Scottish Crime and Justice Survey 2017/18:

Technical Report

Neil Grant, Ben Cook - Scottish Government

Colin Hockaday - Ipsos Mori, Leon Page - ScotCen Social Research

Edinburgh, March 2019

CONTENTS

1 Background 8

1.1 Introduction to the Scottish Crime and Justice Survey 8

1.1.1 Overview 8

1.1.2 Purpose of the Technical Report and the SCJS User Guide 9

1.1.3 The 2017/18 SCJS Survey: Fieldwork Extension and Response Rate 9

1.1.4 History of Crime Surveys in Scotland 10

1.2 Outputs from the 2017/18 SCJS 12

1.3 Structure of the Technical Report 13

2 Sample Design and Selection 15

2.1 Requirements 15

2.2 Sample Design and Assumptions 15

2.3 Sample Selection 17

2.3.1 Selecting households at addresses with multiple dwellings 18

2.3.2 Selecting individuals within households 18

2.3.3 Allocation of sample to different time periods 19

3 Survey Response 20

3.1 Introduction 20

3.2 Scotland level summary 20

3.3 Police Division performance 22

3.4 Self-completion performance 22

4 Survey Weighting 24

4.1 Introduction 24

4.2 Main household weight 24

4.2.1 Dwelling unit selection weight 24

4.2.2 Household calibration 25

4.3 Main adult weight 26

4.3.1 Individual pre-weight 26

4.3.2 Individual calibration 26

4.4 Self-Completion Weights 27
4.5 Victim form weight (incidence weight) 27
4.6 Summary of weights 29
4.6.1 Weighting and expansion variables in SPSS data files 30
4.6.2 Calculating rates per 10,000 statistics 31
5 Questionnaire content 33
5.1 Structure and coverage of the questionnaire 33
5.2 Main questionnaire content 36
5.2.1 Perceptions of crime (section 1) 36
5.2.2 Victim form screener (section 2) 37
5.3 Victim form questionnaire structure 38
5.3.1 Identification and ordering of incidents for victim forms 39
5.3.2 Series of incidents 40
5.4 Victim form questionnaire contents (section 3) 41
5.4.1 Incident dates 41
5.4.2 Incident details 42
5.4.3 Victim's experience of the criminal justice system and related issues 43
5.4.4 Incident summary 44
5.5 Full sample modules (section 4) 44
5.5.1 Justice system 44
5.5.2 Police 45
5.5.3 Experience of conviction of a crime (section 4.3) 45
5.6 Quarter-sample modules (A-D) (section 5) 46
5.6.1 Module A: local community 46
5.6.2 Module A: perception of crime 46
5.6.3 Module B: sentencing 46
5.6.4 Module C: civil law 46
5.6.5 Module C: workplace abuse 47
5.6.6 Module C: smuggled and fake goods 47

5.6.7 Module D: harassment 48
5.7 Demographics section (section 6) 48
5.8 Self-completion questionnaire content (sections 8 to 10) 50
5.8.1 Risk factors (section 7) 51
5.8.2 Illicit drug use (section 8) 51
5.8.3 Stalking and harassment and partner abuse (section 9) 53
5.8.4 Sexual victimisation (section 10) 55
6 Fieldwork 57
6.1 Survey pilot 57
6.2 Briefing of interviewers before main stage fieldwork 58
6.3 Supervision and quality control 58
6.4 Fieldwork dates and fieldwork management 59
6.5 Fieldwork procedures and documents 60
6.5.1 Advance letter and leaflet 60
6.5.2 Address contact record 61
6.6 Response rate and reasons for non-response 61
6.7 Self-completion response rate and reasons for non-completion 62
6.7.1 Response rate 63
6.7.2 Reasons for self-completion refusal/interviewer completion 63
7 The Interview 64
7.1 Survey reference period 64
7.1.1 Series incidents and the reference period 65
7.2 Numbers of victim forms completed 66
7.3 Computer Assisted Personal Interviewing 67
7.3.1 Plausibility and consistency checks 67
7.3.2 Text substitution and date calculations 68
7.3.3 Don't know and refused codes 68
7.4 Use of show cards 68
7.5 Length of interview 69

7.6 Presence of others during the interview 69
7.7 Self-completion interview 70
8 Data Processing 71
8.1 Offence coding 71
8.1.1 Offence coding process 71
8.1.2 Offence coding quality assurance 74
8.1.3 Offence code history 76
8.1.4 Standard and open-end coding 76
8.2 Coding of occupation and socio-economic classification 77
8.3 Data checking 77
8.3.1 SPSS Data Checking 78
8.3.2 Data Table Checking 79
8.3.3 Offence Coding and Survey Statistics Checking 80
9 Offence Codes, Survey Statistics and Crime Groups 82
9.1 Crime types / offence codes covered by the survey 82
9.1.1 Offence codes 82
9.1.2 A note on crime types excluded from the scope of the survey 83
9.1.3 Sexual offences and threats 83
9.1.4 Duplicate victim forms 85
9.1.5 List of in-scope offence codes 85
9.2 Survey statistics 85
9.2.1 Household and personal crimes 86
9.2.2 Incidence and incidence rate 86
9.2.3 Prevalence 87
9.2.4 Multiple victimisation 88
9.2.5 Repeat victimisation 88
9.2.6 Capped series of crimes 88
9.2.7 Population Grossing Totals 90
9.3 Crime groups 90

9.3.1 Crime group descriptions 92
9.3.2 Comparable crime group descriptions 95
10 Data Output 97
10.1 Introduction 97
10.1.1 Respondent file 97
10.1.2 Victim form file 97
10.1.3 Self-completion file 98
10.2 Content of SPSS data files 98
10.3 Conventions used in SPSS data files 99
10.3.1 Case identifiers 99
10.3.2 Don't know and refused values 99
10.3.3 Decimal places 100
10.3.4 Multiple response variables 100
11 Statistical Significance and Confidence Intervals 101
11.1 Statistical significance 101
11.2 Confidence intervals 101
11.2.1 All SCJS crime 102
11.2.2 2017/18 survey design factors 102
11.2.3 Summary of confidence intervals around key survey results 102
12 Comparing the SCJS with Other Data Sources 104
12.1 Comparison with police recorded crime 104
12.2 Comparison with the Crime Survey for England and Wales 105
ANNEX 1 - Population targets used for weighting 108
ANNEX 2 - Sample strata 109
ANNEX 3 - CAPI outcome codes and reissue criteria 110
ANNEX 4 - Advance letter and leaflet 111
ANNEX 5 - Plausibility and consistency checks 115
ANNEX 6 - SCJS offence codes and crime groups 117
ANNEX 7 - Household weighting calibration targets 119

ANNEX 8 - Individual weighting rims targets 121

ANNEX 9 - Effective sample and weights by division 122

ANNEX 10 - Variables for analysis with household weights..... 124

1 BACKGROUND

1.1 Introduction to the Scottish Crime and Justice Survey

1.1.1 *Overview*

The Scottish Crime and Justice Survey (SCJS) is a survey of public experiences and perceptions of crime in Scotland. The 2017/18 survey is the seventh sweep of the SCJS, with the first being conducted in 2008/09. The survey interviews adults (aged 16 or over) who live in private residential addresses in Scotland.

The main aims of the SCJS are to:

- Enable the Scottish population to tell us about their experiences of, and attitudes to, a range of issues related to crime, policing and the justice system; including crime not reported to the police;
- Provide a valid and reliable measure of adults' experience of crime, including services provided to victims of crime;
- Examine trends, over time, in the number and nature of crimes in Scotland, providing a complementary measure of crime compared with police recorded crime statistics;
- Examine the varying risk and characteristics of crime for different groups of adults in the population.

The statistics produced from victimisation surveys provide a picture of the level of crime in the area covered. Respondents are asked directly about their experience of crime, irrespective of whether or not they reported these incidents to the police (police recorded crime)[1]. The surveys provide a record of peoples' experiences of crime, which is unaffected by variations in reporting behaviour of victims or changes in police practices of recording crime. However, the SCJS and police recorded crime statistics should be seen as a complementary series, which together provide a more complete picture of crime than could be obtained from either series alone.

The survey also provides analyses for a number of performance targets for the public sector in Scotland, at a national and a local level, including National Indicators[2].

[1] For more information on police recorded crime, see the Scottish Government website: http://www.scotland.gov.uk/Topics/Statistics/Browse/Crime-Justice/TrendType

[2] More information including details of the specific indicators, can be found on the Scottish Government's 'Scotland Performs' website at: https://nationalperformance.gov.scot/

The survey uses a victim form questionnaire to collect extensive details about the nature of each incident that respondents report, such as when and where it occurred and details about the offenders and other relevant information. This allows classification and hence counts of crimes in Scotland.

The SCJS collects information on incidents occurring in the previous 12 calendar months before the month in which the interview takes place. This time period is referred to as the survey reference period. The survey reference period varies depending on the month in which the interview took place, although the reference period covers an equal length of time (12 calendar months) for each respondent.

The SCJS only collects data on incidents occurring in Scotland in the reference period. Incidents which happen abroad are not covered by the survey (termed non-valid incidents). Incidents which happened in England and Wales will be recorded in the Crime Survey for England and Wales (CSEW, formerly the BCS) where householders are resident in either England or Wales. Crimes experienced in England and Wales by people normally resident in Scotland will not be captured in either the SCJS or CSEW.

Incidents which meet the above criteria and which are identified as crimes within the scope of the survey (see Chapter 9) are used to produce the 'all SCJS crime' statistics which are published in the 2017/18 SCJS Main Findings report.

However, the remit of the SCJS is much wider than a victimisation survey. The survey collects socio-demographic information from respondents which allow a picture to be built up about the nature of crime in Scotland and the risks of victimisation among subgroups of the population. It also collects information on a number of sensitive issues, including the prevalence of drug use, sexual victimisation and stalking, and partner abuse (collected via the self-completion element of the questionnaire).

1.1.2 *Purpose of the Technical Report and the SCJS User Guide*

This report provides a range of technical details on the SCJS. Further information, including background on the survey, accessing and using survey data and examples of analysis are provided in the 2008/09 SCJS User Guide[3].

1.1.3 *The 2017/18 SCJS Survey: Fieldwork Extension and Response Rate*

Fieldwork for the 2017/18 sweep of the survey was originally spread over 12 months to begin in 1st April 2017 and finishing on the 31st March 2018.

[3] 2008/09 SCJS User Guide: http://www.gov.scot/Resource/Doc/933/0117460.pdf

However, fieldwork performance was below target during that period and was extended by two months and finished on 27th May 2018. The target sample size for the 2017/18 survey was 6,000 however only 5,475 interviews were completed. The lower survey response rate is examined in Chapter 3 of this report.

1.1.4 *History of Crime Surveys in Scotland*

Prior to the 2017/18 survey, there have been 14 previous surveys of victimisation in Scotland, beginning with the 1982 and 1988 sweeps of the British Crime Survey (BCS) co-ordinated by the Home Office[4]. BCS coverage in Scotland was limited to south of the Caledonian Canal. The first independent Scotland-only survey was commissioned by the Scottish Office in 1993 under the title of the Scottish Crime Survey (SCS) and was followed by repeated sweeps in 1996, 2000 and 2003[5]. In 2004, following an external review, the survey underwent both a name change, under the title of the Scottish Crime and Victimisation Survey (SCVS), and a major methodological change, with a move away from in-home face-to-face interviewing to telephone interviewing. However, the 2006 survey returned to face-to-face interviewing after it was shown that the robustness of the data produced by the 2004 telephone survey could not be substantiated[6].

The 2016/17 survey sweep retained the same basic design as the 2008/09 surveys onwards with changes to the modular sections of the questionnaire as well as the reduction in sample size and fieldwork period. Other minor changes to the SCJS questionnaire were also made. The 2017/18 survey was identical to the 2016/17 sweep in terms of design and content generally, with only very minor tweaks made to the questionnaire between these sweeps. For further details see Chapter 5.

Despite changes in the design of crime surveys in Scotland over time, the wording of the questions that are asked to elicit experiences of victimisation have generally been consistent. Care must be taken, however, when comparing different surveys, both those conducted in Scotland and other UK surveys, and analysts should be careful to read the relevant technical documentation to ensure that like-on-like comparisons are being made[7].

---

[4] Further information on the shared Office for National Statistics and TNS BMRB website: http://www.crimesurvey.co.uk

[5] For more information see the Scottish Government survey website: http://www.scotland.gov.uk/SCJS

[6] For more information see Hope (2005). The SCVS 2004 survey contained a face-to-face calibration survey to run in parallel against the main telephone survey, and the 2004 crime estimates were based on this survey rather than the telephone survey.

[7] An attempt to look at the differences between the Scottish Crime and Victimisation Survey (SCVS) and other UK surveys was made by Norris and Palmer (2010).

Figure 1.1: Review of methodological changes to crime surveys in Scotland over time, 2008/09 to 2017/18.

	2008-09	2009-10	2010-11[5]	2012-13	2014-15	2016-17	2017-18
Survey Company	TNS-BMRB	TNS-BMRB	TNS-BMRB	TNS-BMRB	TNS-BMRB	Ipsos MORI & ScotCen	Ipsos MORI & ScotCen
Core Sample	16,003	16,036	13,010	12,045	11,493	5,567	5,475
Response Rate	70.9%	70%	67%	67.7%	63.8%	63.2%	62.4%
Sample frame	Royal Mail PAF[1]	Royal Mail PAF	Royal Mail PAF	Royal Mail PAF	Royal Mail PAF	Royal Mail PAF[4]	Royal Mail PAF[4]
Survey Weights	Incident, Individual, Household	Incident, Individual, Household	Incident, Individual, Household	Incident, Individual, Household	Incident, Individual, Household	Incident, Individual, Household	Incident, Individual, Household
Self-completion	✓	✓	✓	✓	✓	✓	
Reference Period[2]	12 months	12 months	12 months	12 months	12 months	12 months	12 months
CAPI / PAPI	CAPI	CAPI	CAPI	CAPI	CAPI	CAPI	CAPI
No of Victim Forms	5	5	5	5	5	5	5
Cap on series of incidents[3]	✓(5+)	✓(5+)	✓(5+)	✓(5+)	✓(5+)	✓(5+)	✓(5+)
Sample Type	Stratified sample design, rural areas were clustered.			Single stage unclustered stratified sample design.			
Design Factor	1.5	1.5	1.5	1.3	1.2	1.34	1.22
Geographical coverage	Scotland (excluding smaller Island Communities)					Sampling frame includes all Islands	
Police Force Area (PFA)	✓	✓	✓	✓	✓	✓	✓
Police Division (PD)[4]					✓	✓	
Community Criminal Justice Areas (CCJA)	✓	✓	✓	✓	✓	✓	✗

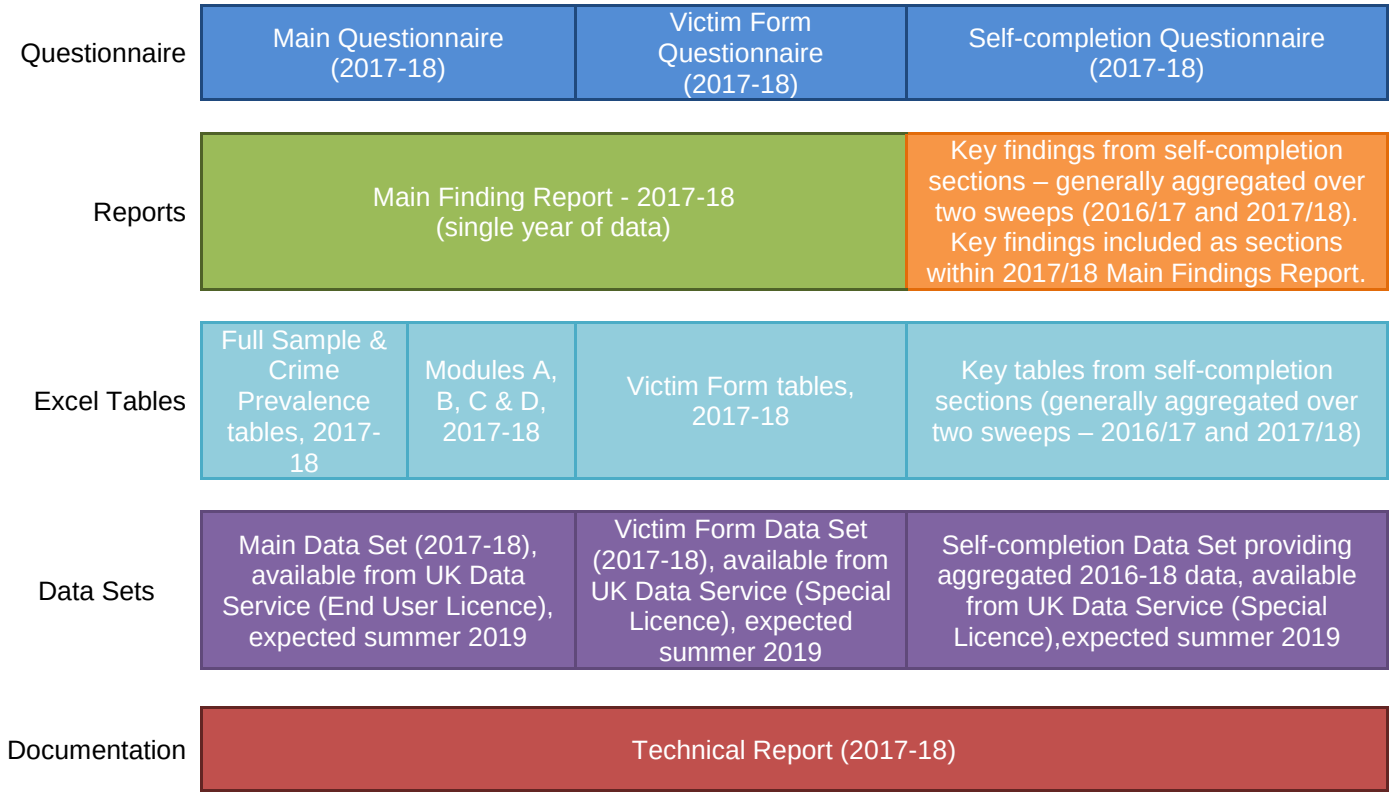
1. PAF – Postal Address File
2. The SCJS only collects and counts data on incidents occurring in Scotland and in the reference period for crime statistics.
3. The SCJS caps all series of crime that are greater than 5 incidents. See Section 9.2.6 for more details.
4. Police Division were introduced 1 April 2013; estimates can be derived for pre 2013 data. Likewise PFA results can still be derived by aggregating divisions in the underlying data set.
5. There were no surveys conducted in 2011-12, 2013-14, or 2015-16

1.2 Outputs from the 2017/18 SCJS

The data collected from the 2017-18 SCJS are reported by the Scottish Government in a number of different formats. Figure 1.2 illustrates the different products and formats for which data produced for the 2017-18 SCJS is available.

Data collected by the self-completion element of the SCJS is collated over two survey sweeps to increase sample sizes, and is published biennially. The 2017/18 SCJS publication contains combined 2016/17 and 2017/18 self-completion data. Likewise, SCJS results provided to Police Division level are also available biennially (as they have been since 2012/13), with two sweeps of data combined to increase the sample size and precision around results with effect from 2016/17.

Figure 1.2: The 2017-18 SCJS output products



All reports are available online in HTML format from the SCJS publications webpage and there is a pdf version that can be downloaded and printed out. The questionnaire, coding manual and other documentation is provided.

In addition, downloadable excel tables are also available on the SCJS website[8]. Further information on how to read the tables is described in the 'Introduction' worksheets within the table files, and in our video on YouTube or Vimeo.

1.3 Structure of the Technical Report

This report documents how the SCJS was designed, the way in which it was conducted and the how the survey data are produced, and should be read when using data from the survey. In common with most victimisation surveys, the SCJS is a complex study with data organised at different levels (households, individuals, and incidents) and has a number of sub-samples contained within it, including the modular and self-completion samples.

Chapter 2 sets out the survey **sample design**.

Chapter 3 provides information on **survey response** and fieldwork outcomes.

Chapter 4 sets out the process for creating and applying **survey weights**.

Chapter 5 provides a summary of the structure and content of the **questionnaire**.

Chapter 6 examines **fieldwork** procedures and response rates.

Chapter 7 provides the details and practicalities of the **interview** itself.

Chapter 8 provides information on **data processing**, including the offence coding process and checking of data.

Chapter 9 looks at the offence codes, survey statistics and crime groups used. As well as the **data outputs**, including the structure of the SCJS SPSS data files and conventions used in them.

Chapter 10 summarises the **data outputs** from the survey including conventions used.

Chapter 11 provides information on **statistical significance** and confidence intervals for the data.

Chapter 12 presents guidance for comparing the SCJS data with **other sources** of data about crime.

[8] SCJS Publications and datasets: http://www.gov.scot/Topics/Statistics/Browse/Crime-Justice/crime-and-justice-survey/publications and http://www.gov.scot/Topics/Statistics/Browse/Crime-Justice/Datasets/SCJS

The series of 2017/18 SCJS Technical Report Annexes referred to in this report are included at the end of the report.

2 SAMPLE DESIGN AND SELECTION

2.1 Requirements

The sample for the SCJS 2017/18 was designed by the Scottish Government. The sample design was coordinated with the sample designs for the Scottish Health Survey (SHeS) and the Scottish Household Survey (SHS) as part of a survey efficiency project and to allow the samples of the three surveys to be pooled for further analysis[9].

The SCJS sample was designed to allow reporting at Police Division level. The requirements of the design for the 2017/18 SCJS were to provide an annual sample size of 6,000 for Scotland with a minimum effective sample size of 315 for each of the 14 Police Division's which existed at the start of fieldwork.

2.2 Sample Design and Assumptions

Fieldwork for the SCJS 2017/18 was programmed to run from April 2017 to March 2018. The survey has a single stage unclustered sample design and, as stated above, the annual sample size for Scotland was 6,000.

To deliver the required Police Division precision the minimum effective sample size for each Police Division was set at 315. The first step in calculating the effective sample size for each Police Division was to allocate the overall sample on the basis of household population. For Police Divisions where the first step led to an effective sample size of less than 315, the target was increased to 315, with a corresponding decrease in the Police Divisions where the target effective sample size was greater than 315. In order to estimate the annual target achieved sample size for each Police Division, analysis of design effects from the 2008/09 survey was undertaken, since:

$$\text{Effective sample size} = \frac{\text{Achieved sample}}{\text{Design effect}}$$

As rural areas were clustered in the 2008/09 survey, for the 2017/18 unclustered sample the median design effect from a range of variables for the unclustered parts of Police Division samples were assumed for the entire areas. This allowed the calculation of the target achieved sample size for each Police Division, as shown in Table 2.1.

[9] Further information on the sample designs and the methodology uses is available here: http://scotland.gov.uk/Topics/Statistics/About/SurveyDesigns201215

Table 2.1: Total annual target achieved sample size

SCJS 2017/18

Police Division	Target sample size
Aberdeen City	378
Aberdeenshire and Moray	384
Argyll and West Dunbartonshire	315
Ayrshire	405
Dumfries and Galloway	345
Edinburgh	474
Fife	354
Forth Valley	360
Greater Glasgow	792
Highlands and Islands	361
Lanarkshire	633
Renfrewshire and Inverclyde	363
Tayside	403
The Lothians and Scottish Borders	433
Total	6,000

While the required sample sizes were set at Police Division (PD) level, due to variations in historic response rates and levels of ineligible addresses across PDs and to allow for coordination with the sample selection of the SHS and SHeS, the sample design was implemented using local authorities as stratum. This was done by allocating the target Police Division samples to local authorities proportionate to household population.

The number of addresses to be selected in order to provide the target number of interviews was calculated by:

1. Estimates for response rates for 2017/18 for each local authority were based on the average response rate from the 2012/13 and 2014/15 sweeps of the SCJS, with the conditions that for any local authority the response rate assumption is not below 60% or above 80% and the Scotland level is not below 68%.

2. Estimates for levels of ineligible addresses were calculated at local authority level and based on the average level of ineligible addresses from the Scottish Health Survey, Scottish Household Survey, Scottish Crime and Justice Survey, and Scottish House Condition Survey from 2007 to 2009/10.

Table 2.2 shows the number of selected addresses in each local authority.

Table 2.2: Local authority selected addresses

SCJS 2017/18

Local authority	Selected addresses
Aberdeen City	673
Aberdeenshire	445
Angus	179
Argyll and Bute	288
Clackmannanshire	84
Dumfries and Galloway	534
Dundee City	238
East Ayrshire	199
East Dunbartonshire	144
East Lothian	142
East Renfrewshire	117
Edinburgh City	849
Eilean Siar	66
Falkirk	260
Fife	515
Glasgow City	1,101
Highland	450
Inverclyde	182
Midlothian	118
Moray	165
North Ayrshire	240
North Lanarkshire	482
Orkney	44
Perth and Kinross	231
Renfrewshire	411
Scottish Borders	168
Shetland	43
South Ayrshire	203
South Lanarkshire	445
Stirling	141
West Dunbartonshire	258
West Lothian	250
Total	9,665

2.3 Sample Selection

The Royal Mail's small user Postcode Address File (PAF) was used as the sample frame for the address selection. The advantages of using the PAF are as follows:

- It has previously been used as the sample frame for Scottish Government surveys so previously recorded levels of ineligible addresses can be used to inform assumptions for 2017/18 sample design
- It has excellent coverage of addresses in Scotland

- The small user version excludes the majority of businesses

The PAF does still include a number of ineligible addresses, such as small businesses, second homes, holiday rental accommodation and vacant properties. A review of the previous performance of individual surveys found that they each recorded fairly consistent levels of ineligible address for each local authority. This meant that robust assumptions could be made for the expected levels of ineligible addresses in the sample size calculations.

As the samples for the SHS, SHeS and SCJS are all being selected by the Scottish Government from 2012 onwards, addresses selected for any of the surveys are removed from the sample frame so that they cannot be re-sampled for another survey. This will help to reduce respondent burden. The addresses are removed from the sample frame for a minimum of 4 years.

The sample design specified above was implemented using systematic random sampling to select the addresses from the sample frame. Within strata the addresses ordered by urban-rural classification, SIMD rank and postcode.

2.3.1 *Selecting households at addresses with multiple dwellings*

In a small number of cases, some addresses have only one entry in the PAF but contain multiple dwelling units. Such addresses are identified in the PAF by the Multiple Occupancy Indicator (MOI). To ensure that households within MOI addresses had the same probability of selection as other households, the likelihood of selecting the addresses was increased in proportion to the MOI. For addresses flagged as having multiple dwellings in the PAF the dwelling for interview was randomly selected as part of the sample selection process.

In a small number of cases, the MOI on the PAF is inconsistent with the actual number of dwelling units. When this occurred, the interviewer recorded the number of dwellings and then randomly selected a dwelling unit for interview using their contact sheets. For Ipsos MORI interviewers, the random selection was done via CAPI software built into the Electronic Contact Sheet (ECS) ScotCen interviewers used a Kish grid that formed part of their paper-based contact sheet. To take into account the differential selection probability a correction was made in the survey weighting.

2.3.2 *Selecting individuals within households*

Only one adult (aged 16 or over) was interviewed in each household. To avoid any selection bias in households with more than one adult, the interviewee was determined by random selection. The names of all adult household members were collected by the interviewer and one adult was randomly selected as the respondent: Ipsos MORI interviewers used an algorithm in the ECS CAPI script, and ScotCen interviewers used a Kish grid that formed part of their paper-based contact sheet at each address.

After a selection was made, no substitutions were permitted under any circumstances (for example, if the selected person refused the interview but

another household member volunteered instead, the interviewer could not interview them and the address outcome was coded as a refusal and no interview was conducted at the address) .

2.3.3 *Allocation of sample to different time periods*

All the addresses in the sample were grouped into batches for effective fieldwork. The process of batching addresses aimed to minimise the distance to visit each address within each batch, and to equalise the difficulty of working batches by varying the batch size – with more addresses in areas where it is historically harder to get interviews, and less addresses in easier areas. This was based on creating a “probability of interview” percentage by modelling historic SCJS response rate information and appending it to the sample addresses.

Batches were then allocated to a particular fieldwork quarter and month. All quarters had, as far as possible, the same number of batches in each local authority to help ensure that the fieldwork was carried out throughout the year. (Addresses were also randomly assigned a quarter-sample module, split evenly across all addresses – e.g. 25% of addresses were allocated Module A, 25% Module B etc.) Each address was then allocated a random eight-digit ID.

3 SURVEY RESPONSE

3.1 Introduction

This section presents the fieldwork outcomes for the sampled addresses. Survey response is an important indicator of survey quality as non-response can introduce bias into survey estimates. Standardised outcome codes (based on an updated version of those published in Lynn et al (2001)[10]) for survey fieldwork were applied across the SHS, SHeS and SCJS. This allows consistent reporting of fieldwork performance and effective comparison between the performance of the surveys.

3.2 Scotland level summary

The following table (3.1) shows a detailed breakdown of the SCJS response for all sampled addresses for Scotland. The addresses of unknown eligibility have been allocated as eligible and ineligible proportional to the levels of eligibility for the remainder of the sample. This approach provides a conservative estimate of the response rate as it estimates a high proportion of eligible cases amongst the unknown eligibility addresses.

[10] Lynn, Peter, Beerten, Roeland, Laiho, Johanna and Martin, Jean (October 2001) 'Recommended Standard Final Outcome Categories and Standard Definitions of Response Rate for Social Surveys', Working Papers of the Institute for Social and Economic Research, paper 2001-23. Colchester: University of Essex.

Table 3.1: Fieldwork outcomes (Scotland)

SCJS 2017/18

Fieldwork Outcome	Sample	Percentage issued	Percentage eligible
Responding	**5,475**	**56.6**	**62.4**
Refused			
Office refusal	200	2.1	2.3
Refusal at introduction/ before interview	1,807	18.7	20.6
Refusal by proxy	56	0.6	0.6
Broken appointment - no re-contact	381	3.9	4.3
Total refused	**2,444**	**25.3**	**27.8**
Non-contact			
No contact with anyone at the address	377	3.9	4.3
Contact made at address, but not with target respondent	71	0.7	0.8
Total non-contact	**448**	**4.6**	**5.1**
Other non-response			
Ill at home during field period	36	0.4	0.4
Away or in hospital throughout field period	102	1.1	1.2
Physically or mentally unable/incompetent	181	1.9	2.1
Language barrier	37	0.4	0.4
Lost interview	7	0.1	0.1
Total other non-response	**363**	**3.8**	**4.1**
Unknown eligibility			
Inaccessible	16	0.2	
Unable to locate address	40	0.4	
Total unknown eligibility	**56**	**0.6**	
Estimated eligible addresses in set of unknown eligibility addresses	51	0.5	0.6
Total eligible addresses	**8,781**	**90.9**	**100**
Not eligible			
Not yet built / under construction	10	0.1	
Demolished/derelict	32	0.3	
Vacant/empty	536	5.5	
Non-residential	92	1.0	
Address occupied but not resident household	189	2.0	
Communal establishment / institution	20	0.2	
Estimated ineligible addresses in set of unknown eligibility addresses	5	0.1	
Total not eligible	**884**	**9.1**	
All issued addresses	**9,665**	**100**	

The overall response rate for the SCJS in 2017/18 was 62.4%.

This was slightly lower than the 63.2% response rate in 2016/17, and 63.8% in 2014/15, and down from 67.7% in the 2012/13 survey. For all selected addresses 9.1% were found to be ineligible for the survey, an increase from 8.9% in the previous survey.

Note: Due to rounding percentages in Table 3.1 may not add up to the sum totals shown.

3.3 Police Division performance

Table 3.2 shows that the response rates for Police Divisions ranged from 53.3% (Renfrewshire & Inverclyde) to 71.8% (Aberdeenshire and Moray).

Table 3.2: Police Division outcomes

SCJS 2017/18

	Sampled addresses	Ineligible addresses		Responding	
		n	% of issued	n	% of eligible
Aberdeen City	673	79	11.7	340	57.2
Aberdeenshire and Moray	610	54	8.9	399	71.8
Arygll and West Dunbartonshire	546	72	13.2	299	63.1
Ayrshire	642	61	9.5	353	60.8
Dumfries and Galloway	534	60	11.2	330	69.6
Edinburgh	849	83	9.8	479	62.5
Fife	515	54	10.5	274	59.4
Forth Valley	485	39	8.0	295	66.1
Greater Glasgow	1,362	91	6.7	730	57.4
Highlands and Islands	603	91	15.1	363	70.9
Lanarkshire	927	51	5.5	545	62.2
Renfrewshire and Inverclyde	593	23	3.9	304	53.3
Tayside	648	58	9.0	375	63.6
The Lothians and Scottish Borders	678	63	9.3	389	63.3
Overall	9,665	879	9.1	5,475	62.4

3.4 Self-completion performance

The SCJS includes a self-completion questionnaire which covers topics of a sensitive nature, including drug use, partner abuser and sexual victimisation and stalking. Respondents were given the opportunity to refuse to participate in the self-completion questionnaire section. This means that the response rate for the self-completion questionnaire is lower than the overall survey. In 2017/18 the conversion rate from the main survey to self-completion was 89.4%. This is a decrease of 2 percentage points compared with the 2016/17 survey (92.0%). The following table shows the age breakdown for participation in the self-completion questionnaire.

Table 3.3: Proportion of respondents completing self-completion section by age

% of survey responders participating in self-completion section	Female	Male	Overall
16 to 19	90.6	93.3	92.2
20 to 24	92.3	94.2	93.2
25 to 29	95.1	89.4	92.6
30 to 34	88.4	91.2	89.6
35 to 39	92.4	89.2	90.9
40 to 44	92.9	85.5	89.3
45 to 49	92.7	91.7	92.2
50 to 54	89.8	92.5	91.1
55 to 59	90.0	88.9	89.4
60 to 64	89.4	89.8	89.5
65 to 69	91.5	92.8	92.1
70 to 74	87.5	87.4	87.4
75 to 79	85.2	85.2	85.2
80 to 84	77.5	82.8	79.7
85 plus	74.8	77.4	75.7
Overall	89.3	89.5	89.4

The table shows that there was little difference between men and women in conversion from main interview to self-completion. However, the proportion of those completing the self-completion section decreased significantly as the age group of the respondent increased, falling from 92.2% for 16 to 19 year olds, to 75.7% for those aged 85 or older.

3.5 Fieldwork Performance

Fieldwork performance was lower than expected and the target of 6,000 interviews across the year was not met. Consequently, to maximise response, the fieldwork period was extended by around one month, and interviews that had not been achieved from the existing sample were reissued. The final number of the interviews achieved was 5,475.

The final response rate achieved in 2017/18 (62.4%), similar to the 63.2% response rate seen in 2016/17. Response rate is an important indicator of the representativeness of the sample with the Scottish population. The impact of the reduced response rate on a range of survey statistics was outlined in the 2016/17 SCJS technical report. To further examine and understand these impacts a methodological workshop was held with stakeholders in September 2018 and follow up analysis has since been commissioned from the survey contractors, which will be reported on later in 2019.

4 SURVEY WEIGHTING

4.1 Introduction

This section presents information on the weighting procedures applied to the survey data. For the SCJS 2017/18 data the weighting was undertaken by the Scottish Government, however, the methodology applied was largely consistent with that from previous sweeps of the survey. The procedures for the implementation of the weighting methodology were developed by the Scottish Government working with the Methodology Advisory Service at the Office for National Statistics.

Weighting procedures for survey data are required to correct for unequal probabilities of selection and variations in response rates from different groups. The weighting procedures for the SCJS use calibration weighting to correct for non-response bias. Calibration weighting derives weights such that the weighted survey totals match known population totals. For the 2017/18 SCJS the population totals used were the National Records of Scotland's (NRS) "Mid-2017 Population Estimates Scotland " and for households the NRS "Estimates of Households and Dwellings in Scotland, 2017" and "Household Projections for Scotland, 2017-based" were used (the latest available at the time of weighting the data). To undertake the calibration weighting the ReGenesees Package for R was used and within this to execute the calibration a rim function was implemented.

The following units of analysis required weights:

- Household main section
- Individual main section
- Household self-completion
- Individual self-completion

Separate weights were required for the self-completion section since not all respondents to the main section completed the self-completion section. The weighting procedures for the self-completion weights were identical to those for the main section.

Details of appropriate application of the weights are presented in Section 4.6.

4.2 Main household weight

4.2.1 *Dwelling unit selection weight*

As stated in Section 2.3.1, the MOI for the PAF was used to ensure that if there were multiple dwelling units at a single address point then they would have the same selection probability as individual addresses. However, there were a small number of cases where the MOI was incorrect. The following correction was applied where this was the case:

$$\text{Dwelling selection weight} = \frac{\text{Recorded dwelling units at the address}}{\text{PAF MOI for the address}}$$

4.2.2 *Household calibration*

The calibration step corrected for unequal probabilities of selection across geographic areas and for response bias from different groups. The dwelling unit selection weight was applied to the data to act as entry weight for the calibration. The execution of the calibration step modified the entry weights so that the weighted household totals match the following estimates:

- Household type within PD
- Age of head of household within PD
- Urban/rural areas within LA

These variables were included as weighting targets as they were part of the SCJS weighting methodology previously implemented by TNS BMRB due to being related to levels of crime and victimisation.

National Records of Scotland publishes household projection tables which provide local authority level data for household type and age of the head of household[11]. The following household types were used:

- One adult, no children
- One adult, one or more children
- Two or more adults, no children
- Two or more adults, one or more children

There were five groups for the age of the head of household:

- 16 to 29
- 30 to 44

[11] Source: Estimates of Households and Dwellings in Scotland, 2012: http://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/households/household-projections/household-projections-for-scotland-2012-based (Tables 6, 8 and 14. The number of households was taken from the 2013 household estimates from NRS, however because we needed to use breakdowns of this number by HRP age and household type the 2012 totals were used (N=2387300). This was the latest available estimate for these breakdowns at the time).

- 45 to 59
- 60 and over

The local authority totals were used to generate totals for PD/CJAA. In Scotland there are 14 PDs.

The Scottish Government's 6-fold Urban Rural Classification was used to assign addresses from the sample frame (the Royal Mail's Postcode Address File) to urban (categories 1 and 2) or rural (categories 3 to 6). The proportion of urban and rural addresses were then applied to NRS's Estimates of Households and Dwellings in Scotland 2012 at local authority level to estimate the total number of urban and rural households in each local authority.

The full tables of household calibration targets are shown in Annex 7.

4.3 Main adult weight

4.3.1 *Individual pre-weight*

There are two elements to the individual pre-weight:

a) Adult selection weight

   The probability that of an adult within a household being selected for the random adult interview was inversely proportional to the number of adults within a household – i.e. in a single adult household the only adult resident must be sampled but in a three adult household each adult only has a one in three chance of being selected. To correct for this unequal probability of selection an adult selection weight equal to the number of adults in the household was applied.

b) Household weight

   Individuals' characteristics and their experiences of crime are related to the characteristics of the households in which they live. Therefore, the household weights are incorporated into the individual weights as pre-weights.

The final pre-weight is given by multiplying the adult selection weight and household weight together.

4.3.2 *Individual calibration*

The combined pre-weight was applied to the survey data for individuals. The execution of the calibration step then modified the pre-weights so that the weighted totals of individuals matched NRS "Mid-2017 Population Estimates Scotland" totals for five-year age bands and gender within each of the 14 PD areas. The individual weighting targets are shown in Annex 8.

4.4 Self-Completion Weights

As stated in Section 3.4, not all respondents who completed the main household and individual interview completed the self-completion section of the SCJS. Furthermore, Table 3.3 showed that the response rates to the self-completion section varied with respondent age, with a higher proportion of young people completing the section. Therefore, a separate weight was required for analysis of the self-completion sections.

For each year's sample, a single year self-completion weight was constructed. This was based on the same methodology as Sections 4.2 and 4.3 above, but excluded those who did not complete the self-completion section.

To achieve a reasonable sample size to be able to accurately estimate crimes with a low prevalence, 2 years' worth of data was pooled together (16/17 and 17/18) to create a combined self-completion sample. An additional calibration target was derived to ensure the combined sample was representative across the 2 years and totalled to a known population figure. The weight was calculated as the proportion of the sample size that came from each year multiplied by the overall population or household target, as outlined in Table 4.1.

Table 4.1: Calibration totals for multiyear weights

	Individual		Household	
Self-completion weight targets	Sample size	Calibration Target	Sample size	Calibration Target
Sample 2016/17 - removing quarter 1	4,369	2,000,472	4,369	1,093,390
Total sample 2017/18	5,475	2,506,886	5,475	1,370,179
	Population Total	4,507,358	**Household Total**	2,463,569

Finally the individual year pre-weights were then calibrated to the same totals as the single year 2017-18 weights (the latest households and population level estimates available) plus the additional calibration target for each year's sample.

Issues in 2016-17 quarter 1 fieldwork

Because of issues in Quarter 1 of fieldwork in 2016/17 (April to June), all completed self-completion modules completed at this time have been removed from the dataset and weighted zero. During this period, individuals were offered to skip modules of the self-completion CAPI script. Analysis has shown that individuals who chose to skip had different characteristics to those who completed the module, therefore to remove any bias this quarters' data has been removed.

4.5 Victim form weight (incidence weight)

Most victim forms collect details of only a single occurrence of an incident. However, respondents can also experience series of incidents, where '*the same thing was done under the same circumstances and probably by the same people*'. In these cases, only one victim form is completed, collecting

details of the *latest incident only*. The total number of incidents that occurred in the series in the reference period is recorded and this number, capped at five incidents, is used in the incidence statistics produced from the survey.

Weighted incident values were calculated for each victim form. The values are the products of the appropriate household or individual weight and the number of incidents (the incident count), capped at five, represented by that victim form[12]. This methodology has been consistently applied throughout the SCJS and erlier crime surveys in Scotland, although this methodology will be kept under review (see Section 9.2.6 for more details)[13].

This weight should be applied when analysing incident details in the victim form file (VFF) data file – for example, when analysing who the offender(s) were for 'all SCJS crime' and any subgroups of 'all SCJS crime' so that data from series incidents are represented in the correct proportion of incidents overall.

Respondents could complete up to five victim forms. The incident count differed according to the characteristics of each victim form:

- Whether the incident detailed in the victim form was assigned an in-scope offence code (i.e. the incident was in Scotland, in the reference period and given one of the 33 offence codes included in the 'all SCJS crime' definition);
- Whether the victim form represented a single incident or a series of incidents;

The following rules were applied:

1. Where the victim form was not assigned an in-scope offence code the household or individual weight was multiplied by zero;
2. Where the victim form was for a single incident the appropriate weight was multiplied by one;
3. Where the victim form represented a series of incidents, the appropriate weight was multiplied by the number of incidents represented, up to a maximum of five[14].

[12] Therefore, a respondent can only have a maximum of 25 incidents included in the survey statistics (five victim forms, each recording up to five incidents in a series).

[13] A similar approach is taken in other victimisation surveys such as the Crime Survey for England and Wales (CSEW) and National Crime Victimisation Survey (NCVS) in the USA. For further updates on recent updates to the approach taken in CSEW see Section 9.2.6.

[14] The VFF SPSS variable providing the incident count (used to multiply the household or individual weights to produce the incident weight) is NUMINC. The uncapped NUMINC is the variable NSERIES.

In the cases where the multiplier was zero, the number of weighted incidents clearly also became zero, effectively removing those cases from weighted analysis of 'all SCJS crime'. This enabled estimates of the incidence of 'all SCJS crime', and of specific types of crimes within that, to be calculated. Further information is provided in Section 9.2.

4.6 Summary of weights

The SCJS, like the Crime Survey for England and Wales (CSEW), technically consists of two highly related, but separate surveys. At various times in the survey, the respondent provides information on behalf of the *household as a whole* and on behalf of themselves as an *individual*. In addition, the victim form (and associated data file) records incidents of victimisation.

There are three main units of analysis used on the SCJS:

1. Households;
2. Individuals;
3. Incidents of victimisation.

Different weights are used depending upon the unit of analysis (and what data file is being analysed):

1. **Household weights** were constructed for use with variables where the *household* is the main unit of analysis. Some crimes are considered household crimes (e.g. burglary, vandalism to household property, theft of and from a car – see Section 9.2.1 for further information) and therefore the main unit of analysis is the household. Similarly, analysis for certain questions in the survey is also conducted at the household level (for example, accommodation type or household income). In these cases the household weight would apply. The household weight is present in the respondent file (RF) data file.

2. **Individual weights** were constructed for use with variables where the *individual* is the main unit of analysis. The individual weight would also be used when analysing personal feelings of safety when walking alone after dark in the local area and other questions where the respondent is asked for their personal opinion or information about themselves. Analysis of crimes which are considered personal crimes (assault, robbery, sexual offences etc. – see Section 9.2.1) is undertaken using the individual weight. The individual weight is present in the RF data file.

3. **Incident weights** are used when analysing the characteristics of *incidents* of crime. The incident weight is only present in the victim form file (VFF) data file. The incident weight is based on the corresponding household and individual weight (depending on whether the crime is classed as a household or personal crime) and additionally incorporates an expansion factor reflecting whether incidents in the victim form reflect a single or a series incident (see Section 4.6.1). The incident weights are used for all

analysis conducted on the VFF data file if 'all SCJS crime' is being analysed or any of the published statistics are being analysed.

The questionnaire included a **self-completion section**. However, not all respondents to the main part of the questionnaire completed the self-completion section. Therefore, an additional set of individual 'self-completion' weights are provided to analyse this sub-sample[15]. These self-completion weights are calculated in a similar way to the main individual and household weights but were based only on respondents who had answered the self-completion section of the questionnaire.

The variable names used for each weight and their descriptions are presented below in Section 4.6.1 and in Annex 12 with details of which variables the household weights are used to analyse.

4.6.1 *Weighting and expansion variables in SPSS data files*

Table 4.2 lists the weighting variables which are contained in the SCJS 2017/18 SPSS data files.

There are two sets of weights – grossed weights and scaled weights. Grossed weights (Table 4.2) include an expansion factor so that data can be expressed as a proportion of the population of Scotland. When using the gross weight to analyse individual based data for a question asked of the entire sample, the weighted sample size would be 4,488,733 (the total number of adults in Scotland).

Table 4.2: Grossed weighting variables in the SCJS SPSS data files

SCJS 2017/18

Weighting variable	Data file[1]	Description
WGTGHHD	RF	Household weight
WGTGINDIV	RF	Individual weight
WGTGINC_SCJS	VFF	Gross indicent weight for SCJS crimes
SCJS_SC_HH_WT	SCF	Self-completion household weight
SCJS_IND_SC_WT	SCF	Self-completion individual weight

[1] Respondent file (RF), victim form file (VFF) and self-completion file (SCF) data files – see Section 10.1 for details

Scaled weights (Table 4.33) do not include this expansion factor and can be used when undertaking more advanced statistical analysis. When using the scaled weight to analyse individual based data for a question asked of the entire sample, the weighted sample size would be 5,475 (the total number of

[15] When analysing the self-completion file (SCF) data file, only the individual weights are required as all of the variables relate to information about the respondent themselves and not any other member of their household

respondents interviewed). The scaled versions of the household and individual weights (including those in the self-completion file) are denoted by the addition of _SCALE at the end of the weighting variable names listed in Table 4.2). The scaled weights are not suitable to analyse INC variables. They will provide incorrect crime volume proportions. More information on scaled weights is provided in the SCJS 2008/09 User Guide (available from the survey website and UK Data Service).

Table 4.3: Scaled weighting variables in the SCJS SPSS data files

SCJS 2017/18

Weighting variable	Data file[1]	Description
WGTGHHD_SCALE	RF & VFF	Scaled household weight
WGTGINDIV_SCALE	RF & VFF	Scaled individual weight
SCJS_SC_HH_WT_SCALE	SCF	Scaled self-completion household weight
SCJS_IND_SC_WT_SCALE	SCF	Scaled self-completion individual weight

[1] Respondent file (RF), victim form file (VFF) and self-completion file (SCF) data files – see Section 10.1 for details

When analysing the respondent file (RF) individual weights should be used as respondents provide details of their own circumstances, experiences, attitudes and opinions. In a small number of cases, respondents are asked to provide information on behalf of the entire household (for example, the way in which the household occupies the accommodation, whether anyone in the household has owned or had regular use of a car, whether there is anyone in the household who requires care etc.). These questions / variables are listed in Annex 10, and the household weight should be used when conducting analysis of these questions / variables.

In addition, when analysing incidence and prevalence variables for household crimes or crime groups (Section 9.2.1) in the RF data file the household weight should be used. A list of household crimes is provided in Annex 10 . Users should note that, following conventions used on the CSEW, where crime groups containing both household and personal crimes, the individual weights are used in the calculation of published incidence and prevalence rates[16].

4.6.2 *Calculating rates per 10,000 statistics*

Past surveys have included weights that incorporate a calculation to display incidence statistics as rates per 10,000 households or individuals (and rates per 10,000 are presented in the Main Findings report). These are not included

[16] i.e. for PROPERTYCRIME, SURVEYCRIME AND COMPARCRIME. For example, property crime includes a mixture of crimes committed against households and individuals, and therefore, for example, prevalence data for property crime in the 2012/13 SCJS Main Findings report is quoted as the percentage of adults experiencing at least one property crime.

in the SCJS data files. They can be created by users if necessary by using the following syntax which simply divides the gross weights by the total population (household or individual) divided by 10,000:

```
compute WGTGINDIVRATE=WGTGINDIV/(4,507,358/10,000).

compute WGTGHHDRATE=WGTGHHD /(2,463,569/10,000).
```

5 QUESTIONNAIRE CONTENT

5.1 Structure and coverage of the questionnaire

The SCJS questionnaire comprises three elements:

- The main questionnaire which consists of a set of core modules asked of the whole sample, including demographics; and a set of full and quarter-sample modules, containing questions on a variety of topics;

- A victim form which collects details about the incidents a respondent may have experienced during the reference period (the 12 months prior to interview). This victim form can be repeated up to five times; the number of victim forms completed depends on the number and nature of incidents a respondent has experienced in the 12 month reference period;

- A self-completion questionnaire covering more sensitive issues. All respondents are asked to complete the self-completion questionnaire, but have the option to refuse this.

Each of these three elements contains various sections (for example, the self-completion questionnaire contains four sections covering risk factors, illicit drug use, stalking and harassment, partner abuse, and sexual victimisation).

Within most sections there is a degree of filtering of the questions so that some are asked only of sub-samples of respondents (for example, those who have had contact with the Police in the last 12 months). It is therefore recommended that data users read the following section on the questionnaire carefully before starting analysis. However, users should also familiarise themselves with the questionnaire before starting any analysis, to ensure they are clear on how the question has been asked and of whom. Copies of the questionnaires for all sweeps of the SCJS are available from the survey website and the UK Data Service.

The basic structure of the questionnaire is shown in Figure 5.1 below[17]. Treated as a single questionnaire, the SCJS 2017/18 had a total of ten distinct sections which flowed in the following order:

Main questionnaire (5,475 respondents)

- Section 1: Perceptions of crime
- Section 2: Victim form screener

[17] The complete questionnaire can be found on the survey website as a separate document.

Victim form (Section 3) (859 respondents, and 1,259 completed forms). The forms are triggered by information collected in the victim form screener section and can be repeated up to five times)

- Incident dates, days of the week and details
- Experience of criminal justice system and related issues (emotions, victims' use of force/drugs/alcohol, Police contact, information and assistance, and attitudes towards offender prosecution and sentencing)
- Incident summary

Full sample module (Section 4) (5,475 respondents)

- Justice system (including the system overall, confidence in the Police and questions about the courts system);
- Police (perceived visibility, attitudes towards policing and contact with the Police)
- Experience of conviction of a crime (including serving an alternative sentence and motoring offences)

Quarter-sample modules (Section 5)

Module A (1,377 respondents)

- How people react to crime in their local community
- Perceptions of crime

Module B (1,349 respondents)

- Sentencing (including community sentencing and prisons)

Module C (1,364 respondents)

- Civil Law
- Workplace abuse
- Smuggled and fake goods

Module D (1,385 respondents)

- Harassment

Demographics (Section 6) (5,475 respondents)

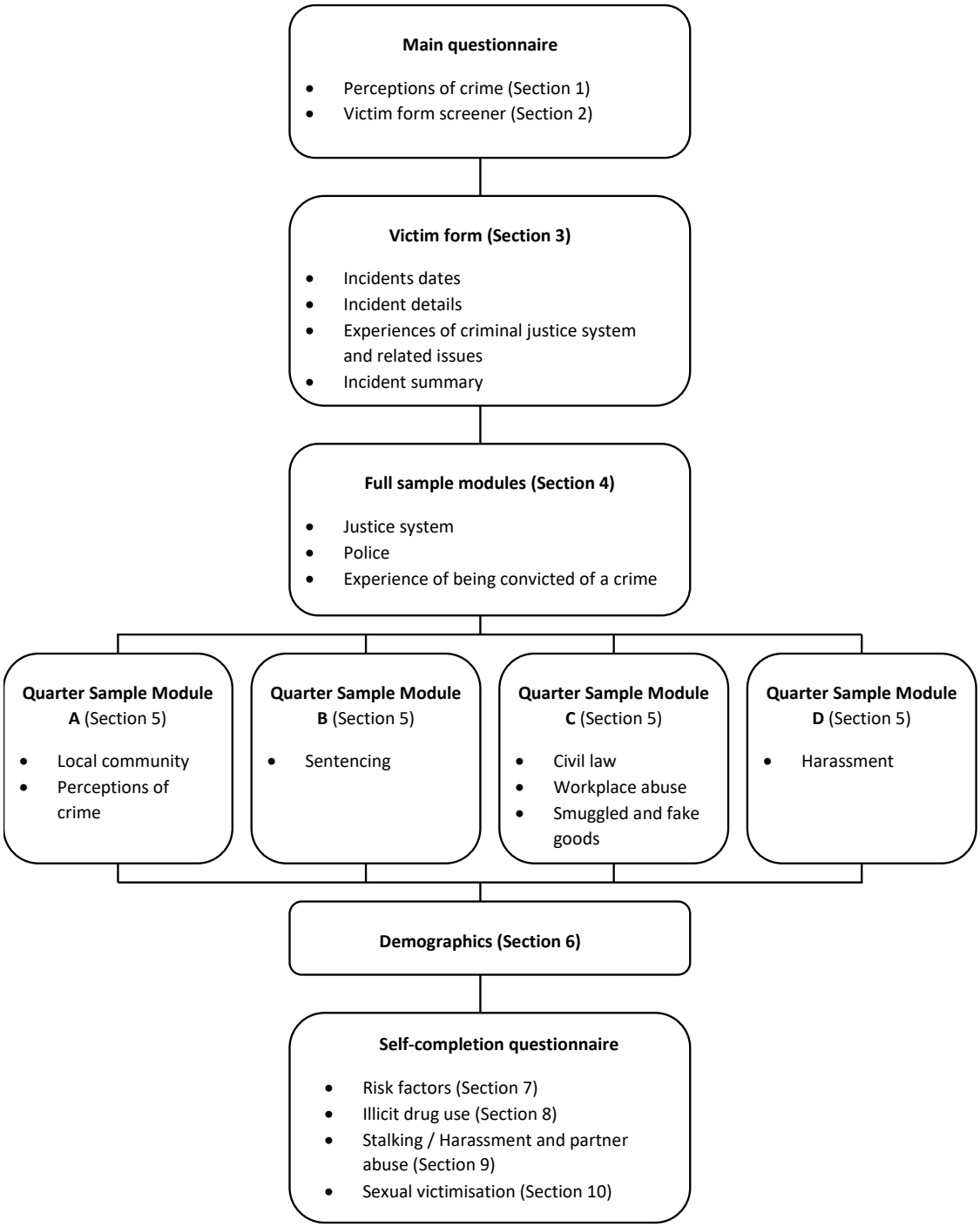
- Household composition/details; tenure and accommodation type; marital status; work status and employment details; qualifications; health status and caring status; identity and household income.

Self-completion questionnaire (completed by 4,888 respondents)

- Section 7: Risk factors (extent to which home left unoccupied, use of alcohol)
- Section 8: Illicit drug use
- Section 9: Stalking, harassment and partner abuse
- Section 10: Sexual victimisation

Before the main questionnaire starts, a series of screener questions are asked by the interviewer when they make contact at an address which allows the CAPI software to make a random selection of a household member (aged 16 or over) for interview (see Section 2.3.2). Parental permission is also asked if the selected household member is aged 16 or 17.

Figure 5.1: Questionnaire structure/sections: SCJS 2017/18



5.1.1 The 2017-18 questionnaire changes

A review of the questionnaire was undertaken for the 2017/18 survey by the Scottish Government. The outcomes of this review are set out in a report published on the SCJS webpage.

The content of the 2017/18 survey is largely the same as the 2016/17 survey. The main changes subsequently made to the questionnaire following the review were:

- In Section 5B, the questions on community sentencing and Community Payback orders were removed, and replaced with a set of new, revised questions on community sentencing and unpaid work projects.

- In 2016/17, changes were also made to some of the questions relating to work status & employment details, so that they were in line with those from the Scottish Household Survey. However, the decision was made to remove these questions and reinstate the questions from 2014/15 to allow more accurate comparison to previous years (QEVJOB2 was removed and replaced with QEVOB and QD1LAST).

- The list of drugs at Section 8 (illicit drug use) was updated to include separate entries for synthetic cannabis, prescription only painkillers, and GHB/GBL. Two new questions on nitrous oxide were added.

There were also changes to the response options in a number of other questions throughout the questionnaire; for example, the responses at QINF (organisations that provided information/assistance to a victim of crime) were updated to include the Scottish Courts and Tribunals. The full questionnaire and the questionnaire report, which details the main changes to the 2017/18 survey, are available from the SCJS website. To assist users wishing to conduct time-series analysis changes to questions/response options from previous sweeps have been highlighted with an updated question label or response option numbering.

5.2 Main questionnaire content

The structure and content of the SCJS questionnaire is explained in detail below, providing users with a comprehensive overview of the questionnaire contents in the order it is asked to respondents (however, as noted above, data users should also familiarise themselves with the questionnaire for relevant sections before conducting any analysis).

5.2.1 *Perceptions of crime (Section 1)*

The survey begins with questions about the local area, including perceptions of how much the crime rate has changed locally and in Scotland overall, and how safe the respondent feels both at home and when out alone after dark. The next questions ask respondents about vehicle ownership, how worried

they are that specific crimes will happen to them, whether any such worry prevents them from doing things they want to, and their views on the likelihood of their being a victim of crimes. The majority of this section of the questionnaire is asked of all respondents.

5.2.2 *Victim form screener (Section 2)*

Respondents are asked whether they have experienced certain incidents since the beginning of the reference period (Section 7.1). These questions are used to trigger the victim form questionnaire.

The screener questions are separated into three broad groups:

- vehicle related incidents, including theft of a vehicle, theft from a vehicle, damage to a vehicle and bicycle theft;
- household property incidents, including whether the home or outbuildings were broken into and things stolen or damaged, or an attempt was made accordingly, or whether any property outside of the home was stolen or damaged;
- personal incidents, including whether any personal property was stolen, or an attempt was made accordingly, whether any personal property was damaged, and whether the respondent had been a victim of force or violence (including from another household member) or threats.

All respondents are asked a maximum of 19 victim form screener questions[18]. The wording of the screener questions has been kept consistent with past Scottish crime surveys. They are designed to ensure that all incidents within the scope of the SCJS, including relatively minor ones, are mentioned. The screener questions deliberately avoid using terms such as burglary, robbery, or assault, all of which have a precise definition that respondents would not be expected to know. This is consistent with the design of the Crime Survey for England and Wales (CSEW) questionnaire.

The focus of the victim form screener questions switches between incidents experienced by the household and those experienced by the individual respondent.

All vehicle and household property incidents are classified in the questionnaire as household incidents. Respondents are asked about whether

[18] Questions relating to vehicle incidents are asked only if the household has had use of the relevant vehicle in the reference period. The question relating to violence from another household member is asked only if there has been more than one adult (aged 16 or over) resident in the household within the reference period.

anyone currently residing in the household has experienced any incidents within the reference period. A typical example of a household incident is criminal damage to a car (owned or used by someone in the household). It is assumed that the respondent will be able to recall these incidents and provide information even in cases where they were not present.

Personal incidents refer to all crimes against the individual and are asked only in relation to incidents that have happened to the respondent personally (for example a personal assault), and not to any other people in the household[19].

The distinction between household and personal incidents also affects how the data is analysed (See Section 9.2).

The questions are also designed in a way that avoids the respondent mentioning the same incident more than once (though this does happen in a small number of cases and hence duplicate victim forms can occur – for information on how such cases are handled see Section 9.1.4)[20].

At the end of the victim form screener questions, the interviewer is shown a list of all incidents recorded. The interviewer checks this list with the respondent to ensure that all incidents they/their household have experienced in the reference period have been recorded and nothing has been counted twice. If this is not the case, the information is corrected before proceeding. Responses to the screener questions then trigger the victim form questionnaire if a respondent has experienced at least one incident, unless the incident relates to card fraud or identity theft (these were not followed up with a victim form since they are included only to provide an estimate of the prevalence of these issues).

5.3 Victim form questionnaire structure

Up to five incidents identified by the victim form screener questions (with the exception of card and identity fraud) are explored in much more detail through the victim form questionnaire. The victim form questionnaire is designed to elicit all of the relevant details of an incident, irrespective of what incident the

[19] To illustrate, if the respondent and another household member were the victims of a combined assault from an offender in the same incident, the details of what happened to the other household member would not be recorded (for example, they may have been injured in the assault while the respondent was not). The offence would be coded according to the crime experienced by the respondent (which may not be the same as the experience of the other household member).

[20] It is possible that two or more types of incident may occur at the same time (i.e. actually be the same incident); for example, an incident of something being taken from a victim may also involve the offender using force or violence against the victim. All screener questions are therefore prefaced with “Apart from anything you have already mentioned” and interviewers are briefed thoroughly on this section to avoid duplication as far as possible.

victim form was triggered by[21]. This then allows the coders to assign the correct offence code to the incident (see Section 8.1 for details of the offence coding process).

Respondents are asked to report all incidents that they/their household experienced in the reference period. However, regardless of the number of incidents the respondent reports, the survey collects detailed information on up to five of these only. Incidents are covered in a specific priority order as explained below. This priority order is consistent with previous surveys.

5.3.1 *Identification and ordering of incidents for victim forms*

Where a respondent had experienced more than one incident in the reference period, the CAPI programme automatically determines which of the incidents are followed up with a detailed victim form questionnaire, and the order in which the incidents are asked about. Neither the interviewer nor the respondent has any choice about which incidents are followed up with the victim form questionnaire (with the exception of incidents of violence from a household member)[22] or which order they are asked in. The priority ordering used by the script is as follows:

1. **According to incident type**: Victim forms are asked in reverse order to the victim form screener questions. Broadly speaking this means that all personal incidents are asked before household incidents. Within household incidents, property-related incidents are asked before vehicle-related incidents.
2. **Chronologically within each type of crime**: If a respondent reports more than one incident of the same type, victim forms are asked in chronological order with the most recent incident first[23].

If a respondent has experienced five or fewer incidents identified at the victim form screener section, then a victim form questionnaire is asked for all incidents (with the order based on the priority ordering above). If the respondent has experienced more than five separate incidents (single

[21] For example, if a respondent has answered yes in the screener section to having experienced an incident where something they were carrying was stolen, and as part of that same incident they were also deliberately hit by the offender, then the victim form would collect detail about the theft and assault.

[22] In the case of incidents of violence from another household member, the interviewer has an option to skip the victim form if there is another person present in the room. This is to prevent forcing the respondent to divulge personal and sensitive information which may embarrass or endanger them in front of someone else. In the 2016/17 survey there were 3 cases of a victim form being skipped for this reason (variable WINTRO in the VFF datafile).

[23] Chronological ordering is used only where respondents have experienced more than one of the same type of incident and it is applied only after the incident type ordering has been applied.

incidents or series of incidents) in the reference period, only five victim forms are asked (with the incidents and order based on the schema set out above). As a result, the survey does not collect details about all incidents which a respondent may have experienced in such cases.

The priority ordering means that the incidents which are not asked about are likely to be incidents that tend to be more common. For example, criminal damage to vehicles is one of the lowest priority crime types in the victim form order, but one of the most common crimes (SCJS 2017/18 Main Findings Report – Table A1.5). In 2017/18, relatively few respondents, only 2 respondents out of 5,475, reported experiences of crime at the screener questions which were not followed up by a victim form.

Section 7.2 provides information on the numbers of victim forms that were completed in 2017/18.

5.3.2 *Series of incidents*

The victim form screener section also determines how many times the respondent has experienced a particular incident within the reference period. Most victim forms represent a single incident. However, in a minority of cases a respondent may have experienced the same type of incident (i.e. one of those asked about in the victim form screener) a number of times in succession. If more than one incident is reported, the respondent is asked whether these incidents represented a 'series' or not. A series is defined as:

> *"the **same thing**, done under the **same circumstances** and **probably by the same people**".*

In common with the CSEW, if a respondent regularly experiences incidents where the same thing is done under the same circumstances by the same type of people, this is recorded as a series of incidents (or 'series incident') rather than separate incidents[24]. For example, this could happen in a work situation, in instances where groups such as patients or the general public might be involved.

Where a series of incidents is identified, only a single victim form is completed for the series, and this relates to the most recent occurrence.

In common with other victimisation surveys such as the CSEW, asking only about the most recent incident where a series of similar incidents has occurred yields three practical advantages:

[24] To illustrate, a care worker who was regularly threatened and verbally abused by patients as part of their job, would count these as a series incident. If, however, they were also physically attacked, then this would count as a separate incident (as the incident is of a different type to the cases of threats and verbal abuse).

1. Many (although not all) incidents classified as a series tend to be minor incidents (e.g. vandalism). Asking only about the most recent incident avoids asking a respondent the victim form questionnaire several times over when the detail of the incidents recorded will be very similar, therefore decreasing the likelihood that the respondent will terminate the interview or refuse to answer repetitive detailed questions about what can be very similar incidents;
2. It avoids using up the limit of five victim forms on similar incidents (and may therefore minimise respondent burden).
3. Respondent re-call of the incident details is likely to be more accurate for more recent incidents, and less so with earlier incidents.

In 2017/18, 78% (985) of all victim forms (1,259) related to single incidents and 22% (274) related to a series of incidents[25].

In rare cases where respondents have experienced a mixture of single incidents and a series of incidents of the same type, the interview program has a complex routine which handles the sequence of individual and series incidents. This allows the priority ordering of the victim forms to be allocated, based on the date of the incidents with the most recent first.

5.4 Victim form questionnaire contents (Section 3)

5.4.1 *Incident dates*

The victim form contains two basic sections; the first relates to the details of the incident itself (including details of the offender(s) if known), and the second relates to the follow-up of the incident with regard to the victim's experience of the criminal justice system and related issues.

Once a victim form is triggered, before any of the detailed questions about the incident or the respondent's experience of the criminal justice system are asked, the date of the incident within the reference period is confirmed. For individual incidents, the respondent is asked to provide the month the incident happened in (MTHINC2). If they are unsure of the exact month, they are asked to provide the quarter in which the incident occurred (e.g. between nine and 12 months prior to the month of interview) (QTRINCID), or, if they are unsure, then to confirm if the incident happened in the 12 month reference period (YRINCIB) (Section 7.1).

In the CAPI questionnaire, reference dates (months, quarters and the start of the reference period) are automatically calculated based on the date of interview and appropriate text substitution is used to ensure that the questions

[25] These are unweighted figures and include all victim forms, including those which are assigned an out-of-scope offence code. Data is based in the variable PINCI in the VFF data file.

always refer to the correct reference period (Section 7.3.2). Because the 12 month reference period changes throughout the fieldwork year, many date-related questions in the victim form have different text each month to reflect this changing reference period.

In some cases, respondents may report an incident in the victim form screener section as having happened within the reference period, which later turns out to be before the start of the reference period (and therefore outside the survey's coverage). In such cases, after this has been confirmed, the victim form is terminated and the questionnaire moves on to the next victim form (or the next section of the main questionnaire if the respondent has not experienced any further incidents). The victim form would be assigned the non-valid offence code 95 (Section 9.1). If the incident is in the month of interview, then details are collected (and an offence code assigned as normal), but the incident is not included in the survey statistics as it is outside the reference period (Section 7.1).

For incidents that were part of a series, respondents are asked how many incidents occurred in each quarter of the reference period (DATESER and NQUART questions) and the month in which the most recent incident occurred (MTHRECIN).[26] If the most recent incident in the series occurred in the month of interview the victim form is still completed, but the number of incidents in the series is adjusted accordingly to include only those that happened in the reference period (Section 7.1.1)[27]. If there are no incidents in the reference period or the month of interview then the victim form is terminated in the same way as for single incidents (and would also be assigned the non-valid offence code 95).

5.4.2 *Incident details*

The victim form is key to estimating victimisation in Scotland and collects two vital pieces of information about incidents to allow offence coding: the respondent's description of the incident; and key details of the incident.

These are explored in turn below. Key questionnaire variables are provided in capitals in brackets.

The respondent's description of the incident

At the start of the victim form, respondents are asked to describe the details of the incident, with the interviewer probing for where it happened, who the

[26] In the same manner as single incidents are treated, if the respondent cannot remember the exact month of the latest incident then they are asked what the corresponding quarter was (QTTRECIN) or to confirm that the incident happened within the reference period (YRINC).

[27] Variables NSERIES and NUMINC in the VFF data file show the number of incidents in the series, uncapped and capped respectively.

victim was, who the perpetrator was and what they did (DESCRINC). The interviewer then summarises these in an open-ended text entry. This summary description is vital to the accurate offence coding of incidents when used in combination with the series of pre-coded questions which ask about key details of the incident (see Section 8.1 for further detail of the offence coding process).

Important details of the incident

Examples of the sort of information collected include when and where the incident took place; whether anything was stolen or damaged and if so, what; whether force or violence was used and if so, the nature of this and any injuries sustained.

Respondents are also questioned about other details of the incident, along with experience of the criminal justice system and related issues – described below – and the characteristics of the offender(s).

The SCJS only records details of incidents which happen within Scotland (QSCO). For an incident occurring on-line to be included (QWHERE), the respondent must have been living in Scotland at the time of the incident. If an incident occurred outside of Scotland, then the victim form questionnaire terminates and the questionnaire moves on to the next victim form (or the start of the next section of the main questionnaire if the respondent has not experienced any further incidents). The victim form would be assigned the non-valid offence code 98 (Chapter 9). The key questions within the victim form have remained largely unchanged from previous versions of the survey.

The victim form also contains a number of questions which are designed to help explain inconsistent answers which may arise within the questionnaire (for example, if a victim form was triggered because of an incident of theft in the victim form screener questions but nothing is recorded as having been stolen).

Several questions are included to allow the interviewer to terminate the victim form if the incident being recorded is a duplicate of a previous victim form (Chapter 9).

5.4.3 *Victim's experience of the criminal justice system and related issues*

There are several sections on the victim's experience of the incident and of the criminal justice system, and related issues[28]:

[28] General questions on the criminal justice system are also asked of all respondents in the Scottish criminal justice system full sample module.

- Emotions felt as a result of the incident;
- Whether the victim used force against the offender/s, and had taken any drugs or alcohol before the incident;
- Police contact; whether and how the Police came to know about the incident; if not then why not; why the incident was reported and how; how satisfied the victim was with Police handling of the incident; and whether the Police found out who the offender/s were and whether they went to court;
- Information and assistance relating to the investigation: this section was asked only in cases where the Police came to know about the incident, and included questions on from whom the respondent received information/assistance (including the Police, and the Crown Office and Procurator Fiscal Service (COPFS)), the types of information/assistance received, and what other information/assistance they would like to have received, if any;
- Attitudes to offender prosecution and sentencing: whether the offender(s) should have been prosecuted in court, and if not, why not; what punishment should be used as an alternative to prosecution in court; whether the offender should have received a prison sentence and how long this should have been; what type of non-prison sentence they should have received; perception of the incident as a crime or not; and the perceived serious of the incident on a scale of one to 20.

5.4.4 *Incident summary*

At the end of each victim form, the open-ended description is re-capped, along with the answers to some of the key pre-coded questions (INCSUM). By presenting this information on a single screen, interviewers have the chance to confirm with respondents that the information is correct and consistent. If the respondent and/or interviewer wish to add or clarify any information they have the opportunity to do so at this stage (QEND).

5.5 Full sample modules (Section 4)

After the victim form screener (or victim form, where the respondent has experienced an incident in the 12 month reference period) has been completed, the main questionnaire continues with three full-sample module sections (justice system, Police and experience of conviction of a crime.

5.5.1 *Justice system*

The criminal justice system in Scotland is defined to respondents as:

> *"the shared name for all the organisations in Scotland that deal with finding offenders and arresting them, then taking them through the court system and deciding what sentence they are given if they are found guilty, and then carrying out that sentence. There are a range of*

sentencing options available to courts, such as imposing a fine, or imposing a community or prison sentence".

Questions are asked of respondents' level of awareness of the system as a whole, and confidence in it[29]. Respondents are then asked specifically about the Police in their local area via a series of statements relating to the role of the Police and an overall assessment of the ability of the Police in the local area. Finally, respondents are asked about contact with the courts system in the past three years. All respondents are asked the questions in this section.

5.5.2 *Police*

The section begins by screening out respondents who are serving Police officers or where a household member is. Questions are asked about Police visibility in the local area, including how important it is that there are local Police officers who know and patrol the local area, whether this is the case and by what means (foot, bicycle or car), how frequently patrols by foot or bicycle are seen, and opinions on Police presence and why these are held.

Respondents are then asked about their level of agreement/disagreement with a series of statements about the Police in their local area (for example, 'they can be relied on to be there when you need them'). Finally, a series of questions are asked about contact with the Police in the 12 month reference period (excluding social contact). If respondents have had contact, then they are asked, for the last incident only, what type of contact it was, how much interest the Police showed, how polite they were, how fairly they treated the respondent, how satisfied the respondent was with the contact, and whether it changed their opinion of the Police. Respondents are then asked whether they have had any other contact with the Police in the last 12 months, and by what means (though no follow-up questions are asked about these contacts).

5.5.3 *Experience of conviction of a crime*

Respondents are asked if they have ever been convicted of a crime (excluding motoring offences) and any sentence they have experienced as a result. They are also asked if they have received a series of 'alternative sentences' (again, excluding motoring offences), as well as whether they have ever been convicted in court for a motoring offence[30].

[29] The questions in this section are asked of the all respondents, irrespective of whether they have completed any victim forms.

[30] Only those offences where the respondent was physically present in court, not on the spot fines.

5.6 Quarter-sample modules (A-D) (Section 5)

Addresses are randomly allocated to one of four modules at the sampling stage. Allocations are equal so that one quarter of addresses are allocated to each module. In the final achieved sample this percentage varies slightly due to small differences in response rates between modules.

Table 5.1: Quarter-sample module sample sizes
SCJS 2017/18

Module	Sample size (n)	Sample %
A	1,377	25.1
B	1,349	24.6
C	1,364	24.9
D	1,385	25.3
Base	5,475	100

5.6.1 *Module A: local community*

This section asks respondents to imagine a scenario where they witness a man being pushed to the ground and his wallet stolen, then poses a series of three questions on how likely or willing they would be to call the Police, identify the offender and go to court to provide evidence. Respondents are then read a list of statements about people in their local area and asked how far they agree or disagree with each statement (for example, 'people in this local area pull together to prevent crime'), before being asked how many people they know in the local area. Finally, they are asked how quickly a problem (broken glass) might be dealt with by local agencies or residents in the area.

5.6.2 *Module A: perception of crime*

This short section includes questions about how common respondents think various crimes are in their local area (that is within about a 15 minute walk of their home) and what measures they have had in place in the last year to reduce the risk that they will become a victim of crime (selecting from a list).

5.6.3 *Module B: sentencing*

Respondents are asked questions about community sentencing, unpaid work projects and prisons. Respondents are asked whether they agree or disagree with a series of statements about community sentences and unpaid work orders and how confident they are about the effectiveness of prisons.

5.6.4 *Module C: civil law*

This section relates to problems and disputes that the respondent may have experienced in their everyday life in the last three years and that could be settled in court. The section is carefully introduced to the respondent due to both the extension in the re-call period and the shift towards incidents which relate to civil law rather than criminal law:

> *"I am now going to ask you some questions about different kinds of problems or disputes you might have had in the past three years[31]. These are problems that are not directly related to crime but to other issues you might have to deal with in your everyday life. Of course, everyone has problems in their lives from time to time which they deal with. We are particularly interested in problems or disputes you had that you found difficult to deal with or that you could not solve easily."*

Civil law issues are grouped into four specific types:

1. Those concerning **home, family or living arrangements** (neighbours, family, housing and immigration);
2. Those concerning **health and well-being** (injury because of an accident or medical negligence and mental health issues);
3. Those concerning **money, finances or any purchased good or service** (debt, benefits and faulty goods and services);
4. Those concerning **unfair treatment** (discrimination, unfair treatment by the Police and employment related issues).

Respondents are then asked which is the most important to them (if they mention more than one). For the most important or only problem respondents are asked about the current situation with the problem.

5.6.5 *Module C: workplace abuse*

This section asks about any abuse respondents may have experienced at work. It begins by screening out those currently not in employment, before asking if respondents have experienced any verbal or physical abuse from members of the public in the course of their work. For each type of abuse experienced, it asks how often this has happened and if the respondent reported the most recent incident to their employer. If the respondent did not report the most recent incident, they are asked why not. Respondents who have experienced abuse at work are asked the time and day of the week it occurred and what they think might have motivated the incident.

5.6.6 *Module C: smuggled and fake goods*

This new section asks about the selling of smuggled and fake goods[32] in Scotland. Respondents are asked how common they think the selling of smuggled and fake goods is – both in Scotland as a whole, and in their local

[31] The date of the start of the three year period is confirmed to the respondent by an automated calculation in the CAPI software. As with the reference period used in victim forms, the date changes every month.

[32] Including alcohol and tobacco to DVDs and games; jewellery, clothes and accessories; and electrical goods.

area. They are then asked if they think the selling of smuggled and fake goods has become more or less common in their local area in the last year, and if anyone has tried to sell them smuggled or fake goods in Scotland during the reference period and, if so, what and where.

5.6.7 *Module D: harassment*

This section asks respondents if they have been insulted, pestered or intimidated in any way by anybody who is not a member of their household, either in person or by some other means (such as in writing or through electronic communications[33]) in the 12 month reference period, and if so, how many times. They are asked by what means they were harassed, what it involved, where the incidents happened and what, if anything, might have motivated the incident (e.g. in terms of ethnicity, sectarianism, gender, age, disability, sexual orientation or religion). For the latest incident only they are asked how many people did it, whether they knew them or not, and how well, and whether, at the time of the incident, they themselves were alone or in a group. Finally, all respondents are asked how much they worry about harassment on the basis of the characteristics noted as possible motivators above.

Question QHDISCRIM1 asks respondents what they think motivated the last incident of harassment they experienced. The same list is then shown at QHDISCRIM2, asked of respondents who experienced more than one incident of harassment within the 12 month reference period (at QAINSNO), to capture perceived motivations for all incidents of harassment experienced. A routing error in the CAPI script meant QHDISCRIM2 was not asked to respondents who gave a single response at QHDISCRIM1 .

5.7 Demographics section (Section 6)

A variety of demographic information is collected from all respondents (many using Scottish Government's core and harmonised questions[34]), including:

- Household composition age, gender and relationship of each person in the household (termed the 'household grid') as well as whether the respondent is living with a couple with someone in the household and marital status;
- Tenure and accommodation/-property type;

[33] Not including contact from individuals trying to sell things or such like.

[34] Information on harmonised questions can be found on the Scottish Government website: http://www.scotland.gov.uk/Topics/Statistics/About/SurveyHarm

- Questions to allow the derivation of employment status, including questions to allow Office for National Statistics (ONS) Socio-Economic Classification (NS-SEC) coding[35], and qualifications;
- Health status (including mental health) and caring responsibilities;
- Questions on identity, including country of birth, ethnicity, religion and sexual orientation;
- Household income and ability to afford an unexpected expense.

As part of this section, the household reference person (HRP) is established[36]. This standard classification is used on most government surveys and is based on the following criteria:

The HRP is the member of the household in whose name the accommodation is owned or rented, or is otherwise responsible for the accommodation.

- In households with a sole householder, that person is the HRP.
- In households with joint householders (for example, two or more people's name on the mortgage) the person with the highest income is taken as the HRP.
    - If both householders have exactly the same income, the older is taken as the HRP.
- If one or more responsible person do not live in the household then the HRP is:
    - In households with a sole person living, that person is the HRP.
    - In household with multiple persons are living, the person with the highest income is the HRP;
        - If both have exactly the same income, the older is taken as the HRP.

At the end of this section respondents are asked whether they are willing to provide their contact details and survey answers to the Scottish Government or research organisations who are acting on their behalf for the purpose of further research.

[35] These questions are asked about the respondent only, regardless of whether that person is the household reference person (HRP) or not. This means that the NS-SEC coding refers to the respondent only and not to the HRP.

[36] Variable HRP in the respondent file SPSS data file records which member of the household is the HRP.

5.8 Self-completion questionnaire content (Sections 8 to 10)

All members of the sample are invited to participate in the self-completion modules – there are no upper age restrictions[37]. Respondents can refuse to do so if this is their preference, or request to have the interviewer administer the modules. The latter option is pursued only in exceptional circumstances; that is, for example, in cases where the respondent is *unable* to complete the modules him/herself, whether due to disability, ill health, poor eyesight, or difficulties reading or writing.

The self-completion questionnaire covers

- Risk factors;
- Illicit drug use and availability;
- Stalking, harassment and partner abuse (including both psychological and physical abuse by a partner);
- Sexual victimisation.

In 2017/18, a total of 89.3% of respondents to the main survey participated in the self-completion questionnaire – 77% completed the questionnaire themselves and 12.3% asked the interviewer to administer it for them (Section 3.4)[38].

Data collected by the self-completion element in 2016/17 and 2017/18 has been collated to increase sample sizes, and is published biennially. The 2017/18 SCJS publication contains combined 2016/17 and 2017/18 self-completion data. The illicit drug use data for 2016/17 could not be used due to a scripting issue so this chapter in the Main Findings report presents results from 2017/18 only (see Section 5.8.2 for more detail).

In the 2017/18 survey, respondents were able to skip the entire self-completion questionnaire (NONRESP). However, it should be noted that the function was initially omitted from the 2016/17 script and options were added allowing respondents to skip individual modules (Sections 8, 9 and/or 10) within the questionnaire. Following the first three months of fieldwork, these skip options were removed as there was concern that their inclusion impacted on the number of respondents completing all four sections of the questionnaire.

[37] This is in contrast to the CSEW where the self-completion questionnaire, containing similar topics, is only asked of those aged up to 74.

[38] In 2016/17, a total of 92% of respondents to the main survey participated in the self-completion questionnaire – 79.2% completed the questionnaire themselves and 12.8% asked the interviewer to administer it for them.

Due to this issue and to ensure consistency, comparability and robustness of results within year and across the time series the results from all completed self-completion modules completed from April to June 2016 have been removed from the dataset. This accounted for 13% of the combined two years of data. The remaining data used to derive the results presented in the 2017/18 report.

Details of stalking and harassment, partner abuse or sexual victimisation incidents recorded in the self-completion questionnaire are not included in the 'all SCJS crime' statistics (see Section 9.1.5 for details) unless the incident is also mentioned by respondents in the victim form and assigned an offence code in the normal way. Incidents reported in the self-completion questionnaire only could not be assigned offence codes in the same way as those collected in the victim form as only a limited number of follow-up questions were asked about incidents (reflecting an ethical decision based on potential respondent distress at having to disclose detailed information on very sensitive incidents).

The partner abuse and stalking and harassment questions of the self-completion section do not ask whether offenders were in Scotland or not, therefore potentially some incidents which were perpetrated, or occurred, outwith Scotland (for example online) may be included in the data. This is consistent with the questionnaire in previous years.

Chapter 7 provides further information on the administration of the self-completion questionnaire.

5.8.1 *Risk factors (Section 7)*

At the start of the self-completion questionnaire, respondents are asked four questions about their day-to-day behaviour which might influence their experience of crime, including how long their home is left unoccupied on an average weekday; how often they visit pubs, bars or nightclubs in the evenings; how frequently they drink alcohol and how often they have felt very drunk.

5.8.2 *Illicit drug use (Section 8)*

Respondents are asked whether they have ever used a range of illicit drugs or groups of illicit drugs, whether they have had anyone offer to sell them each of these drugs in the last 12 months and whether they have taken nitrous oxide or any novel psychoactive substances (or 'legal highs') in the last 12 months.

While under-reporting of illicit behaviour by respondents is often a concern on a survey such as this, it is also recognised that some people may report taking particular drugs when they have not actually done so for reasons of bravado or other reasons. Respondents are therefore asked if they have ever taken 'semeron', a fictitious drug. Respondents who say they have taken semeron are then excluded from the final data outputs and reporting for the

drugs section of the questionnaire[39]. In 2017/18, there was just three cases of a respondent reporting that they had ever taken semeron.

Respondents who have taken drugs in the past are asked if they have taken them in the last 12 months and, for those who have, whether they have taken them in the last month.

Depending on how respondents answer these questions, a series of follow-up questions is then asked, including:

- for those who have ever used drugs, which drug was the first ever taken, at what age they first took drugs, and what methods of drug taking they have ever tried
- for those who have used drugs in the last 12 months, whether they have mixed these drugs, consumed alcohol at the same time as taking them, and how they would describe their usage
- for those who have taken drugs in the last month, which one they have taken most often, how difficult it is to get hold of, where they obtained it the last time they took it, how many times they have used it in the last month, whether they felt dependant on it and whether they had tried to cut down and, if so, whether they had used any support services in the process.
- those who have ever used cannabis, cocaine, ecstasy, tranquilisers or amphetamine, but not used any drugs in the last 12 months are asked at what age they last took it, whether they have ever felt dependant on any of the drugs they have ever taken, and which ones, as well as, for those who have felt dependant, whether they received any help in stopping taking them and from whom.
- those who have taken novel psychoactive substances in the last 12 months are asked what the appearance/form of those they have used were and where they got them from.

The questions about which of the drugs respondents have taken are asked in a loop (i.e. “Have you ever taken <drug name>?”) rather than by selection from a single list of drugs. This approach has been shown to improve survey estimates of illegal drug-taking (Mayhew, 1995).

In the 2016/17 the drugs list entry for cannabis was updated to include synthetic cannabis, and the entry for non-prescription tranquilisers updated to include non-prescription opioids. These drugs were erroneously listed together which meant that direct comparisons to previous years’ cannabis and tranquiliser use data were not possible and hence the aggregated overall drug use figures were also affected. As a result the 2016/17 data could not be used

[39] These respondents are, however, retained in the rest of the dataset, including the remainder of the self-completion section.

in reporting. However, in 2017/18 the drugs list was further updated to include separate entries for synthetic cannabis and prescription only painkillers, along with a new entry for GHB/GBL. This resolved the scripting issue and meant that substance use could be compared over time and a comparable illicit drug use measure over time could be determined for 2017/18. Therefore the illicit drugs chapter in the 2017/18 report only covers data from 2017/18.

However, a routing error in the 2017/18 CAPI script meant that respondents who said they had taken one of these drugs most often in the last 12 months (at QDRMOST) were not asked the follow up questions QDRHOLD, QDRDEAL, QDROFT and QDEP1. The error affected 46 cases; 45 respondents who had taken non-prescribed painkillers, and the other, synthetic cannabis.

5.8.3 *Stalking and harassment and partner abuse (Section 9)*

This section begins with a screener section collecting information about respondents' relationship history.

Respondents are then asked about whether they have experienced any of six forms of stalking and harassment more than once in the 12 month reference period. As measured by the SCJS, stalking and harassment includes[40]:

- Receiving unwanted letters or cards
- Receiving unwanted messages by text, email, messenger or posts on social media sites, like Facebook or Twitter
- Receiving unwanted phonecalls
- Having someone loitering outside a home or workplace
- Being followed
- Having someone share intimate pictures without their consent, for example by text, on a website, or on a social media site like Facebook or Twitter, sometimes known as 'revenge porn'

Respondents who have experienced and of these things, are asked (for the most recent incident in each case): who the offender(s) was and what their relationship to the respondent was; and whether the Police came to know about the incident (and if not, why not). Finally, they are asked how the incident made them feel (e.g. frightened, anxious/worried, threatened etc).

The section then moves on to the subject of partner abuse. This part is asked only of respondents who report having had a partner at any time since they were 16 (based on the questions asked at the start of the section). It is

[40] Therefore the survey does not provide measures of the prevalence of all possible forms of stalking and of harassment, but rather of six types of behaviour that could be construed as forms of stalking and harassment.

introduced carefully to ensure that respondents are clear on the coverage of the questions:

> *"We would now like to ask you some questions about your own relationships with any partners you may have had since you were 16. By partner we mean a boyfriend, girlfriend, husband, wife or civil partner."*

Over two questions respondents are presented with a list firstly of different types of **psychological abuse** and, secondly, different types of **physical abuse**, then asked if they had experienced any of these since they were aged 16, and if so, how many partners perpetrated these acts. If any of these types of abuse have taken place within the 12 month reference period, a series of follow-up questions are asked, about the most recent/only incident in that time, including:

- Where the incident happened (in Scotland or elsewhere) and how many incidents happened since the beginning of the 12 month reference period;
- Whether any children were in the household, whether the children saw or heard what happened or were involved or hurt in the incident and whether they experience any psychological or emotional problems as a result;
- What physical and psychological consequences the respondent experienced;
- What people or organisations, if any, the respondent informed of the incident;
- Whether the Police came to know about the incident and follow-up questions including: why the respondent did or did not report the incident to the Police; if the report resulted in a prosecution and whether there was a conviction; satisfaction with the Police handling of the incident;
- Whether the perpetrator was living with the respondent at the time of the incident, what the relationship was and whether they were living with them at the time of the interview;
- Whether the respondent considered what happened to be a crime or not.

Respondents are then asked about any other incidents of abuse they experienced in the last year and what people or organisations, if any, they informed of the incident. Question DA_8ANY asks respondents who experienced more than one incident of abuse within the 12 month reference period (at DA_6) which, if any, physical impacts they experienced from these other incident(s). A routing error in the 2017/18 CAPI script meant those who answered 'Too many to count' at DA_6 were not asked DA_8ANY. The error affected 4 cases.

At the end of this section, all those who have had a partner since they were 16 are asked whether they consider themselves, personally, to have ever been a victim of domestic abuse. The term domestic abuse is not defined for the respondent.

5.8.4 *Sexual victimisation (Section 10)*

The questionnaire asks about all types of sexual offences. These are categorised into two groups, which are termed 'serious sexual assault' and 'less serious sexual assault'[41].

Less serious sexual assault includes:

- indecent exposure;
- sexual threats;
- touching sexually when it was not wanted.

Serious sexual assault includes:

- forcing someone to have sexual intercourse when they did not want to;
- attempting to force someone to have sexual intercourse when they did not want to;
- forcing someone to take part in other sexual activity when they did not want to;
- attempting to force someone to take part in other sexual activity when they did not want to.

Different follow-up questions are asked of respondents depending on the nature of the incident(s) they have experienced (i.e. whether the incidents are classified as less serious or serious sexual assault) and when they occurred (in the last 12 months or since the age of 16).

Less serious sexual assault

Victims of less serious sexual assault are asked the following questions for each form of assault they have experienced[42]:

[41] The terms 'less serious sexual assault' and 'serious sexual assault' are adopted throughout this report to distinguish between the two types of sexual assault which were asked about separately in the questionnaire. This is consistent with the practice adopted by the Office for National Statistics (ONS) in reporting of the CSEW. The terms do not relate to the seriousness of the impact on the individual experiencing an incident, as this may vary according to the particular circumstances of an incident.

[42] Readers should note that the questions in the questionnaire are asked in a different order to that listed here.

- When the incidents(s) happened (in the last 12 months, longer ago or both); and how many times they occurred during the 12 month reference period
- What the relationship was between the respondent and the offender(s) and the gender of the offender(s) for all incidents in the 12 month reference period and the latest incident in the reference period, as well as for incidents longer ago than the last 12 months but since the age of 16
- For incidents before the 12 month reference period, when the most recent incident happened
- For the latest incident in the 12 month reference period, whether it happened in Scotland; whether the Police came to know and, if so, how; and if they did not then why not
- Whether the Police came to know about any incidents in the last 12 months.

Serious sexual assault

Respondents who have experienced serious sexual assault are asked additional follow-up questions about the incident(s). These included: when the incidents(s) happened; how many times they occurred; the relationship between the respondent and the perpetrator(s); and the gender of the perpetrator(s). For the most recent incident (irrespective of when this was) they were asked: whether it happened in Scotland; any injuries were sustained as a result of the assault; whether the Police (or another organisation) came to know about the incident; how it was reported or if it was not, then the reason why; and, if it was reported as a crime, whether there was a prosecution and conviction.

In addition, the reference period for some of the follow-up questions on serious sexual assault was wider than those for less serious assault, with victims asked about the period since they were 16 years of age, rather than the 12 months only[43].

The end of the interview consists of the interviewer thanking the respondent, collecting details to allow validation and recording some basic information about the administration of the interview.

[43] This amendment to the self-completion questionnaire was made to increase the number of cases available to allow robust analysis. Further detail is provided in the 2009/10 Technical Report (Section 3.6.4).

6 FIELDWORK

Fieldwork for the SCJS 2017/18 was continuous and took place between the 2nd April 2017 and 3rd June 2018. This chapter documents all aspects of the data collection process, focusing on:

- the survey pilot
- the briefing of interviewers before main stage fieldwork
- quality control procedures
- the management of fieldwork across the survey year
- fieldwork procedures and materials
- survey response rates for the main and self-completion questionnaires.

6.1 Survey pilot

A survey pilot was carried out by Ipsos MORI and ScotCen between 8th and 13th February 2017. The purpose of the pilot was to test the survey questionnaire and materials, as well as the functionality of the CAPI script, in advance of the main stage fieldwork commencing in April 2017.

The total number of interviews completed for the pilot was 21. To ensure a cost-effective approach, quota sampling was used (as opposed to the random sampling approach adopted for the main stage). This involved pre-identifying sampling units – in this case postcode areas – across Scotland then, within each area, identifying a selection of addresses for the interviewers to visit. The postcode areas were purposively selected to ensure they were mixed in terms of urbanity/rurality and level of deprivation. Within each postcode area, socio-demographic quotas[44] were set to ensure a cross-section of the adult Scottish population (16+) was interviewed. The quotas reflected the demographic profile of the area, based on latest available Census data.

All interviewers involved in the pilot attended a telephone briefing before the pilot, and were given forms on which to record feedback on the survey, including their overall thoughts (on administering the survey, and its length, flow etc.), thoughts on specific sections and any CAPI issues. Interviewers were also provided with a paper questionnaire to ask pilot respondents who completed Module 5B (sentencing) to check their understanding of the new questions, and to ask all pilot respondents for their views on the new advanced materials.

Following the pilot fieldwork, interviewers attended a debriefing session to discuss their feedback. The findings from this session and associated

[44] Sex, age and employment status.

recommendations were fed back to the Scottish Government in a summary report.

6.2 Briefing of interviewers before main stage fieldwork

All interviewers working on the survey attended a telephone briefing before the main stage fieldwork started on 4th April 2017[45]. The briefings were attended by the Ipsos MORI/ScotCen researchers and field staff working on the survey.

Each briefing covered an overview of the questionnaire structure, and details of new and amended questions for 2017-18, and administration issues, including: how to introduce the survey on the doorstep to potential respondents and call patterns.

In addition to the briefing, interviewers were asked to carry out at least one further practice interview at home before starting their assignments.

6.3 Supervision and quality control

In addition to the survey briefings, several methods were used to ensure the quality and validity of the data collection operation:

- **Data checking and reporting was undertaken throughout fieldwork** to monitor interviewer performance. These checks included looking for cases where interviewers had: a shorter than average length and/or shorter than average gaps between interviews; below average text characters in open-ended response boxes; and lower than expected numbers completing victim forms and/or the self-completion module.
- **Interviewer supervision.** Interviewers were accompanied by a field supervisor at least twice as part of their performance and development review procedures. During the accompaniment, interviewers were given feedback on their interviewing skills, as well as their general manner with respondents and their adherence to guidelines around confidentiality, data protection and so on. The results of all accompaniments were recorded, remedial action taken as required and reports kept on interviewers' files.

[45] The first two main briefings were joint events, attended by both Ipsos MORI and ScotCen staff and interviewers. Subsequent briefings for new interviewers, held during the course of fieldwork, were carried out separately and on an ad hoc basis by each organisation.

- **Interview validation checks.** A minimum of 10% of addresses where a successful interview was obtained were re-contacted (validated) to verify that the interviewer had conducted the interview and that key details they had collected were correct.

In total, 564 addresses where successful interviews were obtained (10%) were successfully re-contacted for validation purposes. Addresses were randomly selected within the framework of Ipsos MORI and ScotCen's field quality procedures whereby all interviewers have their work checked at least twice a year.

Validation was carried out by both organisations, mainly by telephone. The checking involved asking approximately 15 validation questions. These included standard validation questions to ensure that the interview was carried out in the proper manner, asking a small selection of questions from sections of the main questionnaire (for example, how long a respondent had lived in the area) to ensure these had been asked of respondents, and several additional, project-specific questions to check accuracy against the recorded data. Where no telephone number was available, a short postal questionnaire was sent to the address to collect the same information.

In the event of any of any poor validation results or poor quality work, an interviewer's manager was informed and instructed to raise and discuss the issues with them. Depending on the nature of the issues, subsequent follow up actions included some or all of: arranging further accompaniment; re-briefing; retraining; more frequent validation; or disciplinary warnings.

6.4 Fieldwork dates and fieldwork management

Fieldwork was divided into 12 monthly tranches from 4th April 2016, with each tranche starting four or five weeks apart. The fieldwork period was extended by two months (April and May 2017) to increase the achieved sample size, closing on 3rd June 2017.

Across the fieldwork period, 349 first-issue assignments (batches) of addresses were issued to interviewers. A total of 9,665 addresses were issued to interviewers, with the average assignment size being 27.69 addresses within a range from 15 to 38 addresses. The standard deviation was 3.02 addresses.

Interviewers were encouraged to start their assignment as early as possible in the month to allow early identification of invalid addresses (second homes, business addresses, vacant properties etc., also termed 'deadwood' – see Chapter 3). Interviewers had eight weeks to cover all the addresses in their assignment, making a minimum of six calls at each address (including at least

one call each in the evening and the weekend) where no contact with householders or selected participants had been made.

Following standard practice on large social surveys, addresses with non-productive outcomes (where an interview was not obtained but could be in future – for example, non-contacts, soft refusals, broken appointments, etc) were re-issued (see Annex 5 for CAPI outcome codes and re-issue criteria). As a general rule, all non-productive addresses were re-issued unless there was a specific reason not to or noted such as approach would not be cost effective.[46] Re-issued addresses were visited twice in the case of non-contact. Some addresses were reissued a second time.

In total across the year, 3,339 addresses were re-issued, which represented 34.5% of the original sample (9,665 addresses – see Table 2.2). Of all the addresses re-issued, 698 (20.9%) were converted into useable interviews.

6.5 Fieldwork procedures and documents

6.5.1 *Advance letter and leaflet*

All selected addresses were sent a letter from the Scottish Government in advance of an interviewer calling at the address. Interviewers were responsible for posting the letters a few days in advance of starting their assignment.

The letter provided background information on the survey, informed the occupiers that an interviewer from Ipsos MORI/ScotCen would be calling in the next few days, explained why the address had been selected and provided details of data confidentiality. The letter also provided a Scottish Government contact telephone number, as well as an Ipsos MORI/ScotCen freephone telephone number and email address to allow members of sampled households to find out more about the survey, make an appointment for interview, or opt out.[47] Over the course of the whole year 200 people (less than one per cent of addresses issued) opted out of the survey by contacting either Ipsos MORI/Scotcen's office or the Scottish Government.

Included with the advance letter was a leaflet from the Scottish Government providing further details about the survey, including some general findings from past surveys. The leaflet also tried to answer some questions that potential respondents might have, including information for the parents of

[46] For example, if there were only one or two addresses available to re-issue in an assignment in a remote rural area.

[47] The content of the letters sent by Ipsos MORI and ScotCen interviewers were identical, except for the company contact details and reference number.

young adults (aged 16-17), informing them that their son or daughter may be selected to participate in the survey.

Changes to the wording and formatting of both the letter and leaflet were made in advance of the 2017/18 survey, and were tested with respondents during the survey pilot. Copies of the advance letters and survey leaflet can be found in Annex 4.

Interviewers were also provided with a Scottish Government card which provided contact details for Victim Support Scotland, Careline, Samaritans and a range of other organisations that provide support for victims of crime or abuse.

Participation in the survey was entirely voluntary and the interview was not incentivised in any way.

6.5.2 *Address contact record*

There were slight differences in how Ipsos MORI and ScotCen recorded the outcomes of interviewer address contacts. Ipsos MORI interviewers used Electronic Contact Sheet (ECS) CAPI software on their machines, which allowed the electronic collection and storage of the address contact record, while ScotCen interviewers used paper-based contact sheets.

Both types of contact sheet allowed interviewers to:

- automatically record the days and times that the interviewer called at an address, enabling them to tailor their calling strategy based on this;
- provide a record of all the outcomes achieved at the address, both at first-issue and re-issue;

Interviewers updated the relevant address record every time they made a call to the address, reporting an outcome of each call. This information is crucial in allowing interviewers to manage their own calling strategies for each address and field management staff to manage the survey overall.

6.6 Response rate and reasons for non-response

The full response rate analysis for the sample is shown in Table 3.1.

Nine per cent of the issued addresses were recorded as ineligible addresses, known as ‘deadwood’ (see Chapter 3). Empty or vacant residential properties were the most common type of deadwood, accounting for five per cent of all issued addresses. The proportion of deadwood in the 2017/18 survey was the same as in 2016/17 (9%).

Interviewers were unable to contact either the selected respondent or a responsible adult at 4.9% of eligible addresses. Non-contact included:

- No contact made with anyone at the address after 6 calls;

- Contact was made with someone at the address, but no contact was made with the adult selected for interview;
- No contact was made with a responsible adult in order to obtain permission to interview a household member aged 16 or 17;
- Interviewers were unable to access the selected address (for example, unable gain access to the building or locate the address).

Where contact was made at an address, refusals were the most common reason for not obtaining an interview, accounting for 27.8% of all eligible addresses. This proportion of refusals was similar to the 2016/17 survey (27.2%).

The most common types of refusal were refusal at the introduction of the survey/before the interview (11.9%), and refusal after the adult selection, where the adult refused to take part (6.9%).

A further 3.9% of eligible addresses were categorised as 'unable to respond', including when the selected adult was physically or mentally unable to complete an interview (1.7%), or away or in hospital throughout the survey period (0.7%). There were 32 households where people had inadequate English to complete the survey.

Combining all the different types of unproductive addresses gave a final adjusted response rate of 62.3%.

6.7 Self-completion response rate and reasons for non-completion

The final part of the interview involved a self-completion questionnaire containing sections on (see Section 7.7):

- risk factors
- illicit drug use
- stalking, harassment and partner abuse
- sexual victimisation.

Respondents were able to refuse the entire self-completion questionnaire if this was their preference[48]. The response rate and the reasons for non-completion are explored below.

[48] The option to skip the self-completion questionnaire differed slightly during the first few months of the 2016/17. During the first four months' of fieldwork, respondents were given the option of skipping individual sections, rather than the entire questionnaire. See Section 5.8 for more information.

6.7.1 *Response rate*

The self-completion questionnaire was answered by 4,888 respondents (89%) to the main survey (in comparison to 92% in the 2016/17 survey). Table 3.3 compares the profile of respondents who answered the self-completion section of the questionnaire (including those who did so with help from the interviewer) by age and sex.

6.7.2 *Reasons for self-completion refusal/interviewer completion*

Table 6.1 shows the reasons given by respondents for either refusing the self-completion questionnaire altogether or asking the interviewer to administer the questionnaire on their behalf.

The main reason for refusal/interviewer completion was a dislike of computers, mentioned by almost half (44.8%) of people who refused the self-completion or had it interviewer administered. One in five (21.2%) said they did not have time to complete the self-completion questionnaire. Only 2.5% of respondents refused to complete the self-completion questionnaire because of worries about confidentiality.

Table 6.1: Reasons for self-completion refusal/interviewer completion

Reason	Refused	Interviewer administered	Total
Did not like using computers	17.3%	68.6%	44.8%
Ran out of time	39.8%	5.1%	21.2%
Eyesight problems	6.3%	22.3%	14.9%
Other reason[49]	17.9%	6.4%	11.8%
Other disability	4.1%	12.2%	8.4%
Respondent adamant that they have never taken drugs/experienced abuse	24.1%	3.7%	13.2%
Couldn't be bothered	12.8%	5.6%	9.0%
Worried about confidentiality	4.6%	0.6%	2.5%
Other people present in room	3.0%	0.7%	3.1%
Language problems	4.4%	2.4%	3.3%
Objected to study	2.0%	0.1%	1.0%
Children present/tending to children	4.4%	0.7%	2.5%
Could not read/write	1.7%	0.9%	1.3%
Base	*585*	*673*	*1,258*

[49] 'Other reason' includes reasons such as family emergencies, the respondent feeling unwell or the respondent being dyslexic.

7 THE INTERVIEW

Interviews were conducted face-to-face in-home and were administered by specially trained professional interviewers working for Ipsos MORI or ScotCen Social Research using Computer Assisted Personal Interviewing (CAPI).

This chapter provides information on the following elements of the survey:

- The survey reference period;
- Number of victims forms completed;
- Computer Assisted Personal Interviewing (CAPI);
- Use of showcards;
- Interview length;
- Presence of others during the interview;
- Self-completion modules.

7.1 Survey reference period

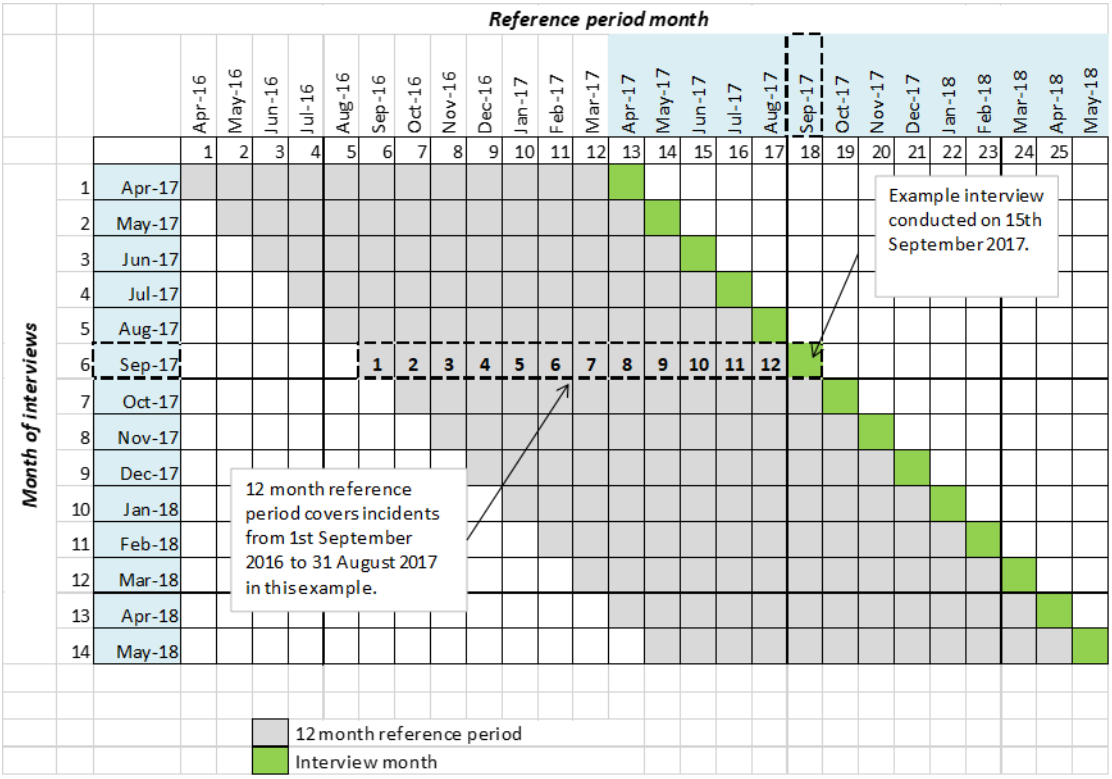
Respondents were asked about their experience of crime within a defined period of time known as the 'reference period'. Questions about exactly when incidents happened were asked at the start of the victim form (see Chapter 5). The survey statistics are based only on incidents which happened in the 12 calendar months prior to the month of interview. For example, in an interview conducted on the 15th September 2017, the survey statistics would include incidents which the respondent had experienced between 1st September 2016 and the 31st August 2017. The reference period therefore covered an equal length of time (12 calendar months) for each respondent, irrespective of when they were interviewed during the fieldwork period. Incidents which fall outside this reference period are not included in crime counts.

Incidents which happened in the month of interview (in the example above, incidents happening in the 15 days between the 1st and 15th September 2017) are not included in the reference period (and therefore any of the data reported in the Main Findings report). However, both for the sake of simplicity with regard to the administration of the interview and for ethical reasons, respondents are asked about incidents which happened in the period of time since the start of the reference period; the victim form screener questions are phrased in the following way "Since the 1st September 2016, have …", where '1st September 2016' is the start of the reference period in this example (the reference period dates change based on what month the interview is conducted in – see below). Full details of incidents occurring in the month of interview are retained in the SPSS data files for use by analysts if necessary

(though these cases are marked as non-valid and the incident weight in the victim firm is set to zero – see Section 4.5).

Due to the continuous interviewing across the fieldwork period, the reference period 'rolled' forward for each consecutive fieldwork month. Compared to the example above, respondents interviewed on the 15th October 2017 were asked about incidents which occurred in the reference period 1st October 2016 to the 30th September 2017. The total reference period for interviews conducted from April 2017 through to the end of May 2018 is therefore a 25 month period from the start of April 2016 through to the end of April 2018. This is illustrated in Figure 7.1 below.

Figure 7.1: Survey reference period



Key:
- Interview month
- 12 month reference period
- Interview month for fieldwork extension

7.1.1 *Series incidents and the reference period*

Where respondents had experienced series incidents, if incidents in the series occurred in the month of interview (that is, outside of the reference period), the number of incidents in the series (capped at five – Section 4.5) was reduced by the number of incidents that occurred in the month of interview.

Variables NSERIES and NUMINC (uncapped and capped count of series incidents, respectively) in the victim form file (VFF) data file are calculated based on the number of incidents in the 12 month reference period only and do not include incidents which happened in the month of interview.

7.2 Numbers of victim forms completed

In total 1,259 victim forms were completed by 859 respondents. Less than one in six respondents (15.7%) completed at least one victim form. Around one in nine (11.3%) respondents completed a single victim form only, while just 0.3% completed five victim forms (the maximum allowed) (Table 7.1).

In the VFF SPSS data file each record represents a victim form (Section 10.1.2), with each record being labelled as victim form one to five for each respondent (variable VICNO).

Table 7.1: Numbers of respondents who completed victim forms

SCJS 2017/18

VFs completed	No of resps.	% of Respondents	% of those with 1 or more VF	Total VFs
None	4,616	84.3	-	0
1	617	11.3	71.8	617
2	147	2.7	17.1	294
3	49	0.9	5.7	147
4	29	0.5	3.4	116
5	17	0.3	2.0	85
1 or more	859	15.7		1,259
Total	5,475			

Not all completed victim forms are used in the production of the SCJS statistics, for example some may refer to incidents which are outside the reference period (Section 7.1) or to crimes which are outside the scope of the survey (Section 9.1). Table 7.2 provides details of how many of the 1,259 victim forms were assigned non-valid / out-of-scope offence codes.

Table 7.2: Classification of non-valid / out-of scope victim forms

SCJS 2017/18

Category	No. of VFs	% total VFs
Terminated as violence from household member*	2	0.2
Incident occurred outside reference period**	116	9.2
Incident occurred outside Scotland	20	1.6
Duplicate VF (series and single incidents)	57	4.5
Other non-valid/no crime offence codes	187	14.9
Non-valid SCJS offence codes (Sexual offences and threats)	118	9.4
Total "Valid SCJS" victim forms	759	60.3
Total victim forms	1259	

* In cases of violence from another household member recorded in the victim form screener section, interviewers have the option to skip the victim form (variable WINTRO if there is another person present at the interview (Section 5.3.1)).
** This includes incidents which occurred in the month of interview and which are therefore outside of the reference period but may have a valid offence code.

7.3 Computer Assisted Personal Interviewing

The use of CAPI interviewing presents various opportunities for improving the quality of data collected and the efficiency of the survey, including:

- Plausibility and consistency checks within the interview;
- Automated text substitution and calculation (especially important for using the correct reference period);
- Automated links between questionnaire sections.
- The use of tablet PCs and CAPI software also allows, the electronic collection and storage of the address contact record and automated random respondent selection (and dwelling selection where necessary).

7.3.1 *Plausibility and consistency checks*

CAPI has the advantage over paper-based interviewing as it allows plausibility and consistency checks to be incorporated into the interview process, improving data quality. A full list of plausibility and consistency checks are provided in Annex 5.

7.3.2 *Text substitution and date calculations*

Text substitutions and date calculations were used extensively throughout the questionnaire. Text substitution is where different text is read out by the interviewer or displayed on screen at a question depending on answers given to previous questions.

Date calculations were made automatically by the CAPI script for the reference period and other questions where a specific time period was required. All of the date variables in the SPSS data files (for example, DATESER variables, QTRRECIN, and MTHINC2 in the VFF file) are given values according to the actual month / time period in question.

7.3.3 *Don't know and refused codes*

Almost every question in the CAPI questionnaire for the SCJS has a 'Don't know' and 'Refused' option. These are displayed on the screen as separate buttons. For 'show card' questions (see Section 7.4) these options are not shown to respondents explicitly as part of the pre-code list of answers.

At the start of the self-completion questionnaire, the interviewer specifically showed the respondent where these buttons were located on the screen via a practice question at the start of the section. The refused option used in the main part of the survey was re-worded as 'Don't wish to answer'.

7.4 Use of show cards

For the majority of pre-coded questions where respondents are asked to select an answer from a list, interviewers handed respondents a booklet of numbered or lettered 'show cards' on which the pre-coded answers to questions were printed. The use of show cards prevents the interviewer from having to read out all of the answer options for certain variables, and thus improves the flow of the interview. The show cards are also particularly important for the following types of variable:

- Questions with long or complicated pre-code lists (e.g. QQUAL asking qualifications);

- Questions on sensitive issues where respondents may not want interviewer to know what their answer relates to (eg QDISCRIM which asks respondent's views on offender's potential motivation; the respondent reads out a letter next the their answer and only the letter code is displayed on the CAPI screen, so the interviewer does not know what their answers means);

- Questions which are not read out by the interviewer because they are on a sensitive topic (e.g. for variable HHLDVIOL, which asks whether the respondent has experienced physical violence from another household member, the question text is included on the show card);

- Particularly sensitive questions in the self-completion section if the interviewer reads them out for the respondent (e.g. DA_1i for experiences of partner abuse).

7.5 Length of interview

Automatic 'time stamps' were placed throughout the CAPI script to allow timing of questionnaire sections. It is not always possible to derive meaningful time stamps from every interview using CAPI systems. For example, if an interviewer has to temporarily stop or suspend an interview for a period of time and fails to come out of the questionnaire in the intervening period (simply powering down the computer instead) the time stamps can show an interview with an erroneously increased length. Interviews lasting longer than 2 hours or, or less than 14 minutes were excluded from the analysis in this section (matching the same criteria used in previous SCJS Technical Reports).

Since the calculation of interview times is based on automatic time stamps in the CAPI script (rather than interviewer estimates), they represent the elapsed time from the first question (QSYAREA) to the last question (Respondent's email address, if consented to provide). They do not include the time during which the interviewer completes the address contact record, introduces the survey or closes the interview.

The average (mean) total interview length, including the self-completion section, across the (5,124, 93.6%) respondents with usable timestamp data was 44 minutes and 46 seconds. The number of victim forms completed was a factor in total interview length. The average total interview length (including the self-completion section) for those not completing any victim forms was 42 minutes and 4 seconds, compared to 60 minutes and 5 seconds for those who completed one or more victim forms.

7.6 Presence of others during the interview

Interviewers aimed to conduct the interviews in private with only the respondent present. This generally helps to make the interview run more smoothly, but it may also encourage some respondents to mention certain incidents or events which they might be embarrassed or worried to talk about in front of others.

However, although it is preferable for the interview to be conducted with no one else present, there are some situations where the presence of other members of the household might improve the accuracy of the information collected. This is particularly the case in incidents of household crime, where the respondent may not have been personally present at the time of the incident, or may not have reported the incident to the police. Information on

the presence of others during the self-completion interview was recorded and is available in the self-completion SPSS datafile (variable SCOTHPRES).

7.7 Self-completion interview

The questionnaire is completed by respondents on the interviewer's tablet PC (Computer Assisted Self-completion Interviewing – CASI). This ensures confidentiality when answering sensitive questions or those on illicit behaviour. The respondent was asked to follow the instructions on the screen of the tablet PC and enter their answers using a stylus to tap the touch screen appropriately. A series of practice questions are included before the start of the self-completion module to allow the interviewer to show the respondent the different functions of the computer and screen layouts and formats (including an explicit demonstration of the 'don't wish to answer' button reflecting the sensitive nature of the topics in the questionnaire). If the respondent was unable or unwilling to complete the questionnaire using the computer but was happy to answer the questions, the interviewer administered the questionnaire on their behalf, showing the respondent the screen and then selecting the answer accordingly.

89% of respondents completed the self-completion section; 77.0% of them entered their answers directly in to the tablet PC themselves and 12.3% asked the interviewer to administer the questionnaire with them.

During interviews where another person (other than the interviewer and the respondent) was present in the room during the self-completion section, interviewers tried to 'arrange' the room whenever possible so that the respondent had a degree of privacy. Thus, for example, interviewers might try to ensure that the respondent was sitting with the screen facing a wall or was in such a position that no-one else in the room could read the computer screen. Of the 568 respondents who refused the self-completion section outright, 38 (6.7%) cited the presence of someone else in the room as the reason.

8 DATA PROCESSING

All data processing was undertaken by ScotCen Social Research, including offence coding, standard coding and data checking. This chapter looks at these processes in turn. Information on the offence codes themselves is provided in Chapter 9 and details of data outputs themselves are provided in Chapter 10.

8.1 Offence coding

8.1.1 *Offence coding process*

The SCJS offence coding system is based on that developed for the 1982 Crime Survey for England and Wales (then the British Crime Survey) but tailored for the Scottish justice system. The system is designed to match as closely as possible the way incidents would be classified by the police to aid comparison between statistics from the SCJS and police recorded crime statistics.

All victim forms are reviewed by trained coders in order to determine whether what has been reported in the interview represents a crime or not and, if so, what offence code should be assigned to the crime. All data for the survey was coded consistently using agreed principles set down in the SCJS Offence Coding Manual (available from the survey website).[50]

Every victim form has an offence code assigned to it. The SCJS Offence Coding Manual has a 'priority' ladder which determines what offence codes are assigned if the incident involves multiple aspects. For example, if an incident involves an offender breaking into someone's house, beating up the occupants, stealing the car and breaking some valuable belongings), the offence coding process needs to sort out which of these offences takes priority (i.e. should the crime be coded as housebreaking, assault, theft of a car or vandalism?).

The priority ladder (with those codes that take priority towards the top) is generally:

- Rape or Serious Assaults
- Robbery
- Housebreaking
- Theft
- Minor Assault
- Vandalism
- Threats

[50] Scottish Government survey website: http://www.scotland.gov.uk/Topics/Statistics/Browse/Crime-Justice/crime-and-justice-survey

Further information is available in the offence coding manual available from the survey website.

The offence coding system consisted of the following steps:

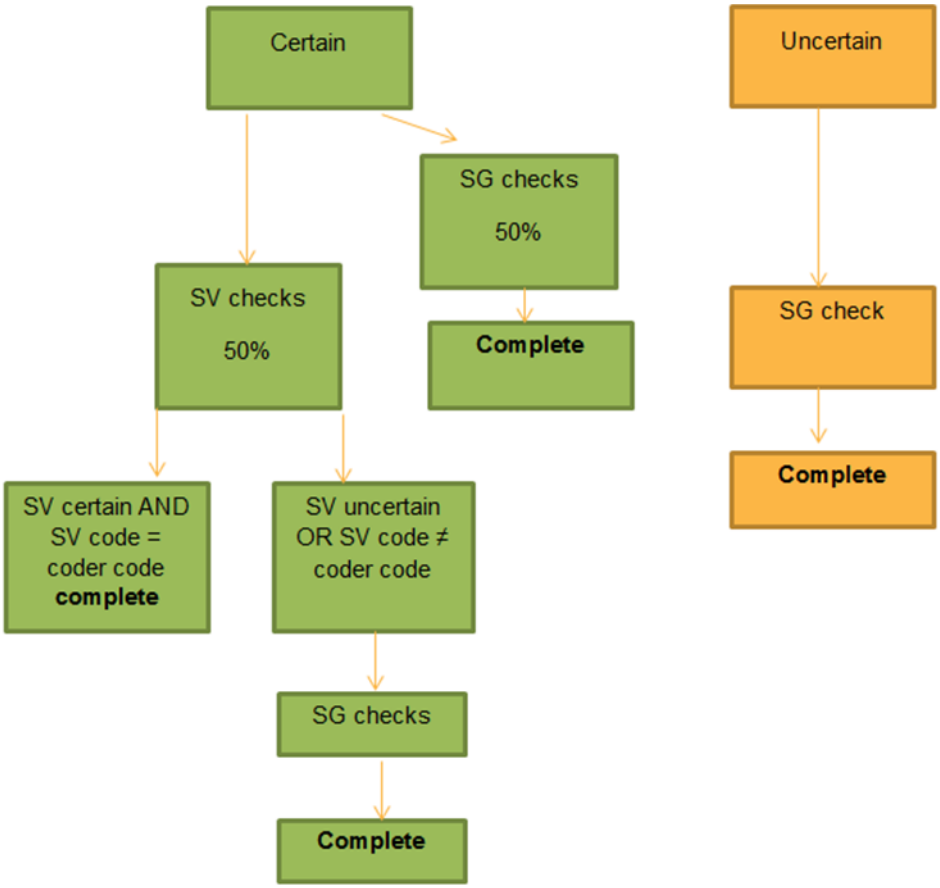
1) Details of the responses to key questions in the victim form and other relevant parts of the questionnaire were presented to the ScotCen coders electronically using IBMDC software.

2) A ScotCen coder reviewed the answers to the questions for each case in the coding system and, consulting the coding manual, assigned an offence code. They also completed a certainty record for each victim form showing whether they were certain or uncertain that the code assigned was correct (for example in cases where there was no specific guidance in the offence coding manual or the information in the victim form was inconclusive). The certainty record for each victim form determined the quality assurance checking process it went through.

3) All codes recorded as uncertain by the original coder were checked by at least one researcher at the Scottish Government. Half of certain victim forms were also checked by the Scottish Government, and the other half by coding supervisors working for NatCen Social Research. Any victim forms where the coder and supervisor gave a different outcome code, or where the supervisor recorded as uncertain were subsequently checked again by the Scottish Government. This process is outlined in figure 8.1

4) The offence coding records were finalised and exported from the IBMDC software for inclusion in the final datasets.

Figure 8.1 – offence code checking process



SV – coding supervisor
SG – Scottish Government

As a result of this process every victim form had a final offence code assigned to it, as well as a record of any codes assigned at the intermediate steps as outlined above.

When more than one offence code was selected by the coder, the software automatically applied the priority ladder to determine the code. In this instance, coders were briefed to complete the certainty record as “uncertain.

All ScotCen Supervisor and Scottish Government coding was completed using a “blind coding” approach. This stipulates that ScotCen Supervisors and Scottish Government completed their coding without knowledge of the codes and certainty records given to a victim form by previous coders. This prevented each coding stage being influenced by previous stages.

Researchers at the Scottish Government were given access to the IMBDC coding questionnaire, which was used each calendar month after fieldwork to complete offence coding.

Researchers at the Scottish Government 'blind coded' each of the victim forms and added their code and comments to a coding history summary file. Where Scottish Government coders did not agree with the code assigned by the ScotCen Coder or Supervisor, a further dialogue was opened until a conclusion was reached.

The coding history summary file included a log of queries and corresponding decisions and why they were taken was retained and referred to on an ongoing basis to ensure consistency throughout. This log was used to set precedents for future decisions, and to provide feedback and guidance to the ScotCen Coders and Supervisors.

8.1.2 *Offence coding quality assurance*

A number of measures were in place to monitor the progress of the offence coding carried out by the ScotCen coders, to ensure a high quality of coding was delivered across the survey year, and to highlight and address any issues with coding accuracy if they arose.

Firstly, Researchers at ScotCen Social Research produced analysis of coding behaviours on a quarterly basis. The analysis focused on a number of parameters, including: agreement between ScotCen Coder assigned codes and Scottish Government assigned codes, proportion of certainty/uncertainty among ScotCen Coders, and agreement between ScotCen Coders and Scottish Government when certain/uncertain. This process shed light into individual or types of codes where agreement between ScotCen Coders and Scottish Government was lower, and allowed Researchers at ScotCen Social Research to feedback valuable guidance to the ScotCen Coders.

Overall, ScotCen coders were consistent with Scottish Government coding on 79.4% of victim forms which were coded by both parties (as outlined above). When coders marked their coding as "Certain" (70.3% of victim forms), consistency with Scottish Government was 85.7%, and when "Uncertain" (29.7% of victim forms), consistency was 74.0%.

The second coding quality assurance measure undertaken was biannual variability studies, which assessed the level of variance amongst the ScotCen coders. The variability study involved every coder each coding the same 100 victim forms. The 100 victim forms were selected from the mainstage sample. The variability study sample included at least 1 victim form with each of the outcome codes selected at mainstage and was also stratified by certainty and frequency of each outcome code selected at mainstage.

This was a change from the variability study sampling approach used in the 16/17 study, when the variability sample was chosen at random from the mainstage coding sample. This change was introduced in order to make the variability sample more reflective of the mainstage coding sample. However, it must be noted that the change in the sampling approach does hinder the comparability of the variability study findings carried out in 16/17 and 17/18.

Fleiss Kappa analysis was then applied to the variability study data, to produce an overall indicator of the level of variance among the coders, and

also for each individual code (eg code 13 minor assaults, no injury).

In different studies (Biemer & Lyberg, 2003; Campanelli et al. 1997; Kalton & Stowell, 1979) two basic measures have been used to assess coding variance: proportion of agreement ($\bar{P}$) which is the proportion of agreement between the coders when compared 1-to-1 and Kappa (k) (1971) which takes into account that some degree of agreement may be due to chance alone. Accounting for the amount of agreement that might be expected by chance is the central benefit of using Kappa analysis. Fleiss Kappa is similar to the original Cohen's kappa, but allows for more than two coders.

The Fleiss Kappa is defined as:

$$k = \frac{\bar{P} - \bar{P}_e}{1 - \bar{P}_e},$$

Where $\mathbf{1} - \bar{\boldsymbol{P}}_{\boldsymbol{e}}$ represents the degree of agreement that can be due to chance and $\bar{\boldsymbol{P}} - \bar{\boldsymbol{P}}_{\boldsymbol{e}}$ gives you the proportion of agreement achieved above chance. The statistic $\boldsymbol{k}$ takes a value from 0 to 1 indicating the strength of the agreement among the coders (though can be less than 0).

While an interpretation of the value of $\boldsymbol{k}$ will vary in different circumstances, the most common interpretation has six categories:

Table 8.1: Description of kappa scores

Value of $\boldsymbol{k}$	**Interpretation**
< 0	Poor agreement (less than chance)
0.01–0.20	Slight agreement
0.21– 0.40	Fair agreement
0.41–0.60	Moderate agreement
0.61–0.80	Substantial agreement
0.81–0.99	Almost perfect agreement

Two variability studies were carried out - in November 2017 and February 2018. The results show that the agreement between coders was "substantial". The variance when certain was almost perfect when coders were certain and moderate when coders were uncertain.

Table 8.2: Results from the 2017/18 variability studies

	Variance overall	Variance when certain	Variance when uncertain
Variability study 1	0.722	0.893	0.442
Variability study 2	0.776	0.878	0.411

The variability study provided us with valuable information on the consistency of coding among the coders, highlighting areas where consistency could be improved, thus informing guidance provided to the coders.

8.1.3 *Offence code history*

The SPSS data files delivered to the Scottish Government include all the offence codes that have been assigned to each victim form at each stage of the offence coding process. This allows a complete history of each case to be viewed.

The final offence code is derived using a priority ordering system, whereby the Scottish Government code takes priority over the ScotCen coding supervisor, who takes priority over the original ScotCen coder (where applicable). The variables in the VFF data file which detail this are:

- VOFFENCE: code assigned by the original coder;
- SOFFENCE: code assigned by the supervisor;
- FINLOFFC: code assigned by the Scottish Government research team;
- OFFENCE: final offence code assigned.

The final offence codes for each victim form are also contained in the RF data file in the VICFORM variables (one for each victim form completed).

8.1.4 *Standard and open-end coding*

In addition to the survey specific offence coding all questions where an 'Other SPECIFY' category was over 10% of answers were reviewed. The aim of this exercise was to see whether the answer given could actually be coded into one of the original pre-coded response options. If it could not be a decision to add a new code was taken and other similar 'Other – specify' answers were added into this new code.

Open-ended questions, with the exception of those required for Standard Occupational Classification (SOC) and National Statistics Socio-Economic Classification (NS-SEC) coding, were treated in the same way, with code frames developed by coders and coding supervisors for these questions before being checked by researchers.

8.2 Coding of occupation and socio-economic classification

Occupation details were collected for all respondents, either relating to their current job or to their last job if the respondent was not currently employed but had worked at some time in the last 12 months.

Occupations were coded using the Standard Occupational Classification 2010 (SOC2010). All occupational coding was done centrally by specialist ScotCen coders once the data were returned by interviewers. SOC coding was done using NatCen's bespoke coding system, which uses enhanced search functionality to lookup the job titles which underlie each SOC unit group.

While full SOC codes were assigned, the SPSS data files only contain a two-digit SOC code to remove the risk of individual respondents being identified in the datasets (known as 'disclosure risk').

As well as occupation codes, National Statistics Socio-Economic Classification (NS-SEC) were assigned to all respondents.[51] NS-SEC categories were derived using documentation provided by the Office for National Statistics (ONS). Both the NS-SEC operational categories and the NS-SEC analytical categories were derived. Details of the NS-SEC categories can be found on the ONS website.[52]

The questionnaire changes in the 2016-17 questionnaire which lead to some comparability issues with previous sweeps were reversed in the 2017-18 survey.

8.3 Data checking

Data quality control is a continuous process which is undertaken throughout the survey life cycle, from survey inception to the provision of a final clean dataset. Specifically, quality control is undertaken during each of the following core survey stages:

- sampling design and methodology
- questionnaire design

[51] It should be noted that information to allow NS-SEC coding was only collected for respondents, and not specifically the Household Reference Person (HRP).

[52] NS-SEC coding based on SOC2010 was used. For further information, see the ONS website: http://www.ons.gov.uk/ons/guide-method/classifications/current-standard-classifications/index.html

- survey administration (e.g. interviewer recruitment and training)
- data collection (by interviewers)
- data entry (e.g. of self-completion questionnaire data); and
- data checking, editing and cleaning

This section focuses on the quality control checks undertaken **during the final survey stages, that is of data checking, editing and cleaning**. These stages were undertaken by ScotCen in full consultation with (and in the latter stages, verification by) the Scottish Government Justice Analytical Services SCJS team.

Details of the methods used for the quality assurance of the remainder of the elements listed above are detailed in the relevant section of this report. The Offence Coding manual also provides further information on the Offence Coding process and the generation of the survey statistics.

After data collection (and data entry for the self-completion element of the survey) the data checking and cleaning tasks are carried out. This involves a number of stages as detailed below, for both the SPSS data files and the Data Tables. The SPSS is generated before the Data Tables are produced since most of the key checks can only be performed using the SPSS data.

In addition to the plausibility and consistency checks which were programmed as part of the CAPI script (see Section 7.3.1), a number of other checks were undertaken as part of the data processing.

The SPSS datafiles for the SCJS contain all of the questionnaire variables as well as some derived and sample variables and the victimisation survey statistics.

8.3.1 *SPSS Data Checking*

- Early data checks during fieldwork to identify and amend potential scripting errors
- Checks on fieldwork records and between raw data, field records and SPSS data to ensure there are no discrepancies.
- Initial checks on completed interviews - identifying and removing duplicated or incomplete or corrupt interviews from the raw dataset.
- Checks of the raw CAPI (topline) data against the SPSS
- Checking the content and formatting of the SPSS datafiles - checking the specifications for the SPSS data file against the content and formatting of the SPSS.

- Specific checking of new or amended variables - checked to ensure that they are correct and no errors have been made in the specification of these.
- Checking the data in the SPSS datafiles are correct - ensuring the total number of responses in the base for each variable matches the total respondents eligible to respond.
- Checks that variable and value labels are clear and meaningful, consistent with questionnaire documentation and previous years.
- Comparing the data against the previous Sweep - checks are made comparing the content, structure and data frequencies against the previous Sweep's data.
- Coding data – checks of the final coding specification for open end and Other SPECIFY questions
- SPSS derived, summary and weighting variable checks - checked by recreating the variables in SPSS and then comparing them to the existing variables, or to the source data.
- Removal of any possible direct/indirect identifiers e.g. name, date of birth, address (in agreement with SG)
- Checking all variables required are present and no/limited surplus variables
- Offence Coding data and associated incidence and prevalence variables - unique to the SCJS – the following section explores this further.

8.3.2 *Data Table Checking*

Once the SPSS is complete and correct, the data tables are produced. The Data Tables replicate the SPSS but present the data in an easier to read and publishable format which does not require any specialist software. Two sets of Data Tables are produced, one for reporting purposes (for Scottish Government use only) and one for publication.

Those for publication are a subset of the reporting tables and use different conventions to simplify the presentation of the data.

- Checking the content and formatting of the tables - checking the specifications for the Tables against the content and formatting of Tables themselves.
- Data Tables and SPSS match – check frequencies match.
- Consistency checks with 2014/15 and 2016/17 tables.

- Data Tables summary codes - the Data Tables often contain summary codes which combine certain responses in a summary (for example, and 'agree' code combing 'agree strongly' and 'agree slightly' codes (which are separate in the SPSS). Since these appear only in the Data Tables these are checked using the tables themselves, or by recreating them in the SPSS.

- Data Tables cross-breaks are correct - the specification, data and labelling for the Data Table cross-breaks is checked against the SPSS to ensure these are correct and clearly labelled.

- Logic checks of key demographic and factual responses

- Victim Form Data Tables – where applicable, the published (and reported) Victim Form data is based only on those forms which are marked as ValidSCJS.

8.3.3 *Offence Coding and Survey Statistics Checking*

The survey statistics (incidence and prevalence figures) are produced from the Offence Coding data. The Offence Coding process and validation is described at the beginning of this section, and in the Offence Coding manual which describes how Offence Codes are assigned and what they comprise.

The production of the survey statistics from the Offence Coding is carried out to an agreed specification which has been used on all sweeps of the SCJS and the surveys which preceded this (for example the Scottish Crime and Victimisation Survey).

This defines what Offence Codes are within the scope of the survey and which are not, as well as how these should be counted and what weighting should be applied. This specification is replicated in SPSS syntax. For the current SCJS, the survey statistics are produced in the data processing software and exported into the SPSS file. An annotated SPSS syntax file is then used to replicate all of the survey statistics (how many incidents are counted, whether the incident was in the Reference Period etc). The SPSS syntax file is used both by ScotCen and the Scottish Government to check the survey statistics.

Prior to the generation of the survey statistics, a number of stages during the data processing are undertaken:

1. Checks are performed to compare the number of Victim Forms in the data against previous Sweeps, and checking against the raw topline data. Checks are also made to ensure that all of the Victim Forms are complete and identifiers are unique.

2. Once the Offence Coding is complete then the data is incorporated into the data processing software and outputs – checks are made to ensure that all the Victim Forms have an offence code and that there are no duplicates.

Once the data is included in the (unweighted) SPSS then logic checks are made to review the data compared to previous Sweeps:

1. Checking the number of single vs series incidents
2. Checking the number of forms which are coded as “Not enough information to code”
3. Checking the number of forms which are outside of the Reference Period
4. The number of ‘Valid’ and ‘ValidSCJS’ forms.

Frequencies are then run to compare the number of Victim Forms with each Offence Code to previous Sweeps.

Once these stages are complete, the syntax noted above is used to recreate the survey statistics incidence and prevalence. The syntax follows a logical process through which forms are assigned as ValidSCJS or not (based on being completed forms, within the Reference Period and having a valid offence code). The resulting data is then copied from the Victim Form SPSS (where each record represents a Victim Form) into the Respondent File SPSS, where it is summarised on a respondent basis and grouped into different categories of crime. The variables are then run with the correct weighting and compared to those in the original SPSS file. Finally, the SPSS is checked against the Data Tables to ensure that they match.

9 OFFENCE CODES, SURVEY STATISTICS AND CRIME GROUPS

The offence coding process assigns offence codes to each victim form completed by a respondent (see Section 8.1.1). This chapter examines the offence codes which are used in the analysis and reporting of the survey, and how they are grouped and defined.

9.1 Crime types / offence codes covered by the survey

A list of all of the offence codes which can be assigned to a victim form, including in-scope codes and out-of-scopes codes is provided in Annex 8. The following section also looks at what is excluded from the scope of the survey.

9.1.1 *Offence codes*

The offence coding manual for SCJS 2017/18 (unchanged from 2016/17) contains the range of offence codes which are assigned to every victim form which is triggered as a result of the victim form screener section (Section 5.2.2). Therefore even incidents classified as non-valid because they occurred outside of the reference period or outside of Scotland are given an offence code (i.e. an out-of-scope non-valid code as detailed below).

The offence codes can be split into two groups: in-scope and out-of-scope codes:

- **In-scope codes**: 33 offence codes were used in the calculation of 'all SCJS crime' (Section 9.1.5) and therefore the incidence and prevalence statistics from the survey;
- **Out-of-scope codes**: these can be grouped into two categories, neither of which are included in the published survey statistics;
    - **Sexual offence or threat codes**: 12 offence codes related to sexual offences or threats which were not included in the 'all SCJS crime' statistics produced by the survey (see Section 9.1.3);
    - **Non-valid codes**: the offence coding manual also contained 21 offence codes for classifying incidents recorded in the victim form which were non-valid incidents (outside of Scotland or the reference period, duplicate incidents), where not enough information was collected to make an accurate classification, where the respondent or household was not the victim or the victim form was skipped. As with the sexual offence or threat codes, these 21 codes were not included in the 'all SCJS crime' statistics produced by the survey.

Included in the non-valid out-of-scope codes is code 97 which is assigned where there is insufficient information to code the offence.

Details of the offence codes and the incidents that they cover are provided in the SCJS Coding Manual.[53] The variables OFFENCE in the victim form file (VFF) data file and the VICFORM variables in the respondent file (RF) data file show the offence code assigned to each victim form.

9.1.2 *A note on crime types excluded from the scope of the survey*

The SCJS only collects information about incidents which occurred within Scotland (or, if an incident happened online, if the respondent was living in Scotland at the time) and within the reference period (see section 7.1).

In addition, the SCJS does not collect data about all types of crime occurring in Scotland and has notable exclusions:

- Crimes against adults living in circumstances other than private households (for example, adults living in institutions, such as prisons or hospitals, or other shared accommodation, such as military bases and student halls of residence – Section 2.3);
- Crimes against children and young people (aged under 16);[54]
- Crimes against businesses;[55]
- So-called 'victimless' crimes, such as speeding, or crime where the victim cannot be interviewed, such as homicide.

9.1.3 *Sexual offences and threats*

The SCJS victim form was used to collect information on threats and, where respondents provided information, sexual offences. Coders assigned offence codes to incidents of these crimes in the normal way. However, the 'all SCJS crime' statistics (Section 9.1.5) produced from the survey, including the estimates of incidence and prevalence, do not include these crimes for the reasons outlined below.

---

[53] Available from the Scottish Government survey website: http://www.scotland.gov.uk/scjs

[54] The Crime Survey for England and Wales (CSEW – formerly the BCS) was extended to cover children aged between 10 and 15 in 2008, with experimental statistic published in summer 2010 (Millard and Flately, 2010). More information can be found on the Office for National Statistics website: http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Crime

[55] The Commercial Victimisation Survey (CVS) conducted for the Home Office provides data on this for England and Wales, but a separate survey is not conducted in Scotland. More information on the CVS is available from the Home Office website: http://www.homeoffice.gov.uk/science-research/research-statistics/crime/crime-statistics/commercial-victimisation-survey

Sexual offences

The victim form screener did not include questions specifically on sexual assault for two reasons:

1. Victims are often reluctant to disclose information on these sensitive crimes in a face-to-face interview and therefore that surveys using face-to-face data collection rather than self-completion tend to under-represent them.

2. On ethical grounds, a decision was taken that it was important to identify respondents' experiences of sexual assault (and to gather limited key information about them) in as sensitive a way as possible without putting them in an uncomfortable position (either by asking questions face-to-face or asking lots of detailed questions).

A separate self-completion questionnaire was therefore used to collect information on sexual victimisation.[56] The statistics and analysis from the self-completion survey are reported separately and a separate data file is available from the UK Data Service.[57]

Details of sexual offences were recorded in the victim form where the respondent did provide details of the incident (for example, as part of the victim form screener question which asks "*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 on you in any other way*?" respondents may have provided details of an incident of sexual assault). However, as the evidence shows that estimates based on this method of data collection for these types of incidents are not reliable, all such incidents were excluded from the 'all SCJS crime' statistics.

Incidents reported only in the self-completion questionnaire could *not* be assigned offence codes in the same was as those collected in the victim form as only a limited number of follow-up questions were asked about incidents (reflecting an ethical decision based on potential respondent distress at having to disclose detailed information on very sensitive incidents).

Threats

Following established practice in previous crime surveys in Scotland, threats, although assigned offence codes, were not included in the estimates of crime

[56] It is important to note that self-completion data collection is still likely to underestimate the number of actual sexual offences occurring as, even with a self-completion format, a degree of under-reporting would be expected.

[57] SCJS reports and related publications are available on the Scottish Government survey website: http://www.scotland.gov.uk/Topics/Statistics/Browse/Crime-Justice/crime-and-justice-survey

due to the difficulty of establishing whether or not a crime actually occurred (Anderson and Leitch, 1996).

9.1.4 *Duplicate victim forms*

Duplicate victim forms can occur where the *same* actual incident is recorded in two separate victim forms or the victim form is part of a series of the same type of incident. This can occur for two reasons:

- Firstly, if the incident contains two or more different types of incidents described in the victim form screener section (for example, an incident of where something is taken from a victim may also involve the offender using force or violence against the victim) the respondent may not have understood or misheard the qualifier to the victim form screener question:[58] "*Apart from anything you have already mentioned*". If the respondent mentions the same incident in two separate victim form screener sections, then this may only become apparent after the victim form has been triggered;

- Secondly, a series of incidents may not be correctly identified / disclosed in the victim form screener section and separate victim forms triggered for very similar incidents.

Duplicate victim forms are marked as 'same duplicate' (code 3) or 'series duplicate' (code 4) according to why the duplicate form has been marked. The questionnaire included a set of questions which were added in order to allow interviewers to better record where this was happening. However relatively few victim forms are coded as duplicates.

9.1.5 *List of in-scope offence codes*

The list of the 33 in-scope SCJS offence codes (crimes) which were included in the 'all SCJS crime' incidence and prevalence statistics produced from the survey is shown in Annex 6. It also shows the SPSS value code for each offence code as well as the crime groups used in the 2017/18 SCJS Main Findings report into which each in-scope offence code is grouped (Section 9.3)

9.2 Survey statistics

The SCJS produces two key measures of crime: incidence (the numbers of crimes) and prevalence (the risk of being a victim of crime or the victimisation rate). It also provides data on repeat and multiple victimisation. These are all presented in the 2017/18 SCJS Main Findings report.

[58] Victim form screener questions identify incidents which will be followed up in the victim form.

Incidence and prevalence statistics were estimated for Scotland using data supplied by National Records of Scotland (NRS); Estimates of Households and Dwellings in Scotland, 2016 (2,463,569 households) and Mid-2016 Population Estimates Scotland (4,507,358 adults).

Variable	Sum of Weights
Household	2,463,569
Individual	4,507,358

9.2.1 *Household and personal crimes*

All of the 33 in-scope offence codes which are assigned in the SCJS relate either to crimes against the individual respondent (such as assault) or to crimes experienced by the respondent's household (such as housebreaking). With regard to crimes against individuals (personal crimes), respondents were asked to only provide information about incidents in which they themselves were the victim. If other household members had experienced personal crimes then this was not recorded in the survey.

This important distinction between personal and household crimes affects how the survey statistics were calculated (Sections 9.2.2 and 9.2.3) and how the data is analysed, reported on and presented in tables of prevalence, for example, with demographic breakdowns only available for personal crimes. Annex 12 provides detail of which crimes are classified as household crimes and should therefore be analysed using the household weights (Section 4.6).

9.2.2 *Incidence and incidence rate*

Incidence is defined as:

> *"The number of crimes experienced per household or adult."*

To calculate incidence, the number of crimes experienced by respondents or their household (Section 9.2.1) was aggregated together for each offence code, based on up to five separate victim forms, and on the number of incidents in a 'series' (capped at five) recorded in the victim forms.

The incidence rate can also been calculated for key crime groups. This is calculated as the gross number of incidents multiplied by the product of 10,000 divided by the population (households or adults aged 16+ depending whether the crime group contains household or personal crimes) to give an incidence rate per 10,000. The incidence rate enables comparison between areas with differing populations.

Incidence and incidence rates are estimated using incidence weights which include a grossing factor based on population estimates for the household and adult populations depending on whether the crime was classified as a household or personal crime.

Incidence variables are present in the respondent file (RF) data file and begin with INC. Users of the SPSS data files should note that the incidence figures for the crime groups 'all SCJS crime', 'property crime' and 'comparable crime' are produced by summing the component incidence figures rather than running the weighted frequencies for the relevant incidence variables.

9.2.3 *Prevalence*

Prevalence is defined as:

> *"The proportion of the population who were victims of at least one crime in the specified period."*

Prevalence takes account of whether a household or person was a victim of a specific crime once or more in the reference period, not the number of times they were victimised. These figures were based on information from the victim form which was used to designate respondents and / or their households as victims, or non-victims.

The SCJS technically consists of two highly related, but separate surveys; at various times in the survey the respondent provides information on behalf of the household as a whole and on behalf of themselves as an individual. The overall crime prevalence rate, relates only to the experience of the respondent, not to other victims within a household. The analytical approach to the survey assumes that the risk of victimisation for those adults not interviewed in a household is determined by the experiences of those other respondents to the survey with whom they share a similar profile (i.e. in terms of age, gender and location).

The percentage of households or individuals in the population that were victims provides the prevalence. This equates to the *rate* or *likelihood of victimisation*. Prevalence was estimated using population estimates for the household and adult populations depending on whether the crime was classified as a household or personal crime (Section 9.2.1).

Where crimes are grouped together in a way that includes both household and personal crime, prevalence was calculated using the population estimates for adults. This follows the practice adopted by the CSEW and includes;

- Property crime;
- Comparable crime;
- 'All SCJS crime' (crime overall).

Prevalence variables are included in the respondent file (RF) data file and begin with PREV.

9.2.4 *Multiple victimisation*

The SCJS classifies multiple victimisation as the experience of being the victim of a crime of any type more than once during the 12 month reference period. This includes those who have been victims of more than one crime of the same type within the last 12 months (repeat victimisation) and also those who have been victims of more than one SCJS crime of any type within the last 12 months. i.e. multiple victimisation includes those who have been a victim of more than one personal crime, or have been resident in a household that was a victim of more than one household crime, or have been a victim of both types of crime.

As noted above, the overall crime prevalence rate, relates only to the experience of the respondent, not to other victims within a household. The analytical approach to the survey assumes that the risk of victimisation for those adults not interviewed in a household is determined by the experiences of those other respondents to the survey with whom they share a similar profile (i.e. in terms of age, gender and location).

To enable an estimation of overall multiple victimisation, the statistics are derived using the individual weight, by summing the weights associated with those experiencing multiple crimes, i.e. two crime, three crimes and so on. This means that the statistics relate to crimes against adults where they were a victim of a personal crime or who lived in a household that was a victim of a household crime.

9.2.5 *Repeat victimisation*

Repeat victimisation is a subset of multiple victimisation. The SCJS classifies repeat victimisation as the experience of being the victim of the same crime more than once in the 12 month reference period. If all victims had only been the victim of one crime in the reference period, incidence and prevalence would be the same. Repeat victimisation accounts for differences between incidence and prevalence. Higher levels of repeat victimisation mean there is a relatively lower prevalence compared with incidence.

Repeat victimisation is calculated as a percentage of household or adult victims according to the crime group. Where both household and personal crimes are grouped together, repeat victimisation is calculated as a percentage of the population of adult victims. Repeat victimisation variables are included in the respondent file (RF) data file and begin with REP.

9.2.6 *Capped series of crimes*

The total number of incidents that occurred in a series in the reference period is capped at five incidents. Therefore, as up to five victim forms are completed, a respondent can have a maximum of 25 incidents included in the survey statistics.

The restriction/cap to the first five incidents of a crime in a series has been applied consistently throughout the SCJS and earlier crime surveys in

Scotland, although this methodology will be kept under review. The cap ensures that survey estimates of incidence are not affected by a very small number of respondents who report an extremely high number of incidents. The number of such victims included in the sample varies from year to year and so the cap is applied to reduce the potential for spurious volatility between survey years, enhancing the ability of the survey to monitor underlying trends consistently (Smith and Hoare, 2009).

Analysis of the SCJS from 2008/09 onwards finds that relatively few respondents report large numbers of crime in a series. The number of respondents reporting a valid series of incidents capped at five has ranged from 72 in 2009/10 to 16 in 2017/18. Based on these relatively small numbers of respondents, the removal of the 'cap' would increase the estimate of SCJS crime by a proportion which would vary from survey to survey. Applying the cap to these small number of high frequency repeat victims enables a more consistent and stable estimation of the incidence of crime in the underlying population. The convention of capping does not affect estimates of crime prevalence (the risk of victimisation).

Recent analysis on the CSEW has examined and questioned the continued use of the cap as it alters the distribution of crime by gender of victim and by whether the offender is well known to the victim or a stranger. Due to the volatility incurred by removing the cap altogether, CSEW maintained a cap on the number of crimes in a series, moving from capping at 5 to capping at the 98th percentile of numbers of crimes for that crime type over the three years up to that point (or 5 if the 98th percentile falls below). The potential impact of this methodological change for the SCJS has been explored and is discussed in our methodological note on calculating crime estimates. On balance, based upon our initial analysis, the SCJS will continue to retain the cap of 5 crimes in a series.

Collecting detailed information from high frequency repeat victims is inherently difficult. Respondents are asked to provide incident dates, characteristics and impacts that are used to assign a crime code. This can be particularly difficult for high frequency repeat victims who experience crime as a continuing pattern, rather than a distinct event (Planty and Strom, 2007).

Given the small number of high frequency repeat victims in annual SCJS samples we are not able to conduct detailed analysis on these group of victims each year. Planned work for the future includes pooling samples across years of the survey to better understand the characteristics and experiences of respondents experiencing high levels of repeat victimisation.

Between 2008/09 and 2017/18 there was a statistically significant decrease in the prevalence of adults experiencing 5+ crimes (from 1.5% to 0.5%). However, there was no statistically significant difference between the most recent survey sweeps, 2016/17 and 2017/18, for this group of high frequency victims.

In 2017/18, 78% (985) of *all victim forms* (1,259) related to single incidents and 22% (274) related to a series of incidents.[59]

In the SCJS 2017/18, 17% (129) of *all victim forms assigned an in-scope offence code* (759) were for series incidents. 2.1% (16) of all valid victim forms recorded a series of more than five similar incidents and 0.5% (4) a series of more than 10.

9.2.7 *Population Grossing Totals*

The SCJS is a face-to-face survey of adults (aged 16 and over) resident in private households in Scotland.

The SCJS does not include a small subset of the adult population who do not reside in private households, who for example, live in group residences (e.g student's hall of residences) or other institutions (prisons), or who are homeless. As part of the weighting process, overall SCJS crime estimates have been calculated using the total adult population, rather than adults living in private households; this assumes that the subset of the adult population not captured in the SCJS experience the same level of victimisation as adults in the household resident population. In reality, this is unlikely to be true, and it may be speculated that some of the groups not included in the survey experience a higher risk of crime than those captured in the survey. However it is notable that methodological work on this issue completed on the CSEW in 2014[60] concluded that 'the effects of the weighting updates on the post-1999 CSEW estimates are minimal and have not altered any trends.'

The adult population has been used consistently as the weighting base in this way throughout the SCJS time series, so results are comparable between years.

9.3 Crime groups

'All SCJS crime' (overall crime) can be broken down into various subgroups of crimes for analysis purposes. There are a total of 13 subgroups which are used in the analysis in the 2016/17 SCJS Main Findings report as shown in Figure 9.1 below.

The two principal crime groups are property crime and violent crime. The level of prevalence associated with these groups of crimes differs, along with the characteristics of the crimes, and victims' experience and perception of them.

---

[59] These are unweighted figures and include all victim forms, including those which are assigned an out-of-scope offence code. Data is based in the variable PINCI in the VFF data file.

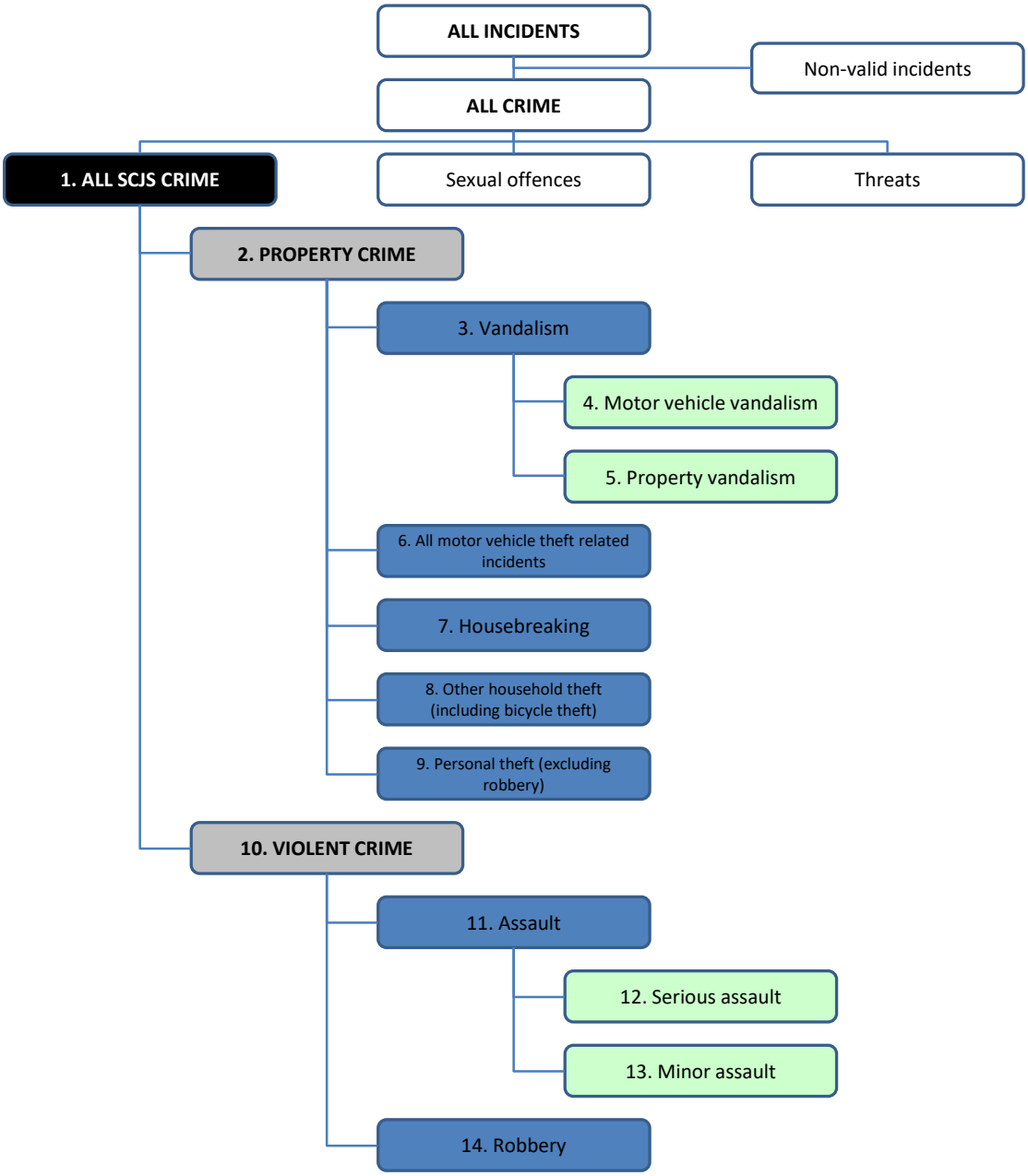
[60] CSEW Methodological amendments Presentational and methodological improvements to National Statistics on the Crime Survey for England and Wales

These two principal groups can also be further broken down into seven groups and three further subgroups are also shown for vandalism and assault. All of these crime groups are discussed in more detail below. Annex 6 also shows how each of these groups is composed of the 33 individual in-scope offence codes.

As well as these crime groups, the respondent file (RF) data file also includes a number of other crime group variables which have been used or analysis of past Scottish crime surveys.

Each of the crime groups has a variable for incidence and one for prevalence.

Figure 9.1: Crime groups used in the SCJS 2017/18 Main Findings report



9.3.1 *Crime group descriptions*

The descriptions of the crime groups below follow the basic order of Figure 9.1 above and the Annex 1 tables in the used in the SCJS 2017/18 Main Findings report.[61] Descriptions for comparable crime groups are also included (Section 9.3.2). Variable names are included in square brackets after the heading for each crime group.[62]

1. 'All SCJS crime' [variable *surveycrime*]

'All SCJS crime' includes all property crime and all violent crime, but excludes threats and sexual offences (Section 9.1.3).

'All SCJS crime' is used throughout the Main Findings report and all of the other crime groups are subgroups of 'all SCJS crime'. Estimates of overall incidence and prevalence of crime in Scotland are calculated using 'all SCJS crime'. As 'all SCJS crime' includes both household and personal crimes, prevalence and repeat victimisation are calculated based on the adult population. Users of the SPSS data files should note that the figures for incidence for all SCJS crime are produced by summing the incidence figures for property and violent crime.

2. Property crime [variable *property*]

This crime group includes vandalism; all motor vehicle theft related incidents; housebreaking; other household theft (including bicycle theft); and personal theft (excluding robbery).

Property crime is one of the main crime groups used in the Main Findings report (together with violent crime). As property crime includes both household and personal crimes, prevalence and repeat victimisation are calculated based on the adult population. Users of the SPSS data files should note that the figures for incidence for property crime are produced by summing the incidence figures for these component crime groups.

3. Vandalism [variable *vand*]

Vandalism involves intentional and malicious damage to property (including houses and vehicles). In the Criminal Justice (Scotland) Act 1980, vandalism became a separate offence defined as wilful or reckless destruction or damage to property belonging to another. Cases which involve only nuisance without actual damage (for example, letting down car tyres) are not included.

---

[61] Some of the categories are unpacked further in the report Annex Tables, where, for example, in 2016/17 Table A1.1 'Other Household theft' and 'Bicycle theft' are presented separately.

[62] Variables in the SPSS data files will be prefaced by INC for incidence variables and PREV for prevalence variables.

Where criminal damage occurs in combination with housebreaking, robbery or violent offences it is these latter crimes that take precedence.

Vandalism is a subgroup of property crime.

4. Motor vehicle vandalism [variable *motovvand*]

This crime group includes any intentional and malicious damage to a motor vehicle such as scratching a coin down the side of a car, or denting a car roof. It does not, however, include causing deliberate damage to a car by fire. These incidents are recorded as fire-raising and therefore included in vandalism to other property. The SCJS only covers vandalism against vehicles belonging to private households; that is, cars, vans, motorcycles, scooters and mopeds which are either owned or regularly used by anyone in the household. Lorries, heavy vans, tractors, trailers and towed caravans were generally excluded from the coverage of the SCJS as these are usually the property of an employer and not for personal use.

Motor vehicle vandalism is a subgroup of vandalism.

5. Property vandalism [variable *propvand*]

Vandalism to the home and other property involves intentional or malicious damage to doors, windows, fences, plants and shrubs for example. Vandalism to other property also includes arson where there is any deliberate damage to property belonging to the respondent or their household (including vehicles) caused by fire, regardless of the type of property involved.

Property vandalism is a subgroup of vandalism.

6. All motor vehicle theft related incidents [variable *allmvtheft*]

The SCJS covers three main categories of vehicle theft: 'theft of motor vehicles' referring to the theft or unauthorised taking of a vehicle, where the vehicle is driven away illegally (whether or not it is recovered); 'theft from motor vehicles' which includes the theft of vehicle parts, accessories or contents; and 'attempted thefts of or from motor vehicles', where there is clear evidence that an attempt was made to steal the vehicle or something from it (e.g. damage to locks). If parts or contents of the motor vehicle are stolen in addition to the vehicle being moved, the incident is classified as theft of a motor vehicle. Included in this category are cars, vans, motorcycles, scooters and mopeds which are either owned or regularly used by anyone in the household. Lorries, heavy vans, tractors, trailers and towed caravans were generally excluded from the coverage of the SCJS as these are usually the property of an employer and not for personal use.

All motor vehicle theft related incidents are a subgroup of property crime.

7. Housebreaking [variable *housebreak*]

In Scottish law, the term 'burglary' has no meaning although in popular usage it has come to mean breaking into a home in order to steal the contents. Scottish law refers to this as 'theft by housebreaking'.

Respondents who reported that someone had broken into their home with the intention of committing theft (whether the intention was carried out or not) were classified as victims of housebreaking. Entry must have been by forcing a door or via a non-standard entrance. Thus, entry through unlocked doors or by using false pretences, or if the offender had a key, were not housebreaking (they would fall into 'other household theft'). The definition of housebreaking used in this report is the same as the definition used in previous reports but differs from the definition used prior to the 2003 report.[63]

Housebreaking is a subgroup of property crime.

8. **Other household theft (including bicycle theft)** [variable *otherhousetheftcycle*]

This crime group includes actual and attempted thefts from domestic garages, outhouses and sheds that are not directly linked to the dwelling. The term also includes thefts from gas and electricity prepayment meters and thefts from outside the dwelling (excluding thefts of milk bottles etc. from the doorstep). 'Thefts in a dwelling' are also included in this group; these are thefts committed inside a home by somebody who did not force their way into the home, and who entered through a normal entrance (examples include guests at parties, workmen with legitimate access, people who got in using false pretences, or if the respondent left a door open or unlocked). Theft of a bicycle is also included.

Other household theft (including bicycle theft) is a subgroup of property crime.

9. **Personal theft (excluding robbery)** [variable *perstheft*]

This group of crime includes actual and attempted 'snatch theft', 'theft from the person' where the victim's property is stolen directly from the person of the victim but without physical force or threat of force and 'other personal theft' which refers to theft of personal property outside the home where there was no direct contact between the offender and the victim.

Personal theft is a subgroup of property crime.

10. **Violent crime** [variable *violent*]

[63] The definition was changed in 2003 to mirror more accurately the Scottish police recorded crime definition of domestic housebreaking by including housebreakings to non-dwellings (such as sheds, garages and out-houses) which are directly connected to the dwelling

The coverage of violent crime consists of actual and attempted minor assault, serious assault and robbery. Sexual offences are not included (Section 9.1.3).

Violent crime is one of the main crime groups used in the Main Findings report (together with property crime).

11. Assault [variable *assault*]

In the SCJS, the term assault refers to two categories:

- Serious assaults, comprising incidents of assault which led to an overnight stay in hospital as an in-patient or which resulted in specific injuries regardless of whether or not the victim stayed in hospital overnight;
- Minor assaults, which are actual or attempted assaults resulting in no or negligible injury.

Assault is a subgroup of violent crime.

12. Serious assault [variable *serassault*]

An assault is classified as serious if the victim sustained an injury resulting in an overnight stay in hospital as an in-patient or any of the following injuries whether or not they was detained in hospital: fractures, internal injuries, severe concussion, loss of consciousness, lacerations requiring sutures which may lead to impairment or disfigurement or any other injury which may lead to impairment or disfigurement.

Serious assault is a subgroup of assault.

13. Robbery [variable *rob*]

This term refers to actual or attempted theft of personal property or cash directly from the person, accompanied by force or the threat of force. Robbery should be distinguished from other thefts from the person which involve speed or stealth.

Robbery is a subgroup of violent crime.

9.3.2 *Comparable crime group descriptions*

Comparable crime groups are used to compare SCJS data with police recorded crime statistics (Section 12.1).

Comparable crime [variable *comparcrime*]

Only certain categories of crime covered by the SCJS are directly comparable with police recorded crime statistics (Section 12.1). These categories are collectively referred to as comparable crime. Comparable crime can be broken down into the following three crime groups:

- Acquisitive crime: comprising housebreaking, theft of a motor vehicle and bicycle theft;
- Vandalism: including both vehicle and property vandalism;
- Violent crime: comprising assault and robbery.

Section 9.3.1 above provides definitions of vandalism and violent crime. Acquisitive crime is defined below.

Acquisitive crime [variable *acquis*]

Acquisitive crime consists of three crime groups / offence codes: housebreaking, theft of a motor vehicle and bicycle theft. Housebreaking is defined above in Section 9.3.1 and theft of a motor vehicle is part of the all motor vehicle theft related incidents crime group. Bicycle theft is defined as theft of a bicycle from outside a dwelling. Almost all bicycles were stolen in this way. Bicycle thefts which take place inside the home by someone who is not trespassing at the time are counted as theft in a dwelling (a subgroup of other household theft including bicycle theft); and thefts of bicycles from inside the home by a trespasser are counted as housebreaking.

10 DATA OUTPUT

10.1 Introduction

The main outputs provided to the Scottish Government by ScotCen/Ipsos Mori are SPSS data files, delivered on an annual basis at the end of the survey. There are three separate SPSS data files provided:

- Respondent file (RF);
- Victim form file (VFF);
- Self-completion file (SCF).

This section provides detail of the content and structure of the three files and the conventions used in them.

10.1.1 *Respondent file*

The RF data file is produced at the level of the individual respondent and contains all questionnaire data and associated variables, excluding information that is collected in the victim form or the self-completion questionnaire. The file also contains additional variables such as geo-demographic variables from the sample data (for example Scottish Index of Multiple Deprivation) and the derived variables for incidence and prevalence measures based on data collected in the Victim Form section of the questionnaire. Data for all respondents who took part in the survey is provided in the RF file, irrespective of whether they are classified as victims or non-victims according to their Victim Form responses.

10.1.2 *Victim form file*

The VFF data file is produced at the level of the individual incident and contains all the data collected in the victim form. Thus, an individual respondent who reported three separate incidents and completed three victim forms would have three separate records in the VFF data file.

All victim forms are included in the file; including cases where the incident occurred outside of the reference period or outside of Scotland. These records were not used for analysis and contain very little information (the victim form questionnaire is terminated in these cases but are retained on the file for use by researchers who may wish to examine this data. Similarly, victim forms which were assigned a non-valid offence code (and therefore were not used in the production of the 'all SCJS crime', Valid or ValidSCJS statistics from the survey) are also retained (Section 9.1).

It should also be noted that some victim forms were completed for incidents which happened in the month of interview (i.e. outside of the reference period): these victim forms may have a valid offence code assigned to them but are NOT included in the published survey statistics (and are marked as non-valid at the variables VALID and VALIDSCJS in the VFF data file).

10.1.3 *Self-completion file*

The SCF data file is produced at the level of the respondent and contains all of the data and associated variables in the self-completion questionnaire (illicit drug use, stalking and harassment, partner abuse and sexual victimisation) as well as the key demographic variables from the RF data file. The file can also be linked to the RF data file for analysis purposes via use of the variable SERIAL.

The variables which correspond to questions in illicit drugs section of the SCF data file do not contain responses for respondents who say they have ever taken semeron (a fictitious drug – Section 5.8.2). These respondents are identified by the variable SEMERON.

The SCF data 2016/17 and 2017/18 data has been combined for both reporting and archiving purposes. For more information on this see Section 5.8.

10.2 Content of SPSS data files

The SPSS data files delivered to the Scottish Government and available from the UK Data Service contain different types of variables, including:

- Questionnaire variables (all files). SPSS variable names correspond to question labels from the questionnaire documentation. Variable names are also repeated in variable labels;

- Incidence and prevalence variables (RF and SCF data files).

- Geo-demographic variables (all data files). All cases have a set of pre-specified geo-demographic variables attached to them, including 2016 Scottish Index of Multiple Deprivation (SIMD)[64] and 2013-2014 Scottish Government Urban / Rural Classification;[65]

- Coding variables (all data files). SOC2010 and NS-SEC codes (based on SOC2010) are included for the respondent (see Section 8.2).

- Offence coding variables (all files). On the VFF data file, a full set of offence codes, including the history, are attached as outlined in Section

[64] SIMD quintiles (SIMD_QUINT) and the 15% most deprived (SIMD_TOP) variables are included in the respondent file (RF) and self-completion file (SCF) data files. Scottish Government website: http://www.scotland.gov.uk/Topics/Statistics/SIMD/

[65] Details of the 2013-2014 Scottish Government Urban / Rural Classification can be found on the Scottish Government website: http://www.scotland.gov.uk/Topics/Statistics/About/Methodology/UrbanRuralClassification

8.1.2. The RF and SCF data files contain the final offence code assigned to each respondent's victim forms;

- Derived variables (all files). Many derived variables are also added to the files. There are two main types of derived variables:
    - Flag variables that identify, for example, the date of interview, the month of issue, a victim or non-victim etc. On the VFF data file, flag variables include whether an incident was assigned and in-scope or out-of scope offence code (Section 9.1.1), whether it was a series or a single incident, and others;
    - Classificatory variables derived from the data. These included standard classifications such as banded age groups, household composition, tenure, etc.;
- Interviewer and observational variables (all files). All interviews had a small amount of observational data collected by interviewers in the CAPI script, such as whether the respondent required any help with the self-completion section of the questionnaire;
- Weighting variables (all files). See Section 4.6 for further information on what these variables are and how they should be used.

10.3 Conventions used in SPSS data files

Consistency was retained between the previous SCJS data files. In the majority of cases, SPSS variable names correspond to question labels from the questionnaire.

10.3.1 *Case identifiers*

There are two types of case identifiers in the data files: SERIAL (all files) and VSERIAL (victim form file [VFF] data file).

The unique identifier SERIAL consists of up to six digits and is present in the respondent file (RF) data file (where each individual case or record represents an individual respondent) as well as the VFF data file (where the identifier is no longer unique as respondents can have more than one victim form).

In the VFF, where each individual case or record represents a victim form, the unique case identifier (VSERIAL) is identical to SERIAL, but with the addition of the victim form number (01 to 05) at the end. This gives each victim form a unique identifier.

10.3.2 *Don't know and refused values*

Don't know and refused codes are standard on most questions. They have been assigned standard values in SPSS to aid data analysis:

- Don't Know: -1

- Refused: -2

For multicode variables in the SPSS data files, the variables relating to the don't know code are named ending '_dk' and for refused '_rf'.

10.3.3 *Decimal places*

Users may find very small (<0.1%) differences in some data when comparing the data in the tables and SPSS files with the published reports on the Scottish Government website. This is due to some of the analysis conducted for the report using data to a reduced number of decimal places.

10.3.4 *Multiple response variables*

Multiple response variables were set up as a set of variables equal to the total number of answers possible (including Don't Know and Refused and any additional codes added in the coding process). Multiple response variables generally follow the format <question label><_><01> with the underscore denoting a multiple response variable and the number incrementing with each additional variable. Each variable was then given a value of '1' or '0', depending on whether the respondent gave that particular answer or not.

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

ASK IF OFFENDER DID NOT GET INSIDE HOME OR DK OR REF (QIN, CODES 1-3).

QNIN Did the person / people TRY to get inside your house or flat, or your garage,
shed or other outbuilding at all during the incident? MULTICODE.

1	Yes – tried to get inside house or flat	[QNIN_01]
2	Yes – tried to get inside the garage	[QNIN_02]
3	Yes – tried to get inside shed or other outbuilding	[QNIN_03]
4	No	[QNIN_04]
	DK	[QNIN_DK]
	REF	[QNIN_RF]

11 STATISTICAL SIGNIFICANCE AND CONFIDENCE INTERVALS

11.1 Statistical significance

SCJS estimates are based on a representative sample of the population of Scotland aged 16 or over living in private households. A sample, as used in the SCJS, is a small-scale representation of the population from which it has been drawn.

Any sample survey may produce estimates that differ from the values that would have been obtained if the whole population had been interviewed. The magnitude of these differences is related to the size and variability of the estimate, and the design of the survey, including sample size.

It is possible to calculate a range of values between which the population figures are estimated to lie; known as the confidence interval (also referred to as margin of error). At the 95 per cent confidence level, when assessing the results of a single survey it is assumed that there is a one in 20 chance that the true population value will fall outside the 95 per cent confidence interval range calculated for the survey estimate. Similarly, over many repeats of a survey under the same conditions, one would expect that the confidence interval would contain the true population value 95 times out of 100.

Changes in observed estimates between survey years or differences between population subgroups may occur due to sampling variation. In other words, even when there are no real differences in population values, differences might be observed from survey samples. These the change may simply be due to which respondents were randomly selected for interview.

Whether this is likely to be the case can be assessed using standard statistical tests. These tests indicate whether differences are likely to be due to chance or represent a real difference in population figures. In general, only differences that are statistically significant at the five percent level (and are therefore likely to be real as opposed to occurring by chance) are described as differences within this report.

11.2 Confidence intervals

In 2017/18, as has been the case since 2012/13, the SCJS sample design was altered to be stratified and weighted, but not clustered. Accurate complex standard errors and confidence intervals were calculated using SAS Surveymeans module. The calculation of the survey design factor (a measure of survey efficiency) was based upon the stratification and survey weighting. To take account of the survey weighting, the standard error for an equivalent simple random sample was approximated by calculating the standard error on the unweighted sample (which although not a true simple random sample, provides a practical approximation to such, given the more complex design of the actual survey sample).

11.2.1 *All SCJS crime*

Statistical significance for change in SCJS estimates for all SCJS crime cannot be calculated in the same way as for other SCJS estimates. This is because there is an extra stage of sampling used in the individual crime rate (selecting the adult respondent for interview) compared with the household crime rate (where the respondent represents the whole household). Technically these are estimates from two different, though highly related, surveys. The Office for National Statistics (ONS) methodology group has provided an approximation method to use to overcome this problem. This method was also used by the BCS.

The approach involves producing population-weighted variances associated with two approximated estimates for overall crime. The first approximation is derived by apportioning household crime equally among adults within the household (in other words, converting households into adults). The second apportions individual crimes to all household members (converting adults into households).

The variances are calculated in the same way as for the standard household or individual crime rates (i.e. taking into account the complex sample design and weighting). An average is then taken of the two estimates of the population-weighted variances. The resulting approximated variance is then used in the calculation of confidence intervals for the estimate of all SCJS crime. It is then used in the calculation of the sampling error around changes in estimates of all SCJS crime. This enables the determination of whether such differences are statistically significant.

This method incorporates the effect of any covariance between household and individual crime. By taking an average of the two approximations, it also counteracts any possible effect on the estimates of differing response rates by household size.

11.2.2 *2017/18 survey design factors*

If confidence intervals are not provided in the report for a variable of interest, then an approximation may be used. The standard error should be calculated assuming a simple random sample and the value multiplied by an appropriate design factor to provide the confidence interval. Design factors will differ for different types of crime and characteristics. Examination of the data indicates that most design factors that have been calculated have values of less than 1.22. This suggests that the use of 1.22 would provide a reasonable and often conservative estimate of the design factor for most estimates from the survey.

11.2.3 *Summary of confidence intervals around key survey results*

Table 11.1 shows the following for the key crime groups:

- The estimates for incidence rates per 10,000 adults / households;
- The 95% confidence intervals;
- The approximated simple random sample (SRS) standard error;
- The complex, or SCJS sample, standard error;
- The design factor.

Table 11.1: Rates, confidence intervals and design factors for key crime groups (per 10,000) SCJS 2016-17

Crime rates per 10,000	Best Estimate	Confidence Interval	Design Factor
ALL SCJS CRIME	**2,010**	**440**	**1.14**
PROPERTY CRIME	**1,620**	**350**	**1.11**
Vandalism	**680**	**240**	**1.27**
Motor vehicle vandalism	430	160	1.16
Property vandalism	260	140	1.27
Motor vehicle theft related crime	**100**	**60**	**1.10**
Theft of motor vehicle	10	20	1.06
Theft from motor vehicle	90	50	1.11
Attempted theft of / from motor vehicle	0	10	1.19
Housebreaking	**100**	**80**	**1.19**
Other household theft (including cycles)	**520**	**180**	**1.19**
Other household theft	420	160	1.19
Bicycle theft	100	80	1.17
All personal theft (excluding robbery)	**210**	**100**	**1.14**
Theft from the person	70	50	1.04
Other personal theft	140	90	1.18
VIOLENT CRIME	**390**	**210**	**1.23**
Assault with attempted assault	**360**	**200**	**1.17**
Serious assault	20	30	1.11
Robbery	**20**	**60**	**3.52**
COMPARABLE CRIME	**1,290**	**370**	**1.25**
Acquisitive crime	210	110	1.15
Violent crimes	390	210	1.23
Vandalism incident	680	240	1.27

12 COMPARING THE SCJS WITH OTHER DATA SOURCES

12.1 Comparison with police recorded crime

The SCJS provides estimates of the level of crime in Scotland. It includes crimes that are not reported to or recorded by the police (as well as those that are), but is limited to crimes against adults resident in private households, and also does not cover all crime types (section 9.1.2).

Police recorded crime is a measure of those crimes reported to the police and recorded by them as a crime or offence.

In order to compare the estimates of crime from the SCJS and police recorded crime statistics, a comparable subset of crime was created for crimes covered by both measures and recorded in a consistent manner. Almost two-thirds (64%) of 'all SCJS crime' as measured by the SCJS 2017/18 falls into categories that can be compared with crimes recorded by the police.

It is possible to make comparisons between the SCJS and police recorded crime statistics for three crime groups:

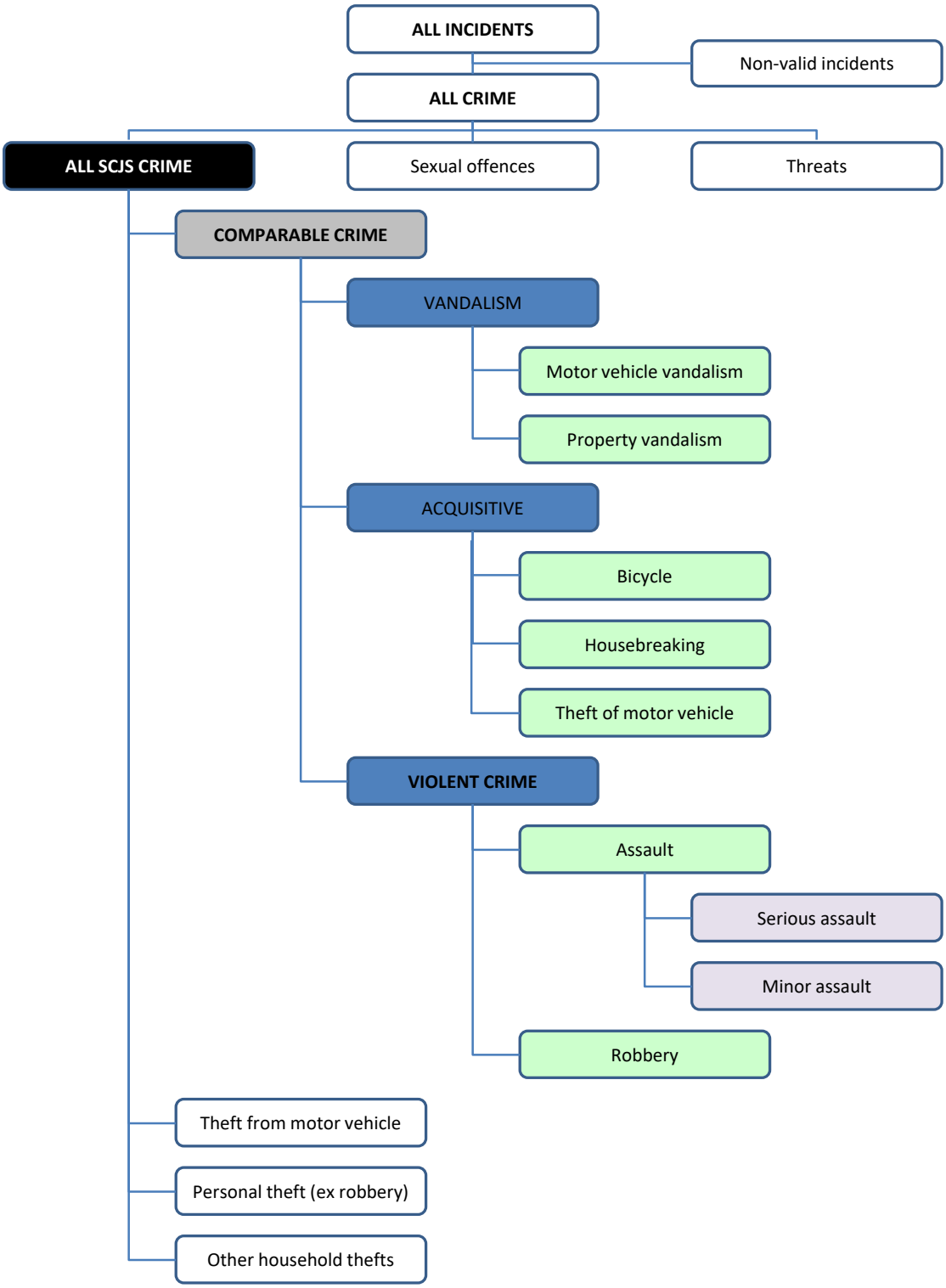
- Vandalism (including motor vehicle vandalism and property vandalism);
- Acquisitive crime (including bicycle theft, housebreaking and theft of motor vehicles);
- Violent crime (including assault and robbery).

Section 9.3 provides further information about these crime groups.

To enable comparison, estimates of the total number of comparable crimes in Scotland were obtained by grossing up the number of crimes identified in the SCJS using National Records of Scotland (NRS) estimates.

Police recorded crime statistics used in this report relate to crimes committed in the financial year between April 2017 and March 2018.

Figure 12.1: Comparable crime groups



12.2 Comparison with the Crime Survey for England and Wales

The coding of crimes differs between the SCJS and the Crime Survey for England and Wales (CSEW – formerly the British Crime Survey BCS) which reflects the different criminal justice systems in which they operate. These differences should be borne in mind when comparisons are made between

SCJS and CSEW estimates in this report. One general difference is that the SCJS includes crimes where the offender is mentally ill or a police officer (these crimes are excluded in the CSEW estimates).

The SCJS also differs from the CSEW in that it prioritises assault over other crimes when coding offences. For example, if an incident includes both vandalism and assault, the assault component will be assumed to be more serious unless it is clear that the damage to property was the most serious aspect of the incident. This is not the case with the CSEW where vandalism has priority over assault.

In addition, the intent of the offender to cause harm is not taken into consideration in the SCJS and the offence code given relies only on the injuries that the victim received. The intention of the offender is taken into consideration when assigning offence codes for assaults in the CSEW.

The definition of burglary in England and Wales as measured by the CSEW and the definition of housebreaking in Scotland as measured by the SCJS differ in two ways:

1. The mode of entry;

In Scotland, housebreaking occurs when the offender has physically broken into the home by forced entry or come in the home through a non-standard entry point such as a window. Even if the offender pushed past someone to gain entry to the home, this would not be coded as housebreaking in Scotland.[66]

Burglary measured by the CSEW in England and Wales does not necessarily involve forced entry; a burglar can walk in through an open door, or gain access by deception.

2. The intention of the offender;

Burglary from a dwelling in England and Wales as measured by the CSEW includes any unauthorised entry into the respondent's dwelling, no matter what incident occurs once the offender is inside. If the offender does not have the right to enter a home, but does so, this will be classified as burglary.

In Scotland, the SCJS records the incident as housebreaking only if there is evidence of either theft from inside the home or an intention to steal in the case of attempted break-ins.

Another difference between the two surveys is that in the SCJS the total number of incidents that occurred in a series in the reference period is capped at five incidents. In previous years this was consistent with the CSEW, however due

[66] If a theft occurred in this instance, it would be included in the other household theft crime group.

to recent changes in the CSEW methodology this is no longer the case. More information on this can be found in Section 9.2.6.

ANNEX 1 - POPULATION TARGETS USED FOR WEIGHTING

Estimates and projections of household and individual populations published by the National Records of Scotland (NRS) were used for weighting calculations. Source notes are provided below the tables. Estimates are rounded to the nearest 50.

Table A2.1: Population targets used for weighting

Police Division	Housheolds in urban areas (b)	Households in rural areas (b)	Estimated households population (a)	Estimated adult population (c)
Aberdeen City	102,376	5,259	107,635	194,305
Aberdeenshire and Moray	41,653	111,557	153,210	292,330
Argyll and West Dunbartonshire	50,118	34,083	84,201	147,467
Ayrshire	103,883	66,850	170,733	308,629
Dumfries and Galloway	20,691	48,812	69,503	125,713
Edinburgh	225,558	7,812	233,370	435,158
Fife	106,333	60,628	166,961	307,077
Forth Valley	95,826	38,822	134,648	252,806
Greater Glasgow	364,798	10,907	375,705	686,683
Highlands and Islands	34,051	107,799	141,850	255,510
Lanarkshire	235,235	61,102	296,337	539,968
Renfrewshire and Inverclyde	106,686	15,903	122,589	212,850
Tayside	125,788	65,506	191,294	348,351
The Lothians and Scottish Borders	116,241	99,292	215,533	400,511
Total Scotland	**1,729,237**	**734,332**	**2,463,569**	**4,507,358**

Sources: (a) & (b) Estimates of Households and Dwellings in Scotland, 2017: https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/households/household-estimates/2017; and Small area household estimates data, numbers and percentages of dwellings by 2001 Data Zone, 2014: https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/households/household-estimates/small-area-statistics-on-households-and-dwellings (c) Mid-2017 population estimates Scotland: https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/population/population-estimates/mid-year-population-estimates/mid-2017

ANNEX 2 - SAMPLE STRATA

Analysis of SCJS was required by Police Division (PD). However, in order to align the SCJS with the Scottish Household Survey and the Scottish Health Survey, local authorities were used as the sample strata. The construction of PDs from the local authority strata is shown below. Note that Aberdeen City and Aberdeenshire police divisions merged together in January 2016.

Weighting Strata	Police Division	Local Authority
1	Aberdeen City	Aberdeen City
2	Aberdeenshire and Moray	Aberdeenshire
		Moray
3	Argyll and West Dunbartonshire	Argyll and Bute
		West
4	Ayrshire	East Ayrshire
		North Ayrshire
		South Ayrshire
5	Dumfries and Galloway	Dumfries and
6	Edinburgh	Edinburgh City
7	Fife	Fife
8	Forth Valley	Clackmannanshire
		Falkirk
		Stirling
9	Greater Glasgow	Glasgow
		East
		East Renfrewshire
10	Highlands and Islands	Eilean Siar
		Highland
		Orkney
		Shetland
11	Lanarkshire	North Lanarkshire
		South Lanarkshire
12	Renfrewshire and Inverclyde	Inverclyde
		Renfrewshire
13	Tayside	Angus
		Dundee City
		Perth and Kinross
14	The Lothians and Scottish Borders	East Lothian
		Midlothian
		Scottish Borders
		West Lothian

ANNEX 3 - CAPI OUTCOME CODES AND REISSUE CRITERIA

For each address issued, an outcome had to be coded from the list below. All, with the exception of codes 31 to 38, 59 and 18 were eligible for reissue.

Response Code	Description	Reissue (Y/N)
31	Not yet built / under construction	**N**
32	Derelict / demolished	**N**
33	Vacant / empty housing unit	**N**
34	Non-residential address	**N**
35	Communal establishment / institution	**N**
36	Not main residence	**N**
37	Other ineligible	**N**
38	Inaccessible	**N**
39	Unable to locate address	Y
40	No contact with anyone	Y
41	No contact with selected respondent	Y
42	No contact with responsible adult (U18 interview)	Y
43	Appointment to interview	Y
44	Appointment to call back	Y
52	Refused Household information - potential to convert	Y
54	Refused all information - no market research / interview too long	Y
55	Refused all information - won't give personal info. / don't trust gov.	Y
56	Refused all information - door slammed / swearing	Y
57	Refused all information - death in family	Y
58	Refused all information - other	Y
59	Office refusal	**N**
60	Selected person refused - potential to convert	Y
61	Selected person refused - no market research / Interview too long	Y
62	Selected person refused - won't give personal info. / don't trust gov.	Y
63	Selected person refused - too busy / no time	Y
64	Selected person refused - death in family	Y
65	Selected person refused - not interested in subject matter	Y
66	Selected person refused - other family / partner objection	Y
67	Selected person refused - other	Y
68	Proxy refusal - potential to convert	Y
69	Proxy refusal - too busy, no time	Y
70	Proxy refusal - death in family	Y
71	Proxy refusal - other family / partner objection	Y
72	Proxy refusal - other	Y
73	Parental Permission refused - possibility to convert	Y
74	Parental Permission refused - interviewer gender	Y
75	Parental Permission refused - other	Y
76	Broken Appointment / no further contact	Y
77	Selected person ill at home during survey period	Y
78	Away / in hospital throughout field period	Y
79	Unable to take part due to physical or learning disability or difficulty	Y
80	Language difficulties	Y
81	Other unproductive	Y
82	Partial interview	Y
18	Successful interview	**N**

ANNEX 4 - ADVANCE LETTER AND LEAFLET

All selected addresses were sent a letter from the Scottish Government in advance of an interviewer calling at the address. Included with the advance letter was a leaflet from the Scottish Government which provided people with further details about the survey.

Interviewers were also issued with an amended copy of the advance letter to hand to a responsible adult in the household in cases where the respondent didn't receive or see the letter.

The advance letter and leaflet (respectively) are shown below. Section 6.5.1 provides further details of procedures relating to the advance letter and leaflet.

The Scottish Government
Riaghaltas na h-Alba

The Resident
<add_line-1>
<add_line-2>
<add_line_3>
<add_line-4>
<IMPcode>

Serial number: <IMAddSerial>
<IMMonthText>
<SampleYear>

Your interviewer will be:_____

Help tackle crime in Scotland

Dear Sir/Madam,

We are writing to ask for your help with the **Scottish Crime and Justice Survey**.

WHAT IS THE SCOTTISH CRIME AND JUSTICE SURVEY?
This is an important study that helps the Scottish Government, the police and other agencies to understand and tackle crime in your local area and across the country. In the previous survey almost **70%** of the households we contacted took part in the study. We hope we can count on your help.

WHY IS IT IMPORTANT?
Every year we invite households across your area and Scotland to tell us about their views and experiences in relation to crime, policing, and the justice system in Scotland. This is a unique chance for you to have your say and to share your thoughts. By taking part you will be playing an important role in supporting our work to reduce crime and improve the service provided by police in your area.

WHAT NEXT?
An interviewer from **<IMFullCompanyName>** will call at your house in the next week or so. So you know who they are, they all carry a photo ID. They will randomly select an adult in your household (aged 16 or over) to take part in the study. We would appreciate it if you could show this letter to others in your household.

COMPLETE CONFIDENTIALITY
All your answers will be completely confidential and anonymous (in accordance with the Data Protection Act 1998) and will be used for statistical and research purposes only.

ANY QUESTIONS?
We have provided more information about the survey in the enclosed leaflet and the FAQs overleaf or you can visit the website at **http://www.gov.scot/scjs**. If you have any questions you can email **<IMCompanyEmail>** or call us free on **<IMFreephoneNumber>**. You can also contact the survey team at Scottish Government on **0131 244 3012**.

Yours faithfully,

Neil Grant,
Project Director,
Scottish Government

The Scottish Government
Riaghaltas na h-Alba

FAQs

HOW DID YOU CHOOSE MY ADDRESS?
Every year we randomly select addresses from across the country and interview 6,000 adults to represent all types of people in Scotland. Your address was chosen at random from the Postcode Address File, a list of every address in the UK, held by the Post Office and available to the public.

WHAT IS THE INTERVIEW ABOUT?
The interview will ask about your views on crime and your experiences of crime in the past year. There are also some questions about your opinions on organisations like the police, courts and prisons. You will be asked to complete some of the questions on your own. In total, the interview will take around 40 minutes to complete.

WHAT WILL HAPPEN TO THE INFORMATION I GIVE?
The information is used by the Scottish Government and police forces to help make important decisions which affect us all. This information will help us to understand who is most at risk of crime, how crime affects victims and to check if current policies are working.

We will treat the information you give in the strictest confidence under the Data Protection Act 1998. The results collected are used for research purposes only and no one looking at the findings will be able to identify you in any way. Personal details, like your name and address, will only be known to the survey team processing the survey results at ScotCen and Ipsos MORI and the Scottish Government. We won't pass on your details unless you give your consent, for example to take part in further research.

WHO IS CARRYING OUT THE STUDY?
The study is carried out jointly by ScotCen Social Research and Ipsos MORI, on behalf of the Scottish Government. ScotCen and Ipsos MORI are impartial research institutes, independent of all government departments and political parties. For more information visit **www.scotcen.org.uk** or **www.ipsos-mori.com**.

ScotCen
Social Research that works for society

Ipsos

USEFUL CONTACTS

If you have been the victim of crime, and want some support or information, you can get in touch with **Victim Support Scotland.**

http://www.victimsupportsco.org.uk
0345 603 9213

More information for interviewees, including details of other support organisations is available on the Scottish Crime and Justice Survey website:
http://www.gov.scot/Topics/Statistics/Browse/Crime-Justice/crime-and-justice-survey/interviewee-information

FOR MORE INFORMATION

For more information including results of previous studies and information on the topics included you can visit **http://www.gov.scot/scjs**, or see the twitter feed **@SGJusticeAnalys**

The study is being carried out jointly by ScotCen Social Research and Ipsos MORI. Contact details for the research teams are below:

ScotCen Social Research: you can email us at **scottishcrime@scotcen.org.uk** or call on Freephone **0800 652 4574.**

Ipsos MORI: you can email us at **crimesurvey@ipsos-mori.com** or call on Freephone on **0808 238 5376.**

The Scottish Government
Riaghaltas na h-Alba

Scottish Crime & Justice Survey

WHAT IS THE SCOTTISH CRIME AND JUSTICE SURVEY?

The Scottish Crime and Justice Survey is an annual survey of around 6,000 households. The study is important because it provides a picture of crime in Scotland, as well as public perceptions of police and the justice system.

Taking part involves a short research interview in your home, at a time convenient to you. We would like to ask you some questions about your experiences and views of policing, crime, and the justice system in Scotland.

TAKING PART IS IMPORTANT

HELP TACKLE CRIME. By taking part in this study you will help the Scottish Government and the police gain a better understanding of crime in Scotland. This will help to tackle crime more effectively.

WE CANNOT REPLACE YOU. In order to get a true picture of all types of people living in Scotland, we have chosen your address at random. This means we cannot ask someone else to replace you as this would bias the results and so your participation is very important to us.

VICTIM OR NOT. Even if you have not been a victim of crime or experienced crime, we need to speak to you to understand if current crime policies are working or not.

TOO BUSY? We are totally flexible and can arrange the interview at a time that suits you. By taking part you'll be supporting the Scottish Government and the work of the police in your area to improve the policing service they provide to the people of Scotland.

INFORMATION FOR PARENTS OF YOUNG ADULTS

If you have a son/daughter/other young adult aged 16+ within your care and living in your home, they may be selected to take part in the survey. Please ensure that they're aware of this and understand that the survey contains some sensitive topics. The interviewer will ask them for their consent to take part in the survey.

A SNAPSHOT OF SCOTLAND

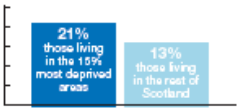
The SCJS measured around **688,000** crimes in 2014/15.

Just under **two-fifths** of crimes were reported to the police in 2014/15, around the same level seen in recent years

One in seven adults were the victim of crime

16-24 year olds were more likely to be a victim of crime (**20%**)

The risk of property crime was **higher** than violent crime



The risk of crime was **higher** for those living in the **15% most deprived** areas

70% said they were **very or fairly confident** in their local police force's ability to investigate incidents after they occur

ANNEX 5 - PLAUSIBILITY AND CONSISTENCY CHECKS

A number of plausibility and consistency checks were included in the CAPI script. These are detailed below:

Main questionnaire

Section 1: General views on crime and social issues

- QSADDNE: If lived in area for less than 1 year (QSYAREA, code 1) but was living at address at start of reference period (QSADD, code 1) why this was the case.

Section 2: Victim form screener

- NSEPCHK_1 to _20: The number of incidents in a series must be two or greater.
- SEPDCHK_1 to _20: Date of earliest separate incident must be within the reference period.
- CNUMSER_1 to _20: The number of incidents in a series cannot be greater than the total number of incidents.
- LATCHK_1 to _20: The most recent incident in a series must be within the reference period.
- INCXCHK_1 to _20: The total number of incidents in a series and as separate incidents cannot be greater than the total number of incidents.

Victim form (Section 3): incident dates: series incidents

- DATESER: Dates of all incidents in a series cannot be before the reference period.
- CHECK1: The sum of incidents occurring across all quarters in a series in the reference period cannot be less than the total number of incidents.
- CHECK2: The sum of incidents occurring across all quarters in a series in the reference period cannot be greater than the total number of incidents.
- MTHQCHK: The most recent month in which an incident in a series occurred should not be after the most recent quarter in which part of a series occurred.
- MTHRECCK: The most recent month in which an incident in a series occurred in cannot be before the reference period.
- QTRRECIN: The most recent quarter in which an incident in a series occurred cannot be before the reference period.
- QQCK: The most recent quarter in which an incident in a series occurred should not be after the most recent quarter in which part of a series happened.
- YRINC: The most recent incident in a series cannot be before the reference period.

Victim form (Section 3): incident dates: single incidents

- MTHINC2: The month the incident occurred in cannot be before the reference period.

- QTRINCID: The quarter the incident occurred in cannot be before the reference period.
- YRINCIB: The incident cannot be before the reference period.

Victim form (Section 3): incident details

- DESCRINC: The number of characters entered to describe the incident should be greater than 99 characters.
- QCHK1: Reason why victim form is for theft but nothing has been recorded as stolen (QSTO, code 2).
- BOTH1: Confirmation that car / van and vehicle parts stolen.
- BOTH2: Confirmation that motorcycle and vehicle parts stolen.
- QBAG1: Briefcase / handbag / shopping bag stolen but cash / cheque book / credit card not stolen.
- QBAG2: Briefcase / handbag / shopping bag stolen but ID or personal details not stolen.
- QPURSE1: Purse / wallet stolen but cash / cheque book / credit card not stolen.
- QPURSE2: Purse / wallet stolen but ID or personal details not stolen.
- QBACCUSE: Cheque book / credit card stolen but no money taken from account or charges added to account.
- QBACCUSE2: Noticed unusual activity in bank account but no money taken from account or charges added to account.
- QCHK2: Reason why victim form is for attempted theft from person but no attempt made to steal anything (QTRY, code 2).
- QCHK3: Reason why victim form is for housebreaking but no attempt made to steal anything (QTRY, code 2).
- QABAG1: Attempted theft of briefcase / handbag / shopping bag but no attempt to steal cash / cheque book / credit card.
- QABAG2: Attempted theft of briefcase / handbag / shopping bag stolen but no attempt to steal ID or personal details.
- QAPURSE1: Attempted theft of purse / wallet stolen but no attempt to steal cash / cheque book / credit card.
- QAPURSE2: Attempted theft of purse / wallet stolen but no attempt to steal ID or personal details.
- QCHK4: Reason why victim form is for vehicle damage / vandalism / damage to property but nothing damaged (QDAM, code 2).
- QCHKSEE: Reason why victim form is for assault / assault within household / threat of force or violence but respondent or anyone else did not have contact with offender (QSEE, code 2).
- QCHK5: Reason why victim form is for assault / assault within household but offender did not use force or violence (QFOR, code 2).
- QCHK6: Reason why victim form is for threats but offender did make threat (QTHR, code 2).

ANNEX 6 - SCJS OFFENCE CODES AND CRIME GROUPS

33 in-scope offence codes were used in the calculation of 'all SCJS crime'. The table below shows these codes and how they relate to the key crime groups used in the SCJS 2016/17 Main Findings report and contained in the SPSS data files. It also shows additional crime groups included in the SPSS data files, though not referenced in the SCJS reports (in the lower half of the table). All variable names in the SPSS data files are prefaced by either INC for incidence or PREV for prevalence.

Variable Name (inc or prev)	Offence Code Description	Serious assault	Minor assault with injury	Minor assault with no/negligible injury	Serious assault and fire raising	Serious assault and housebreaking	Attempted assault	Robbery	Attempted robbery	Snatch theft from the person	Other theft from the person	Attempted theft from the person	Attempted housebreaking to non-connected dom. garage/outh'se	Housebreaking in a dwelling (nothing taken)	Housebreaking in a dwelling (Something taken)	Attempted housebreaking in a dwelling	Theft in a dwelling	Theft from a meter	H'breaking non-connected dom. garage/outh'se – nothing taken	H'breaking non-connected dom. garage/outh'se – something taken	Theft of car/van	Theft from car/van	Theft of motorbike, motor scooter or moped	Theft from motorbike, motor scooter or moped	Theft of pedal cycle	Theft from outside dwelling (excluding theft of milk bottles)	Other theft	Attempted theft of/from car/van	Attempted theft of/from m'cycle, motor scooter or moped	Other attempted theft	Fire raising	Vandalism to a motor vehicle	Vandalism to the home	Other vandalism
	Offence Code	11	12	13	14	15	21	41	42	43	44	45	50	51	52	53	55	56	57	58	60	61	62	63	64	65	67	71	72	73	80	82	84	86
	SPSS Code	2	3	65	4	5	7	17	18	19	20	21	24	25	26	27	29	30	31	32	34	35	36	37	38	39	41	44	45	46	48	49	50	51
	Variable Label / WEIGHTING	Ind	Ind	Ind	Ind	Ind	Ind	Ind	Ind	Ind	Ind	Ind	HH	HH	HH	HH	HH	HH	HH	HH	HH	HH	HH	HH	HH	HH	Ind	HH	HH	Ind	HH	HH	HH	HH
surveycrime	**All SCJS crime**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
property	**Property crime**									**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
vand	Vandalism crime																														1	1	1	1
motovvand	*Motor vehicle vandalism*																															*1*		
propvand	*Property vandalism*																														*1*		*1*	*1*
allmvtheft	All mv theft related crimes																				1	1	1	1				1	1					
theftfrommv	*Theft from motor vehicle*																					*1*		*1*										
theftofmv	*Theft of motor vehicle*																				*1*		*1*											
attttheftmv	*Attempted theft of / from mv*																											*1*	*1*					
otherhousetheftcycle	Other h'hold theft incidents (in. cycle)												1				1	1	1	1					1	1								
otherhousetheft	*Other household theft*												*1*				*1*	*1*	*1*	*1*						*1*								
bicycletheft	*Bicycle theft*																								*1*									
housebreak	Housebreaking													1	1	1																		
perstheft	Personal theft incidents (excl. robbery)									1	1	1															1			1				
theftperson	*Theft from the person*									*1*	*1*	*1*																						
othertheft	*Other personal theft*																										*1*			*1*				
violent	**Violent crime**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**																									
assault	Number of assault incidents	1	1	1	1	1	1																											
serassault	*Serious assault*	*1*			*1*	*1*																												
rob	Robbery							1	1																									
house	Household crime												1	1	1	1	1	1	1	1	1	1	1	1	1	1		1	1		1	1	1	1
person	Person crime	1	1	1	1	1	1	1	1	1	1	1															1			1				
comparcrime	Comparable crime	1	1	1	1	1	1	1	1					1	1	1					1		1		1						1	1	1	1
acquis	Acquisitive crime													1	1	1					1		1		1									
violent	Violent crime	1	1	1	1	1	1	1	1																									

Out-of-scope codes can be grouped into two categories:

- **Sexual offence or threat codes**: 12 offence codes related to sexual offences or threats (not included in the 'all SCJS crime' statistics).
- **Non-valid codes**: 21 offence codes for classifying incidents recorded in the victim form which were non-valid incidents (outside of Scotland or the reference period, duplicate incidents), where not enough information was collected to make an accurate classification, where the respondent or household was not the victim or the victim form was skipped. As with the sexual offence or threat codes, these 21 codes were not included in the 'all SCJS crime' statistics produced by the survey.

Code	Description	Type
19	Other assault outside of the survey's coverage	**NON-VALID**
39	Sexual offence outside the survey's coverage	
48	Possibly theft but could have been loss / possibly attempted theft, but could have been innocent	
49	Other robbery or theft from the person outside the survey's coverage	
54	Possible attempted housebreaking (insufficient evidence to be sure)	
59	Other housebreaking, outside of the survey's coverage	
66	Theft of milk bottles from outside dwelling	
68	Possible theft, possible lost property	
69	Other theft outside of the survey's coverage	
79	Attempted theft falling outside survey's coverage	
87	Possibly vandalism / possibly accidental damage / nuisance with no damage	
88	Attempted vandalism (no damage actually achieved)	
89	Other vandalism outside of the survey's coverage	
99	Other threats / intimidation outside of the survey's coverage	
95	Incident outside of reference period	**NON-VALID**
96	No crime committed	
97	Insufficient information to code	
98	Incident occurred outside Scotland	
3	SAME DUPLICATE	**DUP / SKIPPED**
4	SERIES DUPLICATE	
90	VICTIM FORM SKIPPED	
31	Rape	**SEXUAL OFFENCES** [1]
32	Serious assault with sexual motive	
33	Assault with sexual motive	
34	Attempted rape	
35	Indecent assault	
36	Indecent exposure	
37	Rape and housebreaking	
38	Serious assault with sexual motive and housebreaking	
91	Threat to kill / assault made against, but not necessarily to respondent	**THREATS** [2]
92	Sexual threat made against, but not necessarily to respondent	
93	Other threat or intimidation made against, but not necessarily to respondent	
94	Threats against others, made to the respondent	

[1] The incidence / prevalence variables SEXOFF in the Respondent File SPSS data file denote all sexual offences.

[2] The incidence / prevalence variables THREAT in the Respondent File SPSS data file denote all threats.

ANNEX 7 - HOUSEHOLD WEIGHTING CALIBRATION TARGETS

The calibration targets selected for use in the weighting were:

- Calibration target 1: Household type within Police Division (PD)
- Calibration target 2: Age of head of household within PD
- Calibration target 3: Urban / rural within Local Authority (LA)

Calibration target **1: Household type within Police Division**

Table A9.1: Calibration target 1 used for weighting

PD	1 Adult	1 Adult & 1+ Child	2 + Adult	2 + Adult & 1 + Child	Total households
Aberdeen City	41,978	4,305	43,054	18,298	107,635
Aberdeenshire and Moray	43,058	6,551	66,990	36,611	153,210
Argyll and West Dunbartonshire	32,267	5,882	32,224	13,828	84,201
Ayrshire	59,302	12,061	68,718	30,652	170,733
Dumfries and Galloway	23,631	3,475	29,886	12,511	69,503
Edinburgh City	93,348	11,669	91,014	37,339	233,370
Fife	55,097	11,687	68,454	31,723	166,961
Forth Valley	44,008	8,659	55,208	26,773	134,648
Greater Glasgow	155,030	28,121	131,706	60,848	375,705
Highlands and Islands	47,959	8,066	59,048	26,777	141,850
Lanarkshire	102,207	22,255	114,059	57,816	296,337
Renfrewshire and Inverclyde	49,530	9,049	43,340	20,670	122,589
Tayside	68,957	12,237	76,427	33,673	191,294
The Lothians and Scottish Borders	67,745	14,384	87,987	45,417	215,533
Scotland	**884,117**	**158,401**	**968,115**	**452,936**	**2,463,569**

Source: Estimates of Households and Dwellings in Scotland, 2017: https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/households/household-estimates/2017

Calibration target **2: Age of head of household within Police Division**

Table A9.2: Calibration target 2 used for weighting

	Head of household age				
PD	16-29	30-44	45-59	60 plus	Total households
Aberdeen City	21,744	29,355	27,181	29,355	107,635
Aberdeenshire and Moray	12,591	36,760	46,732	57,127	153,210
Argyll and West Dunbartonshire	7,574	17,220	25,992	33,415	84,201
Ayrshire	15,338	36,929	50,509	67,957	170,733
Dumfries and Galloway	5,505	13,075	19,956	30,967	69,503
Edinburgh City	42,006	67,677	58,343	65,344	233,370
Fife	16,865	38,789	48,908	62,399	166,961
Forth Valley	13,878	32,997	40,280	47,493	134,648
Greater Glasgow	54,630	99,735	107,000	114,340	375,705
Highlands and Islands	11,646	30,742	42,250	57,212	141,850
Lanarkshire	28,205	75,633	90,366	102,133	296,337
Renfrewshire and Inverclyde	12,606	28,384	37,999	43,600	122,589
Tayside	23,600	41,624	53,404	72,666	191,294
The Lothians and Scottish Borders	19,213	51,529	66,028	78,763	215,533
Scotland	**285,401**	**600,449**	**714,948**	**862,771**	**2,463,569**

Source: Estimates of Households and Dwellings in Scotland, 2017: https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/households/household-estimates/2017

Calibration target 3: Urban / rural within LA

Table A9.3: Calibration target 3 used for weighting

PD	Local authority	Urban	Rural	Total
Aberdeen City	Aberdeen City	102,376	5,259	107,635
Aberdeenshire and Moray	Aberdeenshire	32,273	78,668	110,941
Tayside	Angus	32,241	21,386	53,627
Argyll and West Dunbartonshire	Argyll and Bute	7,372	34,083	41,455
Forth Valley	Clackmannanshire	9,686	13,877	23,563
Dumfries and Galloway	Dumfries and Gallow	20,691	48,812	69,503
Tayside	Dundee City	70,049	-	70,049
Ayrshire	East Ayrshire	22,593	32,280	54,873
Greater Glasgow	East Dunbartonshire	40,334	5,356	45,690
The Lothians and Scottish Borders	East Lothian	15,225	30,076	45,301
Greater Glasgow	East Renfrewshire	33,348	5,551	38,899
Edinburgh	Edinburgh City	225,558	7,812	233,370
Highlands and Islands	Eilean Siar	-	12,805	12,805
Forth Valley	Falkirk	64,555	7,245	71,800
Fife	Fife	106,333	60,628	166,961
Greater Glasgow (GCC)	Glasgow	291,116	-	291,116
Highlands and Islands	Highland	34,051	74,268	108,319
Renfrewshire and Inverclyde	Inverclyde	32,986	4,665	37,651
The Lothians and Scottish Borders	Midlothian	25,753	12,804	38,557
Aberdeenshire and Moray	Moray	9,380	32,889	42,269
Ayrshire	North Ayrshire	44,827	18,929	63,756
Lanarkshire	North Lanarkshire	120,893	30,262	151,155
Highlands and Islands	Orkney	-	10,385	10,385
Tayside	Perth and Kinross	23,498	44,120	67,618
Renfrewshire and Inverclyde	Renfrewshire	73,700	11,238	84,938
The Lothians and Scottish Borders	Scottish Borders	14,056	40,250	54,306
Highlands and Islands	Shetland	-	10,341	10,341
Ayrshire	South Ayrshire	36,463	15,641	52,104
Lanarkshire	South Lanarkshire	114,342	30,840	145,182
Forth Valley	Stirling	21,585	17,700	39,285
Argyll and West Dunbartonshire	West Dunbartonshire	42,746	-	42,746
The Lothians and Scottish Borders	West Lothian	61,207	16,162	77,369
Scotland		**1,729,237**	**734,332**	**2,463,569**

Source: see Annex 1 sources (a) and (b).

ANNEX 8 - INDIVIDUAL WEIGHTING RIMS TARGETS

Table A10.1: Individual calibration targets

Strata	PD	16 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 plus	Total adults
	Female														
1	Aberdeen City	15,229	11,538	9,655	7,925	6,647	7,074	7,389	6,966	5,930	5,397	4,474	3,703	6,130	98,057
2	Aberdeenshire and Moray	15,625	9,200	10,880	11,332	11,699	13,850	14,315	12,626	11,667	10,845	9,306	6,727	10,026	148,098
3	Argyll and West Dunbartonshire	8,207	4,779	4,846	4,886	5,103	6,599	7,448	7,013	6,291	6,109	5,198	3,980	5,926	76,385
4	Ayrshire	18,125	10,329	10,296	10,445	11,077	14,276	15,542	14,405	13,211	12,679	11,442	8,455	12,312	162,594
5	Dumfries and Galloway	6,590	3,803	3,761	3,819	3,969	5,446	6,254	6,008	5,636	5,492	5,073	3,734	5,708	65,293
6	Edinburgh	34,503	28,660	23,203	19,255	16,006	16,121	16,169	15,023	12,647	11,784	10,028	7,809	13,908	225,116
7	Fife	20,624	11,282	10,907	11,279	11,156	13,842	14,425	13,516	11,906	11,822	10,405	7,397	11,233	159,794
8	Forth Valley	16,838	9,602	9,084	9,548	9,980	12,058	12,226	10,941	9,421	9,044	7,916	5,970	8,479	131,107
9	Greater Glasgow	50,807	38,961	32,248	28,199	24,444	28,799	30,157	27,989	22,734	19,158	16,526	13,712	22,788	356,522
10	Highlands and Islands	13,256	7,932	8,724	8,956	9,273	11,543	12,463	11,685	10,830	10,428	8,980	6,793	10,064	130,927
11	Lanarkshire	33,402	19,889	21,116	21,842	21,025	25,935	26,866	24,688	21,469	19,103	16,260	12,592	17,890	282,077
12	Renfrewshire and Inverclyde	12,981	8,187	7,855	7,819	7,728	10,111	10,813	10,168	8,327	7,767	6,739	5,182	8,118	111,795
13	Tayside	23,125	13,967	13,052	12,102	11,710	14,331	15,696	15,072	13,340	12,954	11,584	8,933	14,673	180,539
14	The Lothians and Scottish Borders	23,810	13,743	14,963	15,420	15,743	19,625	19,908	18,179	15,664	15,111	13,246	9,664	13,570	208,646
	Male														
1	Aberdeen City	13,592	12,948	10,720	8,763	7,300	7,106	7,213	6,872	6,146	5,261	3,950	2,785	3,592	96,248
2	Aberdeenshire and Moray	18,322	9,780	10,279	11,081	11,687	13,393	13,783	12,682	11,269	10,725	8,608	5,831	6,792	144,232
3	Argyll and West Dunbartonshire	9,628	5,237	4,765	4,591	4,721	5,816	6,816	6,593	5,962	5,606	4,720	3,178	3,449	71,082
4	Ayrshire	19,143	10,015	9,127	9,284	9,801	12,509	13,808	13,466	12,083	11,798	10,263	6,896	7,842	146,035
5	Dumfries and Galloway	7,101	3,700	3,558	3,375	3,565	4,922	5,843	5,681	5,273	5,466	4,632	3,358	3,946	60,420
6	Edinburgh	30,997	26,611	23,145	19,528	16,700	16,296	16,349	14,529	12,348	10,883	8,589	5,834	8,233	210,042
7	Fife	20,652	10,799	10,006	10,549	10,808	12,963	13,561	12,940	11,270	10,787	9,489	6,255	7,204	147,283
8	Forth Valley	17,509	9,029	8,379	8,910	9,303	11,406	11,839	10,565	8,851	8,530	7,120	4,731	5,527	121,699
9	Greater Glasgow	50,955	38,945	33,165	28,470	24,072	26,413	27,379	25,398	21,185	17,766	14,126	9,867	12,420	330,161
10	Highlands and Islands	15,003	8,060	8,482	8,557	8,640	10,548	12,006	11,557	10,645	10,300	8,443	5,755	6,587	124,583
11	Lanarkshire	35,341	19,435	18,970	20,310	20,221	24,113	25,013	23,115	19,707	17,293	14,185	9,740	10,448	257,891
12	Renfrewshire and Inverclyde	13,623	8,199	7,830	7,277	6,859	8,648	9,923	9,571	7,700	6,840	5,905	4,017	4,663	101,055
13	Tayside	23,761	14,496	12,674	11,621	10,801	13,435	15,028	14,197	12,681	12,178	10,351	7,326	9,263	167,812
14	The Lothians and Scottish Borders	24,612	13,122	13,390	13,910	14,995	17,892	18,817	17,441	14,818	13,940	11,972	8,038	8,918	191,865

Source: Mid-2017 Population Estimates Scotland: https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/population/population-estimates/mid-year-population-estimates/mid-2017

ANNEX 9 - EFFECTIVE SAMPLE AND WEIGHTS BY DIVISION

The effective sample sizes resulting from disproportionate stratification and weighting ***by Police Division*** for both household and individuals' based data are presented in the tables below.

Household weights

Table A11.1: Effective sample size by PD - Household

Police Division	Sample size	Effective sample	Effective sample %	Design Effect	Design Factor
Aberdeen City	340	339	99.6%	1.01	1.00
Aberdeenshire and Moray	399	390	97.7%	1.05	1.02
Argyll and West Dunbartonshire	299	277	92.6%	1.17	1.08
Ayrshire	353	342	96.9%	1.06	1.03
Dumfries and Galloway	330	322	97.6%	1.05	1.02
Edinburgh	479	440	91.8%	1.19	1.09
Fife	274	251	91.7%	1.19	1.09
Forth Valley	295	286	97.0%	1.06	1.03
Greater Glasgow	730	705	96.5%	1.07	1.04
Highlands and Islands	363	340	93.7%	1.14	1.07
Lanarkshire	545	512	94.0%	1.13	1.06
Renfrewshire and Inverclyde	304	286	94.1%	1.13	1.06
Tayside	375	372	99.2%	1.02	1.01
The Lothians and Scottish Borders	389	371	95.5%	1.10	1.05

Individual weights

Table A11.2: Effective sample size by PD - Individual

Police Division	Sample size	Effective sample	Effective sample %	Design Effect	Design Factor
Aberdeen City	340	303	89.2%	1.26	1.12
Aberdeenshire and Moray	399	345	86.5%	1.34	1.16
Argyll and West Dunbartonshire	299	257	85.9%	1.35	1.16
Ayrshire	353	297	84.0%	1.42	1.19
Dumfries and Galloway	330	290	87.8%	1.30	1.14
Edinburgh	479	420	87.6%	1.30	1.14
Fife	274	240	87.7%	1.30	1.14
Forth Valley	295	280	94.9%	1.11	1.05
Greater Glasgow	730	654	89.6%	1.25	1.12
Highlands and Islands	363	322	88.8%	1.27	1.13
Lanarkshire	545	485	89.0%	1.26	1.12
Renfrewshire and Inverclyde	304	282	92.6%	1.17	1.08
Tayside	375	330	88.1%	1.29	1.14
The Lothians and Scottish Borders	389	349	89.8%	1.24	1.11

Table A11.3 Mean weights

	Household			Individual		
Police Division	Minimum	Maximum	Mean	Minimum	Maximum	Mean
Aberdeen City	0.07	5.06	0.70	0.10	2.71	0.69
Aberdeenshire and Moray	0.49	3.36	0.85	0.27	5.50	0.89
Argyll and West Dunbartonshire	0.31	3.24	0.63	0.14	3.67	0.60
Ayrshire	0.64	1.76	1.07	0.41	6.20	1.06
Dumfries and Galloway	0.37	0.76	0.47	0.17	1.77	0.46
Edinburgh	0.56	2.58	1.08	0.39	4.63	1.10
Fife	0.99	2.39	1.35	0.40	6.39	1.36
Forth Valley	0.73	5.08	1.01	0.39	8.21	1.04
Greater Glasgow	0.69	2.89	1.14	0.43	4.26	1.14
Highlands and Islands	0.56	1.34	0.87	0.17	3.61	0.85
Lanarkshire	0.87	2.61	1.21	0.39	4.89	1.20
Renfrewshire and Inverclyde	0.52	1.82	0.90	0.26	3.94	0.85
Tayside	0.85	5.32	1.13	0.34	4.39	1.13
The Lothians and Scottish Borders	0.87	3.96	1.23	0.42	6.43	1.25
Scotland	**0.07**	**5.32**	**1.00**	**0.10**	**8.21**	**1.00**

ANNEX 10 - VARIABLES FOR ANALYSIS WITH HOUSEHOLD WEIGHTS

The following **questionnaire, derived and incidence / prevalence SPSS variables** should be analysed using household weights. All other variables use the individual weights.

SPSS variable name	*Description*
MOTORCYC	Whether anyone in h/hold has owned / had regular use of motorbike / scooter / moped during ref period
NUMMOT	How many motorcycles, scooters or mopeds does the household own or have regular use of now?
CAR	Whether anyone in h/hold has owned / had regular use of car / van / other motor vehicle during ref period
NUMCAR	How many cars, vans or other motor vehicles does the household own or have regular use of now?
OWNBIK2	Whether anyone in h/hold has owned a bicycle during ref period
NOWNBIK2	How many bicycles does the household own now?
MOTTHEFT	Has any car, van or other motor vehicle been stolen or driven away without permission?
NMOTTHEF	How many times has a motor vehicle been stolen?
MOTSTOLE	Whether anyone in h/hold has had anything stolen off vehicle or out of it
NMOTSTOL	How many times has anything been stolen off or out of vehicle?
CARDAMAG	Has the vehicle been tampered with or damaged by vandals or people out to steal?
NCARDAM	How many times has the vehicle been tampered with?
BIKTHEFT	Has a bicycle been stolen?
NBIKTHEF	How many times has a bicycle been stolen?
YRHOTHEF	Has anyone got into your home without permission and stolen or tried to steal anything?
NYRHTHEF	How many times has anyone got into your home without permission and stolen anything?
YRHODAM	Whether anyone has got into home without permission and caused damage
NYRHODAM	How many times has anyone got into your home without permission and caused damage?
YRHOTRY	Has anyone tried to get in without permission to steal or to cause damage?
NYRHOTRY	How many times has someone has tried to get in without permission to steal or to cause damage?
YRHOSTOL	Whether anything was stolen out of the home by someone there with permission
NYRHOSTO	How many times has anything been stolen out of your home?

YROSID	Whether anything was stolen from outside the home
NYROSIDE	How many times has anything stolen from outside your home?
YRDEFACE	Has anyone deliberately damaged or defaced your home or anything outside it?
NYRDEFAC	How many times has anyone deliberately damaged or defaced your home or anything outside it?
QNADULTS	How many adults aged 16 or over live in your household, including yourself
QNCHILD	How many children under 16 live in this household
QDTENUR	Tenure of home
QDTIED	Does accommodation go with the job of anyone in household
QDRENT	Who property is rented from
QACCOM	Property type
QDETACH	House type
QFLAT	Flat type
QOTH	Other accommodation type
QENTRAN	Whether flat shares a common entrance with other people
QFLOOR	Lowest floor of respondent's flat
QDINC2	Total annual household income
QDI100	Whether h/hold could find £100 to meet an unexpected expense

The following **derived variables** should be analysed using household weights.

SPSS variable name	***Description***
TENURE	Household tenure
ACCTYPE	Accommodation type summary
NPERSONS	How many people live in this household?
HHCOMP	Household composition

The **incidence, prevalence and repeat variables** should be analysed using household weights (variables are prefixed by INC, PREV or REP respectively).

SPSS variable name	***Description***
MOTOVVAND	Motor vehicle vandalism
PROPVAND	Property vandalism
THEFTFROMMV	Theft from motor vehicle
ATTTHEFTMV	Attempted theft of / from motor vehicle
THEFTOFMV	Theft of motor vehicle
ALLMVTHEFT	All motor vehicle theft related crimes
BICYCLETHEFT	Bicycle theft
HOUSEBREAK	Housebreaking

OTHERHOUSETHEFT	Other household theft
OTHERHOUSETHEFTCYCLE	Other household theft (including bicycle theft)
VAND	Vandalism
HOUSE	Household crime
ACQUIS	Acquisitive crime

Note that the following *incidence* variables for SURVEYCRIME, COMPARCRIME and PROPERTY **cannot be run using weights** since these are the sum of other incidence variables which are separately weighted by household or individual weights. The *prevalence* variable versions for SURVEYCRIME, COMPARCRIME and PROPERTY must be run using the individual weights to correctly calculate their prevalence rates.

SPSS variable name	***Description***
SURVEYCRIME	All SCJS crime
COMPARCRIME	Comparable crime
PROPERTY	Property crime

Please note when using *incidence* variables for analysis use the grossing weight instead of the scaled weights as they are not suitable for calculating crime volume proportions.