British Crime Survey: feasibility of boosting Police Force Area (PFA) sample sizes using supplementary re-contact surveys

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TNS-BMRB Report for the Home Office

JN 220934

September 2011

Acknowledgements

TNS-BMRB was responsible for all aspects of data collection.

We acknowledge the advice and support received from Matthew Scribbins at the Home Office at the project's inception and Philip Hall for managing the project from then on. We would also like to thank John Flatley and Jacqueline Hoare at the Home Office for their comments on earlier drafts of this report. We would like to thank other members of the TNS-BMRB project team namely Keith Bolling, Catherine Grant, Andrew Goldstein and Becky Hamlyn for their contributions throughout the different stages of the project.

Finally, and most importantly, we thank those individuals who kindly agreed to take part in the surveys.

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Key findings

This report provides findings from a number of experimental surveys conducted by TNS-BMRB during Spring/Summer 2011.

The surveys were designed to investigate the feasibility of boosting Police Force Area (PFA) sample sizes in the British Crime Survey (BCS) by re-contacting respondents from the previous year and combining this data with concurrent 'fresh' BCS data.

Four re-contact survey scenarios were tested: 1) telephone-only re-contact; 2) postal-only re-contact; 3) sequential mixed-mode re-contact (online then postal) for those who supplied an e-mail address, otherwise postal-only re-contact; and 4) sequential mixed-mode re-contact (postal then online) for those who supplied an e-mail address, otherwise postal-only re-contact.

In addition, a small context experiment was carried out on the BCS questionnaire. A set of questions on 'perception of crime' was moved from its standard (early) position in the questionnaire to a much later position.

The experimental design allowed analysis of the following factors across various re-design options:

1. response rates;
2. non-response bias;
3. re-interview effects;
4. context effects;
5. costs.

Of all the options tested, the telephone re-contact survey is the best approach for boosting PFA sample sizes in the BCS. However, TNS-BMRB considers there to be a substantial risk of increasing error in some estimates if core BCS and re-contact interviews are combined. Consequently, **the principal recommendation is that a boost sample of this type should not be carried out.**

The main findings of the study are as follows.

- It is estimated that all four re-contact models would yield similar overall response rates of between 35% and 40%. This overall response rate has three components: (a) response to the BCS (c.75%), (b) agreement to be re-contacted and provision of necessary contact details (78% for the telephone re-contact model; 85% for the others), and (c) response to the re-contact survey (60-63% with the sequential postal>online model yielding the highest rate).

- The telephone survey had a less predictable pattern of response than the other re-contact surveys, suggesting that non-response bias is less of a problem compared with the other data collection modes.

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- Respondents who answered via self-completion modes tended to favour the middle categories in a scale, whereas telephone respondents used scales in a similar way to face-to-face interview BCS respondents. However this was not consistent throughout the questionnaire.

- Although it is impossible to say which mode produces the smallest absolute error, the primacy of the face-to-face BCS interviews means that the **face-to-face mode should be treated as the benchmark**. Combining face-to-face interview BCS data with re-contact data is only worthwhile if there is no significant bias introduced. Some of the observed 'mode effects' are sufficiently large for this to be a substantial risk.[1]

- Mode effects were not evident for more objective measures, e.g. the frequency of seeing police officers on foot patrol in the local area.

- Item completion rates were high for all the data collection modes. As expected, the postal mode had the highest level of item non-response on average, although this was still low (no more than two per cent on average).

- There were context effects with some of the 'perception of crime' questions. Placement later in the questionnaire after the 'victim' modules led to an increased tendency to believe that the local crime rate was lower than the national crime rate, while these respondents were also less likely to report 'increased' concern about crime. This suggests that these question items are sensitive to context, although it is always possible that they are sensitive only to the particular context in the experiment.

- TNS-BMRB calculated the relative costs of the re-contact survey options. Obviously, all re-contact options would be cheaper than collecting the equivalent number of interviews via the face-to-face data collection mode. However, as expected, the telephone re-contact option was the most costly option. It was approximately 50% more expensive than the postal and mixed-mode options.

- The profile of BCS respondents who agreed to be re-contacted was very similar to the total sample profile (so the issued sample for a re-contact survey should not be strongly biased).

- Only a minority of respondents agreed to be re-contacted *and* also supplied an e-mail address (30% from BCS January-March 2011). These respondents tended to be younger and more highly educated than average. Thus any online-only survey using this as a sole sample frame would draw from a highly skewed source. The online mode can only be used as part of a mixed-mode strategy.

[1] The absence of a re-contact face-to-face option means that apparent mode effects may be confounded with 'contamination' due to previous experience of the BCS interview. Consequently, 'mode effects' are generally referred to as 're-interview effects' in the text.

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1. Background to the study

The British Crime Survey (BCS) is one of the key sources for measuring the level of crime experienced by the population resident in households in England and Wales. Respondents to the survey are also asked about their attitudes to crime-related issues such as the police, the criminal justice system (CJS) and their perceptions of crime and anti-social behaviour. The results of the survey play an important role in informing government policy.

At present the survey asks respondents about their experiences of crime using face-to-face interviews. Over 46,000 people aged 16 and over are interviewed each year, with a minimum of 1,000 interviews being carried out in each police force area (PFA). Approximately 4,000 interviews are also carried out with 10-15 year olds each year but these are not currently combined with the adult sample to produce estimates at PFA level.

However, face-to-face interviews are expensive and – in the context of reductions in public expenditure – it is necessary to explore methods for reducing BCS costs. One of the simplest ways to reduce the costs of a survey is to reduce the number of interviews. Although the Home Office has indicated that robust PFA-level estimates are not required for the vast majority of questions in the BCS, there are still some for which it is anticipated that PFA-level estimates will be required. Therefore a minimum PFA sample size is desirable.

The Home Office asked TNS-BMRB whether a minimum of 1,000 interviews could still be achieved in each PFA by boosting the BCS sample using alternative (less expensive) data collection modes. After some discussion, it was decided that the only option of sufficient quality was a re-interview option in which respondents are re-contacted 12 months after their BCS interview.[2]

The Home Office asked TNS-BMRB to design and carry out an experiment that would help it assess the feasibility of alternative data collection modes. The objectives of the study were to determine:

- likely response rates;
- any identifiable non-response bias;
- any mode or panel effects that might reduce compatibility with the face-to-face BCS sample;
- whether responses to any of the questions are affected by questionnaire placement;
- an estimate of total error when the boost sample is combined with the BCS sample;
- costs.

Each of these study objectives has been allocated a separate chapter (3-8). The study design is described in Chapter 2.

[2] Note that this option requires a minimum BCS sample size per PFA to ensure there are sufficient cases to re-interview. This is likely to mean that the BCS remains disproportionately sampled from the less populous PFAs.

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2. Study design

Two experiments were required to cover all six study objectives.

The first experiment involved random allocation of previous BCS respondents to one of four re-contact models. The results from this experiment provide information about all objectives bar one. It cannot shed light on whether questionnaire placement affects response. To answer that, a second experiment was designed in which a random subsample of BCS respondents was allocated to a re-ordered version of the questionnaire.

Experiment 1: the re-contact study

Sample design

Previous BCS respondents were randomly allocated to one of four re-contact models:

- telephone interviews;
- postal questionnaires;
- sequential mixed-mode data collection (online>postal with the online option given only to those supplying an e-mail address);
- sequential mixed-mode data collection (postal>online with the online option given only to those supplying an e-mail address).

The sample allocated to the first two models (telephone interviews; postal questionnaires) was restricted to those both agreeing to be re-contacted *and* supplying a telephone number to maximise comparability when studying mode effects. Eighty five per cent of BCS respondents agreed to be re-contacted and almost all of these (98%) supplied a telephone number.

The sample allocated to the sequential mixed-mode models excluded only those who did not agree to be re-contacted. However, the online option was offered only to those supplying an e-mail address (30% of BCS respondents). The remainder were allocated to a postal-only design.

Chapter 4 includes an analysis of the variation in re-contact agreement rates and explores the implications for a BCS re-contact survey.

The expectation is that any re-contact survey would take place 12 months after the initial BCS interview. Therefore, the ideal scenario was to sample cases from among those interviewed early in 2010 and re-contact them in early 2011.

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However, it was only from November 2010 that e-mail addresses started to be collected from BCS respondents. Consequently, the sample for the two mixed-mode re-contact models was drawn from among those interviewed in late 2010 and early 2011.

The requirements of the reporting timetable meant that these BCS respondents were re-contacted only 3-5 months after their initial interview. This has implications for response rate analysis but the findings with regards to question effects ought to be generalisable to the 12 month re-contact model.

The sample size allocated to each re-contact model was driven by a desire to achieve 1,500 interviews in each of the primary (i.e. first offered) data collection modes. This would ensure robust samples for analysis of mode effects. The TNS-BMRB team used its experience to estimate the response rates in advance when calculating the total number of BCS respondents to allocate to each re-contact model.

In the event, *all* BCS respondents supplying an e-mail address between November 2010 and March 2011 were allocated to one or other of the sequential mixed-mode models. There was no other way of achieving a large enough set of online respondents. However, only a sample was drawn from the much larger number who did *not* supply an e-mail address.

Furthermore, the target achieved sample was smaller for this latter group than for the others (500 instead of 1,500). This group was only used to inform response rate estimates for the two sequential mixed-mode re-contact models. Consequently, there was no need to target a large number of *completed* questionnaires (a requirement if the sample is to be used for analysis of re-interview effects etc.)

For the postal and sequential mixed-mode models *all* allocated BCS respondents could be included in the experiment because postal addresses were available for all cases.[3] However, TNS-BMRB report that six per cent of supplied telephone numbers contained syntax errors. It is anticipated that a check will be introduced in future – so this additional attrition ought to be eliminated – but it affected this experiment.

Figure 1 shows how the sample was allocated for the experiment as well as the final number of issued cases. It should be borne in mind that that the BCS itself is subject to non-response (it has a response rate of c.75%) so the numbers contained in Figure 1 should be read in that context. Chapter 3 provides a fuller discussion of the sample attrition affecting a re-contact survey design.

[3] The collection of e-mail addresses might have been expected to lead to some syntactical errors but TNS-BMRB reported no 'bounce-backs' (automated replies from internet servers explaining that the e-mail address is not recognised) in this study. That is not to say that the supplied e-mail addresses were all correct but it demonstrated the success of the 'soft check' employed in the BCS interview to minimise syntactical errors. This 'soft check' requires the interviewer to check with the respondent that his/her e-mail address has been recorded correctly before moving on to the next question.

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Figure 1 Sample attrition and allocation for re-contact study

	No of records	%
BCS interviews achieved from addresses issued January – March 2010	11,188	100
Agreed to re-contact	9,469	85
Agreed to re-contact and supplied telephone number	9,238	83
Agreed to re-contact and supplied telephone number of correct length	8,729	78
• *Of which*, allocated to telephone re-contact model	2,498	
• *Of which*, allocated to postal re-contact model	3,327	
BCS interviews achieved Nov 2010 – March 2011 (from addresses issued no earlier than October 2010)	18,795	100
Agreed to re-contact	14,799	79
Agreed to re-contact and supplied e-mail address	5,623	30
• *Of which*, allocated to online>postal sequential mixed-mode model	3,306	
• *Of which*, allocated to postal>online sequential mixed-mode model	2,317	
BCS interviews achieved November 2010 – January 2011 (from addresses issued no earlier than October 2010)	11,247	100
Agreed to re-contact	8,853	79
Agreed to re-contact but did *not* supply e-mail address	5,585	50
Allocated to 'postal only' element of sequential mixed-mode models	961	

Using information contained in Figure 1 we can calculate the likely attrition between the BCS respondent sample and the issued re-contact sample as around 15-20% with additional attrition of around 5% if telephone interviews are employed (unless a number sense check is included in the BCS interview).

Figure 1 also shows that, if an online mode offer is restricted to those supplying e-mail addresses (as in this experiment), the majority of sampled cases in a sequential mixed-mode survey will experience a postal-only design.

Questionnaire design

The questionnaires used for this study are contained in Appendices A-C of this report. In essence, they contain (i) a subset of BCS questions for which PFA estimates may continue to be required, and (ii) a small number of questions updating demographic information. It was largely developed from existing questions used in the BCS interview.

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Most of the questions were attitudinal although there were some which related to respondents' experience of crime in the past. However, these last questions differed from the much more comprehensive question sets used in the BCS interview.

The questionnaires were designed to be consistent across the various data collection modes but some variation was inevitable due to the restrictions each mode placed on question design. The most restrictive mode was the postal questionnaire so this was developed first and used as a model for the others. In particular, its eight-page length limit determined the number of questions to be used in the study.

Nevertheless, despite matching wording and (where relevant) layout, there were still differences between the questionnaires, primarily over the treatment of non-informative codes (i.e. 'don't know' and 'refused').

In the existing face-to-face BCS interview these codes are usually hidden from respondents to lessen the frequency of use (although they can still be used 'spontaneously'). With a postal self-completion questionnaire it is not possible to have hidden codes and the decision was made to exclude these codes altogether rather than offer them explicitly. In the judgment of the researchers, this would provide a closer match to both the face-to-face BCS interview and the telephone re-contact interview model.

However for the online self-completion questionnaire, the electronic script program could mask these codes in the first instance.[4] If the respondent tried to move forward without entering a response, the page refreshed and the extra codes appeared. Although not an exact match for either the postal or interview models, it seemed the best use of online technology and a good compromise between the two models.[5]

Fieldwork procedures

With one or two exceptions, fieldwork procedures were designed to replicate those that would be used if the re-contact survey became operational.

Telephone re-contact model

Interviewers and telephone centre supervisors were personally briefed before the start of the survey. The briefing covered the background to the survey, the sample design and methodology, how to introduce the survey to respondents and the questionnaire structure. As it was intended to replicate a future re-contact survey, the experimental nature of the study was not explicitly mentioned to respondents.

[4] The platform used to host the online questionnaire was SPSS Dimensions 5.6.

[5] There was one question which, in the face-to-face BCS interview, includes codes for the interviewer to use should the respondent say something which does not correspond to the original response list. This could not be replicated on self-completion modes so this feature was omitted from the response lists for the postal and online questionnaires.

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Due to timing and cost constraints, no letters were sent to sampled respondents in advance of an interviewer phoning them but TNS-BMRB recommends testing this design feature should a telephone re-contact model be adopted at any point.

Postal re-contact model

Up to three mailings were sent to cases allocated to the postal-only model:

- Mailing 1 consisted of a covering letter and a questionnaire;
- Mailing 2 also consisted of a (slightly reworded) covering letter and questionnaire and was targeted at those who had not responded to the first mailing; and
- Mailing 3 consisted of a letter-only reminder to those who had still not responded.

Various methodological studies have shown multiple contacts to be the most effective way of increasing response to postal surveys (for example, see Dillman (2000)). Three mailings was considered to be the appropriate balance between maximising response and minimising the time and cost of multiple contacts.

Sequential mixed-mode re-contact model

A maximum of four contacts were made. For the online>postal model, the sequence was as follows:

- Contact 1 was an e-mail invitation with a link to the online survey;
- Contact 2 was a reminder e-mail sent to those who had not responded;
- Contact 3 was a postal mailing consisting of a covering letter and a questionnaire; and
- Contact 4 was a second postal reminder also consisting of a covering letter and a questionnaire.

For cases allocated to the postal>online model, this contact sequence was revised to 3-4-1-2 with minor changes to the wording of the covering letter to reflect the different sequence.

Any cases allocated to the postal-only part of the sequential mixed-mode model (i.e. those who did not supply an e-mail address) were dealt with in the same way as the postal re-contact model described above.

Length of fieldwork

The total fieldwork length for the telephone and postal re-contact models was 6-7 weeks but the additional contacts required for the sequential mixed-mode models increased this to 9-10 weeks.

Length of interviews

The mean time taken to complete the telephone and online questionnaires was 11 minutes in both cases. This was very close to the expected length of 10 minutes. The median matched the mean for the telephone

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questionnaire but the median was only 8.5 minutes for the online questionnaire. The online questionnaire mean is somewhat misleading because it includes a small number of improbably long times.[6]

The shortest telephone interview was 7 minutes long but the quickest online questionnaire completion was less than 2.5 minutes. There must be some doubt about the *quality* of response when completed at that speed but it is atypical. Only one per cent of online respondents completed the questionnaire in less than 4 minutes, and only seven per cent in less than 5 minutes.

Analysis of the data

The re-contact study allowed analysis of four different factors relevant to the introduction of a re-contact survey to the BCS:

1. response rates;
2. non-response bias;
3. re-interview effects;
4. costs.

Response rates

Response rates were assessed in two parts. The first part compared the telephone and postal re-contact models. The second part added the two sequential mixed-mode models into the analysis. However, because cases allocated to these models were re-contacted only 3-5 months after the BCS interview, some calibration was required to estimate response rates on a 12 month re-contact basis.

Non-response bias

Non-response bias was assessed in two steps. Firstly, the research team identified the factors most strongly associated with the likelihood of agreeing to re-contact. Secondly, the team identified those factors that were most strongly associated with response, *given re-contact agreement*.

Using regression methods, it was possible to quantify the differing degrees of non-response bias affecting each re-contact model.[7]

Re-interview effects

In all four re-interview options, there is a risk that the previous BCS interview experience works as an 'intervention', effectively contaminating the results of a re-interview. Consequently, response differences between

[6] Most likely due to respondents taking a break while completing the questionnaire.

[7] In this context, 'bias' is restricted to a comparison of profile information available for both respondents and non-respondents. No absolute estimate of non-response bias for the survey questions is possible.

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the face-to-face BCS interview and a re-interview may be due either to the change in mode or to this 'contamination' effect (or to a combination of the two). It is not possible to separate these two effects so differences are usually described as 're-interview effects' rather than 'mode effects'.

Re-interview effects were assessed by comparing estimates based on each of the primary (i.e. first offered) modes against the concurrent face-to-face BCS estimate *filtered to include only those agreeing to re-contact*. This maximises the comparability of the samples.

However, differential non-response patterns among the re-contact models might obscure re-interview effects. To mitigate for this, the TNS-BMRB research team computed non-response weights for each mode.

It is worth noting that the online sample is restricted to those supplying e-mail addresses. Consequently, it is only compared directly to the similarly restricted postal sample. Nevertheless, it is reasonable to assume that the relationship between the postal mode and the two interview modes holds for this restricted population as well as for the wider population. Consequently, the online re-contact data can be *indirectly* compared with both the telephone re-contact data and the face-to-face BCS data.

Costs

The total costs for each of the four re-contact models can be directly estimated from this study. The costs are standardised in the text below for ease of comparison.

Experiment 2: the questionnaire placement study

In this experiment, a subsample of BCS respondents interviewed between April and July 2011 was allocated to a non-standard version of the questionnaire.

It differed from the standard version in that seven questions relevant to the study were moved from their usual position early in the questionnaire (in the 'perceptions of crime' module) to a later position *after* the 'victim' modules that collect specific data about crime incidents (specifically after the 'mobile phone and bicycle crime' section).

The objective was to identify questions that *may* be sensitive to questionnaire placement although it must be recognised that any re-contact survey would not include a 'victim' module so the actual differences observed are not of direct relevance.

The flow diagram for the BCS 2011-12 questionnaire structure is shown below in Figure 2. Respondents are randomly allocated to subsamples A, B, C or D at the start of the questionnaire and that determines which questions are put to them. This random allocation was utilised for this study as well. Those allocated to subsample D were subject to the questionnaire order change. The comparison sample comprised those allocated to subsamples A and B. The relevant questions for this study are not asked of those allocated to module C.

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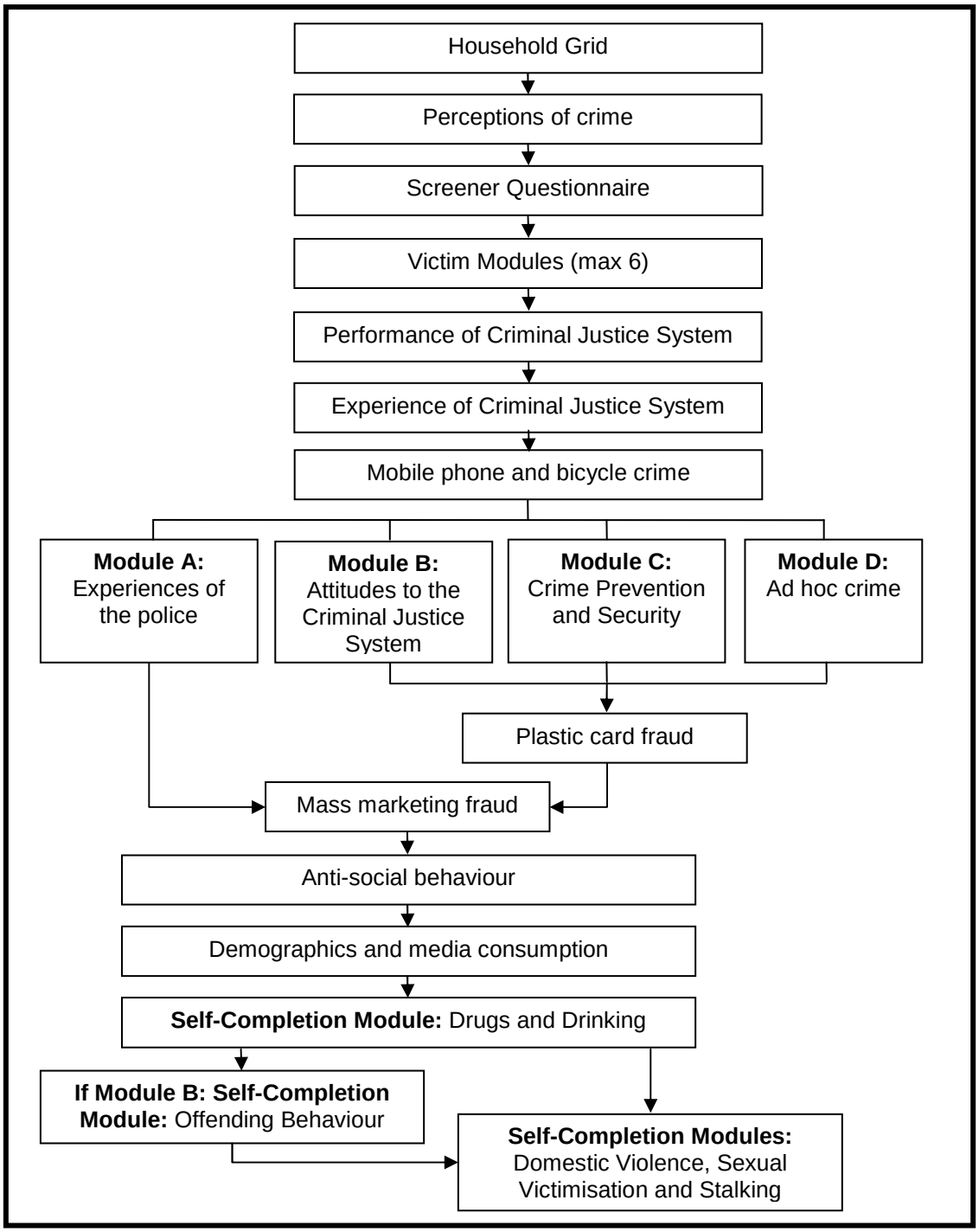
The questions used in this experiment are printed in Appendix D.

Figure 2 Flow diagram of the 2011-12 BCS questionnaire



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3. Response rates

As the sample source for a re-contact survey is the BCS respondent database, *all* cases are eligible unless the respondent has emigrated from England and Wales or has died. Only a tiny fraction fall into these categories after 12 months so it is reasonable to treat the issued sample as the denominator of the 'field' response rate.

However, calculation of the *true* response rate must also take account both of the initial BCS response rate (c.75%) and the attrition that reduces the size of the 'usable' BCS respondent sample.

Figure 3 shows the field response rate data for each of the four re-contact models including a calibrated version that converts the response rate observed for a 3-5 month re-contact period to one for a 12 month re-contact period.[8] Note that the field response rate is 'weighted'. This is to account for the disproportionately small allocation to postal-only re-contact in the sequential mixed-mode models.

Figure 3 Field response rates

	Telephone	*Postal*	*Mixed-mode online>postal*[9]	*Mixed-mode postal>online*
Issued cases	2,498	3,327	4,267 (3,306+961)	3,278 (2,317+961)
Data collected	1,503	2,002	2,662 (2,025+637)	2,209 (1,572+637)
Weighted Field RR	60%	60%	64%	67%
Weighted Field RR (12 months estimate)	60%	60%	61%	63%
Data collected (first offered mode only)	1,503	2,002	1,783 (1,146+637)	2,037 (1,400+637)
Weighted Field RR (12 months estimate) after first offered mode	60%	60%	50%	60%

It can be readily seen that the estimated field response rate based on a 12 month re-contact model varies only slightly between the options (range = 60-63%).

[8] Calibration was achieved by computing the weighted field response rate of the postal>online sequential mixed-mode model *before* the online cases were added (64%). This was compared with the 12 month equivalent (60%) to generate an odds ratio (0.85) to apply to each of the sequential mixed-mode field response rates (e.g. for the online>postal model the odds of response equals 64%/36% * 0.85 = 1.54. The odds of response can be converted into a response rate using the formula odds/odds+1 (i.e. 1.54/2.54 = 61%).

[9] Note that both mixed-mode columns include the cases allocated to postal only re-contact due to lack of e-mail address.

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The online mode contributes very little to the overall response if it is offered only to those supplying an e-mail address. Even if used as the first offered mode in a sequential mixed-mode design, it would contribute only 19% of completed questionnaires. If used as a secondary mode, it is estimated that it would contribute only 5% of completed questionnaires.

Figure 4 adds the other elements of attrition to compute an overall response rate for a re-contact survey. Again, there is little variety by mode with response rates ranging from 35% to 40%. Ultimately, a re-contact survey response rate is approximately half that of the BCS. However, although this response rate is low by conventional standards it must be acknowledged that there is more scope for weighting adjustments with a re-contact survey than there is with a 'fresh sample' survey.

Figure 4 Total response rates

	Telephone	*Postal*	*Mixed-mode online>postal*[10]	*Mixed-mode postal>online*
Weighted field RR (12 months estimate)	60%	60%	61%	63%
BCS response rate	75%	75%	75%	75%
Sample usability rate	78%	85%	85%	85%
Total response rate	35%	38%	38%	40%

4. Non-response bias

Non-response bias exists when the survey estimate differs *in a systematic fashion* from an equivalent figure for the whole population. It is distinct from sample variance which manifests itself in survey estimates that vary from the population total but with predictable frequency and magnitude.

Generally speaking, it is rare to be able to quantify non-response bias because the very purpose of surveys is to provide estimates about unknown population totals and distributions.

It is generally more comprehensible to simply inspect tables showing how the response rate varies between pre-defined subgroups and infer the *potential* for non-response bias rather than attempt to quantify it exactly. It is also important to show how much of the variance in survey response can be accounted for through non-response weighting.

Non-response has two primary components as far as re-contact survey models are concerned:

(1) Attrition due to non-agreement to re-contact;
(2) Non-response from issued sample cases.

[10] Note that both mixed-mode columns include the cases allocated to postal only re-contact due to lack of e-mail address.

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There was no substantial difference in re-contact agreement rates between males and females or between age groups with the exception of the oldest group (aged 75+) which had a lower than average agreement rate (76% compared to 85%).

BCS respondents who are from a minority ethnic group (73%) or have no qualifications (79%) were also significantly less likely than average to agree to re-contact. There are other small variations in agreement rates but nothing particularly alarming (see Appendix E for full details).[11]

The key message is that the level of bias in the subset of BCS respondents that agrees to be re-contacted is tolerable.

It was noted earlier that only 30% of BCS respondents agreed to be re-contacted *and* provided an e-mail address. The practical consequence is that an online-only re-contact survey is not viable. It would need to be combined with another mode (postal in this case). Not only are e-mail supply rates low but they vary substantially between respondent subgroups. E-mail supply rates are highest among the more educated respondents (48% of those with a degree compared with 11% of those with no qualifications). Furthermore, there is a clear age bias. Nearly half (47%) of those aged 16-24 supplied an e-mail address compared with 13% of those aged 65 or older. It is clear from this that the coverage of an online-only survey would be biased (Appendix E provide further details of re-contact rates with e-mail addresses).

The second component of non-response is that between the issued sample and the achieved sample. Figure 5 shows the weighted field response rate (adjusted where necessary to reflect a 12 month re-contact period) for a variety of subgroups under each of the four re-contact models.

Figure 5 Weighted field response rates among different subgroups for each re-contact model (adjusted for 12 month re-contact period)

	Telephone	*Postal*	*Mixed-mode online>postal*	*Mixed-mode postal>online*
	%	*%*	*%*	*%*
OVERALL	60	60	60	63
Sex				
Male	59	58	58	61
Female	61	62	62	65

[11] It is interesting to note that victims of crime were more likely than average to consent to a re-contact interview.

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	Telephone	Postal	Mixed-mode online>postal	Mixed-mode postal>online
	%	%	%	%
Age				
16-24	42	30	33	35
25-44	53	43	46	49
45-64	69	69	67	70
65-74	68	83	79	82
75+	59	74	82	84
Ethnic group				
White	61	61	61	64
Mixed	55	55	40	40
Asian	51	42	58	61
Black	45	45	45	49
Other	58	45	56	53
Education				
No qualifications	56	67	59	65
Lower than degree level	61	57	58	60
Degree level or higher	64	60	65	66
Tenure				
Own outright	68	79	77	79
Buying with mortgage / part rent-part mortgage	63	55	58	62
Rent	46	42	46	47
Rent free	52	54	48	50
Opinion about how good a job the police are doing in their local area				
Excellent	62	62	69	71
Good	60	62	61	64
Fair	62	60	59	61
Poor/very poor	53	53	49	50
Whether victim of crime in last 12 months				
No	62	63	62	65
Yes	55	50	54	57
Base	*2,498*	*3,327*	*4,267*	*3,278*
Standard deviation across subgroups	*6.9*	*12.0*	*11.5*	*11.8*

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Across all re-contact models there were some general patterns observed:

- Men were less likely than women to respond.
- As age increased, so did the likelihood of response, although the oldest age group (75+) was less likely than the middle age groups (45-74) to respond by telephone.
- White BCS respondents were more likely than others to respond, possibly reflecting a language bias in response propensity.
- Response likelihood was correlated with educational level but not particularly strongly and the pattern differed between the postal and telephone models. Under the postal model, those with no qualifications were more likely than average to respond; the reverse was observed under the telephone model.
- Individuals living in rented accommodation were less likely to respond to the re-contact surveys compared with owner-occupiers.
- There was an attitudinal distinction too. BCS respondents who had expressed the view that the police were doing a poor job were less likely than others to respond.
- Finally, regardless of re-contact model, those who had been a victim of crime had a lower than average response likelihood.

While there are some differences between re-contact models, the overall picture is quite similar for each model. One way of summarising this is to calculate correlation coefficients for each data column in Figure 5. The correlation between the telephone and postal models is 0.83; between the postal and mixed-mode models it is 0.87, and between the two mixed-mode models it is 0.99.

This last observation is interesting because it shows that the sequence of offer (online first or postal first) makes very little difference to the final response likelihood. Partly this is because the online offer was made only to a minority (38% of those agreeing to be re-contacted) but, even so, the strength of correlation is higher than might be expected.

Another simple analysis is to compare re-contact models in terms of the *variance* in field response rates across subgroups. In this respect, the telephone re-contact model has the lowest variance and is therefore least likely to suffer from significant non-response bias. The mixed-mode options are not much better than the postal-only option in this respect, running somewhat against a prior hypothesis that the combination of mode options would smooth out the variance in response propensity.

It is worth noting that the variance in field response rates is generally larger than the variance in re-contact agreement rates. These two components can be added together to get a sense of the *overall* difference between the face-to-face BCS sample and the re-contact sample under different re-contact models. Figure 6 shows this response rate for the same subgroups as Figure 5. The patterns are almost the same which is to be expected given the fairly similar re-contact agreement rates across subgroups.

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The variance in *this* response rate across subgroups is slightly lower than for the field response rates. This means there is a small negative correlation between re-contact agreement rates and field response rates. In this context, a negative correlation is best because it means the two forces are somewhat compensatory.

Figure 6 Weighted post-BCS response rates among different subgroups for each re-contact model (adjusted for 12 month re-contact period)

	Telephone	*Postal*	*Mixed-mode online>postal*	*Mixed-mode postal>online*
	%	*%*	*%*	*%*
OVERALL	47	51	51	54
Sex				
Male	46	49	49	52
Female	48	53	53	56
Age				
16-24	33	26	28	30
25-44	41	37	39	42
45-64	54	60	59	61
65-74	53	70	67	69
75+	46	56	62	64
Ethnic group				
White	48	52	53	55
Mixed	43	46	33	33
Asian	40	31	43	45
Black	35	31	31	33
Other	45	33	41	39
Education				
No qualifications	44	53	47	52
Lower than degree level	48	49	50	52
Degree level or higher	50	53	58	58
Tenure				
Own outright	53	66	64	66
Buying with mortgage / part rent-part mortgage	49	48	51	55
Rent	36	35	38	39
Rent free	41	45	40	42

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	Telephone	Postal	Mixed-mode online>postal	Mixed-mode postal>online
	%	%	%	%
Opinion about how good a job the police are doing in their local area				
Excellent	48	55	60	62
Good	47	53	53	55
Fair	48	50	50	51
Poor/very poor	41	45	41	42
Whether victim of crime in last 12 months				
No	48	53	52	55
Yes	43	44	47	50
Standard deviation across subgroups	*5.4*	*10.7*	*10.1*	*10.4*

In addition to these simple bi-variate tables, TNS-BMRB modelled field response using *logistic regression methods*. Logistic regression is used with binary categorical variables and has the objective of producing a linear function that when applied to a set of predictor variables (e.g. age, sex) is most likely to produce the actual distribution of the dependent variable i.e. survey response status. Further details of the models created can be found in Appendix F.

The logistic regression models confirmed the simple variance analysis presented in Figure 5. For the telephone re-contact survey, the response model was fairly weak in terms of predictive power.[12] This suggests that response to the telephone survey is not particularly systematic, indicating a more random pattern of non-response.

For the postal re-contact survey, the response model was stronger, indicating that there were factors which were more easily identified as being characteristic of non-response.[13]

The mixed-mode models of response are complicated by the fact that the sample subject to a sequential mode offer was restricted to those supplying e-mail addresses in the BCS interview.

However, so far as these cases are concerned, the model predicting response to the online offer (when presented first) was gratifyingly weak even if the response rate (35%) was very low.[14] Interestingly, the model predicting response to *either* mode (online or postal) was stronger, even though the response rate was higher (62%).[15] This suggests that the postal second stage did little to reduce non-response bias, although the much larger sample will have helped to reduce sample variance.

[12] Nagelkerke 'pseudo' R^2 = 0.092
[13] Nagelkerke 'pseudo' R^2 = 0.236
[14] Nagelkerke 'pseudo' R^2 = 0.118
[15] Nagelkerke 'pseudo' R^2 = 0.167

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Model strength is not an infallible guide to the extent of non-response bias. Some models are weak because little that is relevant to response propensity is measured. However, non-response models based on the full face-to-face BCS interview ought to be reasonably robust, given the wealth of data available.

In all models, the two key predictor variables are age and tenure with the youngest BCS respondents and those in rented accommodation least likely to respond. These two variables account for approximately two-thirds of each model's explanatory power. Educational level was the third strongest predictor but much less important than the first two.

5. Re-interview effects

Before this analysis is presented it is useful to recall precisely what is meant by 're-interview effects'. In this context, it means the systematic difference between estimates based on re-interview data and estimates drawn from the face-to-face BCS interview data. These differences will follow from:

- different modes of data collection;
- any 'contamination' due to previous experience of the BCS interview;
- biased coverage of the target population due to sub-100% re-contact agreement;
- any uncorrected non-response bias remaining after weighting.

The focus of this chapter is on the first two of these factors. However, it is not possible to separate out re-interview effects that are due to different modes of data collection from those that are due to previous experience of the BCS interview so they are referred to in combination as 're-interview effects'.

There are a number of ways in which the different experimental cells can be compared but this study focused on two main facets:

- whether estimates varied across modes;
- whether item completion rates varied across modes.

Variation of estimates across modes

The vast majority of items in the questionnaire (30 out of a total of 40 substantive items) use four or five point scales and ask for the respondent's opinion or estimation. Of the remaining ten items, seven are factual and the expectation is that response to these items will not be influenced by mode of presentation (or at least not so much as the scale items).

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The thirty items employing response scales can be broadly divided into two: (i) 16 items requiring the respondent to give an opinion, and (ii) 14 items requiring the respondent to estimate a quantity (e.g. the local incidence of crime compared to the national incidence of crime).

Some items that employ the same response options are collected together as a 'battery'. For simplicity of definition, a 'battery' contains at least three consecutive items using the same response options. Items in a battery may be subject to slightly different effects from standalone items.

Figure 7 shows the distribution of questionnaire items across both question type and subject matter. The full questionnaire is provided in Appendix A.

Figure 7 Questions grouped by type and subject matter

Subject matter	*Type*	*Questions used*[a]
Personal safety	Scale (estimation)	Q1, Q2
Concern about crime	Scale (estimation)	Q3, Q4, Q5, **Q6a**, **Q6b**
Local area problems	Scale battery (opinion)	**Q7**
Confidence in criminal justice system (CJS)	Scale (opinion)	**Q8, Q9**
Local police performance	Scale (opinion)	**Q10**
Police and local council partnership working	Scale battery (opinion)	**Q11**
Police screener question	Factual	Q12
Police presence in local area	Awareness	Q13, Q14
Awareness of crime maps	Awareness	Q15
Contacting the police	Factual	Q16
Police effectiveness in local area	Scale (opinion)	**Q17**
Social cohesion	Scale (opinion)	**Q18, Q19**
Crimes committed against them in last 12 months	Factual battery	Q20
Risk of crime	Scale battery (opinion)	**Q21**
Demographics	Demographic	Q22, Q23, Q24

[a] *Questions in **bold** indicate a show-card was used in the BCS questionnaire.*

Re-interview effects were analysed in two parts. The first part compared the results of those allocated to the telephone re-contact model and those allocated to the postal re-contact model with the concurrent face-to-face BCS survey (filtered to include only those agreeing to be re-contacted and supplying telephone numbers since the re-contact surveys were limited to this group).

The second part compared the results of those responding online when offered as the first mode in a sequential mixed-mode model with those responding by post when offered as the first mode. In short, by excluding those responding by the second offered mode, these cells are transformed from mixed-mode cells to online-only and postal-only cells, albeit restricted to those supplying an e-mail address.

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Chapters 3 and 4 have already highlighted the differing response probabilities of certain subgroups and how these additionally vary by mode. Consequently, compensatory weights were applied to the re-contact survey data before analysis (see Appendix F for more detail on how the weights were constructed).

The responses to each question, for all data collection modes, are detailed in Appendices G and H. However the report text will highlight only the key findings, illustrating with relevant figures as appropriate.

Telephone and postal re-contact models: Scale items

Generally speaking, the Home Office 'nets' estimates drawn from scale items, to show the proportion providing a positive response and the proportion providing a negative response.[16] However, it would be preferable if the items were robust enough to be presented in full as well as in the 'netted' format.

Two aspects of scale responses were investigated:

- the direction of opinion;
- the strength of opinion.

A study of the literature led to three general hypotheses:

- those responding by telephone were expected to be more positive than face-to-face BCS respondents;
- those responding by post were expected to be less affected by a 'positivity' bias due to the absence of an interviewer to influence; and
- those responding by post were expected to express less strong opinions than those responding by telephone or face-to-face interview.

Figure 8 presents a series of statistics about the *proportion with a positive view,* calculated on the thirty scale items. It shows that, on average, those responding by telephone were slightly more positive than the face-to-face BCS respondents (+1.6%), although the mean is skewed upwards by a small number of outlier results. The median difference is zero. Overall, this is not strong support for the hypothesis of greater positivity on the telephone.

There is more support for the second hypothesis. On average, those responding by post were less positive than face-to-face BCS respondents (-3.9%). In total, they provided a more positive response in only 2 of 30 items.

Figure 8 also shows the wide range of differences. The telephone re-contact estimate varied from 6 percentage points less positive than the face-to-face BCS estimate to 12 percentage points more positive. The range was slightly narrower with the postal re-contact model but still substantial.

[16] By 'positive' we mean a sunnier outlook rather than agreement with the presented viewpoint. For example, low fear of crime and high confidence in the police would both be positive even though the scales are presented in opposite directions.

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Figure 8 Scale item statistics: the proportion with a positive view

	Telephone %	*Postal %*
Mean difference from face-to-face BCS estimate	+1.6	-3.9
Median difference from face-to-face BCS estimate	+/-0	-4
Range of differences from face-to-face BCS estimate	-6 to +12	-11 to +3
Standard deviation of differences from face-to-face BCS estimate	5.0	3.4
Number of items with a more positive score	*14*	*2*
Number of items with a more negative score	*10*	*27*
Base (items)	*30*	*30*

Figure 9 shows a set of statistics about the *strength of opinion* calculated on the thirty scale items. It shows the proportion providing strong answers (either end of the scale) compared to the face-to-face BCS equivalent. It provides support for the third hypothesis – that postal respondents use the middle categories of the scale at a greater rate than interviewed respondents. On average, the proportion of postal respondents using one of the scale end-points was eight percentage points lower than in the face-to-face BCS survey. The largest difference was eighteen percentage points.

There was no systematic difference between telephone re-contact and face-to-face BCS respondents; although a *maximum* difference of eight percentage points is substantial.

Figure 9 Scale item statistics: strength of opinion (% using either end of scale)

	Telephone %	*Postal %*
Mean difference from face-to-face BCS estimate	+1.3	-7.6
Median difference from face-to-face BCS estimate	+/-0	-8
Range of differences from face-to-face BCS estimate	-8 to +8	-18 to +7
Standard deviation of differences from face-to-face BCS estimate	4.4	6.2
Base (items)	*30*	*30*

Overall, these results suggest that the telephone re-contact model is a better option than the postal re-contact model for combining with face-to-face BCS data to generate a mixed-mode estimate. However, on several items, the two do not look particularly compatible so there remains a risk of increasing error through the addition of re-contact interviews. This issue is dealt with in more detail in Chapter 7.

Finally, these scale item statistics have been broken down to compare standalone items against battery items and opinion items against estimation items. The small number of items in each cross-classification cell (e.g. only five

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estimation battery items) prevents much systematic analysis but it does appear that the small positivity bias observed among telephone respondents may be restricted to standalone items. No positivity bias was observed among the battery items. The positivity bias also seemed to affect 'opinion' items more than 'estimation' items.

Telephone and postal re-contact models: Other items

Although evidence about 'factual' and 'awareness' items is limited by their small number, there appeared to be *no* substantial differences between the telephone and postal re-contact estimates and the face-to-face BCS estimates.

The online re-contact model

Analysis of the online data is restricted to the subgroup providing e-mail addresses. This is a highly skewed subgroup unlike those providing telephone numbers (the base for the previous section).

Consequently, analysis is limited to a comparison with postal data collected from the same subgroup, with the relevant non-response weights applied. Figure 10 shows the summary statistics for scalar items, demonstrating the compatibility of online and postal data. Given the apparent incompatibility of postal and face-to-face BCS data, this suggests that online data is similarly incompatible, at least as far as scale items are concerned. As before, there appears to be no problem with the factual or awareness items but the test pool was very limited.

Figure 10 Scale item statistics: online compared to postal responses

	Online %
Balance of opinion (% positive)	
Mean difference from postal estimate	-1.1
Median difference from postal estimate	-1
Range of differences from postal estimate	-4 to +2
Standard deviation of differences from postal estimate	1.7
Base (items)	*30*
	Online %
Strength of opinion (% using either end of scale)	
Mean difference from postal estimate	+0.4
Median difference from postal estimate	+/-0
Range of differences from postal estimate	-5 to +8
Standard deviation of differences from postal estimate	2.7
Base (items)	*30*

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Item completion rates

Much of the analysis above excludes respondents who answered 'don't know', 'refused' or did not give an answer to a question (the latter affected the postal versions only).

This might have been problematic if the proportion of those not giving a valid answer was large,[17] as it could have led to varying proportions of those giving individual valid responses. However, as Figure 11 demonstrates, the average item non-response rate is comparable with the face-to-face BCS under all re-contact models.

Figure 11 Average proportions of respondents not giving a 'valid' answer across all four modes

	Average proportion giving a 'non-valid' answer i.e. 'don't know', 'refused' or 'not stated' (%)
Telephone	1.3
Postal	2.0
Online	0.3
Face-to-face (BCS January-March 2011)	1.6

Summary

In summary, this study has shown that response to scalar questionnaire items *is* affected by the data collection mode with the presence or otherwise of the interviewer as the primary factor. *On average*, these effects do not appear to be very strong but the average conceals substantial item-by-item variation in the scale of these effects. For some items, there is a substantial risk that a mixed-mode estimate will contain more error than a single mode (face-to-face interview) estimate, despite the increased sample size.

[17] This is not to say that answering 'don't know' or 'refused' is not valid – for the purposes of most analyses however, the interest lies in the informative answers that respondents give.

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6. Assessing context effects

To test whether context effects might exist for some questions an experiment was conducted on the face-to-face BCS during the April to June 2011 quarter.

In this experiment, a subsample of BCS respondents interviewed between April and July 2011 was allocated to a slightly different version of the questionnaire.

It differed from the standard version in that seven questions relevant to the study were moved from their usual position early in the questionnaire (in the 'perceptions of crime' module) to a later position *after* the 'victim' modules that collect specific data about crime incidents (specifically after the 'mobile phone and bicycle crime' section).

The objective was to identify questions that *may* be sensitive to questionnaire placement although it must be recognised that any re-contact survey would not include a 'victim' module so the actual differences observed are not of direct relevance.

There is no need to apply weighting to the two groups before analysing the results because respondents were randomly allocated to the groups during the BCS interview.[18]

The results are contained in Appendix D, along with the results of individual significance tests. With the number of tests performed, we would expect at least one or two spurious significant differences. The total clearly exceeds that but many of the differences, while significant, are not substantial. The very large sample size of this experiment ensures that even small differences are large enough to be 'statistically significant'.

Moving the questions backwards in the questionnaire appeared to elicit answers with (i) an above average tendency to believe that crime was lower than average in their local area, and (ii) a lower than average concern about crime. Oddly, these respondents were also more likely than average to believe that crime in the country as a whole had gone up. Perhaps the intervening questions had persuaded some of them that crime was a major problem nationally and to re-evaluate their local area as less dangerous in that context.

This data was further analysed based only on the subset of respondents who were victims of crime. This yielded exactly the same findings albeit it should be noted that victims of crime had a higher concern about crime overall and are more likely than average to believe crime has increased.

In summary, responses to the 'perception of crime' questions appear to be influenced by questionnaire position. Consequently, if mixed-mode estimates are to be generated, it would be advantageous if the 'perception of crime'

[18] The demographic characteristics of both groups were checked for any major differences before the comparisons were made but none were found (which was to be expected).

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module in the face-to-face BCS interview retains its current position *early* in the questionnaire where ordering effects are likely to be less pronounced.

7. Total error

When a mixed-mode approach is used, we have to consider not just the positive effects of an increase in sample size but the negative effects of additional measurement error. Both face-to-face BCS interviews and re-contact interviews will be affected by an unknown degree of measurement error but the face-to-face BCS interviews have clear primacy in any combined sample estimate. Consequently, any systematic difference in measurement properties between the face-to-face BCS interview and the re-contact interview introduces additional bias.

The 'total error' calculation for a mixed-mode survey employs the Mean Square Error (MSE) formula for working out a total error value that incorporates both sample variance and systematic bias:

Variance of mean + squared systematic bias

For the BCS face-to-face-only estimate this is reduced to:

Variance of $mean_{BCS}$

For the mixed-mode estimate this is:

(W_{BCS}^2 * Variance of $mean_{BCS}$) + (($W_{RE\text{-}INT}^2$ * Variance of $mean_{RE\text{-}INT}$) + squared systematic bias of mixed-mode estimate)

Where W_{BCS} = weighted proportion of cases that are face-to-face BCS interviews, and $W_{RE\text{-}INT}$ = weighted proportion of cases that are re-contact interviews.

It is important to recognise that the systematic bias of the mixed-mode estimate is unknown. It is not simply the difference between the face-to-face-only estimate and the mixed-mode estimate because that difference may be entirely a product of sampling variance. Instead, we must look at a range of possible values.

TNS-BMRB calculated the total error score for a range of overall estimates (5% through 50% in intervals of five percentage points) and for a range of possible differences between the BCS-only estimate and the re-contact interview estimate, assuming that (a) the sample ratio was 650:350 and (b) that both estimates had a design effect of 1.5, fairly typical of BCS estimates.

Figure 12 shows the 'tipping point' for each estimate: the maximum systematic difference between the BCS estimate and the re-contact interview estimate that can be tolerated before the total error score *increases* under a mixed-mode design.

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Figure 12: Tipping points: the maximum systematic difference between BCS estimate and re-contact interview estimate that will lead to a lower error score for mixed-mode estimate

Overall estimate	Tipping point
5%	2%
10%	2.5%
15%	3%
20%	3.5%
25%	4%
30%	4%
35%	4%
40%	4%
45%	4.5%
50%	4.5%

Although Figure 12 suggests a tolerance of around 3-4 percentage points is generally appropriate, the cost of the re-interviews must also be factored in. If the mixed-mode design leads to a reduction in total error but that reduction is very small, then the additional interviews will not provide value for money. The evidence from this study (described in Chapter 5) suggests that the tipping point was reached for a number of questionnaire items and was nearly reached for a number of others.

On balance, the *value* of adding re-contact interviews to the face-to-face interview dataset is negligible.

8. Assessing costs

Cost data from the experiments allowed TNS-BMRB to estimate the costs of conducting the four re-contact survey models.

- Telephone only re-contact;
- Postal only re-contact;
- Postal only re-contact (those who do not supply an e-mail address) / Online then postal mixed-mode re-contact (those who do supply an e-mail address);
- Postal only re-contact (those who do not supply an e-mail address) / Postal then online mixed-mode re-contact (those who do supply an e-mail address).

Figure 13 displays the costs of the four approaches, using the telephone re-contact model as the baseline measure for the indices.

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Fixed costs are incurred regardless of sample size, for example, the development, testing and programming of questionnaires, and the production of a data file.

Variable costs increase with the size of the sample, for example, contacting and interviewing respondents.[19] For the telephone option, the variable costs match the fixed costs when the sample size is 625. Consequently, when computing total survey costs, the variable cost index score multiplied by n/625 should be added to the fixed costs index score.

Figure 13 Indexed re-contact survey costs

	Telephone	*Postal*	*Mixed-mode (online first) / Postal*	*Mixed-mode (postal first) / Postal*
Fixed costs	100	55	131	131
Variable costs	100	67	54	65

The telephone re-contact option would be the most expensive to administer unless the boost sample was very small (n<500).

The postal-only re-contact model has lower fixed and variable costs than the telephone option while the mixed-mode options have the lowest variable costs but the highest fixed costs. If the sample size exceeds 3,700 the online>postal mixed-mode design has lowest overall costs. The postal>online option is never the cheapest option. Given the small number of completed online questionnaires, there must be questions about the value of setting up this alternative mode.

Re-contact feasibility

Based on the response rates observed in this study, the base BCS sample – the pool from which respondents will be re-contacted – needs to be approximately double the number of the targeted interviews.

If the target sample size per PFA is 1,000, that means a minimum base sample size of c.650. A proportional BCS with an overall sample size of 35,000 would include many PFAs with sample sizes lower than 650. Some level of disproportionate sampling is therefore necessary in the BCS if the boost to 1,000 interviews per PFA is to be feasible.

[19] An ESRC factsheet contains a simple explanation of how survey mode affects costs. Available at: http://surveynet.ac.uk/sqb/datacollection/modeeffectsfactsheet.pdf

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9. Discussion and conclusion

There is a presentational advantage in achieving 1,000 interviews per PFA. It is the standard poll sample size and that helps those individuals (e.g. elected Police and Crime Commissioners) who wish to use the data as credible evidence base when debating with non-statisticians.

However, all mixed-mode surveys come with a risk of incompatibility. In many instances, the benefits outweigh the risks but this is not true in this instance. The PFA sample size must be at least 650 to supply enough contacts for a subsequent year's sample to reach 1,000. That alone would be sufficient for a robust estimate. The addition of 350 interviews, while reducing sampling variance, might not reduce total error because of the fog introduced by re-interview effects, even if quite minor in nature.

Nevertheless, if the Home Office wished to commission a re-contact sample in the future, TNS-BMRB recommends using a single telephone mode for the follow-up interviews. The reasons are as follows:

1. The overall conversion rate from initial BCS interviews to re-interviews (47% in this study) is very similar to other modes and mode combinations but the non-response bias in the achieved sample is lower than for a postal survey or either of the postal/online combinations.

2. Although the overall cost of a single telephone mode is greater than the postal and mixed postal/online mode, the absolute difference is not great even with a large sample.

3. It is slightly easier to control the timing of telephone interviews, ensuring a more regular 12 month gap between data collection points.

4. The difference in measurement properties between the face-to-face interview mode and the telephone interview mode are smaller than between the face-to-face interview mode and the postal or online self-completion modes. In particular, the self-completion modes are associated with greater use of the middle points in a scale and a more negative outlook.

5. The telephone questionnaire can use the 'implicit' don't know or refuse codes that are very prevalent in the face-to-face BCS questionnaire. These must either be omitted or explicitly offered in a self-completion questionnaire, compromising comparability.

Although clearly the best mode among those tested in this study, the telephone interview mode is not entirely comparable with the face-to-face interview mode. For example, it appeared to encourage slightly greater use of the most positive point on a scale (a typical finding in mode study literature). It also cannot use show-cards or other visual display options. These features can easily cause a systematic difference in measurement that exceeds the 'tipping point' discussed in Chapter 7.

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Appendix A: Postal questionnaire

Home Office

tns bmrb

British Crime Survey Follow up questions

We would like to ask for your help completing some extra questions for the **British Crime Survey**, some of which are similar to previous questions that we have asked. This questionnaire will ask you about your attitudes towards crime and the criminal justice system and we would be very grateful if you would complete this questionnaire. **Please read these instructions first before completing the questionnaire.**

1. Our guarantee of confidentiality

The names and addresses of people who co-operate in the survey will be held in **strict confidence**. We will never pass your name or address to any other government department, business or anyone else.

2. How to fill in the questionnaire

1. Please fill in this questionnaire using **black ink.** Please start at Section 1 on the reverse of this page.
2. For each question on the following pages **please cross one box only** next to the answer that applies to you, like this, unless the question instructs otherwise:

   Yes ☒
   No ☐
3. Sometimes you will find that the box you have ticked has an instruction next to it to go to another question. By following the instructions carefully you will miss out questions which do not apply to you.
4. If you change your mind about an answer you have given, completely block out the box you have crossed [■] and then put a cross in your preferred answer box.
5. Please try and answer every question that you are asked to. If you cannot remember, do not know, are unable to answer a particular question or it does not apply to you then please cross the 'Don't know' box if available, otherwise leave blank.
6. If you need help **completing the questionnaire**, or have any **questions about the survey itself** please contact Barry Fong at TNS-BMRB on FREEPHONE 0800 015 1882 or e-mail crimefollowup@tns-bmrb.co.uk.

Thank you for taking part. We are very grateful for your help.

+ 1 +

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SECTION 1: Feeling safe

Throughout this questionnaire we will ask about your area. By your area, we mean within 15 minutes walk from your home.

Q1. How safe do you feel walking alone in your area after dark? If you never go out alone after dark, please think about how safe you would feel.

- Very safe ☐
- Fairly safe ☐
- A bit unsafe ☐
- Very unsafe ☐

Q2. How safe do you feel walking alone in your area during the day? If you never go out alone during the day, please think about how safe you would feel.

- Very safe ☐
- Fairly safe ☐
- A bit unsafe ☐
- Very unsafe ☐

SECTION 2: Levels of crime

The next few questions are about the level of crime. Not all areas of the country experience the same levels of crime. What happens in your local area may or may not reflect the national picture. When answering the following questions, please remember that there are no right or wrong answers. We are interested in what you think.

Q3. Compared to the country as a whole, do you think the level of crime in your local area is…

- …a lot higher than average ☐
- …a little higher than average ☐
- …about average ☐
- …a little lower than average ☐
- …or a lot lower than average? ☐

Q4. To what extent has your concern about crime increased or decreased over the last few years?

- It has increased a lot ☐
- It has increased a little ☐
- It has stayed about the same ☐
- It has decreased a little ☐
- It has decreased a lot ☐

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Q5. How likely do you think you personally are to be a victim of crime in the next year?

- ☐ Very likely
- ☐ Fairly likely
- ☐ Fairly unlikely
- ☐ Very unlikely

Q6a. What do you think has happened to crime in the country as a whole over the past few years?

- ☐ Gone up a lot
- ☐ Gone up a little
- ☐ Stayed about the same
- ☐ Gone down a little
- ☐ Gone down a lot

Q6b. What do you think has happened to crime in your local area over the past few years?

- ☐ Gone up a lot
- ☐ Gone up a little
- ☐ Stayed about the same
- ☐ Gone down a little
- ☐ Gone down a lot

SECTION 3: Your local area

The next question asks about different types of behaviour. For each type of behaviour, please think about how much of a problem this is in your area. As a reminder, by your area, we mean within 15 minutes walk from your home.

Q7. Thinking about each of the following things, please tell us how much a problem this is in your area.

Please cross one box on each row ☒

	A very big problem	A fairly big problem	Not a very big problem	Not a problem at all
Noisy neighbours or loud parties	☐	☐	☐	☐
Teenagers hanging around on the streets	☐	☐	☐	☐
Rubbish or litter lying around	☐	☐	☐	☐
Vandalism, graffiti, and other deliberate damage to property or vehicles	☐	☐	☐	☐
People using or dealing drugs	☐	☐	☐	☐
People being drunk or rowdy in public places	☐	☐	☐	☐
Abandoned or burnt out cars	☐	☐	☐	☐

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SECTION 4: The Criminal Justice System

The next two questions are about the effectiveness of the Criminal Justice System. This includes the police, the Crown Prosecution Service (CPS), the courts, the prisons, and the probation service.

We would like to know how you think these organisations are performing across the country as a whole. You don't need to have had contact with any of them to answer the questions. We are just interested in your general opinion.

Q8. The police are responsible for keeping the public safe by preventing crime and catching criminals.

Thinking about the country as a whole, how confident are you that the police are effective at catching criminals?

- Very confident ☐
- Fairly confident ☐
- Not very confident ☐
- Not at all confident ☐
- Don't know ☐

Q9. Thinking about all of the agencies within the Criminal Justice System (the police, the Crown Prosecution Service, the courts, the prisons, and the probation service), please tell us how confident you are that…

Please cross one box on each row ☒

	Very confident	Fairly confident	Not very confident	Not at all confident	**Don't know**
…the CJS as a whole is effective	☐	☐	☐	☐	☐
…the CJS as a whole is fair	☐	☐	☐	☐	☐

SECTION 5: Your local police

Q10. We would now like you to think about the police in your area (by your area, we mean within 15 minutes walk from your home). You don't need to have actually had contact with the police to answer these questions, we are just interested in your general opinion about the police in your area.

Taking everything into account, how good a job do you think the police in your area are doing?

- Excellent ☐
- Good ☐
- Fair ☐
- Poor ☐
- Very poor ☐

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Q11. It is the responsibility of the police and local council working in partnership to deal with anti-social behaviour and crime in your local area.

Thinking about the following statements, please tell us how much you agree or disagree with each of these.

Please cross one box on each row ☒

	Strongly agree	Tend to agree	Neither agree nor disagree	Tend to disagree	Strongly disagree
The police and local council seek people's views about the anti-social behaviour and crime issues that matter in your area	☐	☐	☐	☐	☐
The police and local council are dealing with the anti-social behaviour and crime issues that matter in your area	☐	☐	☐	☐	☐
The police and local council keep people informed about how they are dealing with anti-social behaviour and crime issues that matter in your area	☐	☐	☐	☐	☐

Q12. Are you, or any other members of your household, serving police officers?

Yes ☐ → **GO TO Q18**
No ☐ → **GO TO Q13**

Q13. On average, how often do you see Police Officers or Police Community Support Officers (PCSOs) <u>on foot patrol</u> in your local area?

NOTE: Police Community Support Officers are employed by police forces. They wear a uniform similar to police officers and deal with tasks that do not require a police officer's experience or powers.

More than once a day ☐
Once a day ☐
About once a week ☐
About once a month ☐
Less than once a month ☐
Never ☐

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Q14. In the last two years, have you noticed any change in how often you see Police Officers or Police Community Support Officers on foot patrol in your local area?

Compared with two years ago, would you say that you notice them…

…more often ☐
…less often ☐
…or about the same amount? ☐

Q15. Since January 2011, maps and information which show the level of crime and anti-social behaviour on each street have been publicly available on the internet. Before filling in this survey, did you know that this type of online information was available at street level?

Yes ☐
No ☐

Q16. During the last 12 months have you yourself contacted the police either by telephone, or in the street, or by calling at a police station, for any reason?

Yes ☐
No ☐
Don't know ☐

Q17. Thinking about the police in your local area, how effective do you think they are at…

Please cross one box on each row ☒

	Very effective	Fairly effective	Not very effective	Not at all effective
…solving crimes	☐	☐	☐	☐
…preventing crimes	☐	☐	☐	☐

Q18. We would now like you to think about your neighbourhood. If some children were spray-painting graffiti on a local building, how likely is it that people in your neighbourhood would do something about it?

Very likely ☐
Fairly likely ☐
Fairly unlikely ☐
Very unlikely ☐

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Q19. If there was a fight near your home and someone was being beaten up or threatened, how likely is it that people in your neighbourhood would do something about it?

Very likely	☐
Fairly likely	☐
Fairly unlikely	☐
Very unlikely	☐

SECTION 6: Crimes against you

Q20. We would now like to ask you about crimes you may have experienced in the last 12 months. We are only concerned with incidents that have happened to you personally. In the last 12 months…

Please cross one box on each row ☒

	Yes	No
…has anyone got into your house/flat without permission and stolen or tried to steal anything?	☐	☐
…have you had your car, van, motorcycle or other motor vehicle stolen or driven away without permission?	☐	☐
…has anyone stolen or tried to steal anything you were carrying out of your hands or from your pockets or from a bag or case?	☐	☐
…has anything else of yours been deliberately damaged or tampered with by vandals or people out to steal?	☐	☐
…has anyone, including people you know well, deliberately hit you with their fists or with a weapon of any sort or kicked you or used force or violence in any other way?	☐	☐

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SECTION 7: Risk of crime

Q21. We would now like to ask you about the chance of certain crimes happening. Some crimes are more likely to happen to some people than to others. For each of the following crimes, please tell us how likely you think each one is to happen to you in the next year.

Please cross one box on each row ☒

	Very likely	Fairly likely	Fairly unlikely	Very unlikely
Your home being burgled	☐	☐	☐	☐
Your house, garden, or other household property vandalised	☐	☐	☐	☐
Being mugged or robbed	☐	☐	☐	☐
Being physically attacked or assaulted by a stranger	☐	☐	☐	☐
Being harassed or intimidated in the street or any other public place	☐	☐	☐	☐

SECTION 8: About you

Q22. Are you:

Male ☐
Female ☐

Q23. What is your age?
Please write the number as a figure, not in words

Q24. Have you done any paid work in the past seven days, either as an employee or self-employed?

Yes – full time ☐
Yes – part time ☐
No ☐

Is there anything you intended to go back and complete? Please check.

This is the end of the survey.
Thank you very much for taking part.

Please return your questionnaire in the pre-paid return envelope provided by Tuesday 3rd May 2011

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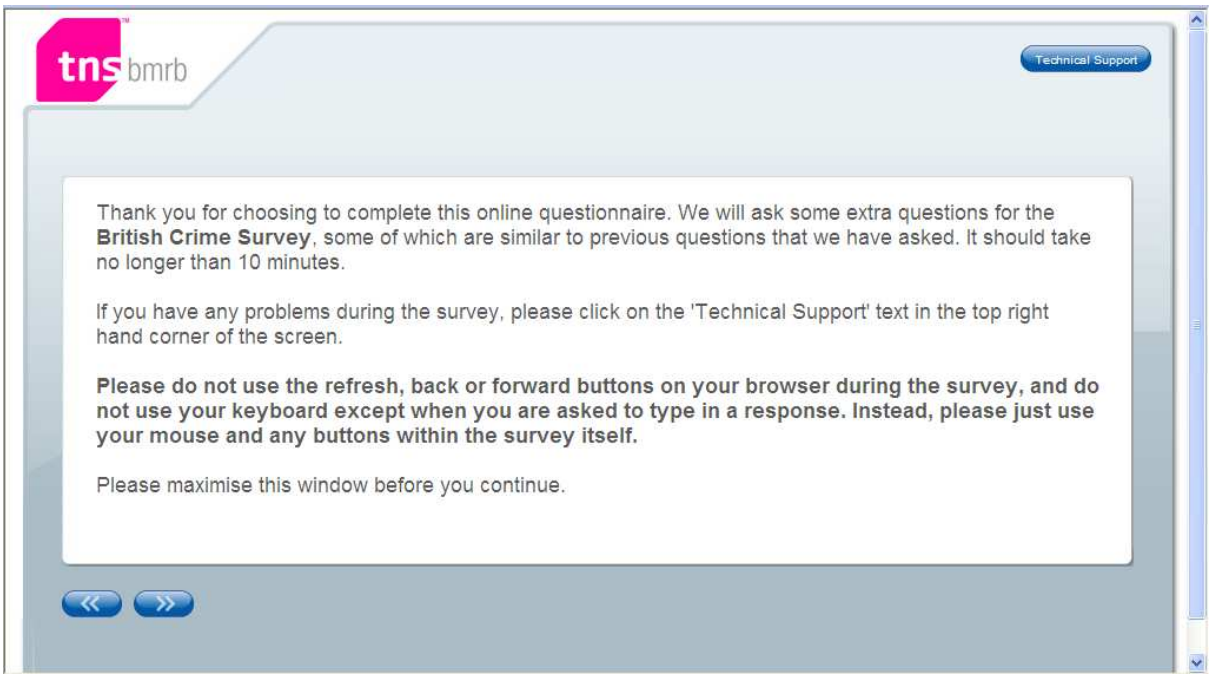
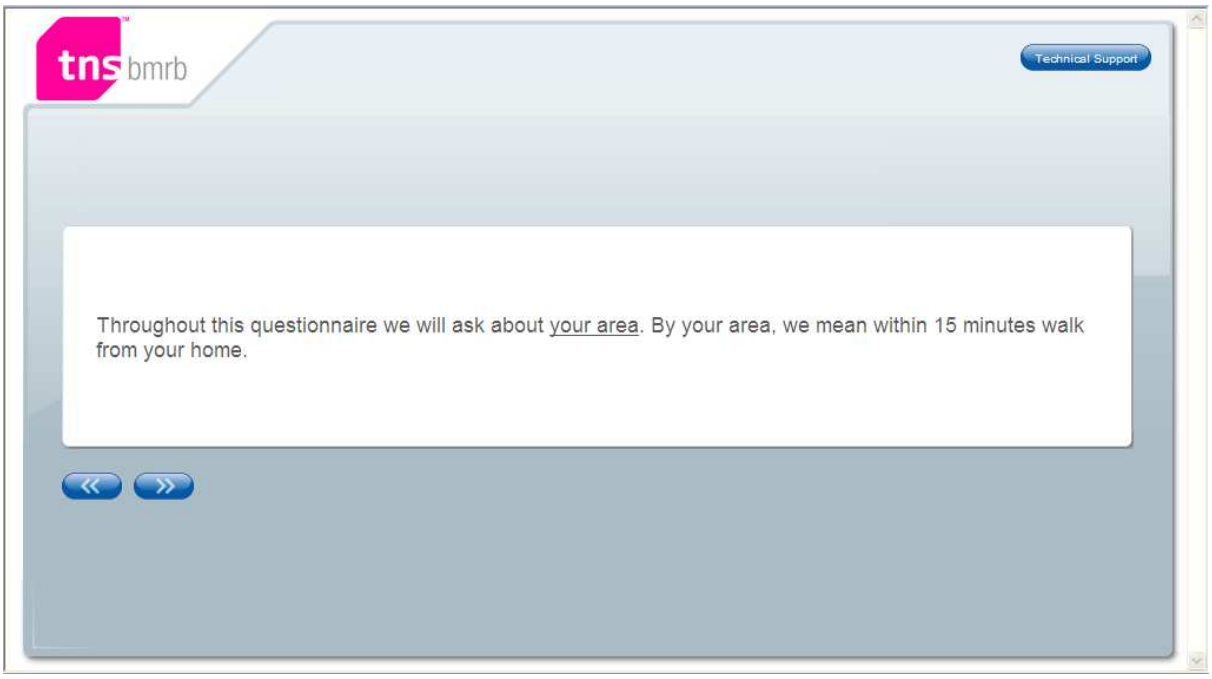
Appendix B: Online questionnaire

Introduction



Section 1 introductory text



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Q1

Q2

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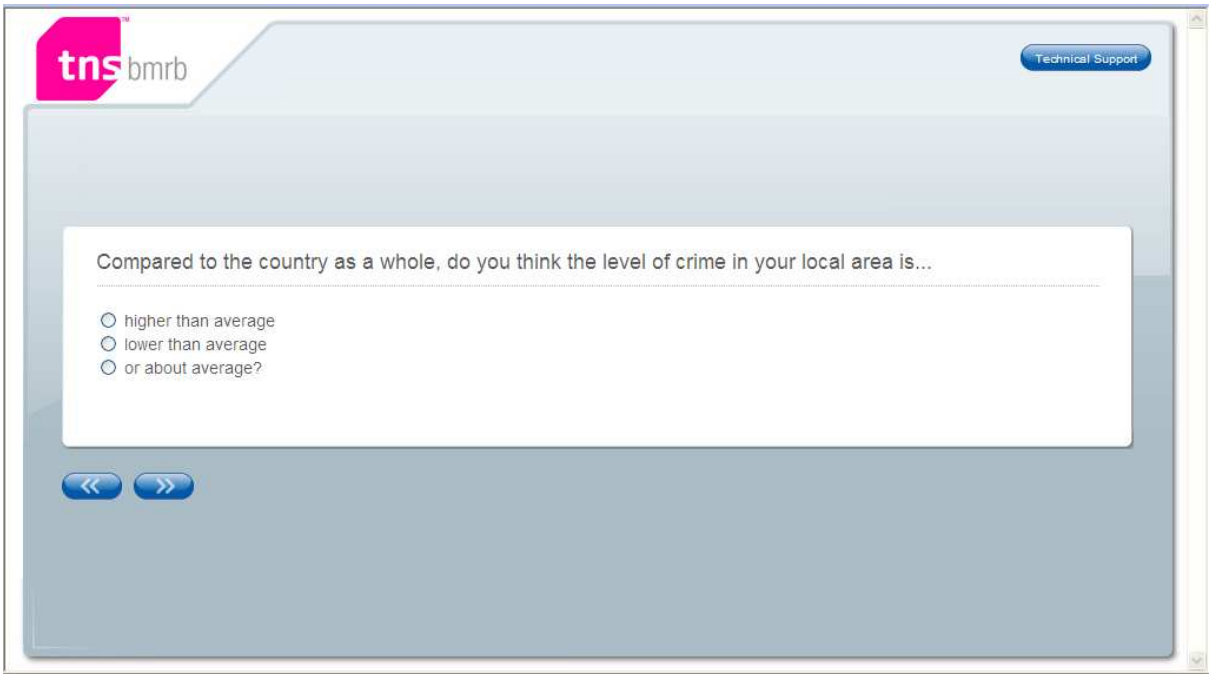
Section 2 introductory text

Q3a



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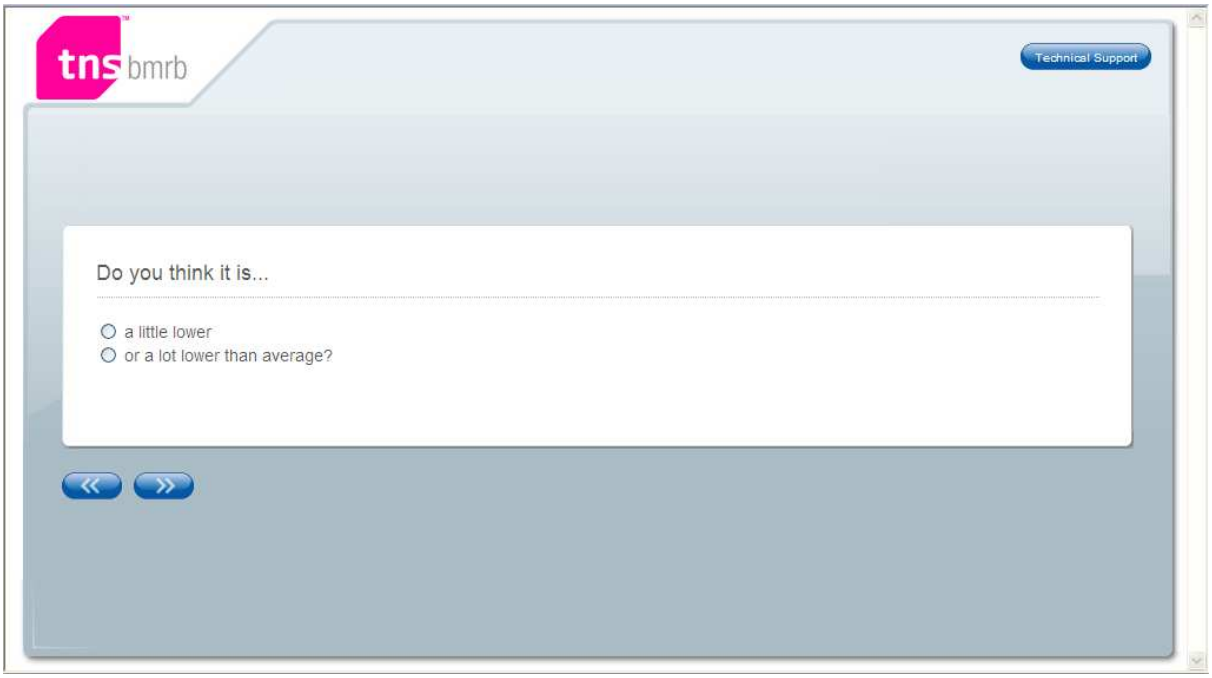
Q3b (IF Q3a=lower than average)



Q3b (IF Q3a=higher than average)

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Q4a

Q4b (IF Q4a=increased)

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Q4b (IF Q4a=decreased)

Q5

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Q6a

Q6b

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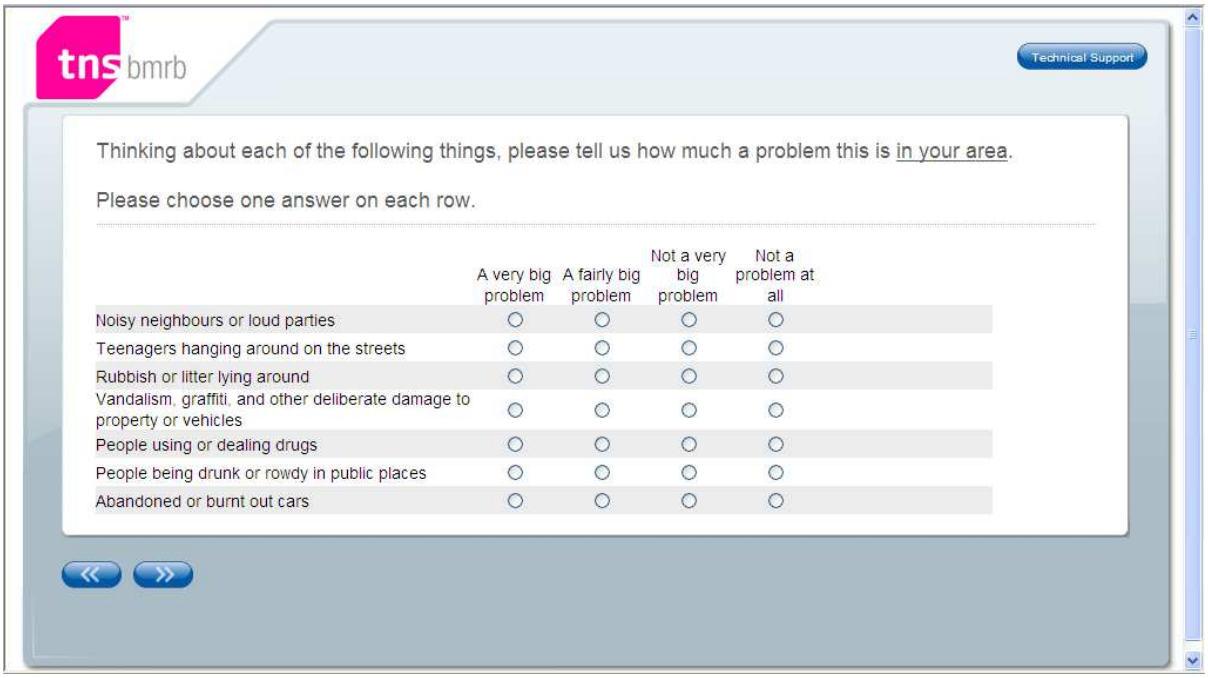
Section 3 introductory text

Q7



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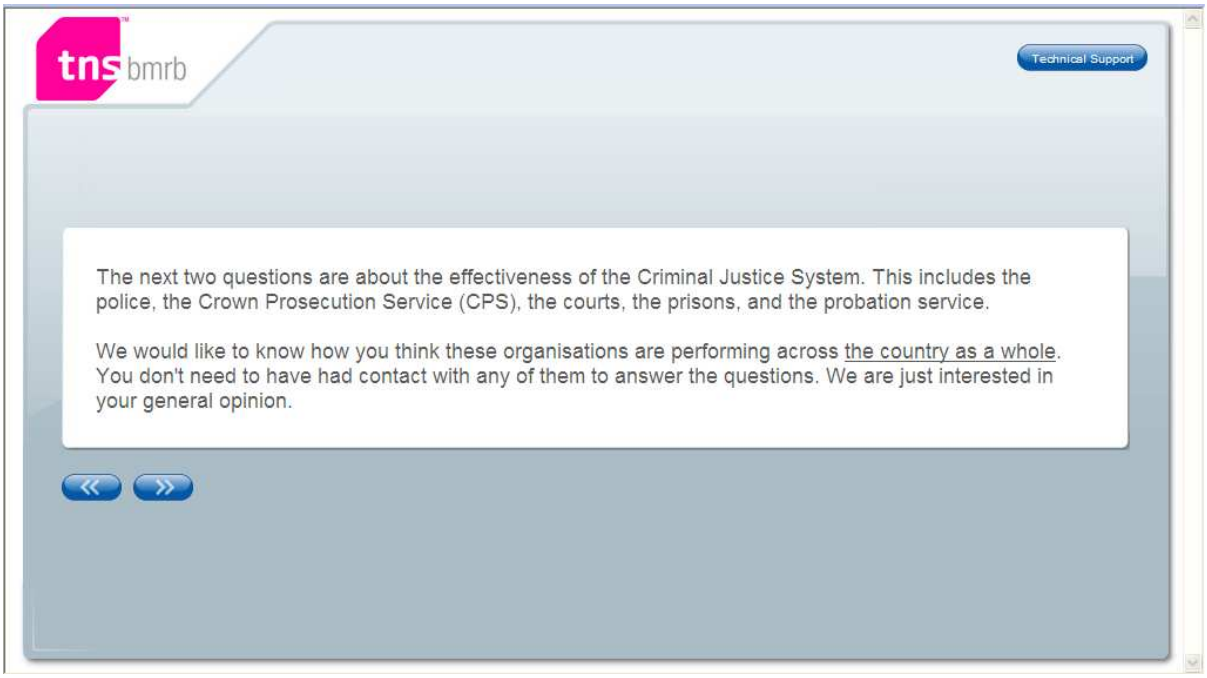
Section 4 introductory text



Q8

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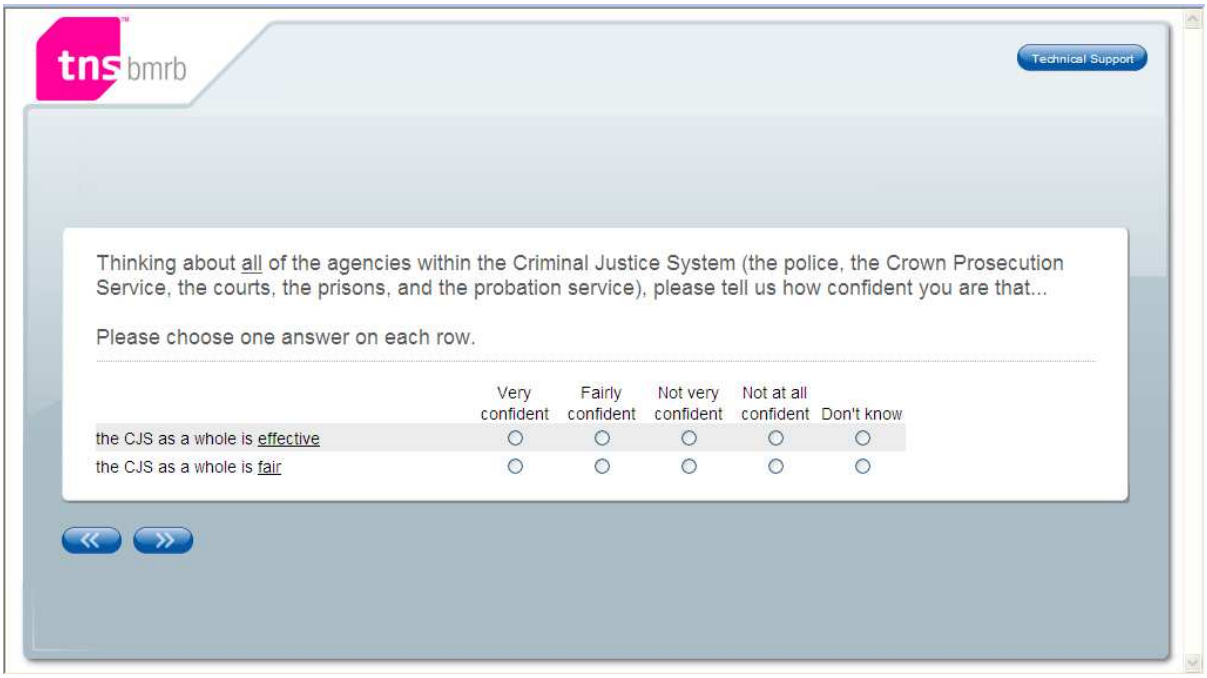
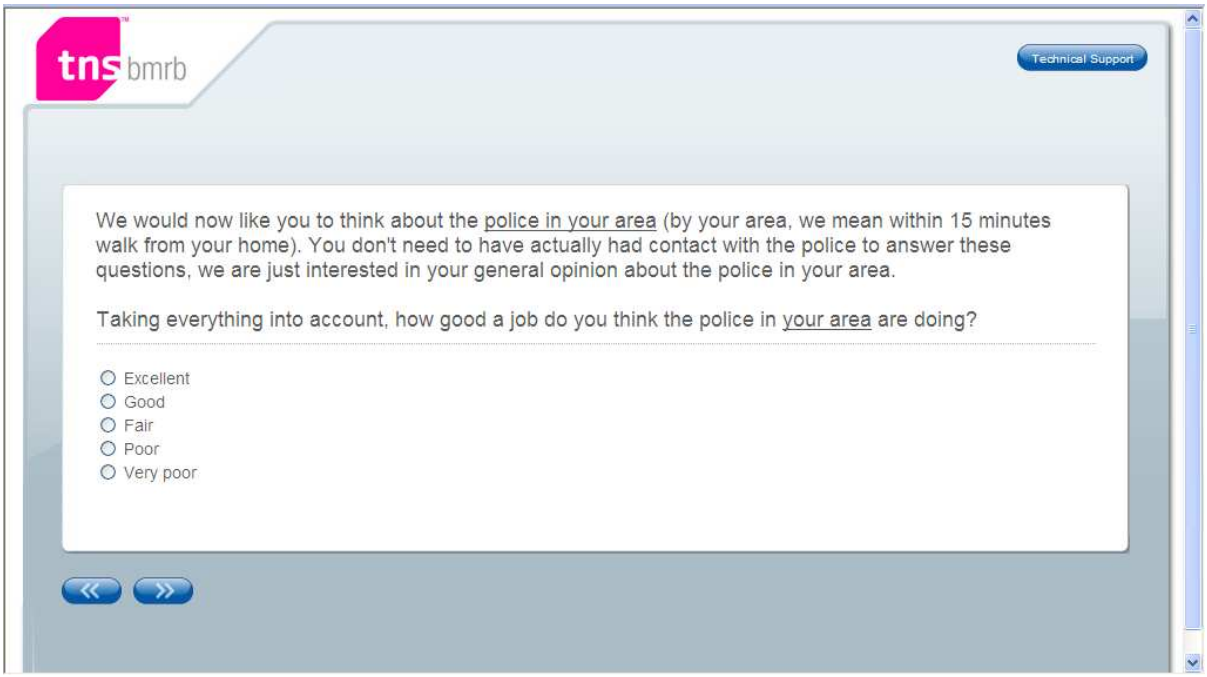
Q9



Q10



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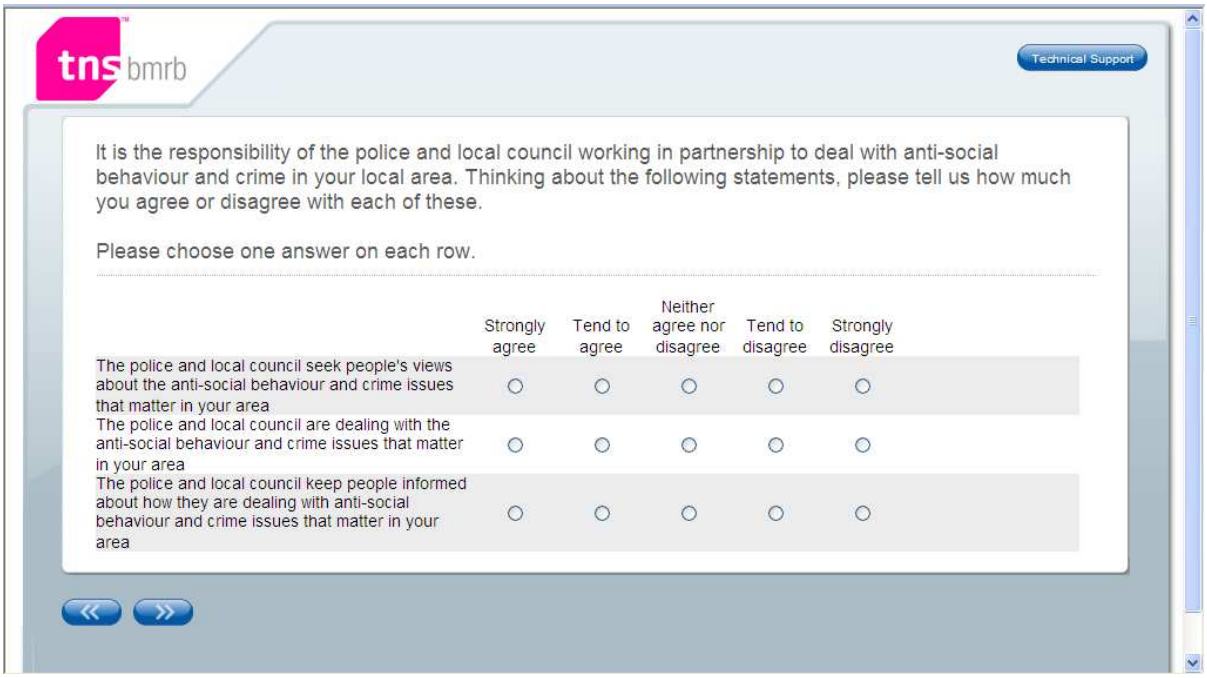
Q11



Q12

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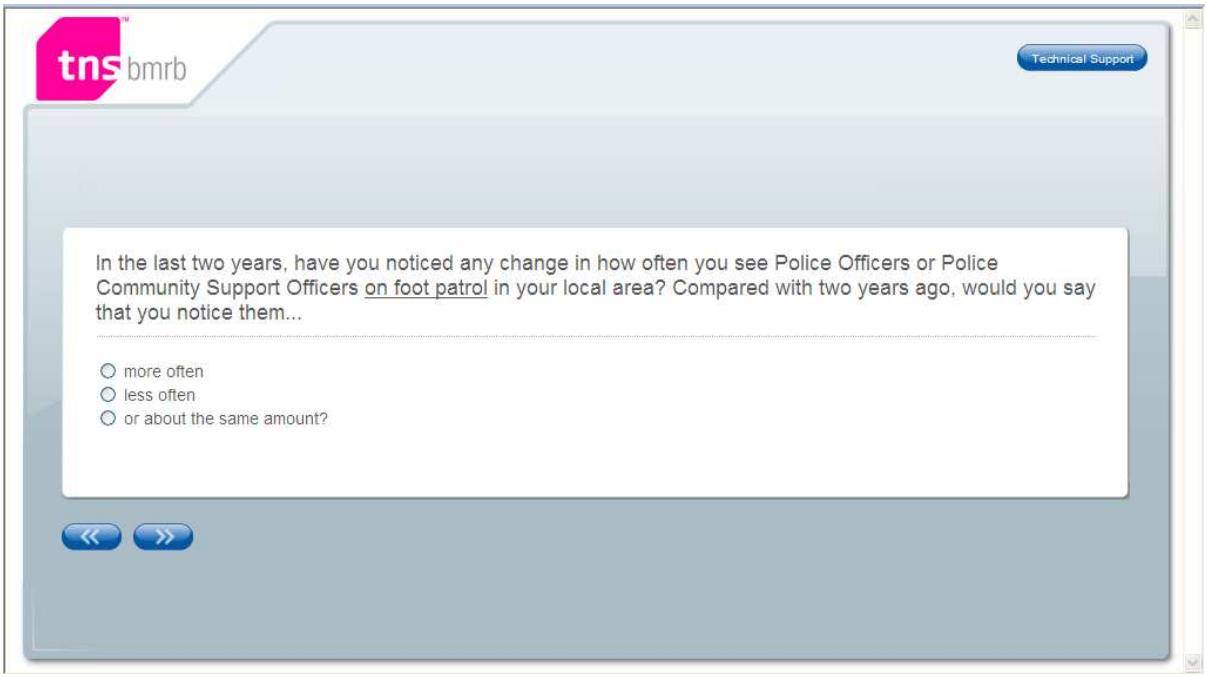
Q13 (IF Q12=No)

Q14 (IF Q12=No)



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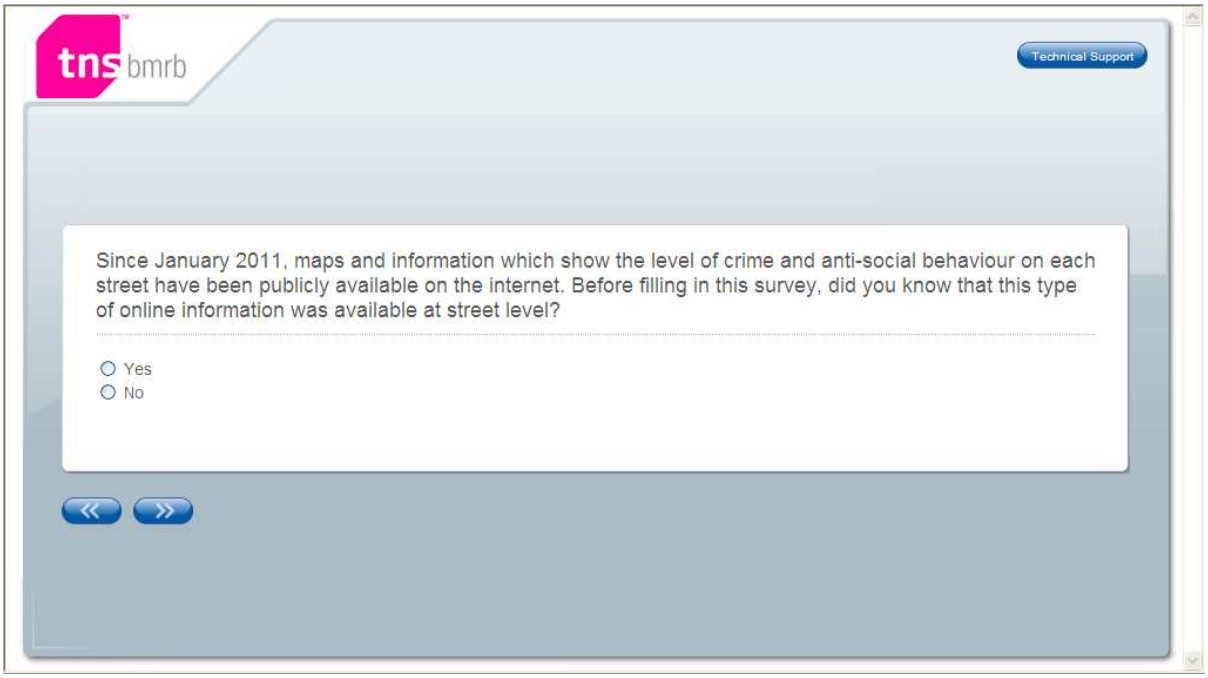
Q15 (IF Q12=No)



Q16 (IF Q12=No)

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Q17 (IF Q12=No)

Q18

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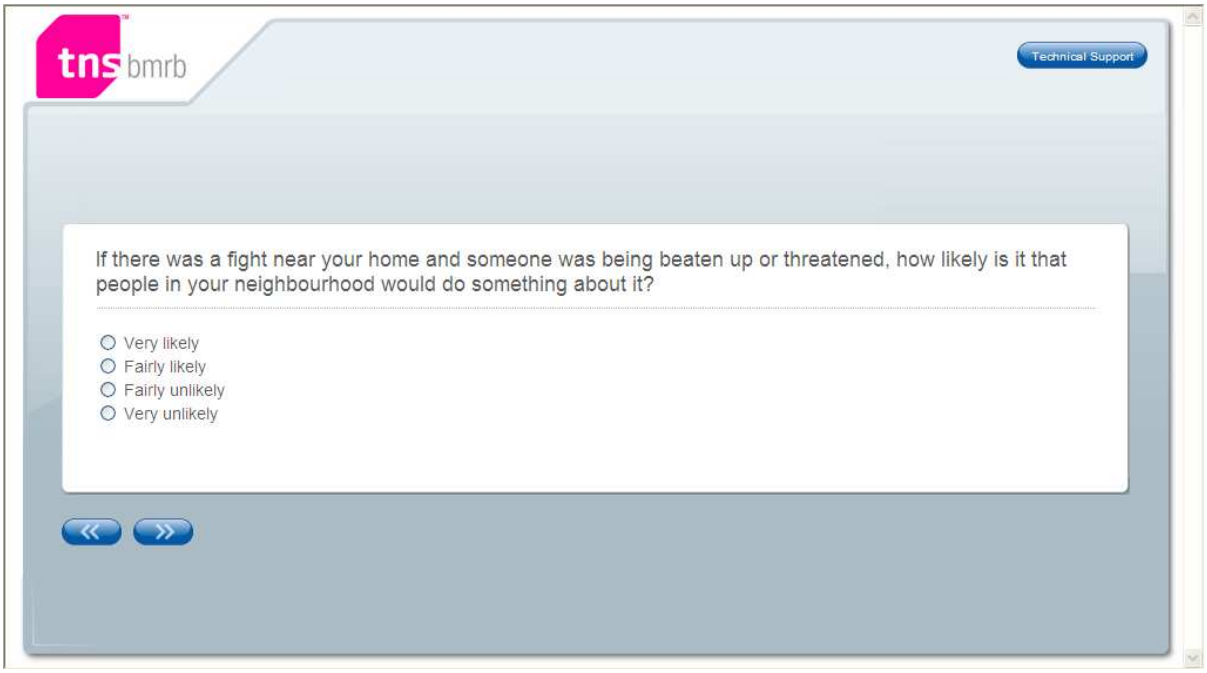
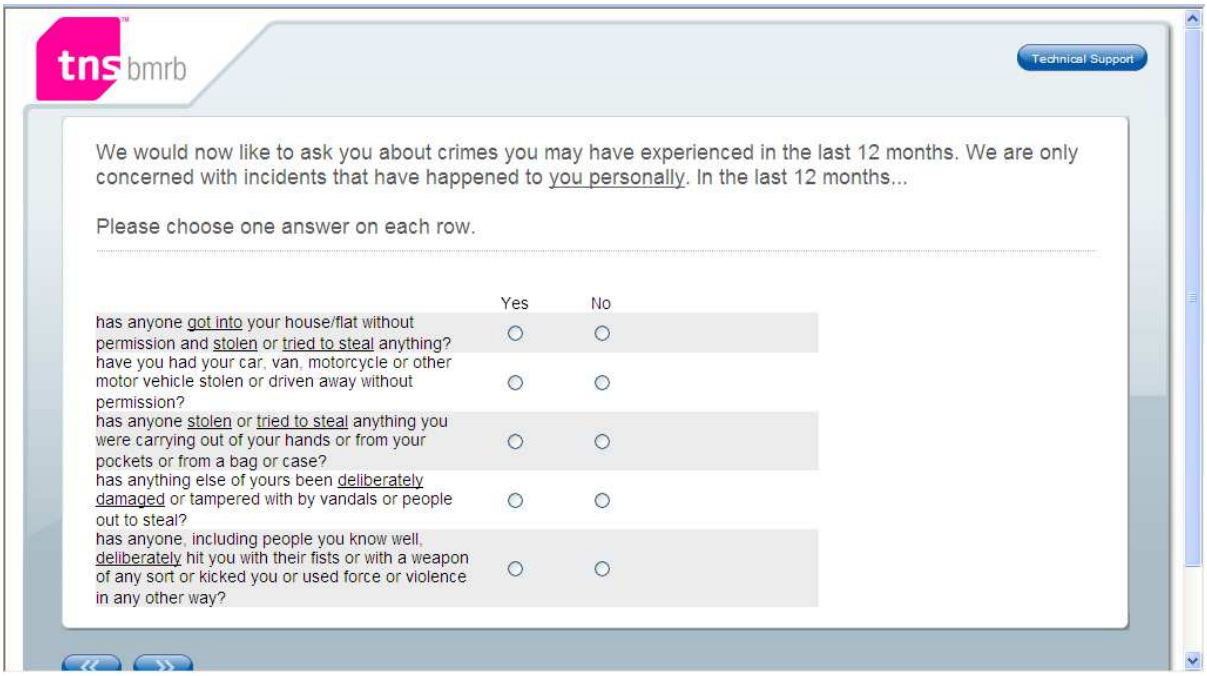
Q19



Q20



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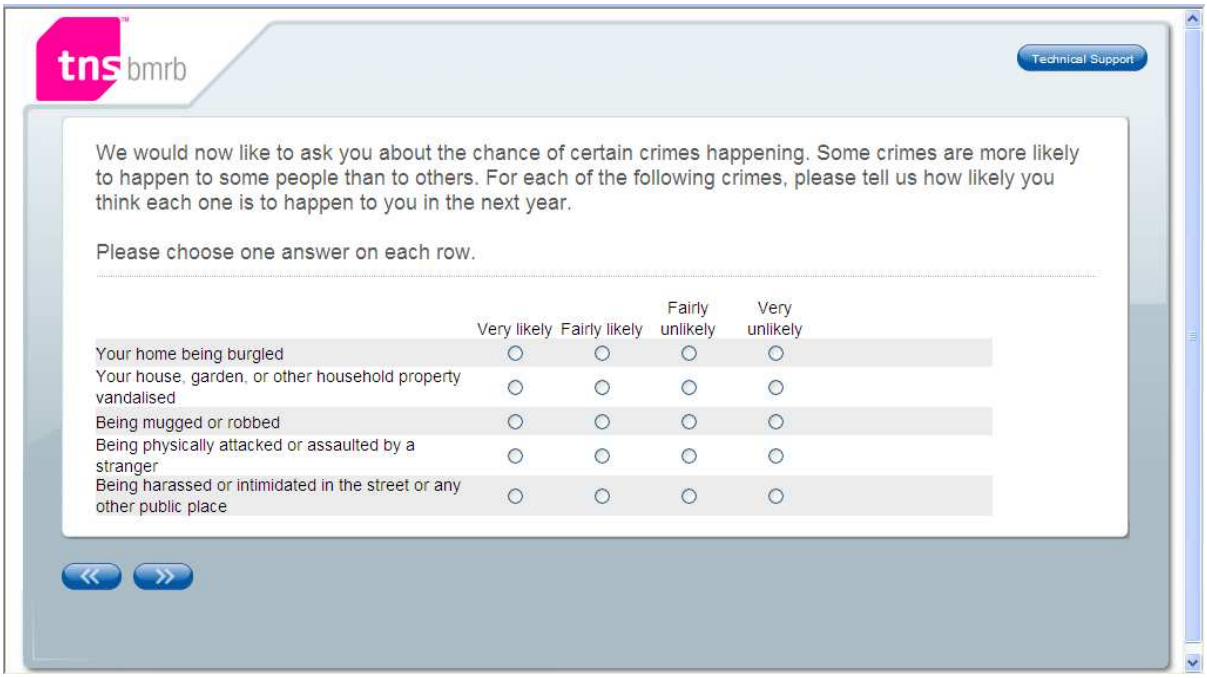
Q21



Q22

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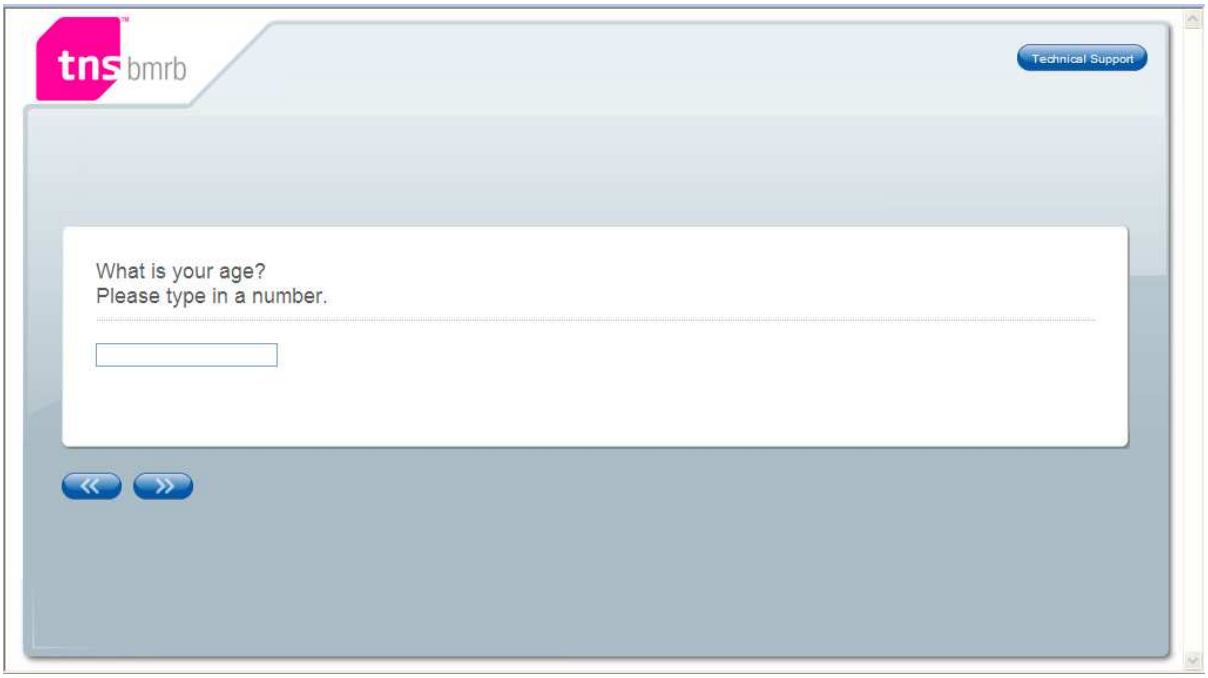
Q23



Q24

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Appendix C: Telephone (CATI) questionnaire

British Crime Survey Follow up questions

JN 220934: CATI questionnaire (FINAL)

INTRODUCTION

Good morning/afternoon/evening my name is ..... and I'm calling on behalf of TNS-BMRB. Can I speak to <named contact>?

ONCE SPEAKING TO NAMED PERSON:

Back at the beginning of 2010 you took part in the British Crime Survey which TNS-BMRB conducted on behalf of the Home Office. The survey covered your views and experiences of crime. We would like to speak to you again to see how things have changed for you. Are you able to spare a few minutes of your time to answer some questions?

IF ASKED: This will only take about 10 minutes

IF ASKED: The British Crime Survey is one of the sources which the government uses to compile national crime statistics.

INSTRUCTIONS FOR SCRIPTERS

- Do not include Section headings in script to be read out.
- Preamble text in grey boxes should be read out and scripted as 'text items'
- Where text is underlined, in CATI, they should be highlighted or capitalised text
- DK and Ref to appear as special codes in CATI survey

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SECTION 1: Feeling safe

Throughout this questionnaire we will ask about your area. By your area, we mean within 15 minutes walk from your home.

ASK ALL

Q1. How safe do you feel walking alone in your area after dark?
READ OUT
NOTE: IF RESPONDENT NEVER GOES OUT ALONE AT NIGHT, PROBE: How safe WOULD you feel?

- Very safe ☐
- Fairly safe ☐
- A bit unsafe ☐
- Very unsafe ☐

ASK ALL

Q2. How safe do you feel walking alone in your area during the day?
READ OUT
NOTE: IF RESPONDENT NEVER GOES OUT ALONE DURING THE DAY, PROBE: How safe WOULD you feel?

- Very safe ☐
- Fairly safe ☐
- A bit unsafe ☐
- Very unsafe ☐

SECTION 2: Levels of crime

The next few questions are about the level of crime. Not all areas of the country experience the same levels of crime. What happens in your local area may or may not reflect the national picture. When answering the following questions, please remember that there are no right or wrong answers. We are interested in what you think.

ASK ALL

Q3a. Compared to the country as a whole, do you think the level of crime in your local area is…
READ OUT

- …higher than average ☐
- …lower than average ☐
- …or about average? ☐

ASK IF Q3a=Higher than average OR Lower than average

Q3b. Do you think it is…
READ OUT

- …a little <TEXTFILL FROM Q3a ANSWER: higher/lower> ☐
- …or a lot <TEXTFILL FROM Q3a ANSWER: higher/lower> than average? ☐

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ASK ALL

Q4a. To what extent has your concern about crime increased or decreased over the last few years? Would you say it has…READ OUT

increased	☐
decreased	☐
or stayed about the same?	☐

ASK IF Q4a=Increased OR Decreased

Q4b. Has it <TEXTFILL FROM Q4a ANSWER: increased/decreased>… READ OUT

…a lot	☐
…or a little?	☐

ASK ALL

Q5. How likely do you think you personally are to be a victim of crime in the next year? READ OUT

Very likely	☐
Fairly likely	☐
Fairly unlikely	☐
Very unlikely	☐

ASK ALL

Q6a. What do you think has happened to crime in the country as a whole over the past few years? READ OUT

Gone up a lot	☐
Gone up a little	☐
Stayed about the same	☐
Gone down a little	☐
Gone down a lot	☐

ASK ALL

Q6b. What do you think has happened to crime in your local area over the past few years? READ OUT

Gone up a lot	☐
Gone up a little	☐
Stayed about the same	☐
Gone down a little	☐
Gone down a lot	☐

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SECTION 3: Your local area

The next question asks about different types of behaviour. For each type of behaviour, please think about how much of a problem this is in your area. As a reminder, by your area, we mean within 15 minutes walk from your home.

ASK ALL

Q7. Thinking about each of the following things, please tell us how much a problem this is in your area.

READ OUT AS NECESSARY

	A very big problem	A fairly big problem	Not a very big problem	Not a problem at all
Noisy neighbours or loud parties	☐	☐	☐	☐
Teenagers hanging around on the streets	☐	☐	☐	☐
Rubbish or litter lying around	☐	☐	☐	☐
Vandalism, graffiti, and other deliberate damage to property or vehicles	☐	☐	☐	☐
People using or dealing drugs	☐	☐	☐	☐
People being drunk or rowdy in public places	☐	☐	☐	☐
Abandoned or burnt out cars	☐	☐	☐	☐

SECTION 4: The Criminal Justice System

The next two questions are about the effectiveness of the Criminal Justice System. This includes the police, the Crown Prosecution Service (CPS), the courts, the prisons, and the probation service.

We would like to know how you think these organisations are performing across the country as a whole. You don't need to have had contact with any of them to answer the questions. We are just interested in your general opinion.

ASK ALL

Q8. The police are responsible for keeping the public safe by preventing crime and catching criminals.

Thinking about the country as a whole, how confident are you that the police are effective at catching criminals?
READ OUT

- Very confident ☐
- Fairly confident ☐
- Not very confident ☐
- Not at all confident ☐
- Don't know ☐

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ASK ALL

Q9. Thinking about <u>all</u> of the agencies within the Criminal Justice System (the police, the Crown Prosecution Service, the courts, the prisons, and the probation service), please tell us how confident you are that…

READ OUT AS NECESSARY

	Very confident	Fairly confident	Not very confident	Not at all confident	**Don't know**
…the CJS as a whole is <u>effective</u>	☐	☐	☐	☐	☐
…the CJS as a whole is <u>fair</u>	☐	☐	☐	☐	☐

SECTION 5: Your local police

ASK ALL

Q10. We would now like you to think about the <u>police in your area</u> (by your area, we mean within 15 minutes walk from your home). You don't need to have actually had contact with the police to answer these questions, we are just interested in your general opinion about the police in your area.

Taking everything into account, how good a job do you think the police in <u>your area</u> are doing?
READ OUT

Excellent	☐
Good	☐
Fair	☐
Poor	☐
Very poor	☐

ASK ALL

Q11. It is the responsibility of the police and local council working in partnership to deal with anti-social behaviour and crime in your local area.

Thinking about the following statements, please tell us how much you agree or disagree with each of these.

READ OUT AS NECESSARY

	Strongly agree	Tend to agree	Neither agree nor disagree	Tend to disagree	Strongly disagree
The police and local council seek people's views about the anti-social behaviour and crime issues that matter in your area	☐	☐	☐	☐	☐
The police and local council are dealing with the anti-social behaviour and crime issues that matter in your area	☐	☐	☐	☐	☐

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The police and local council keep people informed about how they are dealing with anti-social behaviour and crime issues that matter in your area	☐	☐	☐	☐	☐

ASK ALL

Q12. Are you, or any other members of your household, serving police officers?

Yes ☐ → **GO TO Q18**
No ☐ → **GO TO Q13**

ASK IF Q12=No

Q13. On average, how often do you see Police Officers or Police Community Support Officers (PCSOs) <u>on foot patrol</u> in your local area? Would you say it was…READ OUT

<IF NECESSARY>: Police Community Support Officers are employed by police forces. They wear a uniform similar to police officers and deal with tasks that do not require a police officer's experience or powers.

More than once a day ☐
Once a day ☐
About once a week ☐
About once a month ☐
Less than once a month ☐
Never ☐

ASK IF Q12=No

Q14. In the last two years, have you noticed any change in how often you see Police Officers or Police Community Support Officers <u>on foot patrol</u> in your local area?

Compared with two years ago, would you say that you notice them…READ OUT

…more often ☐
…less often ☐
…or about the same amount? ☐
SPONTANEOUS ONLY: Not noticed any change
SPONTANEOUS ONLY: Never see any officers on foot patrol in local area

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ASK IF Q12=No

Q15. Since January 2011, maps and information which show the level of crime and anti-social behaviour on each street have been publicly available on the internet. Before this interview did you know that this type of online information was available at street level?

Yes	☐
No	☐

ASK IF Q12=No

Q16. During the last 12 months have you yourself contacted the police either by telephone, or in the street, or by calling at a police station, for any reason?

Yes	☐
No	☐
Don't know	☐

ASK IF Q12=No

Q17. Thinking about the police in your local area, how effective do you think they are at…

READ OUT AS NECESSARY

	Very effective	Fairly effective	Not very effective	Not at all effective
…solving crimes	☐	☐	☐	☐
…preventing crimes	☐	☐	☐	☐

ASK ALL

Q18. We would now like you to think about your neighbourhood. If some children were spray-painting graffiti on a local building, how likely is it that people in your neighbourhood would do something about it?
READ OUT

Very likely	☐
Fairly likely	☐
Fairly unlikely	☐
Very unlikely	☐

ASK ALL

Q19. If there was a fight near your home and someone was being beaten up or threatened, how likely is it that people in your neighbourhood would do something about it?
READ OUT

Very likely	☐
Fairly likely	☐
Fairly unlikely	☐
Very unlikely	☐

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+ + +

SECTION 6: Crimes against you

ASK ALL

Q20. We would now like to ask you about crimes you may have experienced in the last 12 months. We are only concerned with incidents that have happened to you personally. In the last 12 months…

READ OUT AS NECESSARY

	Yes	No
…has anyone got into your house/flat without permission and stolen or tried to steal anything?	☐	☐
…have you had your car, van, motorcycle or other motor vehicle stolen or driven away without permission?	☐	☐
…has anyone stolen or tried to steal anything you were carrying out of your hands or from your pockets or from a bag or case?	☐	☐
…has anything else of yours been deliberately damaged or tampered with by vandals or people out to steal?	☐	☐
…has anyone, including people you know well, deliberately hit you with their fists or with a weapon of any sort or kicked you or used force or violence in any other way?	☐	☐

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+ + +

SECTION 7: Risk of crime

ASK ALL

Q21. We would now like to ask you about the chance of certain crimes happening. Some crimes are more likely to happen to some people than to others. For each of the following crimes, please tell us how likely you think each one is to happen to you in the next year.

READ OUT AS NECESSARY

	Very likely	Fairly likely	Fairly unlikely	Very unlikely
Your home being burgled	☐	☐	☐	☐
Your house, garden, or other household property vandalised	☐	☐	☐	☐
Being mugged or robbed	☐	☐	☐	☐
Being physically attacked or assaulted by a stranger	☐	☐	☐	☐
Being harassed or intimidated in the street or any other public place	☐	☐	☐	☐

SECTION 8: About you

Finally, we just have a few questions about you to finish with. These questions will allow us to group your responses with those of other people for analysis.

ASK ALL

Q22.

INTERVIEWER: CODE RESPONDENT'S SEX

Male ☐
Female ☐

ASK ALL

Q23. What is your age?

RANGE FOR SCRIPTERS: 16-99

ASK ALL

Q24. Have you done any paid work in the past seven days, either as an employee or self-employed?

IF YES, PROBE: Was that full time or part time?

Yes – full time ☐
Yes – part time ☐
No ☐

CLOSING TEXT

THANK AND CLOSE

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Appendix D: Context effect experiment

Questions used

The following questions were the ones that were used to test whether context effects existed. The experiment was conducted on the face-to-face BCS for interviews conducted between 1 April 2011 and 30 June 2011.

For respondents who were randomly allocated to modules A and B for follow-up questions, they were asked the questions in their normal context. However for respondents who were randomly allocated to module D, they were asked these questions at the beginning of the ad hoc crime module (so out of normal context).

[ASK ALL MODULE A, B, D RESPONDENTS]
PERCLL
I'd now like to ask you some questions about the level of crime.

Not all areas of the country experience the same levels of crime. What happens in your local area may, or may not, reflect the national picture. There are no right or wrong answers to these questions, it is just what you think.

Compared to the country as a whole do you think the level of crime in your local area is….READ OUT
1. higher than average
2. lower than average
3. or about average?

[ASK ALL MODULE A, B, D RESPONDENTS]
PERCON
To what extent has your CONCERN ABOUT CRIME increased or decreased over the last few years? Would you say it has…READ OUT
1. increased
2. decreased
3. or stayed about the same?

[ASK ALL MODULE A, B, D RESPONDENTS]
PERVICT
How likely do you think you PERSONALLY are to be a victim of crime in the next year? READ OUT
1. Very likely
2. Fairly likely
3. Fairly unlikely
4. Very unlikely

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[ASK ALL MODULE A, B, D RESPONDENTS]

PERCLL3

LIGHT PINK SHOW CARD M5

Looking at this card what do you think has happened to crime in the COUNTRY AS A WHOLE over the past few years?

1. Gone up a lot
2. Gone up a little
3. Stayed about the same
4. Gone down a little
5. Gone down a lot

[ASK ALL MODULE A, B, D RESPONDENTS]

PERCLC2

LIGHT PINK SHOW CARD M5

And what do you think has happened to crime in your LOCAL AREA over the past few years?

1. Gone up a lot
2. Gone up a little
3. Stayed about the same
4. Gone down a little
5. Gone down a lot

[ASK ALL MODULE A1, B1, D1 RESPONDENTS IF PERCLL3 IN (1..5)]

IMPCRNA-IMPCRNN

LIGHT PINK SHOWCARD M6

Looking at this card which of these sources would you say has given you the impression that crime has [answer from PERCLL3] in the COUNTRY AS A WHOLE over the past few years?

CODE ALL THAT APPLY

1. Personal experience
2. Relatives' and/or friends' experiences
3. Word of mouth/ Information from other people
4. Broadsheet newspapers (e.g. Times, Guardian, Telegraph)
5. Tabloid newspapers (e.g. Sun, Express, Daily Mail)
6. Local newspapers
7. TV documentaries
8. News programmes on TV/radio
9. Radio programmes
10. Internet / world-wide-web
11. Something else (SPECIFY)
12. SPONTANEOUS ONLY: No one particular source/Not sure

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[ASK ALL MODULE A2, B2, D2 RESPONDENTS IF PERCLL3 IN (1..5)]

IMPCRLA-IMPCRLO

LIGHT PINK SHOW CARD M6

Looking at this card which of these sources would you say has given you the impression that crime has [answer from PERCLL3] in your LOCAL AREA over the past few years?

CODE ALL THAT APPLY

1. Personal experience
2. Relatives' and/or friends' experiences
3. Word of mouth/ Information from other people
4. Broadsheet newspapers (e.g. Times, Guardian, Telegraph)
5. Tabloid newspapers (e.g. Sun, Express, Daily Mail)
6. Local newspapers
7. TV documentaries
8. News programmes on TV/radio
9. Radio programmes
10. Internet / world-wide-web
11. Information from the police (e.g. newsletter, notice board, word of mouth)
12. Something else (SPECIFY)
13. SPONTANEOUS ONLY: No one particular source/Not sure

Context effect results

The results of the context effects experiment are shown in Figure D1. It also shows whether the differences between the standard BCS interview and the re-ordered BCS interview were significant at the 95% level.

The following conventions have been applied to the figures presented below.

Percentages

Due to rounding, percentage figures may not always add up to 100%. All survey percentage figures are based on unweighted data.

Symbols in tables

The symbols below have been used in the tables and they denote the following:

* percentage value of less than 0.5

\- percentage value of zero

All bases shown in the tables are the unweighted totals.

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Figure D1 Context effect results

Column percentages

	Standard BCS interview %	*Re-ordered BCS interview %*	*Results of 95% level significance test*
Level of crime in local area compared to country as a whole			
Higher than average	9	8	Significant
Lower than average	52	56	Significant
About average	39	36	Significant
Base	*5,894*	*2,925*	
How concern about crime has changed over the last few years			
Increased	49	42	Significant
Decreased	6	7	Significant
Stayed about the same	46	51	Significant
Base	*5,994*	*2,960*	
Perception of likelihood of being a victim of crime in the next year			
Very or fairly likely	21	17	Significant
Very or fairly unlikely	79	83	Significant
Base	*5,884*	*2,910*	
Perception of what has happened to crime in the country over the past few years			
Gone up (a lot or a little)	77	81	Significant
Stayed about the same	17	14	Significant
Gone down (a lot or a little)	6	5	Significant
Base	*5,940*	*2,931*	
Perception of what has happened to crime in local area over the past few years			
Gone up (a lot or a little)	36	35	Non-significant
Stayed about the same	55	57	Significant
Gone down (a lot or a little)	9	8	Non-significant
Base	*5,864*	*2,904*	

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Column percentages

	Standard BCS interview %	*Reordered BCS interview %*	*Results of 95% level significance test*
Where got impression about crime levels in country as a whole			
Personal experience	20	18	Non-significant
Relatives or friends' experience	18	16	Non-significant
Word of mouth/ information from others	28	28	Non-significant
Broadsheet newspapers	21	24	Non-significant
Tabloid newspapers	32	34	Non-significant
Local newspapers	33	33	Non-significant
TV documentaries	21	25	Significant
News programmes on TV/radio	61	66	Significant
Radio programmes	13	16	Significant
Internet/web	12	16	Significant
Some other source	1	1	Non-significant
No one particular source/ not sure	*	*	Non-significant
Don't know	*	*	Non-significant
Refused	*	-	Non-significant
Base	*2,994*	*1,515*	
Where got impression about crime levels in local area			
Personal experience	40	37	Non-significant
Relatives or friends' experience	25	23	Non-significant
Word of mouth/ information from others	49	47	Non-significant
Broadsheet newspapers	7	8	Non-significant
Tabloid newspapers	9	9	Non-significant
Local newspapers	50	51	Non-significant
TV documentaries	7	8	Non-significant
News programmes on TV/radio	26	28	Non-significant
Radio programmes	8	9	Non-significant
Internet/web	5	9	Significant
Information from the police	*	1	Non-significant
Some other source	2	3	Non-significant
No one particular source/ not sure	*	*	Non-significant
Don't know	*	*	Non-significant
Refused	-	-	Non-significant
Base	*2,901*	*1,398*	

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Appendix E: Re-contact rates

This appendix looks at non-response attrition due to non-agreement to re-contact from the face-to-face BCS. Figure E1 shows the proportion of individuals who agreed to be re-contacted from the face-to-face BCS January-March 2010.

Figure E1 Re-contact agreement rates (BCS January-March 2010)

Row percentages

	Agreed to be re-contacted %	***Base***
OVERALL	85	*11,188*
Sex		
Male	85	*4,988*
Female	85	*6,200*
Age		
16-24	85	*915*
25-44	86	*3,594*
45-64	87	*3,778*
65-74	84	*1,528*
75+	76	*1,373*
Ethnic group		
White	86	*10,366*
Mixed	83	*80*
Asian	74	*362*
Black	68	*202*
Other	74	*152*
Education		
No qualifications	79	*2,982*
Lower than degree level	86	*5,947*
Degree level or higher	88	*2,237*
Tenure		
Own outright	83	*3,926*
Buying with mortgage / part rent-part mortgage	88	*3,704*
Rent	83	*3,243*
Rent free	84	*282*

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Row percentages

	Agreed to be re-contacted %	*Base*
Opinion about how good a job the police are doing in their local area		
Excellent	88	*879*
Good	86	*5,285*
Fair	84	*3,702*
Poor/very poor	84	*1,086*
Whether victim of crime in the preceding 12 months		
No	84	*8,686*
Yes	88	*2,502*

As noted in Chapter 4, only small variations existed between different subgroups.

Figure E2 shows the non-response attrition that would be associated with an online-only re-contact survey, so the rates of agreement to re-contact and supplying an e-mail address from the face-to-face BCS January-March 2011.

Figure E2 Re-contact agreement rates with e-mail supplied (BCS January-March 2011)

Row percentages

	Agreed to be re-contacted, with e-mail %	*Base*
OVERALL	32	*10,222*
Sex		
Male	33	*4,614*
Female	30	*5,608*
Age		
16-24	47	*826*
25-44	42	*3,020*
45-64	34	*3,468*
65-74	19	*1,545*
75+	6	*1,363*
Ethnic group		
White	32	*9,382*
Mixed	41	*80*
Asian	28	*376*
Black	35	*196*
Other	26	*167*

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Row percentages

	Agreed to be re-contacted, with e-mail %	*Base*
Education		
No qualifications	11	*2,673*
Lower than degree level	35	*5,442*
Degree level or higher	48	*2,089*
Tenure		
Own outright	24	*3,746*
Buying with mortgage / part rent-part mortgage	43	*3,121*
Rent	29	*3,016*
Rent free	41	*312*
Opinion about how good a job the police are doing in their local area		
Excellent	34	*912*
Good	32	*5,049*
Fair	32	*3,217*
Poor/very poor	25	*828*
Whether victim of crime in last 12 months		
No	30	*8,011*
Yes	38	*2,211*

As noted in Chapter 4, there was a clear bias in the types of individual who agreed to be re-contacted in this way, thus making an online-only re-contact survey unviable.

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Appendix F: Non-response analysis and weighting

Previous BCS respondents were randomly allocated to one of four re-contact models:

- telephone interviews;
- postal questionnaires;
- sequential mixed-mode data collection (online>postal with the online option given only to those supplying an e-mail address); and
- sequential mixed-mode data collection (postal>online with the online option given only to those supplying an e-mail address).

However, as shown in Figure F1 five experimental cells were used to generate the findings for the four re-contact models.

Figure F1 Experimental cells set up to examine re-contact survey scenarios

	Sample	*Data collection mode*	*Provided information for which re-contact model*
Cell A	BCS interviews achieved from addresses issued January-March 2010, agreed to re-contact and supplied telephone number	Computer-assisted telephone interviewing (CATI)	Telephone-only
Cell B		Postal self-completion	Postal-only
Cell C	BCS interviews achieved November-March 2011 (from addresses issued no earlier than October 2010), agreed to re-contact and supplied e-mail address	Sequential mixed-mode (online survey followed by postal survey)	Mixed-mode online>postal
Cell D		Sequential mixed-mode (postal survey followed by online survey)	Mixed-mode postal>online
Cell E	BCS interviews achieved November-January 2011 (from addresses issued no earlier than October 2010), agreed to re-contact but did not supply e-mail address	Postal self-completion	Mixed-mode online>postal & Mixed-mode postal>online

This appendix details how each of the five experimental cells contributed to the overall analysis of non-response for each of the four re-contact models.

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Models of non-response for the experimental cells A to E were created using binary logistic regression methods. Two models were created for cells C and D – the first model in each cell focused on non-response to the first data collection mode only, whereas the second model created focused on non-response after both data collection modes had been offered.

The models gave each case an individual response propensity derived from data available about each issued case for the experimental cells. The data available were the face-to-face BCS dataset and so this was a rich source of information containing demographic data, geo-demographic data, attitudinal data and behavioural data about each respondent and non-respondent. Thus there was a vast pool of information from which to investigate the characteristics of non-responders.

Model development

The models looked at whether an individual would complete the follow-up survey. The dependent variable was coded so that 1=issued and responded to the survey and 0=issued but did not respond to the survey.

The logistic regression results show the explanatory power of different factors, when controlling for all other factors, on whether respondents would respond to the re-contact survey.

As there were a lot of information available about each issued case, it was not as straightforward as including all of the demographic, attitudinal and behavioural factors into a logistic regression model to see which ones had a significant effect on being likely to respond to a re-contact survey.

A first stage initial screening was carried out to rule out those variables with no chance of exerting any measurable influence and to look for possible collinear variables. Thus the first step was to look at the likelihood of responding to the follow-up survey across a range of demographic, geo-demographic, attitudinal and behavioural variables.

Selection of independent variables

Choosing which variables to include in the non-response models was guided by existing knowledge and intuition. Independent variables were reviewed, codeframes were rationalised where necessary and representative variables were selected where several were highly inter-correlated.

Inter-correlation (or multicollinearity) is where two or more independent variables in a regression model are highly correlated. It can affect coefficient estimates and lead to good predictors being rejected from the final model, or affect coefficients in such a way that they have the opposite meaning from what is intuitively suggested. One solution for dealing with multicollinearity is to select just one variable, which appears to be the most intuitive, to represent the effects of that variable. A number of variables were ruled out on the basis of multicollinearity.

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Another solution for dealing with multicollinearity is to run a factor analysis of the correlated statements. This reduced them to a smaller set of factors. It follows from this procedure that the factors which do emerge do not have collinearity with one another. The highest loading variable for each factor produced was then selected to represent the effects of that factor in the model.

All of the variables tested were categorical. They were then grouped into blocks of similar characteristics, which are shown in Figure F2.

Figure F2 Independent variables by type

Variable type	*Variables*
Personal demographics	Sex Age Ethnic group Nationality Whether has any difficulties reading in English Satisfaction with life as a whole nowadays General health
Lifestyle choices	Marital status Religion Education Personal income Number of adults in household Number of children aged under 16 in household Household tenure Occupational group Whether owns mobile phone Working status (any paid work in last week) Hours spent away from home during day How often visited pub or bar in last month How often visited nightclub in last month
Existing attitudes and experiences	Whether in last 12 months have had money taken from bank a/c or had cards used with permission Whether a victim of crime in the last 12 months How good a job police in the area are doing How safe feel walking alone after dark How safe feel walking alone in area during day How safe feel when alone in home at night Confidence that police are effective at catching criminals Confidence that CJS as a whole is effective

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Variable type	*Variables*
Newspaper readership	Whether read Sun, Mirror or Star in last 3 months Whether read Telegraph, Guardian, Independent, Times or FT in last 3 months Whether read Mail or Express in last 3 months
Local area	Accommodation type of sampled dwelling How long lived in area How long lived at address Presence of visible security features Prevalence of litter in neighbourhood Prevalence of vandalism in neighbourhood Prevalence of poor housing in neighbourhood Housing condition relative to neighbourhood Whether in a neighbourhood watch area Location of dwelling within neighbourhood
Wider geography	Output Area Classification (Supergroup) Whether address lies in an inner city area Urban or rural classification Region Index of Multiple Deprivation by decile
Previous interview experience	Follow-up module split – original BCS interview Whether anyone else was present in room during face-to-face BCS questionnaire Sex of interviewer – original BCS interview Interview length – original BCS interview

The initial list was further edited after inspection of the data. Where variables were highly correlated with each other, one was usually chosen include in the models. However to minimise the likelihood of model mis-specification, all variables were tested for appropriate inclusion nonetheless.

Model power

There are various indicators of the explanatory power of logistic regression models. TNS-BMRB opted to use the Nagelkerke 'pseudo R^2', which gives an estimate of the amount of variance in a binomial dependent variable that is explained by the independent variables entered into a model. Figure F3 shows this value for each of the non-response models created.

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Figure F3 Model power

	Variance explanation (NR^2)
Responded to Survey A re-contact survey by telephone (Yes/No)	9.2%
Responded to Survey B re-contact survey by post (Yes/No)	23.6%
Responded to Survey C re-contact survey online (Yes/No)	11.8%
Responded to Survey C re-contact survey online or by post (Yes/No)	16.7%
Responded to Survey D re-contact survey by post (Yes/No)	21.1%
Responded to Survey D re-contact survey online or by post (Yes/No)	22.3%
Responded to Survey E re-contact survey by post (Yes/No)	21.3%

It can be seen that for surveys B, D and E, the non-response models were able to explain around one-fifth of the variance. The models for surveys A and C were weaker, despite the same variables being tested for inclusion across all models, suggesting that there may have been other unexplained factors that accounted for an individual not responding to either of these re-contact surveys.

Model building methods

Most of the work was carried out using the logistic regression package in SPSS 13.0. The general method of working was to enter each group of variables in blocks, with personal demographics of respondents being entered first, the next being household characteristics, then area-based characteristics, and so on (see Figure F2 earlier).

A 'forward stepwise' procedure was used to identify the smallest number of significant predictors in each group. Although the intention was to retain the identified predictors in the model, even if they lost statistical significance due to the addition of a subsequent group of variables, in practice this was not always the most sensible way to proceed, so a more flexible approach was taken when this arose i.e. assessing practical significance along with statistical significance.

As noted earlier, care was taken to avoid including variables that overlapped to a greater extent i.e. were collinear. A degree of overlap, however, was inevitable.

The Hosmer-Lemeshow test was used to assess model fit. This is a chi-square test in which cases are divided into deciles based on modelled response propensity. The expected number of cases in each class is then compared with the actual number of responding cases. A significant test result suggests that the model works better for one end of the distribution than the other (a phenomenon called heteroscedasticity).

All Hosmer-Lemeshow tests were non-significant suggesting that heteroscedasticity was not a problem for any of these models.

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The final estimates were computed using the 'complex samples' logistic regression package in SPSS 17.0. This version was used for computing the correct confidence intervals around each parameter estimate, which could not be done using the basic logistic regression package in SPSS 13.0.

Interpreting the results – Odds ratios

Interpretations of the model outputs are detailed in the main body of the report. In this section, the final variables included in the models are shown, as well as their odds ratios.

The odds ratios (Exp(B)) are calculated by taking the ratio of the odds of one group responding to the re-contact survey compared with the odds of the reference group responding to the re-contact survey. The 'odds' is equivalent to the ratio of the probability of the event occurring to the probability of the event not occurring i.e. responding to the survey against not responding to the survey. Odds are another scale for representing probabilities.

An odds ratio greater than one implies an increased tendency to respond to the re-contact survey, whereas an odds ratio of less than one implies a decreased tendency, compared with the reference group. The reference groups are indicated by the categories that have odds ratios of exactly one.

Figure F4 shows the final non-response model for cell A.

Figure F4 Cell A: propensity to respond to telephone re-contact survey – odds ratios

Independent variables	*Exp (B)*	*95% confidence interval for Exp (B)*	
		Lower	Upper
Base odds	1.126	0.472	2.685
Age			
16-19	0.648	0.404	1.040
20-24	0.675	0.445	1.024
25-34	0.722	0.542	0.961
35-44	1.000		
45-54	1.505	1.148	1.972
55-64	2.025	1.512	2.712
65-74	1.801	1.297	2.501
75-84	1.564	1.073	2.279
85+	0.612	0.336	1.113
Household tenure			
Own outright	1.000		
Buying with mortgage / Part rent-part mortgage	0.979	0.785	1.221
Rent	0.558	0.453	0.688
Rent free	0.828	0.466	1.472

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Independent variables	Exp (B)	95% confidence interval for Exp (B)	
		Lower	Upper
Highest level of qualifications			
No qualifications	0.582	0.442	0.767
Lower than degree level	0.873	0.701	1.088
Degree level or higher	1.000		
Whether dwelling located on housing estate			
No	1.000		
Yes	0.800	0.664	0.963
Follow-up module split in face-to-face BCS			
A	1.412	1.137	1.752
B	1.232	0.972	1.563
C	1.000		
D	1.248	0.995	1.566

Five variables entered the final model for cell A. Figure F5 shows the final non-response model for cell B.

Figure F5 Cell B: propensity to respond to postal re-contact survey – odds ratios

Independent variables	Exp (B)	95% confidence interval for Exp (B)	
		Lower	Upper
Base odds	1.330	0.555	3.190
Age			
16-19	0.254	0.159	0.403
20-24	0.128	0.080	0.205
25-34	0.238	0.178	0.318
35-44	0.277	0.208	0.369
45-54	0.512	0.392	0.670
55-64	1.000		
65-74	1.535	1.116	2.111
75-84	1.082	0.750	1.561
85+	0.644	0.365	1.138
Sex			
Male	0.747	0.644	0.866
Female	1.000		
Household tenure			
Own outright	1.000		
Buying with mortgage / Part rent-part mortgage	0.709	0.566	0.888
Rent	0.427	0.342	0.533
Rent free	0.891	0.538	1.475

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Independent variables	*Exp (B)*	*95% confidence interval for Exp (B)*	
		Lower	Upper
Marital status			
Married	1.000		
Cohabiting	0.786	0.608	1.016
Single	0.930	0.722	1.199
Widowed	0.604	0.435	0.840
Divorced	0.689	0.513	0.926
Separated	0.641	0.428	0.959
How good a job police in the area are doing			
Excellent	1.104	0.847	1.44
Good	1.000		
Fair	0.812	0.680	0.971
Poor / very poor	0.668	0.515	0.866
Prevalence of litter in neighbourhood			
Very or fairly common	0.632	0.496	0.805
Not very common	1.000		
Not at all common	1.016	0.862	1.197
Personal income			
Less than £10,000 including Nothing	0.797	0.620	1.024
£10,000-£19,999	1.000		
£20,000-£29,999	0.842	0.665	1.066
£30,000-£44,999	1.249	0.962	1.622
£45,000 or over	0.942	0.711	1.249
Don't know or Refused	0.754	0.572	0.993

Seven variables entered the final model for cell B and it shared some common predictors of non-response with cell A, namely age and household tenure.

Figure F6 shows the final non-response model for the online component of cell C. This was the sequential mixed-mode cell beginning with the online survey before switching to a postal self-completion survey. The purpose of running this model was to create weights that could be used to compare an online data collection mode (from cell C) with a postal data collection mode using a common sample frame (from cell D).

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Figure F6 Cell C: propensity to respond to online re-contact survey only – odds ratios

Independent variables	*Exp (B)*	*95% confidence interval for Exp (B)*	
		Lower	Upper
Base odds	0.400	0.169	0.946
Age			
16-19	0.604	0.374	0.978
20-24	0.606	0.415	0.887
25-34	0.772	0.603	0.990
35-44	1.000		
45-54	1.445	1.141	1.831
55-64	1.790	1.365	2.349
65-74	1.472	1.059	2.046
75+	1.779	1.005	3.151
Highest level of qualifications			
No qualifications	0.522	0.396	0.688
Lower than degree level	1.000		
Degree level or higher	1.407	1.192	1.660
Household tenure			
Own outright	1.380	1.127	1.689
Buying with mortgage / Part rent-part mortgage	1.000		
Rent	0.920	0.752	1.126
Rent free	0.877	0.552	1.393
Number of children under 16 in household			
0	1.000		
1	0.776	0.622	0.966
2	0.691	0.534	0.894
3 or more	0.541	0.348	0.839
Prevalence of vandalism in neighbourhood			
Very or fairly common	0.815	0.476	1.395
Not very common	0.787	0.657	0.941
Not at all common	1.000		
Whether read Sun, Mirror or Daily Star in last 3 months			
No	1.000		
Yes	0.789	0.663	0.938
Whether dwelling located on main road			
No	1.000		
Yes	0.784	0.635	0.967

Seven variables entered the final non-response model for the online component of cell C. Age and household tenure again were important predictors.

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Figure F7 shows the final non-response model for cell C overall, so non-response after two data collection modes were used. The purpose was to see whether there were any differences in the non-response profile after both stages.

Figure F7 Cell C: propensity to respond to online or postal re-contact survey – odds ratios

Independent variables	*Exp (B)*	*95% confidence interval for Exp (B)*	
		Lower	Upper
Base odds	2.435	0.921	6.438
Age			
16-19	0.643	0.419	0.986
20-24	0.419	0.300	0.586
25-34	0.643	0.514	0.805
35-44	1.000		
45-54	1.421	1.123	1.796
55-64	1.861	1.402	2.470
65-74	2.411	1.648	3.526
75+	3.372	1.638	6.941
Household tenure			
Own outright	1.319	1.045	1.664
Buying with mortgage / Part rent-part mortgage	1.000		
Rent	0.914	0.758	1.102
Rent free	1.173	0.773	1.781
Highest level of qualifications			
No qualifications	0.604	0.461	0.792
Lower than degree level	1.000		
Degree level or higher	1.506	1.273	1.782
Number of adults in household			
1	0.856	0.712	1.029
2	1.000		
3	0.784	0.607	1.013
4 or more	0.678	0.490	0.939
Number of children under 16 in household			
0	1.000		
1	0.676	0.547	0.835
2	0.719	0.566	0.913
3 or more	0.489	0.343	0.695
Whether a victim of crime in the last 12 months			
No	1.000		
Yes	0.797	0.679	0.935

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Independent variables	Exp (B)	95% confidence interval for Exp (B)	
		Lower	Upper
Physical condition of the outside of the sampled house, relative to others in area			
Better	1.023	0.754	1.387
Worse	0.575	0.423	0.781
About the same	1.000		
Whether read Daily Mail or Daily Express in last 3 months			
No	1.000		
Yes	1.210	1.036	1.413
London region			
No	1.000		
Yes	0.717	0.594	0.865

The model was quite similar to the online-only non-response model. Nine variables entered the final non-response model, four of which were present in the online-only non-response model.

Figure F8 shows the final non-response model for the postal component of cell D. This was the sequential mixed-mode cell beginning with the postal survey before switching to an online self-completion survey. As mentioned earlier, the purpose of running this model was to create weights that could be used to compare a postal data collection mode (from cell D) with an online data collection mode using a common sample frame (from cell C).

Figure F8 Cell D: propensity to respond to postal re-contact survey only – odds ratios

Independent variables	Exp (B)	95% confidence interval for Exp (B)	
		Lower	Upper
Base odds	1.824	0.639	5.205
Sex and age			
Male 16-24	0.288	0.170	0.489
Male 25-34	0.463	0.320	0.670
Male 35-44	0.890	0.622	1.275
Male 45-54	1.318	0.918	1.893
Male 55-64	2.437	1.589	3.739
Male 65+	4.244	2.394	7.524
Female 16-24	0.633	0.427	0.937
Female 25-34	1.000		
Female 35-44	1.606	1.128	2.285
Female 45-54	1.206	0.830	1.753
Female 55-64	3.477	2.074	5.827
Female 65+	3.453	1.885	6.326

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Independent variables	*Exp (B)*	*95% confidence interval for Exp (B)*	
		Lower	Upper
Highest level of qualifications			
No qualifications	0.873	0.632	1.206
Lower than degree level	1.000		
Degree level or higher	1.237	1.029	1.486
Household tenure			
Own outright	1.048	0.792	1.385
Buying with mortgage / Part rent-part mortgage	1.000		
Rent	0.599	0.477	0.752
Rent free	0.925	0.568	1.507
Number of children under 16 in household			
0	1.000		
1	0.807	0.627	1.038
2	0.685	0.518	0.906
3 or more	0.444	0.288	0.684
Physical condition of the outside of the sampled house			
Very good	1.114	0.900	1.378
Fairly good	1.000		
Neither	0.671	0.521	0.863
Fairly or very bad	0.621	0.365	1.056

Five variables entered the final non-response model for the postal component of cell D. Household tenure was again part of the non-response model. However age entered interactively with sex.

Figure F9 shows the final non-response model for cell D overall. Since the introduction of the online mode added only a small proportion of interviews overall, it was unsurprising to find that many of the predictors were the same as in the postal-only non-response model.

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Figure F9 Cell D: propensity to respond to online or postal re-contact survey – odds ratios

Independent variables	Exp (B)	95% confidence interval for Exp (B)	
		Lower	Upper
Base odds	1.373	0.422	4.469
Sex and age			
Male 16-24	0.321	0.197	0.522
Male 25-34	0.436	0.299	0.634
Male 35-44	0.785	0.548	1.124
Male 45-54	1.561	1.063	2.291
Male 55-64	2.582	1.591	4.190
Male 65+	3.934	2.053	7.539
Female 16-24	0.618	0.413	0.924
Female 25-34	1.000		
Female 35-44	1.575	1.077	2.304
Female 45-54	1.218	0.810	1.831
Female 55-64	3.095	1.758	5.447
Female 65+	3.904	1.977	7.710
Highest level of qualifications			
No qualifications	0.837	0.590	1.188
Lower than degree level	1.000		
Degree level or higher	1.276	1.053	1.547
Household tenure			
Own outright	0.878	0.651	1.185
Buying with mortgage / Part rent-part mortgage	1.000		
Rent	0.567	0.446	0.720
Rent free	0.912	0.538	1.546
Number of adults in household			
1	0.665	0.532	0.832
2	1.000		
3	0.871	0.648	1.173
4 or more	0.630	0.419	0.948
Number of children under 16 in household			
0	1.000		
1	0.778	0.599	1.010
2	0.591	0.444	0.788
3 or more	0.451	0.285	0.714

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Independent variables	Exp (B)	95% confidence interval for Exp (B)	
		Lower	Upper
Physical condition of the outside of the sampled house			
Very good	1.068	0.849	1.344
Fairly good	1.000		
Neither	0.602	0.466	0.779
Fairly or very bad	0.520	0.297	0.911
Whether dwelling located on main road			
No	1.000		
Yes	0.736	0.564	0.959
Whether dwelling located on housing estate			
No	1.000		
Yes	0.768	0.614	0.961

Eight variables entered the final non-response model; all of the variables present in the postal-only non-response model entered this model as well.

Figure F10 shows the final non-response model for cell E. This model was run to compare with the postal-only survey from cell B. The only differences between these cells were that cell E used a 3-5 month re-contact period instead of a 12 re-contact period and these were respondents who did not supply an e-mail address, whereas cell B respondents were those who supplied a telephone number.

Figure F10 Cell E: propensity to respond to postal re-contact survey – odds ratios

Independent variables	Exp (B)	95% confidence interval for Exp (B)	
		Lower	Upper
Base odds	1.019	0.215	4.831
Age			
16-19	0.116	0.040	0.341
20-24	0.283	0.134	0.598
25-34	0.210	0.121	0.364
35-44	0.317	0.190	0.529
45-54	0.468	0.280	0.782
55-64	0.760	0.468	1.235
65-74	1.000		
75-84	1.034	0.586	1.823
85+	1.119	0.388	3.225

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Independent variables	*Exp (B)*	*95% confidence interval for Exp (B)*	
		Lower	Upper
Household tenure			
Own outright	1.000		
Buying with mortgage / Part rent-part mortgage	0.785	0.535	1.152
Rent	0.386	0.270	0.551
Rent free	0.522	0.204	1.334
How good a job police in the area are doing			
Excellent	1.710	0.935	3.130
Good	1.000		
Fair	0.870	0.647	1.169
Poor / very poor	0.582	0.336	1.009
How safe feel when alone in home at night			
Very safe	1.000		
Fairly safe	1.396	0.995	1.958
A bit unsafe / very unsafe	0.571	0.307	1.062
Follow-up module split in face-to-face BCS			
A	0.548	0.379	0.793
B	1.000		
C	0.684	0.468	1.001
D	0.621	0.414	0.931

Five variables entered the final model for cell E and it shared some common predictors of non-response with cell B (and the other surveys), namely age and household tenure. A further predictor it had in common with cell B was those who perceived police in their local area to be doing a poor or very poor job had a lower likelihood of response.

Creating non-response weights

Before an analysis of potential mode effects could proceed, the data needed to be weighted. Since respondents for cells A and B had been randomly selected from those who agreed to be re-contacted and supplied a telephone number from the face-to-face BCS January-March 2010 this was, in essence, the population profile. Thus the aim of the weighting was to bring the profile of the interviewed sample back in line with those who agreed to be re-contacted and supplied a telephone number from the face-to-face BCS January-March 2010.

However the analysis of the face-to-face mode would be conducted on the face-to-face BCS January-March *2011* dataset of those who agreed to be re-contacted and supplied a telephone number. However it was expected that the profile of these respondents would be virtually identical to those interviewed the year before, so cells A and B could be weighted in this way and still match the face-to-face mode.

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The logistic regression models produced response propensity scores for each respondent. The inverse of these values were then used as weights to reflect differential levels of non-response.

The weights were generated and, for cell B, some of the largest weights were capped to reduce variance inflation caused by these large weights. This is standard survey practice since the introduction of a small degree of bias (via trimming) is usually more than made up for by the reduction in variance.

Figure F11 shows the weighted profile of interviewed respondents in cell A and cell B, compared with the unweighted profile of interviewed respondents from the face-to-face BCS January-March 2011 who agreed to be re-contacted and supplied a telephone number.

Figure F11 Profile of cell A interviewed sample (weighted), cell B interviewed sample (weighted) and face-to-face BCS January-March 2011 (unweighted)

	Telephone (cell A)	*Postal (cell B)*	*Face-to-face*
	%	*%*	*%*
Sex			
Male	43	44	45
Female	57	56	55
Age			
16-24	8	7	8
25-44	34	31	31
45-64	34	36	35
65-74	13	15	14
75+	11	11	11
Ethnic group			
White	94	95	93
Mixed	1	1	1
Asian	3	2	3
Black	1	1	2
Other	2	1	1
Education			
No qualifications	24	25	23
Lower than degree level	54	54	55
Degree level or higher	22	21	21

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	Telephone (cell A)	*Postal (cell B)*	*Face-to-face*
	%	*%*	*%*
Tenure			
Own outright	35	36	35
Buying with mortgage / part rent-part mortgage	35	35	33
Rent	27	26	29
Rent free	2	3	3
Don't know/refused	*	*	*
How good a job think police are doing in their local area			
Excellent	8	8	9
Good	48	48	50
Fair	35	33	31
Poor/very poor	8	9	8
Don't know/refused	2	2	2
Whether victim of crime in last 12 months			
No	78	78	77
Yes	22	22	23
Base	*1,503*	*2,002*	*9,208*

After applying the weights to cells A and B, the profiles were very similar to the face-to-face respondents and to each other, and so the samples could be compared against each other for mode effects.

A similar method was employed before the analysis of potential mode effects could be undertaken between the postal and online modes. Since respondents for cells C and D had been randomly allocated from all those who agreed to be re-contacted and supplied an e-mail address from the face-to-face BCS October 2010-March 2011 this was, in essence, the population profile. Thus the aim of the weighting was to bring the profile of the interviewed sample back in line with the original sample frame. This would then ensure that the two samples were closely matched.

The comparison between online and postal modes only looked at the first modes of the sequential mixed-mode designs in cells C and D. So the non-response models for the online component of cell C and the postal component of cell D were used to form the weights. As each respondent had a response propensity score from the generated models, the inverse of these values were then used as the weights.

Figure F12 shows the weighted profile of interviewed respondents in cell C (online only) and cell D (postal only).

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Figure F12 Profile of cell C interviewed online-only sample (weighted) and cell D interviewed postal-only sample (weighted)

	Online (cell C)	Postal (cell D)
	%	%
Sex		
Male	46	48
Female	54	52
Age		
16-24	12	11
25-44	41	42
45-64	36	36
65-74	9	8
75+	2	3
Ethnic group		
White	91	91
Mixed	1	1
Asian	3	3
Black	2	3
Other	2	2
Education		
No qualifications	8	9
Lower than degree level	61	58
Degree level or higher	31	33
Tenure		
Own outright	26	27
Buying with mortgage / part rent-part mortgage	44	42
Rent	27	27
Rent free	4	4
Don't know/refused	-	*
How good a job think police are doing in their local area		
Excellent	10	10
Good	52	52
Fair	31	30
Poor/very poor	6	7
Don't know/refused	1	1

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	Online (cell C)	*Postal (cell D)*
	%	*%*
Whether victim of crime in last 12 months		
No	74	73
Yes	26	27
Base	*1,146*	*1,400*

After applying the weights to the two groups, the profiles were very similar and so the samples could be compared against each other for mode effects.

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Appendix G: Data tables (telephone vs. postal vs. face-to-face mode)

The results of the telephone re-contact survey and postal re-contact survey are shown below compared against the results from the face-to-face BCS dataset January-March 2011 (of those who agreed to re-contact and supplied a telephone number). The results for the telephone and postal surveys were weighted to reduce the risk of confounding differences in response propensity with differences due to mode of data collection. The results for the face-to-face mode are presented unweighted. The responses of 'don't know', 'refused' and where they did not answer the question in the postal mode were excluded from the bases.

The following conventions have been applied to the figures presented below.

Percentages

Due to rounding, percentage figures may not always add up to 100%.

Symbols in tables

The symbols below have been used in the tables and they denote the following:

* percentage value of less than 0.5
\- percentage value of zero

All bases shown in the tables are the unweighted totals.

Column percentages

	Telephone *%*	*Postal* *%*	*Face-to-face BCS* *%*
Q1 How safe feel walking alone in local area after dark			
Very safe	34	17	35
Fairly safe	47	53	40
A bit unsafe	14	23	17
Very unsafe	5	7	7
Base	*1,489*	*1,991*	*9,158*

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Column percentages

	Telephone %	Postal %	Face-to-face BCS %
Q2 How safe feel walking alone in local area during the day			
Very safe	80	66	81
Fairly safe	18	31	17
A bit unsafe	2	3	2
Very unsafe	*	*	*
Base	*1,502*	*1,989*	*9,203*
Q3a Perception of how level of crime in local area compares to the country as a whole			
Higher than average	7	13	9
Lower than average	49	48	54
About average	44	40	37
Base	*1,491*	*1,993*	*6,747*
Q3b Perception of how level of crime in local area differs from the country as a whole			
A little (higher/lower)	51	64	49
A lot (higher/lower)	49	36	51
Base	*836*	*1,208*	*4,231*
Q4a Whether concern about crime has increased or decreased over the last few years			
Increased	36	49	50
Decreased	7	5	6
Stayed about the same	58	46	45
Base	*1,499*	*1,994*	*6,843*
Q4b Extent to which concern about crime has increased or decreased over the last few years			
A lot	43	34	45
A little	57	66	55
Base	*631*	*1,086*	*3,777*

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Column percentages

	Telephone %	*Postal %*	*Face-to-face BCS %*
Q5 Perception of likelihood of personally being a victim of crime in the next year			
Very likely	4	3	3
Fairly likely	14	19	18
Fairly unlikely	57	62	56
Very unlikely	25	16	23
Base	*1,469*	*1,983*	*6,730*
Q6a Perception of what has happened to crime in the country as a whole over the past few years			
Gone up a lot	34	40	43
Gone up a little	31	32	34
Stayed about the same	27	22	18
Gone down a little	8	5	5
Gone down a lot	1	1	*
Base	*1,486*	*1,992*	*6,812*
Q6b Perception of what has happened to crime in local area over the past few years			
Gone up a lot	6	9	8
Gone up a little	25	32	29
Stayed about the same	56	50	54
Gone down a little	10	8	8
Gone down a lot	2	1	1
Base	*1,487*	*1,972*	*6,731*
Q7_1 How much of a problem noisy neighbours or loud parties are in local area			
A very big problem	3	3	3
A fairly big problem	8	8	7
Not a very big problem	28	39	28
Not a problem at all	62	49	62
Base	*1,502*	*1,971*	*9,202*

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Column percentages

	Telephone %	*Postal %*	*Face-to-face BCS %*
Q7_2 How much of a problem teenagers hanging around on the streets are in local area			
A very big problem	7	7	7
A fairly big problem	22	21	16
Not a very big problem	33	47	37
Not a problem at all	38	25	40
Base	*1,496*	*1,970*	*9,193*
Q7_3 How much of a problem rubbish or litter lying around is in local area			
A very big problem	9	11	9
A fairly big problem	21	24	19
Not a very big problem	38	47	39
Not a problem at all	32	18	33
Base	*1,502*	*1,981*	*9,208*
Q7_4 How much of a problem vandalism, graffiti, and other deliberate damage to property or vehicles is in local area			
A very big problem	4	6	5
A fairly big problem	19	18	15
Not a very big problem	40	54	41
Not a problem at all	37	23	40
Base	*1,500*	*1,966*	*9,191*
Q7_5 How much of a problem people using or dealing drugs are in local area			
A very big problem	8	10	9
A fairly big problem	17	17	16
Not a very big problem	31	43	29
Not a problem at all	44	30	46
Base	*1,380*	*1,945*	*8,856*

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Column percentages

	Telephone *%*	*Postal* *%*	*Face-to-face BCS* *%*
Q7_6 How much of a problem people being drunk or rowdy in public places are in local area			
A very big problem	5	6	6
A fairly big problem	18	16	15
Not a very big problem	36	50	38
Not a problem at all	41	29	41
Base	*1,487*	*1,970*	*9,153*
Q7_7 How much of a problem abandoned or burnt out cars are in local area			
A very big problem	1	1	1
A fairly big problem	3	4	3
Not a very big problem	21	28	19
Not a problem at all	75	68	78
Base	*1,498*	*1,970*	*9,179*
Q8 In the country as a whole, confidence that the police are effective at catching criminals			
Very confident	11	6	9
Fairly confident	63	56	58
Not very confident	21	29	27
Not at all confident	5	8	6
Base	*1,487*	*1,904*	*9,044*
Q9_1 Confidence that the CJS as a whole is effective			
Very confident	6	3	3
Fairly confident	48	42	39
Not very confident	36	42	44
Not at all confident	10	13	14
Base	*1,484*	*1,790*	*8,897*
Q9_2 Confidence that the CJS as a whole is fair			
Very confident	9	4	5
Fairly confident	54	46	56
Not very confident	26	35	32
Not at all confident	11	15	7
Base	*1,474*	*1,736*	*8,903*

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Column percentages

	Telephone %	Postal %	Face-to-face BCS %
Q10 How good a job think police in local area are doing			
Excellent	12	8	9
Good	48	49	50
Fair	32	35	32
Poor	5	5	6
Very poor	3	2	2
Base	*1,479*	*1,968*	*9,059*
Q11_1 Agree/disagree that the police and local council seek people's views about the anti-social behaviour and crime issues that matter in local area			
Strongly agree	12	7	9
Tend to agree	45	35	40
Neither agree nor disagree	21	33	23
Tend to disagree	17	19	20
Strongly disagree	6	6	8
Base	*1,451*	*1,957*	*9,028*
Q11_2 Agree/disagree that the police and local council are dealing with the anti-social behaviour and crime issues that matter in local area			
Strongly agree	14	5	7
Tend to agree	50	41	46
Neither agree nor disagree	19	36	30
Tend to disagree	12	13	13
Strongly disagree	5	4	4
Base	*1,463*	*1,949*	*9,006*
Q11_3 Agree/disagree that the police and local council keep people informed about how they are dealing with anti-social behaviour and crime issues that matter in local area			
Strongly agree	15	6	7
Tend to agree	40	29	37
Neither agree nor disagree	16	32	22
Tend to disagree	20	24	25
Strongly disagree	9	8	9
Base	*1,471*	*1,950*	*9,096*

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Column percentages

	Telephone %	*Postal %*	*Face-to-face BCS %*
Q12 Whether any member of the household is a serving police officer			
Yes	3	1	1
No	97	99	99
Base	*1,503*	*1,947*	*6,924*
Q13 How often see Police Officers or Police Community Support Officers (PCSOs) on foot patrol in local area			
More than once a day	4	3	3
Once a day	11	9	8
About once a week	25	23	22
About once a month	19	19	16
Less than once a month	16	22	21
Never	26	24	29
Base	*1,454*	*1,912*	*2,248*
Q14 Whether noticed any change in how often see Police Officers or Police Community Support Officers on foot patrol in local area			
More often	24	21	22
Less often	19	23	12
About the same amount	45	56	43
SPONTANEOUS ONLY: Not noticed any change	5	-	13
SPONTANEOUS ONLY: Never see any officers on foot patrol in l	6	-	10
Base	*1,455*	*1,885*	*2,231*
Q15 Whether knew that street-level crime maps and information were available online before interview			
Yes	31	32	-
No	69	68	-
Base	*1,460*	*1,897*	-
Q16 Whether in last 12 months have contacted the police either by telephone, or in the street, or by calling at a police station, for any reason			
Yes	24	23	23
No	76	77	77
Base	*1,459*	*1,903*	*2,258*

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Column percentages

	Telephone %	Postal %	Face-to-face BCS %
Q17_1 How effective think police in local area are at solving crimes			
Very effective	12	5	8
Fairly effective	69	69	69
Not very effective	14	23	20
Not at all effective	4	3	3
Base	*1,361*	*1,834*	*999*
Q17_2 How effective think police in local area are at preventing crimes			
Very effective	9	4	6
Fairly effective	64	59	59
Not very effective	21	31	30
Not at all effective	6	6	5
Base	*1,360*	*1,819*	*1,014*
Q18 Likelihood of people in neighbourhood doing something about children spray-painting graffiti on a local building			
Very likely	35	27	41
Fairly likely	36	43	36
Fairly unlikely	20	23	17
Very unlikely	8	8	6
Base	*1,468*	*1,978*	*1,128*
Q19 Likelihood of people in neighbourhood doing something about someone being beaten-up or threatened in a fight near their home			
Very likely	35	24	37
Fairly likely	39	46	41
Fairly unlikely	19	23	16
Very unlikely	7	7	5
Base	*1,467*	*1,973*	*1,121*
Q20_1 Whether in last 12 months anyone has got into house/flat without permission and stolen or tried to steal anything			
Yes	2	3	-
No	98	97	-
Base	*1,503*	*1,986*	-

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Column percentages

	Telephone %	Postal %	Face-to-face BCS %
Q20_2 Whether in last 12 months have had car, van, motorcycle or other motor vehicle stolen or driven away without permission			
Yes	1	1	-
No	99	99	-
Base	*1,503*	*1,973*	-
Q20_3 Whether in last 12 months anyone has stolen or tried to steal anything they were carrying out of their hands or from their pockets or from a bag or case			
Yes	1	2	-
No	99	98	-
Base	*1,503*	*1,985*	-
Q20_4 Whether in last 12 months anything else has been deliberately damaged or tampered with by vandals or people out to steal			
Yes	11	12	-
No	89	88	-
Base	*1,503*	*1,989*	-
Q20_5 Whether in last 12 months anyone, including people they know well, has deliberately hit them with their fists or with a weapon of any sort or kicked them or used force or violence in any other way			
Yes	2	3	-
No	98	97	-
Base	*1,503*	*1,983*	-
Q21_1 Perception of likelihood that their home will be burgled in the next year			
Very likely	2	2	2
Fairly likely	10	15	10
Fairly unlikely	54	64	60
Very unlikely	34	19	28
Base	*1,482*	*1,975*	*2,273*

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Column percentages

	Telephone %	Postal %	Face-to-face BCS %
Q21_2 Perception of likelihood that their house, garden, or other household property will be vandalised in the next year			
Very likely	3	4	2
Fairly likely	10	15	10
Fairly unlikely	51	59	55
Very unlikely	37	22	33
Base	*1,488*	*1,972*	*2,274*
Q21_3 Perception of likelihood that they will be mugged or robbed in the next year			
Very likely	1	1	*
Fairly likely	7	9	7
Fairly unlikely	51	64	59
Very unlikely	40	26	33
Base	*1,481*	*1,971*	*2,274*
Q21_4 Perception of likelihood that they will be physically attacked or assaulted by a stranger in the next year			
Very likely	2	1	1
Fairly likely	6	8	7
Fairly unlikely	49	60	56
Very unlikely	43	30	37
Base	*1,482*	*1,974*	*2,274*
Q21_5 Perception of likelihood that they will be harassed or intimidated in the street or any other public place in the next year			
Very likely	4	5	2
Fairly likely	13	17	11
Fairly unlikely	48	56	57
Very unlikely	35	22	30
Base	*1,490*	*1,982*	*2,279*

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Appendix H: Data tables (online vs. postal)

To compare re-interview effects between the online and postal modes, the results of the online survey (cell C – first mode only) and postal survey (cell D – first mode only) were analysed and presented below. The results were weighted to reduce the risk of confounding differences in response propensity with differences due to mode of data collection. The responses of 'don't know', 'refused' and where they did not answer the question in the postal mode were excluded from the bases.

The following conventions have been applied to the figures presented below.

Percentages

Due to rounding, percentage figures may not always add up to 100%.

Symbols in tables

The symbols below have been used in the tables and they denote the following:

* percentage value of less than 0.5
\- percentage value of zero

All bases shown in the tables are the unweighted totals.

Column percentages

	Online %	*Postal %*
Q1 How safe feel walking alone in local area after dark		
Very safe	28	25
Fairly safe	49	51
A bit unsafe	18	21
Very unsafe	5	4
Base	*1,146*	*1,396*
Q2 How safe feel walking alone in local area during the day		
Very safe	71	70
Fairly safe	25	27
A bit unsafe	3	3
Very unsafe	1	*
Base	*1,146*	*1,395*

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Column percentages

	Online %	Postal %
Q3a Perception of how level of crime in local area compares to the country as a whole		
Higher than average	9	11
Lower than average	54	55
About average	37	35
Base	*1,146*	*1,395*
Q3b Perception of how level of crime in local area differs from the country as a whole		
A little (higher/lower)	54	60
A lot (higher/lower)	46	40
Base	*749*	*924*
Q4a Whether concern about crime has increased or decreased over the last few years		
Increased	44	47
Decreased	5	5
Stayed about the same	51	47
Base	*1,146*	*1,395*
Q4b Extent to which concern about crime has increased or decreased over the last few years		
A lot	41	33
A little	59	67
Base	*548*	*734*
Q5 Perception of likelihood of personally being a victim of crime in the next year		
Very likely	2	3
Fairly likely	17	18
Fairly unlikely	67	63
Very unlikely	14	17
Base	*1,141*	*1,389*

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Column percentages

	Online %	Postal %
Q6a Perception of what has happened to crime in the country as a whole over the past few years		
Gone up a lot	33	31
Gone up a little	36	38
Stayed about the same	23	23
Gone down a little	7	8
Gone down a lot	1	1
Base	*1,146*	*1,392*
Q6b Perception of what has happened to crime in local area over the past few years		
Gone up a lot	9	7
Gone up a little	32	33
Stayed about the same	49	51
Gone down a little	9	8
Gone down a lot	1	1
Base	*1,146*	*1,378*
Q7_1 How much of a problem noisy neighbours or loud parties are in local area		
A very big problem	4	3
A fairly big problem	9	9
Not a very big problem	39	40
Not a problem at all	47	49
Base	*1,146*	*1,390*
Q7_2 How much of a problem teenagers hanging around on the streets are in local area		
A very big problem	9	7
A fairly big problem	22	20
Not a very big problem	46	47
Not a problem at all	24	26
Base	*1,146*	*1,389*

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Column percentages

	Online %	*Postal %*
Q7_3 How much of a problem rubbish or litter lying around is in local area		
A very big problem	10	9
A fairly big problem	25	24
Not a very big problem	48	49
Not a problem at all	17	19
Base	*1,145*	*1,387*
Q7_4 How much of a problem vandalism, graffiti, and other deliberate damage to property or vehicles is in local area		
A very big problem	6	5
A fairly big problem	18	16
Not a very big problem	50	52
Not a problem at all	26	27
Base	*1,146*	*1,386*
Q7_5 How much of a problem people using or dealing drugs are in local area		
A very big problem	8	7
A fairly big problem	18	16
Not a very big problem	40	42
Not a problem at all	33	35
Base	*1,143*	*1,379*
Q7_6 How much of a problem people being drunk or rowdy in public places are in local area		
A very big problem	7	5
A fairly big problem	17	16
Not a very big problem	46	46
Not a problem at all	30	32
Base	*1,145*	*1,387*
Q7_7 How much of a problem abandoned or burnt out cars are in local area		
A very big problem	1	1
A fairly big problem	4	3
Not a very big problem	29	25
Not a problem at all	67	72
Base	*1,144*	*1,386*

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Column percentages

	Online %	*Postal %*
Q8 In the country as a whole, confidence that the police are effective at catching criminals		
Very confident	5	4
Fairly confident	57	58
Not very confident	32	30
Not at all confident	7	8
Base	*1,133*	*1,368*
Q9_1 Confidence that the CJS as a whole is effective		
Very confident	3	3
Fairly confident	43	43
Not very confident	40	41
Not at all confident	15	13
Base	*1,104*	*1,291*
Q9_2 Confidence that the CJS as a whole is fair		
Very confident	5	5
Fairly confident	46	47
Not very confident	33	35
Not at all confident	16	13
Base	*1,101*	*1,266*
Q10 How good a job think police in local area are doing		
Excellent	8	9
Good	49	48
Fair	37	37
Poor	5	5
Very poor	1	1
Base	*1,146*	*1,386*
Q11_1 Agree/disagree that the police and local council seek people's views about the anti-social behaviour and crime issues that matter in local area		
Strongly agree	7	7
Tend to agree	34	34
Neither agree nor disagree	35	36
Tend to disagree	20	18
Strongly disagree	4	5
Base	*1,144*	*1,391*

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Column percentages

	Online %	*Postal %*
Q11_2 Agree/disagree that the police and local council are dealing with the anti-social behaviour and crime issues that matter in local area		
Strongly agree	4	6
Tend to agree	40	40
Neither agree nor disagree	36	37
Tend to disagree	15	14
Strongly disagree	4	4
Base	*1,144*	*1,389*
Q11_3 Agree/disagree that the police and local council keep people informed about how they are dealing with anti-social behaviour and crime issues that matter in local area		
Strongly agree	6	7
Tend to agree	27	29
Neither agree nor disagree	34	31
Tend to disagree	26	24
Strongly disagree	7	8
Base	*1,145*	*1,388*
Q12 Whether any member of the household is a serving police officer		
Yes	2	1
No	98	99
Base	*1,146*	*1,374*
Q13 How often see Police Officers or Police Community Support Officers (PCSOs) on foot patrol in local area		
More than once a day	3	1
Once a day	7	9
About once a week	26	25
About once a month	18	18
Less than once a month	24	22
Never	23	25
Base	*1,128*	*1,351*

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Column percentages

	Online %	*Postal %*
Q14 Whether noticed any change in how often see Police Officers or Police Community Support Officers on foot patrol in local area		
More often	24	21
Less often	22	18
About the same amount	53	60
Base	*1,121*	*1,333*
Q15 Whether knew that street-level crime maps and information were available online before interview		
Yes	41	38
No	59	62
Base	*1,128*	*1,346*
Q16 Whether in last 12 months have contacted the police either by telephone, or in the street, or by calling at a police station, for any reason		
Yes	27	26
No	73	74
Base	*1,122*	*1,338*
Q17_1 How effective think police in local area are at solving crimes		
Very effective	4	4
Fairly effective	68	69
Not very effective	26	24
Not at all effective	2	3
Base	*1,124*	*1,319*
Q17_2 How effective think police in local area are at preventing crimes		
Very effective	3	4
Fairly effective	57	60
Not very effective	35	30
Not at all effective	5	6
Base	*1,124*	*1,310*
Q18 Likelihood of people in neighbourhood doing something about children spray-painting graffiti on a local building		
Very likely	26	27
Fairly likely	40	43
Fairly unlikely	25	23
Very unlikely	9	7
Base	*1,145*	*1,384*

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Column percentages

	Online %	Postal %
Q19 Likelihood of people in neighbourhood doing something about someone being beaten-up or threatened in a fight near their home		
Very likely	20	23
Fairly likely	49	48
Fairly unlikely	23	24
Very unlikely	8	6
Base	*1,145*	*1,385*
Q20_1 Whether in last 12 months anyone has got into house/flat without permission and stolen or tried to steal anything		
Yes	3	2
No	97	98
Base	*1,146*	*1,394*
Q20_2 Whether in last 12 months have had car, van, motorcycle or other motor vehicle stolen or driven away without permission		
Yes	2	2
No	98	98
Base	*1,146*	*1,391*
Q20_3 Whether in last 12 months anyone has stolen or tried to steal anything they were carrying out of their hands or from their pockets or from a bag or case		
Yes	2	2
No	98	98
Base	*1,146*	*1,391*
Q20_4 Whether in last 12 months anything else has been deliberately damaged or tampered with by vandals or people out to steal		
Yes	13	13
No	87	87
Base	*1,145*	*1,394*
Q20_5 Whether in last 12 months anyone, including people they know well, has deliberately hit them with their fists or with a weapon of any sort or kicked them or used force or violence in any other way		
Yes	4	3
No	96	97
Base	*1,145*	*1,395*

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Column percentages

	Online %	*Postal %*
Q21_1 Perception of likelihood that their home will be burgled in the next year		
Very likely	2	2
Fairly likely	12	13
Fairly unlikely	69	67
Very unlikely	17	18
Base	*1,144*	*1,390*
Q21_2 Perception of likelihood that their house, garden, or other household property will be vandalised in the next year		
Very likely	3	2
Fairly likely	12	15
Fairly unlikely	65	60
Very unlikely	21	22
Base	*1,143*	*1,392*
Q21_3 Perception of likelihood that they will be mugged or robbed in the next year		
Very likely	1	1
Fairly likely	8	8
Fairly unlikely	62	64
Very unlikely	30	27
Base	*1,143*	*1,392*
Q21_4 Perception of likelihood that they will be physically attacked or assaulted by a stranger in the next year		
Very likely	2	1
Fairly likely	8	7
Fairly unlikely	60	61
Very unlikely	31	30
Base	*1,143*	*1,393*
Q21_5 Perception of likelihood that they will be harassed or intimidated in the street or any other public place in the next year		
Very likely	5	3
Fairly likely	17	18
Fairly unlikely	57	57
Very unlikely	21	22
Base	1,142	1,390

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