Questions asked included:

- daily and Sunday newspaper readership;
- amount of TV watched;
- amount of local and national news watched on TV; and
- use of the internet and type of sites visited

3.1.11 Self – completion modules

Up until this year the self-completion modules on the BCS have been asked only of respondents aged less than 60 years of age. From the 1st April 2008 the upper age limit for the self-completion was raised to 69 for a trial period. In doing so it was agreed that this would be reviewed after six months to establish the value of the data being collected and the impact on the survey in terms of respondent burden.

Following this review it was decided to return the upper age for the self-completion to 59 from October 2008. This was done for two reasons. First, although the change had little impact on the overall average length of the survey, the addition of self-completion section resulted in a fairly substantial increase in the interview length for respondents aged 60-69. And second, it was noted that although the refusal rate to the self-completion was no higher than average among the 60-69 age group (7%), a significant proportion of respondents within this age band asked the interviewer to administer the questions for them (26%), a proportion that was twice as high as respondents aged under 60 (12%).

Respondents are all presented as computer assisted self-completion (CASI) modules to ensure respondent confidentiality in answering these questions. The respondent was asked to follow the instructions on the screen of the laptop and enter their answers appropriately. Practice questions were included before the start of the self-completion module to give the interviewer an opportunity to show the respondent the different functions of the computer. If the respondent was unable or unwilling to complete the modules using the computer the interviewer could administer the self-completion. Where interviewers administered the self-completion, respondents were only asked the modules on drug use and drinking. They were not asked the module on domestic violence, sexual assault and stalking.

Interviewer assistance and the presence of others while completing these modules was recorded by the interviewer (see Chapter 4).

Self-completion module: Illicit drug usage

The module on drug use remained virtually unchanged from the previous survey. A total of 19 illicit drugs were asked about. Methamphetamine was added to the existing list of drugs for the first time in 2008-09. Questions included:

- whether ever taken illegal drugs;
- whether taken illegal drugs in last 12 months;
- whether taken illegal drugs in last month; and
- frequency of drug use

Self-completion module: Drinking and truancy

In 2008-09, only a few questions on drinking were asked of all 16-30 year olds as part of the self-completion module. This module covered:

- frequency and volume of alcohol drunk in the last 12 months;
- how often felt drunk in the last 12 months; and
- whether the respondent had skipped school between the ages of 10 and 16 or whether they had been suspended or excluded from school (16-24 year olds only)

Self-completion module: Domestic violence, sexual victimisation and stalking module

The module was largely based on the module first developed in 2001 (and modified in 2004-05) to measure prevalence of domestic violence, sexual victimisation, and stalking.

The 2008-09 questions on inter-personal violence covered the following topics:

experience of domestic violence by either a partner or by an other family member since age 16 and in the last 12 months;

- experience of less serious sexual assault since age 16 and in the last 12 months;
- experience of serious sexual assault since age 16 and in the last 12 months; and
- experience of stalking since age 16 and in the last 12 months

Those who had been subject to partner violence (defined as any experience of domestic violence, sexual assault or stalking by a current or ex-partner) were asked some supplementary questions about the (last) incident. These questions covered:

- frequency of incidents;
- whether the police came to know or not;
- whether drugs or alcohol were involved;

- whether respondent suffered any injuries or sought any medical help; and
- whether respondent had to take any time off work

3.2 Life event calendar

Due to the change in the reference period that was introduced to the 2001 survey, the Home Office wished to take the opportunity to try and improve the accuracy with which respondents recalled events.

Whenever respondents are asked to think about events that have happened during a particular time period there is likely to be a certain level of response error. Errors most salient to the BCS include:

- respondents forgetting about more trivial incidents;
- respondent not being sure about incidents that did not involve them personally, such as vehicle-related crimes; and
- respondents remembering an incident but placing it wrongly in time, either by remembering an incident as happening earlier than it actually did (i.e. counting something outside the 12 month reference period that actually happened within the last 12 months), or later than it actually did (i.e. counting something inside the 12 month reference period that actually happened longer ago).

It was decided to try and address issues of recall by using a life event calendar on the survey. Such a calendar works by trying to place events or incidents in some sort of meaningful context for each respondent by building up a picture of events that have happened to them in the last year (e.g. birthdays, anniversaries, holidays, starting a new job, etc.) which are memorable to the respondent. Additionally, national dates such as Christmas, Easter, or Bank Holidays can be put on the calendar as common reference points. Further details about the thinking behind the life event calendar and its development can be found in the 2001 BCS Technical Report.
In relation to the BCS, the life event calendar can be used for two purposes:

- First, to provide respondents with a visual aid throughout the screener questions; and
- Second, to help respondents who were having difficulty recalling in which particular month an incident may have occurred.

Appendix E in Volume 2 has an example of the calendar used on the 2008-09 survey.

3.3 Questionnaire development

Since most of the questions on the 2008-9 BCS had been included in previous years of the survey, it was decided to concentrate piloting efforts primarily on new questions. In 2008-09 a mixture of methods were used to pilot the new questions as outlined below.

A first stage of cognitive testing was carried out by researchers. Cognitive testing uses probing techniques to try and understand the thought processes that a respondent uses in answering a survey question. It is designed to see whether the respondent understands the question, or specific words and phrases contained within the question; what sort of information the respondent needs to retrieve in order to answer the question; and what decision processes the respondent uses in coming to an answer.

This first stage of testing was carried out in central locations to maximise the efficiency of the process. Interviewers carried out in-street recruitment according to broad quotas in town centres, while researchers carried out the cognitive interviewing using paper questionnaires. With several researchers able to carry out interviews at the same time, this method allowed about 20 cognitive interviews to be carried out in a single day. All researchers worked to the same probe guide and interviews were recorded. A short report was produced from the first round of piloting which made recommendations about the tested questions and changes for the next round of piloting

Following the first stage of testing the questions were revised and a second round of cognitive testing was carried out. Although the aim of this stage was broadly the same as the first round, it was done using accompanied piloting. This is where the pilot interview is programmed into CAPI and the interview is conducted in-house by an interviewer, accompanied by a researcher who carries out the probing of the respondent.

With accompanied piloting the interviewer fulfils his or her conventional role, while the researcher observes the interview at first hand. This enables the observer to identify and note areas of doubt, misunderstanding or incomprehension on the part of the respondent during the interview. By observing the interview as it takes place, the researcher is able to witness not only the verbal communication that

takes place, but also any non-verbal reactions of the respondent. At the end of the interview or immediately following questions or sections of particular interest, the researcher probes on specific aspects of the interview.

The main question areas covered in the initial 2008-09 piloting were as follows:

- Perception about whether crime in the local area is higher or lower than the country as a whole;
- Perceptions about whether the level of certain types of crime have gone up or down in the last few years – both in the country as a whole and in the local area;
- Trust in crime statistics and information;
- Perceptions about likelihood of being a victim of crime;
- Personal experiences of different types of anti-social behaviour; and
- Attitudes about types of sentences that should be give to particular offenders under particular circumstances.

Following the completion of the piloting it was decided that further work was needed on the anti-social behaviour questions before any were put on the survey. As a result of this a second round of piloting was carried out in August and September 2008, with the resulting questions on anti-social behaviour being placed on the survey in October 2008. This was done using only a central location methodology as described above.

The full pilot reports of the 2008-09 survey can be found in Appendix J of Volume 2

3.4 Final questionnaire and revisions

Following feedback from the piloting and detailed analysis of the timings, further modifications were made to the questionnaire to bring the length of the questionnaire in line with previous surveys.

A paper questionnaire was produced from the Quanquest software that detailed the questions and their routing instructions as specified in the Quanquest code. This was translated into a Word document to provide a more user-friendly questionnaire.

Once all changes had been approved the questionnaire was thoroughly checked by BMRB researchers and Home Office research staff.

3.5 Allocation of sample within CAPI

In the 2008-09 survey the unique serial number entered by interviewers into the computer had to be capable of the following:

- to randomly allocate respondents to one of four part-sample modules (and within each module to further allocate respondents into a sub-sample)
- to distinguish between a core sample respondent and a young adult boost respondent

The unique serial number pre-printed on all core Address Contact Sheets and transferred by interviewers into the CAPI consisted of 6 digits. The first 4 digits (1000-9999) represented the area or sample point number and the last 2 digits (01-99) represented the address number. Additionally, the interviewers had to enter a screen number which denoted whether the interview was a core sample interview (screen number 0) or a young adult boost sample interview (screen number 9). Various checks were incorporated into the questionnaire to minimise the chances of errors being made by interviewers when entering the serial and screen numbers.

Allocation of respondents to each part-sample module was done on the basis of the address number, using an algorithm based on division of the address number by 8 as shown in Table 3.3. The allocation to a particular Module was done automatically at the start of the interview by the CAPI programme when the interviewer entered the serial number.

Since each sample point contained 32 addresses the above algorithm ensured that within each sample point a similar number of issued addresses were randomly allocated to each follow-up module.

Table 3.3 Allocation of interviews to modules

Address Numbers	Remainder divided by 8	Allocated module
01/09/17/25	1	A1
02/10/18/26	2	B1
03/11/19/27	3	C1
04/12/20/28	4	D1
05/13/21/29	5	A2
06/14/22/30	6	B2
07/15/23/31	7	C2
08/16/24/32	8	D2

In the event this method of randomly allocating respondents to different sub-modules ensures that the process is strictly controlled and results in an even allocation across the year. Table 3.4 shows the actual proportion of respondents allocated in 2008-09 to the different sub-modules against the target.

Table 3.4 Achieved allocation of respondents to modules against target, 2008-09 BCS

Module	Target allocation	Achieved allocation
A1	12.5%	12.9%
B1	12.5%	12.4%
C1	12.5%	12.7%
D1	12.5%	12.4%
A2	12.5%	12.5%
B2	12.5%	12.4%
C2	12.5%	12.6%
D2	12.5%	12.1%

3.6 Features of Quancept used in the BCS

3.6.1 Don't Know and Refusal Keys

In the Quancept script, Don't Know and Refused are special codes. Rather than entering numeric codes for these options, interviewers enter DK and REF respectively. As with previous years of the survey, almost every question had a Don't Know and Refused option that the interviewer could use. However, at most questions they were hidden, and so did not appear on the screen as an explicit option to try and ensure that interviewers did not over use these options. In the paper questionnaire in Appendix D of Volume 2, Don't Know and Refused are only shown if they actually appeared as an option on the screen.

3.6.2 Different question types

The vast majority of questions were pre-coded, meaning that a list of answer categories appears on the laptop screen and the interviewers enter the appropriate numeric code. Questions were either single response (i.e. only one code can be entered) or multi-response (i.e. more than one code can be entered). In the latter case, entered answers are separated by spaces. In multi-response questions it is possible to allow a combination of either multi-response or single response options at the same question. In the case of numeric questions, where an actual value is required, the interviewer simply types in the appropriate number.

Many pre-coded questions had an 'Other –specify' option, and if this option was selected by a respondent, the interviewer would simply type in the answer given. In all these questions, the answers were later examined by coders to see if the other answer could be back coded into one of the original pre-coded options (see section 5.2).

In Quancept the standard keys that interviewers use to move forwards and backwards through the questionnaire are *Ctrl* + *Enter* and *Ctrl* + *Backspace* respectively. It was felt that these keystroke combinations might be awkward for respondents when completing the self-completion part of the questionnaire. Consequently, a modified version of the software was used for the BCS which allowed respondents to use single keystrokes (F2 for forward, F1 for backward) to complete the self-completion.

3.6.3 Logic and consistency checks

A number of logic and consistency checks were built into the Quancept script. These were of two types: hard checks and soft checks. Hard checks are ones where the interviewer is unable to move to the next question until the discrepancy or inconsistency has been resolved. Soft checks are ones where the interviewer is asked to confirm that the information entered at a specific question is correct but is able to pass on to the next question. An example of a hard check is to make sure that every household has someone coded as the Household Reference Person. Until the interviewer codes someone in the household as the HRP they cannot move forward. An example of a soft check is to check the value of stolen items that appear low (for example, a vehicle). In this case the interviewer will be prompted to check with the respondent whether the value entered is correct or not, and has the option either to change the original answer or leave it as it is.

A full list of all the logic and consistency checks in the 2008-09 script can be found in Appendix I of Volume 2.

3.6.4 Date calculation and text substitution

Text substitution and date calculations were used extensively throughout the questionnaire.

Text substitution is where alternative text is used in a question depending upon the series of answers given by a respondent to previous questions. In the paper

questionnaire, square brackets are used to denote the existence of text substitution in a question.

Two main types of **date calculations** were used in the questionnaire:

- First, the precise reference period was calculated based on the date of interview and this was then substituted into the text of many questions. In all cases it was decided to calculate the date to the first of the month 12 months previous. Thus, for example, any interviews conducted in July 2008 would use the reference period *"since the first of July 2007".* This means that in practice the 12 month reference period consisted of the last 12 full calendar months, plus the current month (i.e. slightly more than 12 months). This fact is taken into account when the victimisation rates are estimated.
- Second, some code frames consisted of particular time periods (e.g. months or quarters) which changed on a month by month basis. With these type of questions the Quancept script was programmed to allow the whole reference period covered by the questionnaire (that is, from April 2007 to June 2009 – a total of 27 months). However, interviewers only saw on screen the sub-set of codes that were appropriate to the correct reference period (i.e. 13 calendar months) for the month they were interviewing in.

Since some questions use these constantly rotating code frames based upon date of interview it is impossible to label these variables in any meaningful way in the SPSS data file. A list of these questions and the appropriate code frames that actually appeared on screen depending upon the month of interview can be found in Appendix F of Volume 2.

4. Fieldwork

This chapter documents all aspects of the data collection process, focusing on fieldwork procedures, the management of fieldwork across the survey year, quality control procedures and response rates achieved across the different samples.

4.1 Briefing of interviewers

All interviewers working on the 2008-09 survey attended one of two types of briefings during the year.

Interviewers who had not previously carried out a BCS assignment were required to attend a full day face-to-face briefing before they could work on the survey. These briefings were held throughout 2008-09 as required. In total, 4 full briefings were held and 59 interviewers were briefed during the year.

For the first time in 2008-09 new interviewers were also asked to attend a half-day briefing about a month or so after they had finished their first BCS assignment. This was intended to be a chance for new interviewers to seek clarification about any of the field procedures they were unsure about; to share experiences and good practice amongst each other; and generally to provide new interviewers with a supportive environment for developing their skills. A total of 27 new interviewers attended these two-day BCS briefings.

All briefings were attended by BMRB researchers and field staff working on the survey, and some were also attended by Home Office staff.

Each briefing covered the following topics:

- some background to the BCS and how the information is used by the Home Office;
- details about sampling and fieldwork procedures and advice on how to obtain high response rates;
- an introduction to the Address Contact Sheet and how to carry out the selection procedures;
- an explanation of the screening procedures used on the young adult boost sample; and
- an introduction to the BCS questionnaire. The primary purpose of this part of the briefing was not to cover every single question in the

survey but to cover the broad structure of the questionnaire and provide key pointers on how to collect accurate and comprehensive information from the screener questions and the Victimisation Module. Additionally, this part of the briefing looked at how interviewers should approach the self-completion sections of the questionnaire.

In addition to this face-to-face briefing, before starting their BCS assignment interviewers were also required to read the written Interviewer Instructions and carry out at least two practice interviews based on particular scenarios provided in the Instructions.

It is normal practice on BCS to brief experienced BCS interviewers at least once a year, holding a half-day 'refresher' briefing. The last set of refresher briefings were held in July and August 2008. These were timed to cover the launch of the 10 to 15 year old field trial and the majority of the refresher briefings covered this aspect of the survey. The topics covered in each briefing included:

- the rationale for the new component of the survey and a brief description of the development work;
- an explanation of the screening and selection procedures for 10 to 15 year olds;
- an introduction to the field documents (leaflets, parental information cards, etc.) that were being used;
- a discussion of the consent procedures to be used on the survey; and
- going through the questionnaire, including the use of CASI and audi-CASI.

A total of 28 refresher briefings were held in 2008-09 and 349 interviewers attended.

In addition to the above briefings, 24 experienced BCS interviewers attended two review sessions in January 2008 prior to the start of the 2008-9 survey. These were intended to enable interviewer input into the survey development cycle.

4.2 Supervision and quality control

Several methods were used to ensure the quality and validity of the data collection operation.

A proportion of interviewers, particularly those less experienced, were accompanied in the field by supervisors. This included interviewers who were new to random probability sample surveys, who were accompanied on the first day of their BCS assignment by a supervisor. A total of 179 interviewers working on a BCS assignment were accompanied by a supervisor during 2008-09.

A proportion of addresses were re-contacted, to verify that the interviewer had contacted someone at the address and whether or not an interview had resulted. In total, 5,318 addresses were re-contacted (12% of addresses where an interview was achieved) to verify that the interviewer had contacted someone and whether or not an interview had resulted. Addresses for back checking were selected on the basis of BMRB's overall field quality procedures, whereby all interviewers have their work checked at least twice a year. A total of 405 separate BCS assignments were back checked during the year.

Validation was carried out mainly by telephone. Where no telephone number was available a short postal questionnaire was sent to the address to collect the same information.

4.3 Fieldwork dates and fieldwork management

During 2008-09 the survey was managed on a monthly basis. As mentioned in Section 2.8, it was decided to frontload the sample on a quarterly basis rather than issuing an even number of assignments each month. Thus, approximately 210 assignments were issued at the start of the first month of each quarter, 180 assignments were issued at the start of the second month, and 140 assignments were issued at the start of the third month. The aim of this approach was to try and get a balance between on the one hand reducing the proportion of interviews where sample was issued in one quarter, but the interview was conducted in the following quarter; but on the other hand maintaining a relatively even flow of interviews throughout the year.

Interviewers were encouraged to start their assignment as early as possible in the month to minimise the time between respondents receiving the advance letter and an interviewer calling. Interviewers had until the end of the calendar month to cover all the addresses in their assignment and report final outcomes.

Once all the issued addresses had been covered the Address Contact Sheets were returned to Head Office and a decision was taken about re-issuing non-productive outcomes. As a general rule all non-productive addresses (non-contacts, refusals,

broken appointments, etc.) were re-issued unless there was a specific reason not to or it was considered not to be cost effective (e.g. only one or two addresses in an assignment). Once the first re-issue period had been completed a decision was taken about whether to re-issue addresses that were still non-productive for a second or third time.

In total across the year, 11,728 addresses were re-issued on the core sample, which represented 18% of the original sample. A further 5% of addresses were issued for a second time, and just over 1% of addresses were issued for a third time. Of all the addresses re-issued, 21% were converted into productive outcomes at some stage. Addresses where the original outcome had been a refusal were less likely to be converted than those that had been a non-contact or some other unproductive outcome (e.g. broken appointment, away, etc.). Overall, the impact of the re-issue process was to increase the response rate on the core sample from 71.2% after the initial issue to the final response rate of 75.8% (see section 4.7.1).

Because of this time lag between addresses being issued and interviews being achieved, the time period covered by the 2008-09 issued sample and the time period covered by the 2008-09 achieved sample are different. Although sample for the survey was issued between April 2008 and March 2009, the actual fieldwork dates over which interviews were achieved ran from April 2008 to June 2009. As already explained this means that for each quarter of the year not all interviews were actually achieved in the quarter of issue. In fact, approximately 85% of interviews were achieved in the same quarter as they were issued, with 15% of interviews falling into the next quarter. Not surprisingly, most of the interviews that fell into the following quarter were those issued in the last month of a quarter (i.e. June, September, December and March).

One significant change in the 2008-09 survey procedures was that the questionnaire used in the field was aligned to the survey year, rather than being aligned to the sample issue. In previous years, the exact questionnaire used for any individual interview depended upon the period in which the sample was issued. This meant that in the first quarter of the survey year (April-June) there were two questionnaires being used in the field at the same time – the 'old' questionnaire was used in interviews from sample issued in the last quarter of the previous year which was still in the field (i.e. January – March), while the 'new' questionnaire was used in interviews from sample issued from April onwards.

In 2008-9 the switch of questionnaire took place on 1st April, meaning that all interviews carried out from the 1st April were done with the new 2008-9 questionnaire, irrespective of the time period in which the sample was issued. The advantage of this is that the questionnaire is now in line with the way in which the data are reported.

Further details of how the quarterly data outputs relate to the issued and achieved sample can be found in section 6.2.

4.4 Fieldwork procedures and documents

Due to the new survey design there was a slight variation in the number of addresses per assignment. All assignments in the clustered part of the sample consisted of 32 addresses. As part of the process to batch up the unclustered part of the sample into manageable fieldwork assignments an attempt was made to make assignments of 32 addresses wherever possible. However, in practice this was not always possible and so assignment sizes did vary. In fact, 80% of assignments in 2008-09 consisted of 32 addresses, while 93% had between 30 and 34 addresses. The largest assignment consisted of 37 addresses, while the smallest assignment consisted of 7 addresses.

Screening for 16 to 24 year olds was required at 68.75% of addresses within each assignment. In a standard assignment of 32 addresses this equated to 22 out of the 32 addresses.

4.4.1 Advance letter and leaflet

All selected addresses were sent a letter from the Home Office in advance of an interviewer calling at the address. For addresses in Wales, a Welsh translation was provided on the reverse of the letter. This explained a little about the survey, why this particular address had been selected and telling the occupiers that an interviewer from BMRB would be calling in the next few weeks. The letter also provided a telephone number and an email address for people to contact to find out more about the survey, to make an appointment for an interviewer to call, or to opt out of the survey. Over the course of the whole year 1,383 people, representing around 2% of addresses issued, opted out of the survey by contacting either BMRB or the Home Office.

In addition to the advance letter sent out on the core sample there was a similar letters for the young adult boost sample. Since the boost sample was not pre-

identified, these letters were given to potential respondents by interviewers once they had identified an eligible individual. If the selected person was 16 or 17 years old, the interviewer had to obtain parental permission before carrying out the interview.

Included with the advance letter was a coloured leaflet from the Home Office which provided people with some more details about the survey, including findings from the previous survey. The leaflet also tried to answer some questions that potential respondents might have such as issues relating to confidentiality.

Examples of the advance letters used on the core and young adult boost samples can be found in Appendix A and a copy of the leaflet can be found in Appendix B of Volume 2.

4.4.2 Address Contact Sheets (ACS)

Interviewers were issued with an Address Contact Sheet (ACS) for each sampled address. This was the key document that allowed interviewers to carry out the different tasks that make up the BCS assignment and to record and manage their own calling strategies for each address. In total there were three different types of Address Contact Sheet used on the BCS in 2008-09, all of which were colour coded to avoid confusion[24]. These were as follows:

- **Yellow Address Contact Sheet** – The yellow ACS indicated a pre-identified core sample address where additional screening for 16 to 24 year olds was required. In a standard assignment 22 out of 32 addresses required screening for this age group. All core sample Contact Sheets had the full address printed on the front page, as well as details of the serial number for that address.
- **White Address Contact Sheet** – The white ACS was identical to the yellow ACS, except that it indicated that no screening was needed. In a standard assignment 10 out of 32 addresses did not require any additional screening to be carried out.
- **Pink Address Contact Sheet** – The pink ACS was created by interviewers once they had identified a potentially eligible 16 to 24 year old at an address. The pink ACS was blank and interviewers had to fill in the address and serial number details themselves.

The Address Contact Sheets are crucial documents to the management of the BCS, both at the level of the individual assignment and for the management of the survey overall. The primary functions of the Address Contact Sheet are as follows:

- To allow interviewers to record the days and times that they called at an address. Additionally, there was space for interviewers to record details or comments that may be useful should the address be re-issued to another interviewer.
- To provide a record of all the outcomes achieved at the address. The ACS allowed the outcome at each re-issue stage to be recorded separately, so that there was a complete record of outcomes for each address. Although these outcomes were recorded by interviewers on the paper ACS, they were also reported electronically to Head Office on a daily basis so that overall progress could be monitored and managed.
- To allow the interviewer to carry out any selection procedures where required. Where an interviewer found more than one dwelling unit at an address they had to carry out a procedure to randomly select one dwelling unit for interview. Similarly, where more than one eligible adult was found at an address, interviewers had to randomly select one person for interview. The ACS allowed interviewers to carry out these procedures and record the details for future reference or checking.
- To allow the interviewer to carry out the screening process for the young adult boost samples. The ACS had step by step instructions for interviewers about how to carry out these procedures and also allowed them to record the screening outcomes for every address. As with the final response outcomes, all screening outcomes were reported back to Head Office on a daily basis.
- To collect some basic information about the area and the selected address (e.g. type of property, condition of the property, whether it is in a Neighbourhood Watch area, etc.). This information was collected by interviewers based on their own observations and, as such, was highly subjective. Nevertheless, such information does tend to be highly associated with non-response and is also used by the Home Office as an area based disorder measure. This observational data was recorded by interviewers on the back page of

[24] During the period of the 10 to 15 year old field trial from August to December 2008 an additional green ASC was used in addition to those mentioned above.

the ACS. Interviewers returned this information by completing a short CAPI survey for each address as part of their end of day administration procedures. The data was added to the main data files at a later stage.

Examples of both the core sample Address Contact Sheets and the young adult Boost Sample ACS can be found in Appendix C of Volume 2.

4.5 Presence of others during the interview

During the interviewer briefing sessions emphasis was given about trying, wherever possible, to conduct the interview in private. This generally helps to make the interview run more smoothly, but it also might encourage some respondents to mention certain incidents or events, which they might be embarrassed or worried of talking about in front of others.

Privacy during the interview is a particular concern for respondents who have experienced domestic violence or sexual assault. Where respondents had experienced such incidents in the last 12 months, interviewers had the option of suspending the Victimisation Module (simply by skipping over it) if they felt it was inappropriate to continue with the questions because of the presence of others in the room. This procedure meant that the interviewer could complete the rest of the questionnaire, rather than having to abandon the whole interview. During 2008-09, a total of 18 Victimisation Modules were suspended by interviewers for this reason.

Although it is preferable for the interview to be conducted with no-one else present, there are also some situations where the presence of others might improve the accuracy of the information collected. This is particularly the case in incidents of vehicle crime or property crime, where the respondent may not have been personally present, reported the incident to the police, etc. Additionally, in many cases it is simply not be possible for the interview to be conducted without others present in the room.

4.5.1 Presence of others during the screener interview

The key point at which the presence of another person could affect the estimate of victimisation is during the initial set of screener questions. Therefore, at the end of these questions, the interviewer recorded whether anyone else was present. Table 4.1 shows whether or not anyone else was present in the room during the initial

screener questionnaire, when respondents are giving details about their experiences of crime.

Table 4.1 Presence of others during the screener questionnaire by type of sample, 2008-09 BCS

	Core sample	Young adult boost	Total
	%	%	%
No-one present	70	62	70
Children under 16	8	7	8
Spouse/partner	18	3	17
Other adult	8	32	9
Bases: All respondents	*45,519*	*1,704*	*47,223*

Percentages add to more than 100% because respondents could give more than one answer

In 2008-09, seven out of ten (70%) respondents were interviewed with no-one else other than the interviewer being present. Where someone else was present, the people most commonly there were the respondent's spouse or partner (17%) or their children (8%). Respondents interviewed on the young adult boost sample were more likely to have been interviewed with some other adult present (32%), which in many cases was probably a parent.

Male and female respondents on the core sample were just as likely to have done the interview with no-one else being present (71% of men and 69% of women). Asian respondents, and in particular Asian women, were significantly less likely than respondents from other ethnic groups to have done the screener questionnaire with no-one else present. Thus, 52% of Asian respondents completed the screener with no-one else present, while only 42% of female Asian respondents did so. Asian respondents were more likely than other respondents to have a spouse or partner present (24%), children present (18%), or another adult present (16%).

Respondents aged 16 to 24 were less likely than average (60%) to have done the screener questionnaire with no-one else present, with more than a quarter (27%) having done the interview with some other adult present.

However, any patterns by age or ethnicity will also be influenced by household composition. For example, young adult boost interviews are never carried out in single person households since in such situations the core sample interview would

always take priority over a boost interview. Table 4.2 shows the information from the previous table with single person households identified separately.

Not surprisingly this shows that the vast majority of respondents interviewed in single person households were interviewed with no-one else present. The majority of respondents living in households with more than one person were also interviewed with no-one else present, although around four in ten respondents were interviewed with someone else present.

Table 4.2 Presence of others during the screener questionnaire by household size and sample type, 2008-09 BCS

	Core sample		Young adult boost	
	Single person	More than one person	Single person	More than one person
	%	%	%	%
No-one present	93	61	-	62
Children under 16	1	11	-	7
Spouse/partner	*	24	-	3
Other adult	6	8	-	32
Bases: All respondents	*12,546*	*32,973*	-	*1,704*

Percentages add to more than 100% because respondents could give more than one answer

4.5.2 Presence of others during the self-completion and assistance given

For those who did the self-completion, the presence of others during this part of the interview was also recorded. Table 4.3 shows that almost three-quarters of respondents (73%) who did the self-completion did so when no-one else was present. Respondents in the young adult boost sample were less likely than those in the core sample to have done the self-completion with no-one else present (65% and 73% respectively). Less than one in ten respondents (8%) who completed the self-completion did so when children were present in the room. As with the screener questionnaire, those who lived on their own were more likely than those who lived with other people to do the self-completion when no-one else was present (93% and 70% respectively).

Table 4.3 Whether anyone else was present or not during the self-completion by sample type, 2008-09 BCS

	Core sample	Young adult boost	Total
	%	%	%
No-one else	73	65	73
Spouse/partner	13	4	12
Child(ren) under 16	9	6	8
Other household member	6	27	7
Someone else	3	3	3
Bases: All respondents who did the self-completion	*28,070*	*1,691*	*29,761*

Percentages add up to more than 100% since more than one answer could be coded at this question

Where anyone else was present in the room during the self-completion section, interviewers were briefed to try and 'arrange' the room whenever possible so that the respondent had a degree of privacy to do the self-completion. Thus, for example, interviewers might try to ensure that the respondent was sitting with the screen facing a wall or was in such a position that no-one else in the room could actually read the computer screen.

Where anyone else was present, the extent to which they were involved in answering questions was noted, as was whether the interviewer was involved in the self-completion sections. In cases where someone else was present during the self-completion, it was not common for others to become involved in answering the questions. In 90% of interviews where someone else was present, the respondent completed the questions entirely on their own. In 5% of interviews someone else actually looked at or read the self-completion with the respondent, while in another 5% of interviews the respondent discussed the self-completion with other people. Among young adult boost respondents, 95% completed the self-completion entirely on their own.

Respondents aged 45-59 (12%), Asian respondents (19%), and Black respondents (13%) were more likely than average to have had someone else look at or read the self-completion or to have discussed the self-completion with someone else.

Table 4.4 shows the amount of assistance that interviewers gave to respondents on the self-completion section. The vast majority of respondents who answered the questions (84%) used the laptop on their own without any help from the

interviewer. About one in six respondents (16%) required some form of assistance with the self-completion. One in eight respondents (12%) asked the interviewer to enter their answers for them, while a further 4% of respondents entered their own answers but asked the interviewer for some help.

Respondents aged 45-59 (24%), Asian respondents (31%) and Black respondents (26%) were the most likely to have sought some help with the self-completion. This was primarily because these respondents were more likely to have asked the interviewer to complete the self-completion for them, rather than using the computer themselves.

Table 4.4 Amount of assistance given by interviewers with the self-completion questionnaire by sample type, 2008-09 BCS

	Core sample	Young adult boost	Total
	%	%	%
All done by respondent	83	97	84
Help given with one or two questions	3	1	2
Help given with more than one or two questions, but less than half	1	<0.5	1
Help given with more than half, but not all	<0.5	0	<0.5
Help given with all/nearly all	1	<0.5	1
Completed by interviewer	13	2	12
Base: All respondents who did the self-completion	*28,070*	*1,691*	*29,761*

4.6 Length of interview

4.6.1 Introduction

Timing stamps were placed throughout the questionnaire to allow timing of individual sections. Due to various technical issues associated with CAPI systems, it is not always possible to derive meaningful time stamps from every interview. For example, should an interviewer briefly go back into an interview at a later time

to check or amend a response the time stamps can be set to show an apparently very short (2-3 minutes) interview. Similarly, if an interviewer has to temporarily stop or suspend an interview for an hour or so and fails to come out of the questionnaire in the intervening period (simply powering down the computer instead) the time stamps can show an interview of 4-5 hours.

To eliminate the effects of these outlying cases on the calculation of average timings, it was decided to only include interviews where the total length of interview was in the range 15 minutes to 180 minutes[25]. On the 2008-09 survey, around 99% of interviews had a valid time within these ranges and are included in the analysis below[26].

Since the calculation of interview times is based on time stamps generated within the interview (rather than an interviewer estimate), they represent the elapsed time from the first question to the last question. As such they do **not** include the time during which the interviewer is introducing the survey, setting up the laptop, or packing up at the end of the interview.

4.6.2 Overall length of interview

The average (mean) core interview length during 2008-09 was 49 minutes. This is broadly the same length compared with all previous surveys since 2001. The main influence on interview length was whether or not the respondent had been a victim of crime or not. The average interview length for non-victims was 45 minutes compared to 63 minutes for victims of crime. The average length of the young adult boost interviews was 21 minutes[27].

The average length of interview by number of Victimisation Modules is shown in Table 4.5 below. The length of interview was strongly related to the number of Victimisation Modules completed by the respondent, with those completing 4 or more modules having an average interview length of 91 minutes.

[25] For youth interviews the acceptable valid range was set between 10 minutes and 120 minutes.
[26] Timings are based on the 2008-09 survey questionnaire which relates to all interviews conducted between 1st April 2008 and 31st March 2009.

[27] Young adult boost interviews are NOT included in the rest of the analysis since they would act to lower overall average times since the Young adult boost interview is a cut down version of the main questionnaire.

Table 4.5 Average time of interview by number of Victimisation Modules, 2008-09 BCS

Number of Victimisation Modules	Average time (minutes)
Non victims	**45**
All victims	**63**
1	58
2	71
3	81
4 or more	91
All respondents	**49**

Most interviews took between 30 and 60 minutes, with 65% of all respondents completing the survey in this time. Just over one in eight (13%) completed the survey in less than 30 minutes, while 4% of respondents took 90 minutes or more.

Respondents aged 60 or over had a shorter average interview time compared with those aged under 60 (45 minutes and 51 minutes respectively), probably reflecting the fact that those aged 60 or over did not do the self-completion part of the interview and also the fact that older people are less likely to be victims of crime.

Non-white respondents took longer on average to complete the interview than non-white respondents (52 minutes and 49 minutes respectively) This difference by respondent ethnicity was consistent for both victims and non-victims.

4.6.3 Average time for different sections of the interview.

The average times for each of the main modules of the questionnaire are shown in Table 4.6. It should be noted that this table shows the average times for each module across all respondents. Therefore, respondents who did not complete a particular module because of the sub-sampling are allocated a time of 0.

Table 4.6 Average time of each module of the questionnaire, 2008-09 BCS

Questionnaire module	Average time (minutes)
Household Box	3.2
Perceptions of crime module	7.2
Screener questions	3.0
Victimisation Modules	3.8
Mobile phone and second home crime	0.4
Attitudes to the Criminal Justice System	8.1
Module A-D[1]	4.8
Plastic card and identity fraud	2.6
Night Time Economy	0.3
Anti Social Behaviour	1.1
Demographics	7.0
Drugs and Drinking	2.8
Inter-Personal Violence	2.7
End of interview administration	2.1
Average time	**49**

[1] This is the average time across all the four Modules A-D. Every respondent completes one of these modules and the aim is to ensure that they are as similar as possible in length.

4.6.4 Length of Victimisation Modules

As mentioned above the average length of the survey is affected primarily by the number of Victimisation Modules completed by a respondent, with the average time for non-victims being 45 minutes compared to an average of 63 minutes for victims of crime.

Although the average time taken to complete the Victimisation Modules was only 3.8 minutes across all respondents, this time is skewed by the fact that three-quarters of respondents were non-victims and so did not complete any Modules. Therefore, a more meaningful analysis is to look at the time taken to complete the survey by the number of Victimisation Modules completed.

Table 4.7 shows that long Victimisation Modules (1-3) averaged about 10 minutes per module, while short Victimisation Modules (4-6) averaged 4-5 minutes per module. The time taken to complete the first Victim Module was greater than for modules two or three, suggesting that respondents speed up as they go through each subsequent module. This pattern has been evident in all previous surveys.

Table 4.7 Average time of each individual Victimisation Module, 2008-09 BCS

Victim Module number	Average time (minutes)
Victim Module 1	12.0
Victim Module 2	9.7
Victim Module 3	8.6
Victim Module 4	4.8
Victim Module 5	4.2
Victim Module 6	4.2

4.6.5 Length of part-sample modules

Because the BCS survey is highly filtered each respondent only complete a certain number of modules. Table 4.8 below shows the average time taken for each of the part-sample modules based only on those respondents who were asked the module.

Table 4.8 Average time of different survey modules, 2008-09 BCS

Part-sample module	Average time (minutes)
Module A	4.1
Module B	7.1
Module C	5.4
Module D	2.9
Night Time Economy (Module A respondents)	1.4
Anti Social Behaviour (Modules B/D respondents)	2.6
Drugs and drinking self-completion	4.5
Inter-personal violence self-completion	4.5

The overall timings of the self-completion are masked by the fact that all those who are not eligible for the self-completion (i.e. those aged 60 years or over) and those who refuse the self-completion have an average time of zero. Considering only those respondents who actually did the self-completion sections, the average time of the Drugs and Drinking module was 4.5 minutes, while the average time of the Inter-Personal Violence module was also 4.5 minutes.

About two-thirds (66%) of respondents who completed the Drugs and drinking module did it in under 5 minutes, while 2% of respondents took more than 10 minutes to complete it. The variation in times for the Inter-Personal Violence

module was similar, with 68% of those who completed it taking less than 5 minutes, and 6% taking more than 10 minutes.

4.7 Response rate and reasons for non-response: core sample

4.7.1 Overall core response rates

The full response rate analysis for the 2008-09 issued core sample is shown in Table 4.9.

Just less than one in ten issued addresses (9.6%) were identified as not being eligible residential addresses (known as deadwood). The most common type of deadwood was empty or vacant residential properties, which accounted for 6% of all issued addresses. The total proportion of addresses identified as deadwood in 2008-09 was similar to the levels identified on previous surveys.

Interviewers made contact with either the selected respondent or a responsible adult at 96% of eligible addresses, meaning a non-contact rate of 4%. There were two types of non-contact. The most common (3% of eligible addresses) was where no contact was made with anyone at the address despite repeated calls over a lengthy fieldwork period. It is possible that some of these addresses were actually empty or vacant and so should have been coded as deadwood. However, the impact that this would have on the overall response rate is minimal[28]. The remaining addresses classified as non-contact (0.6% of eligible addresses) were where contact had been made with someone at the address, but no contact was made with the person selected for interview.

At eligible addresses the most common reason for not getting an interview was due to a refusal, which accounted for 16% of all eligible addresses. The most common types of refusal were where the person selected for interview refused to take part in the survey (7%), and where no information about the household was given meaning that the person selection could not be carried out (4%). Proxy refusals (someone refusing on behalf of the selected respondent) and refusals directly to Head Office were less common.

A further 4% of eligible addresses were categorised as unproductive for other reasons including broken appointments, people who were ill or away during the

[28] If addresses where no contact was made with anyone at the household were apportioned between ineligible (vacant) and eligible in the same ratio as on the survey overall the impact would be to increase the response rate from 75.8% to 76.0%.

period of the survey and people who had inadequate English to complete the survey.

Combining all the different types of unproductive addresses gave a final response rate of 76% for the 2008-09 survey. The response rate was similar to the previous year. In fact, response to the BCS has been broadly stable since 2001. Reasons for non-response were also broadly similar to previous surveys.

During the whole of 2008-09 a booklet of six first class stamps was sent with the advance letter as a 'thank you' to people for taking part in the survey[29].

[29] See Grant C. et. al. (2006) 2004/5 British Crime Survey (England and Wales) Technical Report (London: BMRB) for details of experiment carried out on BCS to test the impact of stamps on overall response rates.

Table 4.9 Core sample response rate and non-response outcomes, 2008-09 BCS

	N	% of issued addresses	% of eligible addresses
Total addresses issued	**66,387**	***100.0***	
Addresses not traced/inaccessible	357	*0.5*	
Not built/ does not exist	97	*0.1*	
Derelict/ demolished	260	*0.4*	
Empty/vacant	3,778	*5.7*	
Second home/not main residence	823	*1.2*	
Business/ industrial	706	*1.1*	
Institution/communal establishment	121	*0.2*	
Other deadwood	215	*0.3*	
Total ineligible addresses	**6,357**	***9.6***	
Total eligible addresses	**60,030**	***90.4***	***100.0***
No contact with anyone in household	1,814	*2.7*	*3.0*
No contact with selected respondent	369	*0.6*	*0.6*
Total non contact	**2,183**	***3.3***	***3.6***
Office refusal	1,383	*2.1*	*2.3*
Refused all information	2,399	*3.6*	*4.0*
Personal refusal	4,246	*6.4*	*7.1*
Proxy refusal	733	*1.1*	*1.2*
Contact made, no specific appointment	714	*1.1*	*1.2*
Total refusal	**9,475**	***14.3***	***15.8***
Broken appointment	809	*1.2*	*1.3*
Temporarily ill/incapacitated	181	*0.3*	*0.3*
Physically or mentally unable	705	*1.1*	*1.2*
Away/ in hospital	366	*0.6*	*0.6*
Inadequate English	358	*0.5*	*0.6*
Other unsuccessful	434	*0.7*	*0.7*
Total other unsuccessful	**2,853**	***4.3***	***4.8***
Total unproductive	**14,511**	***21.9***	***24.2***
Achieved interviews	**45,519**	***68.6***	***75.8***

4.7.2 Core response rates by Government Office Region

Table 4.10 shows the different response rates and reasons for non-response achieved by Government Office Region in 2008-09. This shows that across most regions the response rate was broadly similar, ranging from 81% in Wales to 75.5% in Yorkshire and The Humber. Only in London was response to the survey noticeably lower, with a final response rate of 64%. The lower response rate achieved in London was due to a slightly higher than average refusal rate (20%),

but mainly due to a significantly higher non-contact rate (8%) compared with other regions. Lower response rates in London are a problem that is common to most major surveys, although the response achieved in 2008-09 was slightly higher compared with previous years (for example, 60% in 2005-06).

Table 4.10 Core sample response rates and non-response by Government Office Region, 2008-09 BCS

	Percentage of eligible addresses:			
	Non-contact	Refusal	Other unproductive	Achieved interviews
	%	%	%	%
North East	2.7	13.9	3.8	79.6
North West	3.7	15.1	4.7	76.5
Yorkshire & The Humber	4.6	15.6	4.3	75.5
East Midlands	4.0	15.0	4.4	76.6
West Midlands	2.8	15.9	4.7	76.6
East of England	2.4	16.7	4.7	76.2
London	8.0	19.9	7.7	64.4
South East	3.0	16.6	4.4	76.0
South West	2.5	15.0	4.6	77.9
Wales	2.6	12.9	3.7	80.8

4.7.3 Core response rate by Police Force Area

As outlined in section 2.5 the aim was to achieve around 1,000 interviews in each Police Force Area, with larger sample sizes in the most populous Areas. In order to achieve this sample size within each PFA the amount of sample issued was based on actual average deadwood rates and response rates over the period 2004-2007.

Table 4.11 below shows the actual number of interviews achieved in each PFA and the response rates. This shows that in a number of Areas the target number of exceeded 1,000, while in other areas the number of achieved interviews fell slightly short. This is explained simply by the fact that the actual eligibility and response rates achieved in certain Areas in 2008-09 were slightly different (either higher or lower) from the figures used to estimate the amount of sample to issue.

Table 4.11 Core sample achieved interviews and response rates by Police Force Area, 2008-09 BCS

	Number of interviews		
PFA	**Target**	**Achieved**	**Response rate**
	N	***N***	**%**
Avon & Somerset	1,000	925	78.1
Bedfordshire	1,000	970	74.6
Cambridgeshire	1,000	951	76.0
Cheshire	1,000	944	78.1
Cleveland	1,000	1,004	76.5
Cumbria	1,000	1,003	80.6
Derbyshire	1,000	1,002	78.3
Devon & Cornwall	1,000	996	76.0
Dorset	1,000	969	78.9
Durham	1,000	1,060	82.2
Dyfed Powys	1,000	1,018	84.4
Essex	1,000	965	77.3
Gloucestershire	1,000	1,012	76.9
Greater Manchester	1,425	1,413	73.9
Gwent	1,000	1,025	78.1
Hampshire	1,000	953	74.5
Hertfordshire	1,000	967	73.4
Humberside	1,000	1,013	75.3
Kent	1,000	974	77.9
Lancashire	1,000	880	73.5
Leicestershire	1,000	996	74.7
Lincolnshire	1,000	995	77.0
Merseyside	1,000	929	77.7
Metropolitan	3,900	3,894	64.4
Norfolk	1,000	918	74.3
North Wales	1,000	1,018	82.3
North Yorkshire	1,000	970	73.0
Northamptonshire	1,000	1,081	78.1
Northumbria	1,000	1,048	80.2
Nottinghamshire	1,000	1,094	75.1
South Wales	1,000	1,057	78.9
South Yorkshire	1,000	950	77.2
Staffordshire	1,000	990	75.5
Suffolk	1,000	987	82.0
Surrey	1,000	995	77.6
Sussex	1,000	983	75.6
Thames Valley	1,125	1,110	74.9
Warwickshire	1,000	970	78.5
West Mercia	1,000	998	76.8
West Midlands	1,375	1,322	75.8
West Yorkshire	1,175	1,190	76.3
Wiltshire	1,000	980	79.7

4.7.4 Core response rates by type of area and type of property

Since large administrative areas such as Government Office Regions contain a variety of different types of area it is useful to examine response to the survey

broken down by area type. Table 4.12 shows the response rates and reasons for non-response by different types of area. This shows that overall response rates tended to be lower in areas categorised as inner city compared with non inner city areas (70% and 76% respectively). This difference in response rate explains why the current BCS data includes a weight to correct for differential response rates between those areas defined as inner city and non-inner city (see section 7).

Similarly, the response rate in urban areas was lower compared with that achieved in rural areas (74% and 80% respectively). Response also varied significantly by ACORN Category, being highest in areas classified as 'Wealthy Achievers' (80%) and lowest in areas classified as 'Urban Prosperity' (67%). There was similar variation in response by Output Area Classification, ranging from 81% in 'Countryside' Areas to 66% in 'Multicultural' Areas[30].

Looking at the differences in response rates by types of area shows how most of the response differential is due to variation in the non-contact rate, while the refusal rate tends to be fairly consistent. Thus, while the refusal rate varied between 14% and 19% in the different types of areas shown in Table 4.12, the non-contact rate varied from 2% to 9%.

[30] For details of Output Area Classification see http://areaclassification.org.uk/

Table 4.12 Core sample response rates and non-response by types of area, 2008-09 BCS

	Percentage of eligible addresses:			
	Non-contact	Refusal	Other unproductive	Achieved interviews
	%	%	%	%
Inner city[1]	3.3	15.8	4.5	76.4
Non-inner city	6.9	15.8	7.3	70.0
Urban[2]	4.1	16.2	5.2	74.4
Rural	2.0	14.4	3.3	80.2
ACORN Category				
Wealthy Achievers	1.9	15.5	3.0	79.6
Urban Prosperity	8.3	17.8	6.9	67.0
Comfortably Off	3.0	15.8	4.2	76.9
Moderate Means	4.1	15.6	5.8	74.5
Hard Pressed	4.5	15.3	6.1	74.1
Output Area Classification				
Blue Collar Communities	2.8	15.0	4.5	77.7
City Living	8.9	18.9	6.8	65.3
Countryside	1.8	14.6	2.9	80.7
Prospering Suburbs	2.2	15.8	3.3	78.7
Constrained by Circumstances	4.6	15.4	6.2	73.8
Typical Traits	3.6	16.2	4.4	75.8
Multicultural	7.7	16.6	9.6	66.0

[1] Inner city is based on the BCS definition that has been used for many years. See section 7.2 for more details.
2 This is based on the ONS definition of urban-rural areas, where urban is classed as 'urban – sparse' and 'urban –less sparse' and all other areas are classed as rural

As mentioned in section 4.4.2, part of the BCS assignment involved the interviewer collecting some details about the area and about the specific issued address. Since this information was collected for all residential addresses, whether or not an interview was obtained, it is possible to analyse response rates according to this data. Of most interest is how response varies first, by the type of property and second, by the type of area.

Table 4.13 shows how response rates on the 2008-09 survey varied according to the type of property, ranging from 82% among detached and semi-detached houses to 67% among flats.

The differential response rates achieved at different types of flats shows the impact on response rates of two particular aspects of flats, namely whether or not a property has a communal entrance and whether or not the communal entrance is

lockable (e.g. controlled entry phone system). Not surprisingly, flats with communal entrances that had controlled entry systems were the most difficult type of property for interviewers to gain response. In 2008-09, the response rate at these types of property was 65% compared with 72% for flats with their own (non-communal) entrances. Flats with locked entrances had a higher than average level of non-contact (10%). This highlights the difficulty faced by interviewers in trying to gain an interview at an address where they are unable to make direct face-to-face contact with people, often having to communicate via intercom systems.

Table 4.13 Core sample response rates and non-response by types of property (recorded by interviewers), 2008-09 BCS

	Percentage of eligible addresses:			
	Non-contact	**Refusal**	**Other unproductive**	**Achieved interviews**
	%	**%**	**%**	**%**
Detached/semi-detached house	1.8	12.8	3.5	82.0
Terraced house	3.7	13.7	5.2	77.4
Maisonette	5.5	14.6	6.6	73.3
Flats with:				
Own entrance	6.8	14.4	6.5	72.2
Non-lockable communal entrance	6.1	14.7	6.1	73.1
Lockable communal entrance	10.4	15.4	8.8	65.4
All types of flat	***9.5***	***15.1***	***8.2***	***67.3***

Taken together these figures go some way to explain the lower than average response rate in London, although there are clearly other factors involved as well. For the country as a whole, flats represented only 13% of the issued eligible sample, while flats with locked communal entrances represented 10% of the issued eligible sample. However, in London these types of properties represented 37% and 29% of the issued eligible sample respectively. Therefore, one important reason for the lower response rate in London, and inner city areas in general, is the composition of the housing stock and the greater difficulties faced by interviewers in making contact.

Apart from the actual type of property, interviewers were also asked to record their general observations about the area immediately surrounding each issued address with respect to a number of characteristics including how common rubbish or litter was, how common vandalism and graffiti was and how common run down houses

were. These might be considered to be an indication of the degree of physical disorder within a particular area.

Although these observations are clearly open to a high degree of subjectivity, Table 4.14 shows that there was some association between interviewer observations and the final response rate. Response rates were highest in areas that had a low level of physical disorder, while they were lower in the areas that had the highest levels of physical disorder.

Table 4.14 Core sample response rate by evidence of physical disorder (recorded by interviewer), 2008-09 BCS

	Very common	Fairly common	Not very common	Not at all common
How common is...	**%**	**%**	**%**	**%**
Litter or rubbish lying around	74	75	77	81
Vandalism, graffiti or damage to property	78	71	76	80
Homes in poor condition or run down	76	74	76	80

4.8 Response rate and reasons for non response: Young adult sample

Table 4.15 shows the screening and response outcomes for the Young adult boost sample. During 2008-09, interviewers were required to screen for 16 to 24 year olds at up to 22 out of their 32 core sampled addresses on a standard assignment. The way in which the screening was carried out in the field relative to the selection of the core sample respondent is described in section 2.9.

After accounting for deadwood addresses, 18% of addresses which were issued for screening were not actually screened because the outcome at the core address was a non-contact or a refusal by the selected respondent on the core sample[31]. Interviewers identified at least one 16-24 year old at 16% of addresses where screening was successfully carried out. However, at more than half of these addresses a 16-24 year old was selected as the core sample respondent meaning that a second interview with a 16-24 year old was not allowed. Thus, an eligible 16-24 year old was identified at around 8% of successfully screened addresses.

Among households where an eligible respondent was identified the response rate achieved was 66%. The levels of non-contact (6%) and refusal (13%) were broadly in line with the levels achieved on the core sample.

Although the response rate achieved on the young adult boost is broadly in line with the core sample this does not take into account households where it was not know whether a 16-24 year old lived because of non-response to the core sample. When this is taken into consideration the response rate for the young adult boost is 54%[32].

[31] Interviewers were instructed not to carry out screening at households where the core sample selected respondent refused either in person or by proxy. This was done to maximise the chances of a core sample interview being achieved at a reissue stage.

[32] This is calculated by applying the actual eligibility rate achieved for successfully screened addresses (7.6%) to the total non-deadwood addresses issued for screening (41,424) to give an estimate of 3,148 eligible households, from which 1,704 interviews were achieved which represents a response rate of 54%.

Table 4.15 Screening outcomes and response outcomes for the young adult boost sample, 2008-09 BCS

	N	% of issued eligible addresses	% of screened households	% of eligible households
Total addresses issued for screening	**45,642**	***100.0***		
Deadwood addresses	4,218			
Total non-deadwood households	**41,424**	***100.0***		
No screening attempted (eligibility unknown)	7,491	*18.1*		
Total households screened	**33,933**	***81.9***	***100.0***	
Core sample respondent aged 16-24	2,885	*7.0*	*8.5*	
No 16-24 year old at address	28,356	*68.5*	*83.6*	
All information refused	124	*0.3*	*0.4*	
Total ineligible addresses	**31,365**	***75.7***	***92.4***	
Total eligible households	**2,568**	***6.2***	***7.6***	***100.0***
No contact with selected respondent	146			*5.7*
Total non contact	**146**			***5.7***
Office refusal	5			*0.2*
Personal refusal	253			*9.9*
Proxy refusal	214			*8.3*
Contact made, no specific appointment	29			*1.1*
Total refusal	**501**			***19.5***
Broken appointment	56			*2.2*
Temporarily ill/incapacitated	4			*0.2*
Physically or mentally unable	39			*1.5*
Away/in hospital	39			*1.5*
Inadequate English	16			*0.6*
Other unsuccessful	63			*2.5*
Total other unsuccessful	**217**			***8.5***
Total unproductive	**864**			***33.6***
Achieved interviews	**1,704**			***66.4***

4.9 Response to the self-completion questionnaire

The last part of the questionnaire involved a self-completion questionnaire which was asked of all respondents aged 16-59[33]. In 2008-09 there were three self-completion modules on the survey:

- Use of illegal drugs

[33] See section 3.1.11 for discussion about the age range of the self-completion during the first 6 months of 2008-09.

- Drinking behaviour and truancy (asked only of 16-30 year olds); and
- Experience of domestic violence, sexual victimisation, and stalking.

Because of the sensitive nature of the questions these modules were asked using Computer Assisted Self Interviewing (CASI). Respondents were asked to complete the last part of the survey by entering the answers directly in to the laptop. Interviewers gave respondents a brief explanation of how to use the laptop, including taking them through some practice questions, before handing the laptop over. Interviewers were always present to help respondents if they needed any technical assistance. Once respondents had completed the modules, they handed the laptop back to the interviewer.

Although respondents were encouraged to use the computer themselves, if they did not want to use it for some reason, interviewers were allowed to administer the modules provided that no-one else was present in the room. Where the self-completion part of the survey was administered by the interviewer the domestic violence, sexual victimisation and stalking modules were not completed, since these questions were considered too sensitive to be read out by the interviewer.

Table 4.16 shows that 95% of eligible respondents in the core sample answered the self-completion questionnaire, with 83% of them entering their answers directly in to the laptop themselves and 12% asking the interviewer to enter their answers for them. As might be expected, response to the self-completion among respondents in the young adult boost sample was high, with 97% of respondents doing the self-completion themselves and a further 2% asking the interviewer to complete it for them. Less than 1% of respondents on the young adult boost refused to do the self-completion.

Table 4.16 Response to the self-completion questionnaire by type of sample, 2008-09

	Core sample	Young adult boost
	%	%
Refused	5	1
Completed by interviewer	12	2
Accepted by respondent	83	97
Overall self-completion response	***95***	***99***
Bases: (All 16-59 year olds)	*29,623*	*1,704*

Table 4.17 shows how response to the self-completion questionnaire varied according to the demographic characteristics of respondents. Since more than 95% of respondents on the young adult boost sample accepted the self-completion there were not any obvious differences by demographic characteristics and they have been excluded from the analysis.

There was no difference between men and women in terms of response to the self-completion. Older respondents were slightly more likely than younger respondents to refuse to complete the self-completion questions (6% of 45-59 year olds compared with 4% of 16-24 year olds). More noticeable, however, was the fact that older respondents were more likely than younger ones to ask the interviewer to enter their answers for them (17% of 45-59 year olds compared with 6% of 16-24 year olds).

Some of the most noticeable differences were between respondents from different ethnic groups. Only 4% of White respondents refused to do the self-completion compared with 13% of Black respondents and 16% of Asian respondents. Asian and Black respondents were more likely than White respondents to ask the interviewer to enter their answers for them (18% of Asian and 15% of Black respondents compared with 12% of White respondents).

There were also some differences by socio-economic classification, with respondents from routine and manual occupations being less likely than those from managerial and professional occupations to answer the self-completion (94% and 97% respectively). Respondents from routine and manual occupations were also more likely than those from managerial and professional occupations to ask the interviewer to enter their answers for them (17% and 7% respectively).

Table 4.17 Response to the self-completion questionnaire by socio-demographic characteristics of respondents (core sample), 2008-09 BCS

	Refused	Completed by interviewer	Accepted by respondent[1]	*Overall self-completion response*	*Bases:*
	%	%	%	%	***N***
Sex					
Male	5	12	83	***95***	*13,572*
Female	5	12	83	***95***	*16,051*
Age					
16-24	4	6	89	***96***	*3,796*
25-34	5	9	86	***95***	*6,288*
35-44	5	11	84	***95***	*8,519*
45-59	6	17	77	***94***	*11,020*
Ethnicity					
White	4	12	84	***96***	*26,719*
Mixed	10	10	80	***90***	*271*
Asian	16	18	66	***84***	*1,333*
Black	13	15	72	***87***	*861*
Other ethnic group	14	19	67	***86***	*430*
NS-SEC					
Managerial & professional	3	7	90	***97***	*9,954*
Intermediate occupations	5	12	83	***95***	*5,791*
Routine & manual	6	17	77	***93***	*10,102*
Unclassified	10	11	78	***89***	*2,638*
Total	**7**	**12**	**83**	***95***	*29,623*

[1] Respondent used the laptop on their own

Table 4.18 shows the reasons given by respondents either for refusing the self-completion questionnaire or for asking the interviewer to enter their answers for them. This shows that a dislike of computers was the most common reason why respondents asked the interviewer to enter their answers for them (mentioned by 43%), while running out of time was the most common reason given for respondents refusing to do it (mentioned by 48%). Language problems were a reason given by 17% of respondents who refused the self-completion and 7% of those who asked the interviewer to do it for them. Only 6% of respondents refused to do the self-completion questionnaire because of worries about confidentiality.

Table 4.18 Reasons for refusing self-completion questionnaire or for completion by interviewer (core sample), 2008-09 BCS

	Refused	Completed by interviewer	Total
	%	%	%
Don't like computers	13	43	34
Ran out of time	48	26	32
Language problems	17	7	10
Couldn't be bothered	7	9	9
Children in room	9	7	8
Disability	3	5	4
Eyesight problems	2	4	3
Could not read/write	3	3	3
Confidentiality worries	6	1	3
Other people in room	4	2	2
Objected to study	3	1	1
Other reasons	9	7	8
Bases:	*1,536*	*3,579*	*5,115*

Percentages add up to more than 100% since more than one answer could be coded at this question

Table 4.19 shows the reasons given by people who refused the self-completion or who had the interviewer enter their answers for them broken down by age and ethnic group. This shows that older respondents were more likely than younger respondents to cite a dislike of computers as a reason for not doing the self-completion or for asking the interviewer to enter their answers for them (mentioned by 47% of 45-59 year olds compared with 13% of 16-29 year olds). Respondents aged 45-59 were also slightly most likely to mention eyesight problems (5%) and having a disability (5%). Respondents aged 16-29 were more likely than older respondents to cite the fact that children were present in the room as a reason for refusal or asking the interview to enter their answers for them (17%) or language problems (16%).

Non-white respondents were more likely than white respondents to mention language problems as a reason for refusing the self-completion or asking the interviewer to enter their answers for them. This was given as a reason by 40% of Asian respondents and 23% of Black respondents.

Table 4.19 Reasons for refusing self-completion questionnaire or for completion by interviewer by age and ethnic group (core sample), 2008-09 BCS

	Age			Ethnic group				
	16-29	30-44	45-59	White	Mixed	Asian	Black	Other
	%	%	%	%	%	%	%	%
Ran out of time	39	35	28	33	26	27	33	19
Don't like computers	13	25	47	37	22	23	19	20
Children in room	17	13	2	8	11	7	15	6
Couldn't be bothered	10	8	8	9	11	6	10	6
Language problems	16	14	5	4	19	40	23	52
Disability	4	3	5	5	4	2	3	1
Eyesight problems	1	2	5	4	6	3	3	0
Could not read/write	4	3	3	3	4	5	3	3
Confidentiality worries	1	2	3	2	4	2	4	3
Other people in room	4	2	2	2	2	4	3	1
Objected to study	1	1	2	2	2	1	1	0
Other reasons	6	8	8	8	11	6	9	4
Bases:	*783*	*1,853*	*2,479*	*4,232*	*54*	*451*	*236*	*140*

Percentages add up to more than 100% since more than one answer could be coded at this question

4.10 Full and Partial Interviews

For an interview to be regarded as valid, respondents had to answer to the end of the screener questions. Any interview which was abandoned before the end of the screener questions was not regarded as useable and was not put on the data file.

An interview was counted as a full interview for the core sample if the respondent completed to the end of the demographics module. If the interview was stopped before the end of the demographics module it was coded as a partial interview. Full and partial interviews were recorded separately in the field figures. In 2008-09, 99.9% of interviews achieved on the core sample were full interviews and only 0.1% (n=43) were partial interviews.

On the young adult boost sample the respondent had to complete the survey to the end of the questionnaire (including the self-completion) for it to count as a full interview. If the interview was stopped anywhere before the end of the survey it was coded as a partial interview. In 2008-09, 0.8% of interviews achieved (n=13) on the young adult boost sample were partial interviews.

5. Data Processing

5.1 Offence coding

The BCS Offence Coding System was developed for the 1982 BCS to match as closely as possible the way incidents were classified by the police. This involves collecting detailed information about incidents reported by respondents in the Victimisation Modules. Once the data is returned to the office, all Victimisation Modules are reviewed by specially trained coders in order to determine whether what has been reported represents a crime or not and, if so, what offence code should be assigned to the crime.

Apart from some minor changes, the code frame and the instructions to coders have remained stable since 1982. The operational procedures used for assigning codes on the 2008-09 survey have been in place since 2001.

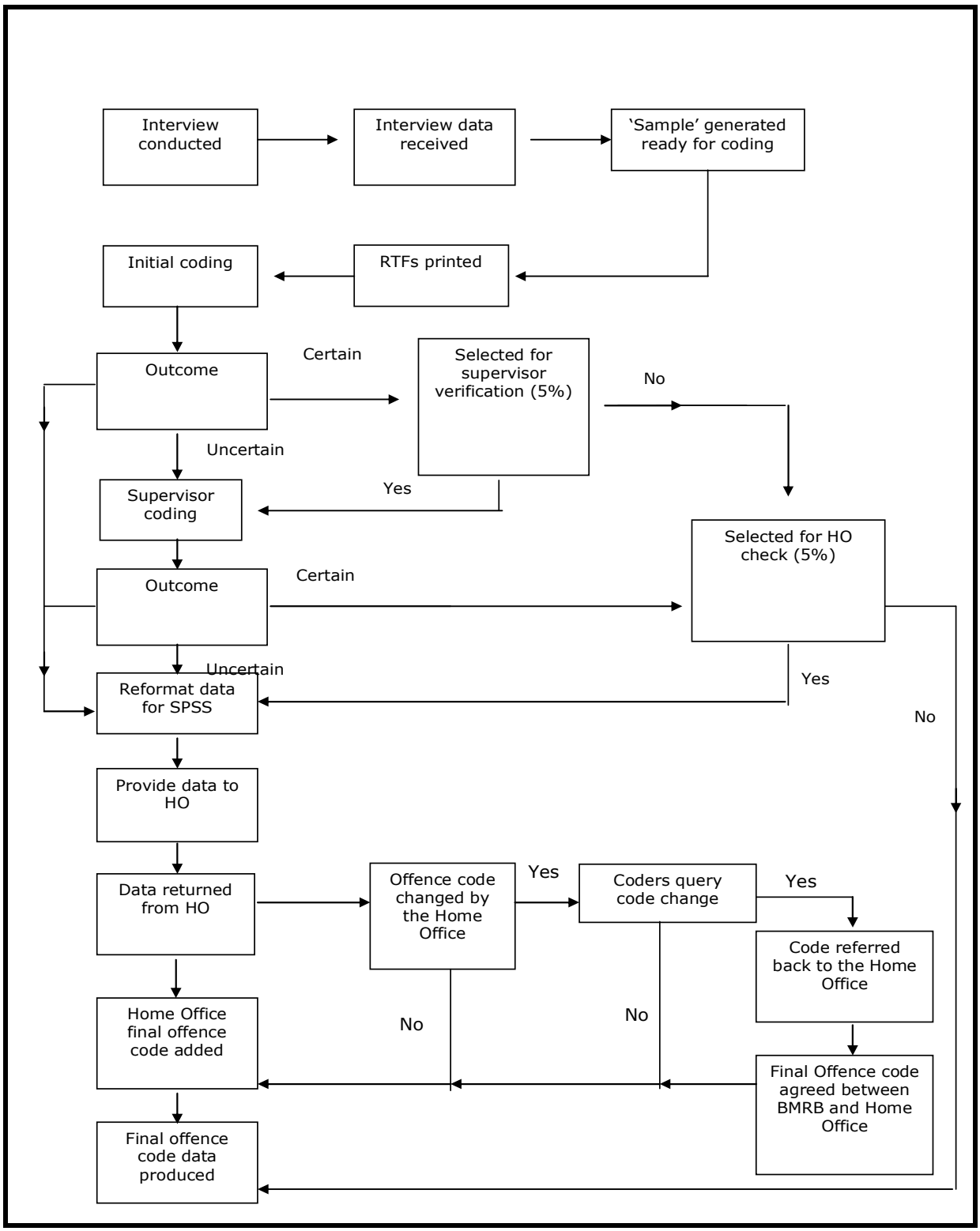
During 2008-09, the Offence Coding System consisted of the following steps:

1. For each Victimisation Module a paper-based summary was produced. This represented the key information from the CAPI questionnaire, including the verbatim description, which coders needed to enable them to assign an offence code.
2. In addition to these paper-based summaries the coders used a specially developed computer assisted questionnaire to help them arrive at a final offence code for each Victimisation Module. The questionnaire is written in a way that allows coders to arrive at a particular offence code by answering a series of questions using the information they have available on the paper-based summary. Additionally coders have a full reference manual (see Appendix G of Volume 2). It should be stressed however, that the computer assisted questionnaire is simply a tool to help coders arrive at a final offence classification. The final decision ultimately relies on the skill and judgement of the coder.
3. A supervisor checked any codes that the original coder was uncertain about. Additionally, 5% of codes where the coder was certain of the outcome were also checked as a further quality check. These are systematically selected from all cases that have been coded (i.e. every n*th* case) in a particular period.
4. Researchers at the Home Office checked:

- Any codes that BMRB were uncertain about
- Certain types of incident that were automatically referred (e.g. arson)
- A proportion of certain codes as part of a quality control check

The result of this process was that every Victimisation Module had a final offence code assigned to it. A flow chart of the Offence Coding System is shown in Figure 5.1 and the offence coding system is explained in more detail below.

Figure 5.1 British Crime Survey Offence Coding Flowchart



5.1.1 The automatically generated offence code

In 1996 a programme was introduced that automatically generated an offence code based on the answers to a number of pre-coded variables in the Victimisation Module. The programme that was used for the 2008-09 survey was the same as that used on the survey since 2001.

An automatic code cannot be generated in all cases, and in 2008-09 no automatically generated code was produced for just under three in ten (28%) Victimisation Modules. Reasons for this included missing codes or due to some inconsistency between the different variables used. Irrespective of the suggested automatic code, the coder has the responsibility of producing an offence code, and coders are instructed to see the generated code as only a starting point.

On the 2008-09 survey for Victimisation Modules where a code was automatically generated, it was the same as the final offence code in 76% of cases.

5.1.2 The coding task

Coders are provided with a paper-based print out of the key variables from each Victimisation Module and this information forms the basis of the coding. This document also provides coders with the offence code that had been generated by the automatic generation programme. An example of this paper form can be found in Appendix G in Volume 2.

Coders used a specially designed computer assisted questionnaire to carry out the coding. The questionnaire asked the coders certain questions about the nature of the offence. The questionnaire takes account of the major rules that apply to offence coding (such as the priority of codes), and by answering the questions on the basis of the information provided in the Victimisation Module, the coders reach an offence code.

All coders were personally briefed about the offence coding. The coders were also provided with a coding manual. This manual is similar to the one used in previous years of the BCS and contains all the rules that govern offence coding. The manual also provides flow-charts that show how the coding questionnaire works, so that coders can see how they reached a particular offence code on the basis of the answers that they input. A copy of this manual is provided in Appendix G in Volume 2.

When the coder reaches an offence code, they can say whether they are certain or uncertain that this is the right code. Any Victimisation Module which the coder is uncertain about is automatically referred to their supervisor for checking. In addition, the supervisor checks 5% of codes which coders were certain about.

5.1.3 Home Office coding

All cases where the coders are uncertain about the correct code to assign are automatically referred to the Home Office.

In addition to this, 5% of all codes which BMRB were certain about were selected to be sent to the Home Office for quality control checking. These were selected in a systematic fashion by selecting every n*th* case in each two-week time period.

A list of Victimisation Modules to be checked by researchers at the Home Office was sent every two weeks. This consisted of an Excel spreadsheet that contained the unique serial number of each Victim Module, the code that the coder (and supervisor if applicable) had given the incident, how certain the coder (and supervisor) was about the coding, and any notes that the coder added about why they were uncertain. An electronic version of the paper-based document providing the key variables from the Victimisation Module was also provided.

Researchers at the Home Office coded each of the Victimisation Modules sent to them (using the paper-based document) and returned the spreadsheet with their code and any comments added. These codes were than manually added into the coding file (so that the coders could see the changes that had been made).

Particular attention was paid to cases where the Home Office changed a code that BMRB coders had marked as "certain". If the BMRB coders disagreed with such a coding decision, this was fed back to both BMRB researchers and Home Office researchers for further consideration and discussion.

In total 1,386 cases were sent to the Home Office for checking as part of the 2008-09 survey, which represented about 9% of all Victimisation Modules.

Of the Victimisation Modules sent to the Home Office:

- 23 were code 01s which were automatically referred to Home Office. This covers cases of aggravated burglary, duplicate cases and cases where the Victimisation Module was invalid;

- 131 were code 02s (cases where the BMRB coder was not certain about the code) which were also automatically referred to the Home Office for checking.
- 557 were part of the quality control check.
- 675 were related Victimisation Modules. To ensure that those checking offence codes had complete information all the Victimisation Modules belonging to an individual respondent were sent to the Home Office, rather than just the single Module under consideration.

Of the 1,386 Victimisation Modules sent to the Home Office 97 cases had their code changed by the Home Office, representing 7% of all cases sent. This level of change was fairly static across the survey year suggesting a degree of stability in the offence coding process.

The codes changed by the Home Office according to the categories outlined above were as follows:

- in 8 cases offences were coded 01 for referral to the Home Office. As code 01 is not a valid this code was changed;
- in 15 cases where the module was judged to be invalid by BMRB coders, 5 (33%) were changed by the Home Office;
- in 131 cases where BMRB coders were uncertain, 31 (24%) were changed by the Home Office;
- in 557 cases sent for quality control 20 (4%) were changed by the Home Office; and
- in 675 related cases, 33 (5%) were changed by the Home Office

In all cases where the Home Office changed a code that BMRB coders or supervisors had been certain about, this was double checked and verified by BMRB upon return of the coding from the Home Office. Where BMRB did not agree with the Home Office decision cases were referred back to the Home Office for re-checking. Of the 97 cases changed by the Home Office, 21 were referred back for re-checking. In 10 cases the original BMRB code was deemed to be correct and was re-instated as the final code and in 8 cases the Home Office code was deemed to be correct. For the remaining 3 cases a different code was decided upon after further discussion. After all queries had been resolved 87 cases were changed by the Home Office, representing 6% of all cases sent.

5.1.5 Final Offence Code

The SPSS data set delivered to the Home Office includes all the offence codes that have been given to each Victimisation Module at every stage of the coding process. This allows a complete history of each case to be maintained at all times. The final offence code is derived using a priority ordering system, whereby the Home Office code takes priority over the supervisor code, which takes priority over the original coder code. The variables supplied to the Home Office are:

OFFSUG	Suggested offence code (generated by computer)
VOFFENCE	Code assigned by the original coder
SOFFENCE	Code assigned by the supervisor
FINLOFFC	Code assigned by the Home Office research team
OFFENCE	Final offence code

5.1.6 Checks on final offence code

During the creation of the SPSS data sets some further consistency checks are run on the final offence codes, checking these against key pre-coded variables in the Victimisation Module. The purpose of this is to highlight cases where some of the pre-coded data seems potentially anomalous with the final offence code. Such anomalies can arise because sometimes the information reported by the respondent is not consistent. In particular, there may be inconsistencies between the verbatim description of the incident and subsequent pre-coded questions. While interviewers are carefully briefed to try and be aware of such inconsistencies arising during the interview it is inevitable that some will be missed. Furthermore, consistency checks within the actual questionnaire script to try and pick up anomalies are not possible when a verbatim description is involved.

The consistency checks carried out are as follows:

- Assaults where no force or violence was recorded as having been used
- Burglary where entry to the property was recorded to be authorised
- Car thefts where no car was recorded as being stolen, or where the police were not informed
- Sexual assaults where there was no sexual element to the assault recorded
- Snatch thefts where the item stolen was not recorded as being held or carried

- Other thefts where the item stolen was recorded as being held or carried
- Wounding where no injury was recorded as being sustained
- In scope offences where the offender was perceived by victim to be mentally ill
- Thefts where nothing has been recorded as having been stolen
- Vandalism where no damage has been recorded
- Threats where no threat has been recorded

All cases that fail these checks are examined individually by a researcher and, if necessary, referred to the Home Office. Where clear anomalies in the data do exist it is up to the judgment of the researchers to decide which bits of information should be prioritised in arriving at the final agreed offence code. In such cases, greater credence tends to be given to a good verbatim description of the incident over the answers to specific pre-coded questions where for example anomalies may be a result of interviewer mis-keying.

Experience of running these checks shows that most flagged cases do have the correct offence codes, but a few may be amended each quarter as a result of this additional check.

5.2 Other coding

In addition to the Offence coding, coders also 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. Coding was done in Ascribe, a Windows based coding package.

Coders were provided with the code frames used in the questionnaire as a starting point. Since most of the questions have been used in previous years of the survey, the code frames were already well developed and there was little need to add new codes to the frames. However, if the coding supervisor felt an extra code was needed, this was flagged up to researchers who approved any changes before they were implemented.

In 2008-09 there were two new open-ended questions that needed to have code frames developed from the verbatim answers given by respondents. This was done by researchers working on the BCS who examined verbatim responses from several hundred cases to develop a comprehensive code frame. These code frames were

approved by the Home Office. The code frames developed for these two questions are in Appendix F of Volume 2.

5.3 Coding of occupation and socio-economic classification

Occupation details were collected for all respondents, either relating to their current job or to their last job if the respondent was not currently employed but had worked at some time in the past. Occupational details of the Household Reference Person were also collected, if this was not the same person as the respondent.

Occupations were coded using the Standard Occupational Classification 2000 (SOC2000). All occupational coding was done centrally by specialist coders once the data were returned by interviewers. Coding was done using CASCOT, a package widely used to code occupation, with coders using the manuals for reference.

As well as occupation codes, National Statistics Socio-Economic Classification (NS-SEC) was added to the file for all respondents and Household Reference Persons. NS-SEC categories were derived automatically using an algorithm which was developed from the documentation provided by ONS. Both the NS-SEC operational categories and the NS-SEC analytical categories were derived.

Details of the NS-SEC categories can be found in Appendix H of Volume 2.

6. Data Output

6.1 Introduction

The main outputs provided to the Home Office are SPSS data files that are delivered on a quarterly basis. Separate data files are provided for the core sample and the youth sample. For each type of sample, two data files are provided: the Non Victim File and the Victim File.

The **Non Victim File (NVF)** is produced at the level of the individual respondent and contains all questionnaire data and associated variables, except for information that is collected in the Victimisation Modules. Data for both victims and non-victims are included on the Non Victim File.

The **Victim File (VF)** is produced at the level of the individual incident or crime and contains all the data collected in the Victimisation Modules. Thus, an individual respondent who reported three crimes and completed three Victimisation Modules would have three separate records in the Victim File. All generated Victimisation Modules were included on the file, including cases where the module either had been suspended or where the reference period was out of scope. Although such records contain no information and are not used for analysis, it is useful to keep these on the file to monitor the number of modules that fall into these categories.

6.2 Delivery of data output

During 2008-09 data files were supplied to the Home Office on a quarterly basis for each of the two types of sample (core and youth sample). Data was supplied on a 12 month rolling basis, meaning that each new data delivery was updated by adding the newest quarter of data and deleting the oldest quarter of data. The youth data file consisted of all relevant 16-24 year old respondents, whether from the core sample or the young adult boost sample.

In addition to the achieved sample, a data file of the entire 2008-09 issued sample was supplied to the Home Office. This contained information on every issued address such as the final outcome, the screening outcomes, the observational data collected by interviewers, sample variables and geo-demographic variables.

Data was delivered to the Home Office approximately five weeks after the end of each quarterly fieldwork period. Each quarterly data delivery included interviews that were **achieved** in a specific 12 month period, rather than those that were

issued in a specific time period. Thus, the four sets of quarterly data files delivered in 2008-09 covered all the relevant interviews achieved in the following periods:

- July 2007 – June 2008
- October 2007 – September 2008
- January 2008 – December 2008
- April 2008 – March 2009[34]

6.3 Content of SPSS data file

The SPSS data files delivered to the Home Office contain various types of variables. The main types of variables contained on the files are:

- **Questionnaire variables** (NVF and VF).
- **Geo-demographic variables** (NVF only). All interviews had a set of pre-specified geo-demographic variables attached to them (see Appendix H in Volume 2 for complete listing).
- **Observational variables** (NVF only). All interviews had the observational data collected by interviewers on the Address Contact Sheets attached to them (see Appendix H in Volume 2 for complete listing). Due to the way in which the Observational data was processed it was difficult to do this on a quarterly basis. Consequently it was agreed that Observational variables only be supplied on the main data set on an annual basis, as well as being supplied on the issued sample file mentioned in section 6.2.
- **Coding variables** (NVF and VF). On the Non Victim File, SOC2000 codes are included for both the respondent and the Household Reference Person. Additionally, NS-SEC for both the respondent and the Household Reference Person are included. On the Victim File, a full set of offence codes are attached as outlined in section 5.1.5.
- **Derived variables** (NVF and VF). Many derived variables were also added to the file. These consisted primarily of 2 types:
- **Flag variables** that identify, for example, the type of sample (core or young adult boost), the part-sample module split and sub-split,

[34] The April 2007 – March 2008 data file is the data on which the main 2008-09 annual crime figures are based and is the basis of the file deposited by the Home Office at the UK Data Archive.

the date of interview, the month of issue, whether a partial or full interview, whether a victim or non-victim, etc. On the Victim File, flag variables include whether the record was a Long or Short Victimisation Module, whether it was a Series or a Single incident, and whether it was inside or outside the reference period.

- **Classificatory variables** derived from the data. These included standard classifications such as ONS harmonised variables, banded age groups, ethnic groups, income groups, etc.
- **Weighting variables** (NVF only).

6.4 Conventions used on SPSS Data Files

In creating the 2008-09 data files great attention was paid to ensuring as much consistency as possible was maintained with previous years of the survey.

6.4.1 Case identifier

The case identifier was required to be similar to that used on previous years of the survey but also had to be designed to meet the requirements of a continuous survey.

On the Non-Victim File, where each individual case or record represents an individual respondent, the unique case identifier (ROWLABEL) is an 8-digit number constructed as follows:

	Column position	Values
Year of issue	1	1-9
Area point number	2-5	1000-9999
Address number	6-7	01-32
Screen number[35]	8	0-9

On the Victim File, where each individual case or record represents a Victimisation Module or incident, the unique case identifier (MATCH) is a 9-digit number, which is identical to ROWLABEL with the addition of the Victimisation Module number:

[35] Screen numbers are used to identify the type of sample. '0' indicates a core sample case and '9' indicates a young adult boost case.

	Column position	Values
Year of issue	1	1-9
Area point number	2-5	1000-9999
Address number	6-7	01-32
Screen number	8	0-9
Victimisation Module number	9	1-6

6.4.2 Naming conventions

Variable names were kept the same as on the previous surveys wherever possible. Consistency is particularly important on a continuous survey where data from one survey year is combined with data from a previous survey year as described in section 6.2. However, this means it is also important to systematically document changes to questions over time to avoid confusion amongst users. For example, small changes to a question from one year to the next (such as adding an extra code to the code frame) can create the possibility of wrongly merging data that appears similar but, in fact, is not. To avoid such situations, the variable names on the 2008-09 data file were changed to reflect any variables where such changes had been introduced between 2007-08 and 2008-09. A list of variables which changed slightly between 2007-08 and 2008-09 is shown in Table 6.1.

Table 6.1 Changes in variables between 2007-08 survey and 2008-09 survey

Module	2007-08 variable	2008-09 variable	Reason for change
HHLD	CREL01-CREL10	CRELA01-CRELA10	Change of code frame
PERC	CRIMERAT	CRIMRAT2	Change of filter – now asked of everyone (previously only if lived in area 2 years+)
PERC	PESTER	PESTER2	Change of question wording
CJS	XCJSINF2	XCJSINF3	Position of question changed (from Module B) and code frame changed
FUC	SECYR4A-P	SECYR5A-Q	Change of code frame
FUC	IMMOB01	IMMOB02	Change of question wording
FUC	SECPIN0	SECPIN02	Change of question wording
FUC	PARKDOO0	PARKDOO3	Change of question wording
FUC	PARKDO00	PARKDO03	Change of question wording
FUC	IMMOB11	IMMOB12	Change of question wording
FUC	SECPIN1	SECPIN12	Change of question wording
FUC	PARKDOO1	PARKDOO4	Change of question wording
FUC	PARKDO02	PARKDO04	Change of question wording
FUC	SECWHY1A-O	SECWHY3A-P	Change of question wording
NTE	NTEDRK1A-I	NTDRK11A-J	Change of code frame
NTE	NTEDRK2A-H	NTDRK21A-H	Change of code frame
ASB	ASBOFF	ASBOFF2	Change of question wording
ASB	ASBINF	ASBINF2	Change of question wording
VICT	WHERVIC2	WHERVIC4	Change of question wording
VICT	TYPESECA-M	TYPSEC2A-N	Change of code frame
VICT	AGEOFF1	AGEOFF2	Change of question wording
VICT	AGEOFFA-G	AGEOFF2A-G	Change of question wording
VICT	VIMMOB2	VIMMOB5	Change of question wording
VICT	VSECPIN1	VSECPIN3	Change of question wording
VICT	YTIMOF3A-L	YTIMOF4A-L	Change of question wording
VICT	ITIMEOFF	ITIMEOF2	Change of question wording
VICT	RTIMEOFF	RTIMEOF2	Change of question wording
VICT	VIMMOB4	VIMMOB6	Change of question wording
VICT	VSECPIN2	VSECPIN4	Change of question wording
VICT	WHOAWAA-F	WHOAW2AA-G	Change of wording to existing codes
VICT	WHWEA2A-R	WHWEA3A-R	Change of wording to existing codes
VICT	STYHOS1	STYHOSL	Change of code frame
VICT	HOWCTOL2	HOWCTOL3	Change of code frame

6.4.3 Labelling variables

The changing nature of the 12-month reference period over the course of the year creates a difficulty in labelling certain variables. In the Quancept script, dates were automatically calculated based on the date of interview and appropriate text substitution was used to ensure that the question always referred to the correct period. In the SPSS data files, which contain data from interviews achieved over the whole year, it is difficult to attach meaningful labels to certain variables since the label is different each month depending upon the month of interview. This issue affects the following variables (all on the Victim File):

- DATESERA-DATESERH
- NQUART1-NQUART5
- QTRRECIN
- QTRINCID

Details of how the code frames for these specific questions relate to the month of interview can be found in Appendix F of Volume 2.

6.4.4 Don't Know and Refused values

The convention for Don't Know and Refusal codes used in the most recent surveys was maintained on the 2008-09 data. This meant that on the SPSS file the code for Don't Know was '9' for code frames up to 7, '99' for code frames up to 97, and so on. The code for Refused was 8, 98, and so on. Since these are standard codes used throughout the SPSS files, Don't Know and Refused codes are not labelled.

6.4.5 Multiple response variables

Prior to the 2001 survey, multiple response variables were created as a set of variables equal to the maximum number of answers that could be given. The first variable held the first answer given by the respondent; the second variable held the second answer given, and so on.

After discussions with the Home Office it was agreed from 2001 onwards to present multiple response variables differently from previous years. Instead, multiple response variables were set up as a set of variables equal to the total number of answers possible (including Don't Know and Refused). Each variable was then given a value of '0' or '1' depending on whether the respondent gave that particular answer or not. To denote this change all multiple response variables in 2001 were

all named with a letter suffix, rather than the number suffix that was used in previous years of the survey.

An example of a multiple response variable where there are seven possible answer categories, and so seven separate variables, is shown below:

AGEOFFA-AGEOFFG **[ASK IF NumOff IN (2..4)]**

How old were the people who did it? Would you say they were…READ OUT CODE ALL THAT APPLY

1.	children under school age	(AGEOFFA)
2.	children of school age	(AGEOFFB)
3.	people aged between 16 and 23	(AGEOFFC)
4.	people aged between 25 and 39	(AGEOFFD)
5.	or people aged over 40?	(AGEOFFE)
	Don't Know	(AGEOFFF)
	Refused	(AGEOFFG)

7. Weighting

7.1 Overview of weighting

The following weights have been calculated for the 2008-09 BCS data:

- A household weight for the core sample
- An individual adult weight for the core sample
- An individual adult weight for the youth (16-24 year olds) sample

In addition to these weights, the Home Office apply additional calibration weights once they receive the data so that the data reflect the population profile by age and sex within Government Office Region (see section 7.5).

There are three main reasons for computing weights on the BCS:

- To compensate for unequal selection probabilities. In the BCS, different units of analysis (households, individuals, instances of victimisation) have different probabilities of inclusion in the sample due to factors such as over sampling of small Police Force Areas, the selection of one dwelling unit at multi-household addresses, the selection of one adult in each household, and the inclusion of a single Victimisation Module to represent a series of similar incidents.
- To compensate for differential response. Differential response rates can arise both between different geographic units (e.g. differences in response between inner city and non-inner city areas) and between different age and gender sub-groups.
- To ensure that quarters are equally weighted for analyses that combine data from more than one quarter.

As outline above a variety of different weights were computed to meet the different analysis requirements. The 2008-09 weighting schedule was broadly similar to the weighting schedule applied on previous surveys.

All weights include a component to compensate for unequal selection probabilities, while weighting components to compensate for differential response and to equally weight quarters are included in some weights but not in others. Weights were calculated separately for the core sample and the youth sample.

7.2 Component weights

The weights constructed for the 2008-09 BCS sample were based on a number of key component weights. In constructing all the different weights for the core sample and the youth sample the following conventions have been used for the components that made up the final weights:

- w_1 : weight to compensate for unequal address selection probabilities in each PFA;
- w_2 : inner city versus non inner-city non-response weight;
- w_3 : dwelling unit weight;
- w_4 : individual selection weight;
- numinc : series of incidents weight

7.2.1 Police Force Area weight (w_1)

Under the new survey design the address sampling probability is a function of the Police Force Area, the cluster stratum and, in a few cases, the number of addresses sampled within the PSU. These can be explained as follows:

1. Police Force Area: As already described in Chapter 2, addresses were disproportionately sampled in Police Force Areas to ensure a minimum of 1,000 achieved interviews in each Area regardless of the population size. Consequently the basic sampling fraction applied within each PFA varies significantly between different Areas;
2. Cluster stratum: As already explained in Chapter 2 all addresses were allocated to one of three cluster strata. While the intention was to allocate proportionately, the requirement to sample whole number PSUs within cluster strata B and C lead to a tiny level of between-strata variation in address sampling probabilities. This could have been corrected by altering the number of addresses selected within each sampled PSU, but this was not done. Instead a standard number of addresses (32) were issued in each PSU sampled from strata B and C; and
3. The number of addresses within the PSU: A small number of very large PSUs had a computed sampling probability greater than 1. This is because the size of the PSU (as measured by the PAF address count) was larger than the selection interval, meaning they had a 100% chance of selection. In this situation the PSU sampling probability was capped at 1 but the number of addresses sampled within these PSUs was not increased to compensate for

this. This introduced another slight variation in address sampling probabilities. Only a handful of PSUs were affected by this.

While the above represents a full explanation of the address sampling probability it is only the Police Force Area which actually introduces any significant variation in probabilities. Factors 2 and 3 above only introduce extremely minor variations in probabilities within each PFA. Consequently, it is probably easiest to think of w_1 as the Police Force Area weight, which compensates for different selection probabilities between Areas.

7.2.2 Inner city weight (w_2)

In some previous rounds of the BCS, inner city areas were over sampled meaning that an inner city weight was applied. Historically this weight compensated not only for the difference in selection probabilities but also for the differential response rates between inner city and non-inner city areas.

To be consistent with previous survey years the practice of applying a weight to correct for differential response rates between inner city and non-inner city areas has continued. In essence, the inner city weight is simply the reciprocal of the achieved response rate in inner city and non-inner city areas (after weighting by w_1).

The definition of inner city or non-inner city has been kept consistent since it was first used on the BCS and is based on 1981 census data. Details of how the inner city weight is constructed can be found in previous BCS Technical Reports.

7.2.3 Dwelling unit weight (w_3)

At addresses which had more than one dwelling unit, the interviewer made a random selection of one dwelling unit. The dwelling unit weight is therefore simply the number of dwelling units identified at the address. In over 99% of cases, the dwelling unit weight was 1.

7.2.4 Individual weight (w_4)

At dwelling units that had more than one eligible adult, the interviewer made a random selection of one adult. Thus, the probability of any one individual being selected was inversely proportional to the number of adults in the household. The individual weight is therefore simply the number of adults in the household.

7.2.5 Series weight (numinc)

This weight is applied when estimating victimisation rates. For single incidents NUMINC is always 1. For series incidents, where only details are collected about the most recent incident in the series, the weight equals the number of incidents in the series that fall within the reference period, subject to a maximum limit of 5[36].

In estimating victimisation rates, the household or individual weights are multiplied by the NUMINC weight, according to which offence classification code has been assigned to the incident(s).

7.3 Core sample weights

The main units of analysis used on the BCS are households, individuals, and incidents of victimisation. Different weights are used depending upon the unit of analysis. In particular, some crimes are considered household crimes (e.g. burglary, vandalism to household property, theft of and from a car) and therefore the main unit of analysis is the household, while others are personal crimes (assault, robbery, sexual offences) and the main unit of analysis is the individual.

For the core sample two weights were constructed to take account of this difference, namely the **core household weight** and the **core individual weight.** These were calculated as follows:

wtm2hhu= $w_1 * w_2 * w_3$

wtm2inu= $w_1 * w_2 * w_3 * w_4$

Once the unscaled weights had been calculated the frequencies were examined and extreme values were capped where necessary. Although capping of extreme weights may introduce a small amount of bias this is more than compensated for by the improvement in precision that results. The capped weights were called **wtm2hhf** and **wtm2inf** respectively.

Finally, the weights were scaled to a notional sample size of 11,500 interviews per quarter. Although an approximately equal number of addresses were issued each quarter during 2008-09, the number of interviews actually achieved per quarter varied to some extent. Thus, for analyses based upon a 12 month period, the

[36] Although the number of incidents is capped at 5 for weighting purposes, the actual number of reported incidents in each series (uncapped) is also supplied on the data file

weights were constructed to adjust for differences in sample size by equalising the quarterly achieved sample sizes.

The final scaled weights were called **wtm2hhs** and **wtm2ins** respectively.

7.4 Youth weights

The 2008-09 young adult data comprised all respondents aged 16 to 24 years who were interviewed during the survey year, irrespective of whether the respondents were interviewed as part of the core sample or as part of the young adult boost sample. For the young adult data an individual weight was computed. The basis of the youth weighting was the core sample weights.

In terms of computing a youth weight all respondents came from households that were selected as part of the core sample. This meant that the main household weight (unscaled and uncapped) calculated for the core sample was applied to the youth sample as the starting point for the youth weights.

For all interviews (whether from the core sample or the boost sample) carried out as part of youth sample, the young adult boost weight was calculated as follows:

ypwtu = wtm2hhf * r

where, r was the number of adults aged between 16 and 24 years in the household. This is because the probability of a 16 to 24 year old being selected for interview is always equal to 1 in r because of the way the core and young adult boost selection processes work. Thus, if there is one 16 to 24 year old in the household they have a 1 in 1 chance of selection (either as the core respondent or as the young adult boost respondent), if there are two 16 to 24 year olds in the household each has a 1 in 2 chance of being selected (but both cannot be selected), and so on.

Once the unscaled weight was created the distribution of weights were examined and extreme values capped where necessary (ypwtf). Finally, the weight was scaled to ensure the weighted and unweighted sample sizes were the same across the year (ypwts). Youth weights were not equalised between quarters across the year.

7.6 Calibration Weights

From 2001 onward the Home Office have calculated and applied additional calibration weights to counter the effect of differential response rates between age, gender and regional sub-groups. Results for BCS surveys from 1996 onwards have all been re-weighted using this technique[37].

Calibration weighting is designed to make adjustments for known differentials in response rates between different age by gender subgroups and households with different age and gender composition. For example, a 24 year old male living alone may be less likely to respond to the survey than one living with a partner and a child. The procedure therefore gives different weights to different household types based on their age and sex composition in such a way that the weighted distribution of individuals in the responding households matches the known distribution in the population as a whole.

The effects of applying these weights are generally low for household crime, but are more important for estimates of personal crime, where young respondents generally have much higher crime victimisation rates than average, but also lower response rates to the survey. However, crime trends since the 1996 survey have not been altered to any great extent by the application of calibration weights.

[37]Calibration weights are applied to the data by the Home Office after the application of the design weights.

8. Comparing key survey variables with the population

The achieved sample was weighted in order to be representative of the population living in private households in England and Wales. A series of comparisons are presented in the following tables, showing to what extent the 2008-09 BCS achieved core sample reflected the population as a whole, after applying the appropriate design weights and before final calibration weighting.

The regional distribution of the adult population aged 16 years or over by Government Office Region compared with the Mid-2007 Population Estimates is shown in Table 8.1. This shows that the regional profile of the weighted sample was broadly in line with the population figures. The main discrepancy in the achieved sample was the under-representation of respondents in London compared with the population estimates. This reflects the lower response rates achieved in London as already noted.

Table 8.1 Comparison of the BCS core achieved sample compared with the population by Government Office Region, 2008-09 BCS

Government Office Region	Weighted Core Sample[1]	Mid-2007 population estimates	Difference (sample – population)
	%	%	%
North East	5.4	4.8	+0.6
North West	12.7	12.7	+0.0
Yorkshire & The Humber	9.7	9.6	+0.1
East Midlands	8.5	8.2	+0.3
West Midlands	10.2	9.9	+0.3
East of England	10.5	10.4	+0.1
London	11.6	13.9	-2.3
South East	15.6	15.3	+0.3
South West	10.0	9.7	+0.3
Wales	5.8	5.5	+0.3
Bases:	*45,519*	*43,860,000*	

1 Prior to the calibration weights applied at a later stage by the Home Office.
Source: Mid-2007 Population Estimates, Office of National Statistics

Table 8.2 shows similar comparisons between the achieved core sample in relation to the Mid-2007 Population estimates for England and Wales by sex and age. This shows that the survey slightly under represented men, those aged under 35, and those aged over 85 (especially women). The profile of the survey by sex and age

was very similar to the previous year. All of these patterns are fairly common in large scale surveys and reflect the slightly lower response rates achieved among these particular groups.

Although not reported here, as already mentioned the age and sex distribution of the achieved sample are further corrected by the Home Office at the analysis stage through the application of calibration weights so that the age and sex profile of survey respondents matched population estimates within each GOR (see section 7).

Table 8.2 Comparison of the BCS achieved core sample with the population by sex and age, 2008-09 BCS

	Weighted Core Sample[1]	Mid-2007 population estimates	Difference (sample - population)
	%	%	%
Men			
16-19	6.2	6.9	-0.7
20-24	6.6	8.8	-2.2
25-34	13.9	16.4	-2.5
35-44	18.9	19.1	-0.2
45-54	17.4	16.3	+1.1
55-64	16.4	14.7	+1.7
65-74	12.1	10.0	+2.1
75-84	6.9	6.0	+0.9
85 and over	1.6	1.7	-0.1
Bases:	*20,466*	*21,338,600*	
Women			
16-19	5.1	6.2	-1.1
20-24	6.6	7.9	-1.3
25-34	14.5	15.5	-1.0
35-44	19.0	18.3	+0.7
45-54	17.4	15.8	+1.6
55-64	16.3	14.5	+1.8
65-74	11.4	10.4	+1.0
75-84	7.5	7.8	-0.3
85 and over	2.2	3.6	-1.4
Bases:	*25,052*	*22,521,500*	
All men	47.2	48.7	-1.5
All women	52.8	51.3	+1.5
Bases:	*45,519*	*43,860,100*	

1 Prior to the calibration weights applied at a later stage by the Home Office.
Source: Mid-2007 Population Estimates, Office of National Statistics

Other comparisons between the achieved sample and the population are summarised in Table 8.3. This shows that households with no cars, single person

households, and white respondents were slightly underrepresented in the achieved core sample compared with the 2001 Census. While these small differences may reflect differential response rates on the survey, this is also likely to be a reflection of the fact that Census figures are now out of date.

Recently ONS have used new estimation techniques to produce a series of 'experimental' statistics, including more up to date estimates for the ethic profile of England. These figures (for mid-2007) show that the ethnic profile of BCS respondents (in England) is broadly in line with these experimental statistics. Thus, the ONS figures suggest that in mid-2007 89.2% of the adult (16+) population in England was white, 1.2% was of Mixed ethnic origin, 5.3% was Asian, 2.7% was Black, and 1.6% was on Chinese or other ethnic origin[38].

Table 8.3 Comparison of the BCS achieved core sample with the 2001 Census by socio-demographic characteristics, 2008-09 BCS

	Weighted Core Sample[1]	2001 Census estimates	Difference (sample - population)
	%	%	%
Tenure			
Owners	68	69	-1
Social rented sector	17	19	-2
Private rented sector	15	12	+3
Car availability			
None	22	27	-5
One	42	44	-2
Two or more	36	29	+7
Household size			
1 person household	28	29	-1
2 person household	37	35	+2
3 person household	16	15	+1
4+ person household	19	21	-2
Ethnic Group			
White	90.0	92.1	-2.1
Mixed	0.7	1.2	-0.5
Asian	5.3	4.0	+1.3
Black	2.6	2.0	+0.6
Other	1.4	0.8	+0.6
Base:	*45,519*		

1 Prior to the calibration weights applied at a later stage by the Home Office.
Source: 2001 Census, Office of National Statistics

[38] Source: ONS Population Estimates by Ethnic Group Mid-2007 (experimental)