

# PEOPLE, COMMUNITIES AND PLACES

# Scottish Surveys Core Questions 2018 Technical Report



# **Scottish Surveys Core Questions 2018**

The Scottish Surveys Core Questions (SSCQ) is an annual Official Statistics publication for Scotland. The SSCQ gathers survey responses from identical <u>indicator questions</u> in the Scottish Crime and Justice Survey, the Scottish Health Survey and the Scottish Household Survey into one output.

The Scottish Surveys Core Questions in 2018 reports on the indicators: self-assessed general health, limiting long-term conditions, smoking and unpaid caring (released alongside the Scottish Health Survey), perception of crime in the local area (released alongside the Scottish Crime and Justice Survey) and satisfaction with local government services (released alongside the Scottish Household Survey). Detailed population characteristics are also available from the SSCQ data.

The pooling of Core Questions results in an annual sample of around 20,000 respondents, providing unprecedented precision of estimates at national level. This sample size enables the detailed and reliable analysis of national indicators by **equalities characteristics** such as ethnic group, religion, country of birth, sexual orientation, age and gender. Further variables are education level, economic activity, tenure, car access and household type. Multi-level analysis is available on request.

SSCQ also enables a more detailed analysis of **sub-national geographies** than source surveys allow. Annually, SSCQ reports for Local Authorities, Health Boards, Police Divisions.

## The questions covered in SSCQ 2018 are;

- limiting long-term conditions
- smoking
- provision of unpaid care
- household type
- perception of local crime rate
- highest qualification held
- economic activity
- satisfaction with local government services
- country of birth
- housing tenure
- car access
- ethnic group
- religion
- marital status
- sexual orientation
- gender
- self-assessed general health
- age

## 1.1 Source Surveys and Core Questions

Results from the three large-scale Scottish Government population surveys are published as National Statistics:

- Scottish Crime and Justice Survey (SCJS)
- Scottish Health Survey (SHeS)
- Scottish Household Survey (SHS)

Further information on Population Surveys in Scotland can be found on the SG website.

Since the beginning of 2012 each of the surveys included a set of 20 core questions that provide information on the composition, characteristics and attitudes of Scottish households and adults across a number of topic areas including equality characteristics, housing, employment and perceptions of health and crime. Responses on these questions from all three surveys have been pooled to provide the Scottish Surveys Core Questions (SSCQ) dataset with a sample size of around 20,000 responses.

Full details of the <u>harmonised questions</u> are available online and questionnaires are provided on the websites of each of the individual surveys.

Due to the different sampling nature of each survey, which is necessary to meet their primary aims, the number of respondents varies between different SSCQ questions. The questions were hence batched into three groups: household questions, individual questions and crime questions, and at least three different sets of weights calculated to ensure representative results. Sampling, weighting and pooled sample numbers are described separetely for each survey below.

### Scottish Crime and Justice Survey (SCJS) technical notes

Sampling, survey response and weighting are described in full in the <u>SCJS technical</u> <u>report</u>. Briefly, the survey consists of a simple random sample, designed to achieve a robust sample at national and subgroup level. The target samples size at national level is 6,000 interviews per year. One random adult per household is interviewed and asked all SSCQ and SCJS questions.

#### Scottish Health Survey (SHeS) technical notes

Sampling, survey response and weighting are described in full in the <a href="SHeS technical report">SHeS technical report</a>. The SHeS sample is clustered in each calendar year and unclustered over four years. All adults and up to two children in each household are eligible for interview. Only one adult in each household was asked the crime and household questions, to remain in line with the SCJS sampling procedure. The SHeS sample is boosted by participating health boards. It is further boosted to interview children in further households.

#### Scottish Household Survey (SHS) technical notes

Sampling, survey response and weighting are described in full in the <u>SHS technical report</u>. The SHS consists of a simple random sample with a target minimum sample size of 250 per local authority. The SSCQ household questions are answered by the highest income householder or their spouse/partner, and one adult is randomly selected to answer the individual and crime questions, in line with the other two surveys.

## 1.2 Weighting

Datasets from the three source surveys were combined into new SSCQ datasets: SSCQ household variables (19,968 responses), SSCQ individual variables (20,049 responses) and SSCQ crime and local government variables (18,447 responses) see Table 1.

In the Scottish Crime and Justice Survey (SCJS) questionaire in 2018, respondents were not presented with a "No opinion" option when asked questions on satisfaction with local government services. A separate weight has been created, removing SCJS responses from six of the local government satisfaction questions where "No opinion" constituted a high proportion of responses in the other two surveys, namely: Local Schools, Public Transport, Council Museums and Galleries, Council Sports and Leisure Facilities, Council Parks and Greenspace and Council Libraries. The resulting 12,910 responses give reliable estimates in conjunction with the satisfaction with Local Government services weight.

Each variable response category in each of the surveys carries a different design effect. If we were solely seeking the most efficient estimate for each variable separately, then separate scale factors could be derived for each one. However, this would restrict the use of the dataset. Rather, for each constituent survey dataset the design effects were estimated for each category and then the median design effect over all categories was used as the representative design effect of that survey. These design effects were then used along with the sample sizes to calculate the effective sample sizes (neff) and scaling factors for combining the three datasets.

Table 1: Numbers of sample and effective sample pooled from the source surveys

	SCJS		SHeS		SHS		SSCQ	
	Sample	Neff	sample	neff	sample	neff	sample	neff
Household responses[1]	5,537	5,035	3,899	2,243	10,532	9,029	19,968	16,307
Individual responses[2]	5,537	4,143	4,810	2,416	9,702	6,804	20,049	13,332
Crime and Local Government responses [3]	5,537	3,942	3,208	1,487	9,702	6,609	18,447	12,038
Local Government Service only [4]	0	0	3,208	1,417	9,702	6,658	12,910	8,075

To combine the data the scale factors were applied to the grossing weights for the individual surveys (described in section 0). The neff of each survey contribution formed the basis for the scaling factors:

survey A weight scaling factor = neff (surveyA) / (sum of three survey neffs).

The weights were then re-scaled to be proportionate to effective sample size contribution of each survey and used as pre-weights. The three pooled SSCQ datasets were then weighted again to be representative of population estimates. See <a href="SSCQ Weighting tables">SSCQ Weighting tables</a>.

#### 1.3 Confidence Interval Calculations

All three source surveys are stratified to ensure sufficient sample sizes in smaller local authorities. SHeS is clustered in each annual fieldwork period and, while this effect cancels out over each four-year period, must be accounted for in producing annual results.

Confidence intervals have been calculated using a method to account for stratification and clustering (surveyfreq in SAS). Confidence intervals across all subgroup estimates in SSCQ are provided in the supplementary tables.

If the intervals surrounding two different point estimates do not overlap then there is a significant difference between the two points, but if they do overlap it does not necessarily mean there is no significant difference (see <u>further guidance</u>). In the report text the term "significant" refers to "statistically significant" differences.

A comparison of estimates of key variables across the three constituent surveys and the SSCQ are provided in Annex A.

#### 1.4 Statistical Disclosure Control

All estimates based on a low number of respondents and displayed in main and supplementary tables have been denoted with "to safeguard the confidentiality of respondents with rare characteristics. Cells with true zero counts are denoted with "throughout, unless denoted "as part of disclosure control."

Further cells with zero or low respondent numbers in the same row and column as the low responses have also been suppressed with '\*' to ensure confidentiality.

## 1.5 Presentation of Data on Country of Birth

The country of birth of respondents is collected in considerable detail by the pooled surveys. Reporting on the data in this way would uniquely identify, and therefore potentially disclose the identity of, participants from a range of countries. For this reason, country of birth has been presented as follows:

Scotland: Respondents who specifically list "Scotland" as their country of birth

**Rest of UK**: England, Northern Ireland, Wales, Great Britain/United Kingdom (Not Otherwise Specified). Inclusion of this last item may lead to an over-count of respondents from outside Scotland.

**Rest of EU**: Austria, Belgium, Bulgaria, Croatia, Cyprus (European Union), Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden

**Rest of World:** All other responses (excluding refusals)

## 1.6 Presentation of Data on Religion

Table 2: Grouping of religion in the SSCQ 2018

Base Collection Categories		SSCQ Groups	
None	9,470	None	9,470
Church of Scotland	5,430	Church of Scotland	5,430
Roman Catholic	2,690	Roman Catholic	2,690
Other Christian	1,790	Other Christian	1,790
Muslim	220	Muslim	220
Buddhist	70	Other	370
Sikh	30		
Jewish	30		
Hindu	70		
Pagan	20		
Another religion	150		

## 1.7 Presentation of Data on Ethnic Group

Table 3: Grouping of ethnic group in the SSCQ 2018

Base Collection Categories		SSCQ Groups	
A - WHITE - White Scottish	15,680	White: Scottish	15,680
A - WHITE - Other British	2,580	White: Other British	2,580
A - WHITE – Polish	250	White: Polish	250
A - WHITE – Irish	180	White: Other	830
A - WHITE - Gypsy/Traveller	<10		
A - WHITE - Any other white ethnic group	650		
C - ASIAN, ASIAN SCOTTISH OR ASIAN BRITISH - Pakistani, Pakistani Scottish or Pakistani British	130	Asian	400
C - ASIAN, ASIAN SCOTTISH OR ASIAN BRITISH - Indian, Indian Scottish or Indian British	120		
C - ASIAN, ASIAN SCOTTISH OR ASIAN BRITISH - Bangladeshi, Bangladeshi Scottish or Bangladeshi British	20	•	
C - ASIAN, ASIAN SCOTTISH OR ASIAN BRITISH - Chinese, Chinese Scottish or Chinese British	70	•	
C - ASIAN, ASIAN SCOTTISH OR ASIAN BRITISH - Other Asian, "Asian" Scottish or "Asian" British	70	•	
B - MIXED OR MULTIPLE ETHNIC GROUP - Any mixed or multiple ethnic groups	60	All other ethnic groups	310
D - AFRICAN - African, African Scottish or African British	80	•	
D - AFRICAN - Other African background	30	•	
E - CARIBBEAN OR BLACK - Caribbean, Caribbean Scottish or Caribbean British	<10	•	
E - CARIBBEAN OR BLACK - Black, Black Scottish or Black British	<10	•	
E - CARIBBEAN OR BLACK - Other Caribbean or Black background	<10		
F - OTHER ETHNIC GROUP - Arab, Arab Scottish or Arab British	30	•	
F - OTHER ETHNIC GROUP - Other	70	•	

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- □ are available on the UK Data Archive under end user license
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# Annex A. Comparison of the pooled surveys

In this section, estimates from the pooled SSCQ and its constituent surveys SCJS, SHeS and SHS are displayed and assessed to determine agreement.

Estimates in these tables may differ to figures published by the individual surveys. This is due to differences in the valid sample size and weights being applied before pooling (see section 1.2).

Table A.1: Self-assessed general health by source survey (row % and margin of error)

	Good/very good	Very good	Good	Fair	Bad	Very Bad
SSCQ	72.7 ± 0.7	34.1 ± 0.9	38.6 ± 0.8	19.1 ± 0.6	$6.2 \pm 0.4$	1.8 ± 0.2
SCJS	74.5 ± 1.5	36.6 ± 1.6	37.9 ± 1.5	17.8 ± 1.1	$5.8 \pm 0.7$	1.6 ± 0.3
SHeS	$70.9 \pm 1.9$	$31.7 \pm 2.0$	$39.2 \pm 1.7$	$20.3 \pm 1.5$	$6.5 \pm 0.9$	$2.2 \pm 0.5$
SHS	$72.3 \pm 1.2$	$33.4 \pm 1.2$	$38.9 \pm 1.2$	$19.5 \pm 0.9$	$6.3 \pm 0.5$	$1.8 \pm 0.3$

Table A.2: Current smoker by source survey (row % and margin of error)

	Yes				
SSCQ	17.8	± 0.7			
SCJS	18.7	± 1.2			
SHeS	18.4	± 1.7			
SHS	17.0	± 0.9			

Table A.3: Long-term limiting health condition by source survey (row % and margin of error)

	Limiting condition					
SSCQ	24.7	± 0.7				
SCJS	22.3	± 1.2				
SHeS	33.8	± 1.9				
SHS	22.9	± 1.0				

SHeS reports a somewhat higher percentage of adults living with long-term limiting health conditions, while SHS and SCJS estimates overlap. It is thought that respondents are more likely to identify long-term conditions when asked about them in the context of a specific interview about numerous aspects of their health and wellbeing, and the longer list of options on the SHeS showcard.

Table A.4: Provides unpaid care by source survey (row % and margin of error)

	Provides Care				
SSCQ	18.4	± 0.7			
SCJS	14.1	± 1.1			
SHeS	15.0	± 1.5			
SHS	22.2	± 1.0			

The three surveys produce somewhat different estimates of the rate of the provision of unpaid care. The confidence intervals on estimates from SCJS and SHeS overlap and do not represent a significant difference. It is thought that the SHS estimate is higher due to this being asked in the context of other questions around volunteering and time spent providing care.

Table A.5: Local service satisfaction by source survey (row % and margin of error)

	Very/fairly satisfied		Neither sa			/fairly tisfied		oinion/ efused
Local Healt	Local Health Services				u		2.4.0	0.000
SSCQ	79.3	± 0.7	6.1	± 0.5	12.1	± 0.6	2.5	± 0.3
SCJS		± 1.3	6.0	± 0.8	12.3	± 1.0	1.2	± 0.4
SHeS		± 2.1	6.4	± 1.3	11.2	± 1.6	3.5	± 1.1
SHS		± 1.0	6.0	± 0.6	12.1	± 0.8	3.1	± 0.4
Local Refu	se Colle	ction						
SSCQ	73.4	± 0.8	7.8	± 0.5	16.7	± 0.7	2.0	± 0.3
SCJS	76.5	±1.4	7.2	± 0.9	15.3	± 1.1	1.0	± 0.4
SHeS	75.4	± 2.2	8.5	± 1.5	15.2	± 1.9	0.9	± 0.5
SHS	71.2	± 1.1	8.0	± 0.7	17.9	± 0.9	2.9	± 0.5
Local Scho	ols							
SSCQ	44.4	± 1.1	12.9	± 0.7	3.9	± 0.4	38.8	± 1.1
SHeS	44.9	± 2.7	7.4	± 1.6	3.0	± 0.7	44.7	± 2.9
SHS	44.3	± 1.2	14.0	± 0.8	4.1	± 0.5	37.6	± 1.1
Public Tran	nsport							
SSCQ	56.3	± 1.1	12.4	± 0.7	16.4	± 0.8	14.8	± 0.8
SHeS	58.8	± 2.7	10.1	± 1.7	15.6	± 1.9	15.4	± 1.7
SHS	55.8	±1.2	12.9	± 0.8	16.6	± 0.9	14.7	±0.9
Street Clea	ning							
SSCQ	59.3	± 0.9	13.7	± 0.6	21.2	± 0.7	5.8	± 0.4
SCJS	62.4	± 1.5	13.0	± 1.1	21.3	± 1.3	3.2	± 0.5
SHeS	58.6	± 2.9	14.6	± 1.9	20.3	± 2.1	6.5	± 1.2
SHS		± 1.2	13.9	± 0.8	21.4	± 1.0	7.1	± 0.6
Council Sp	ortsand	d Leisu	re Facilitie	S				
SSCQ	47.7	± 1.1	13.6	± 0.7	7.5	± 0.6	31.3	± 1.0
SHeS		± 2.5	12.4	± 1.6	12.3	± 1.8	22.6	± 2.0
SHS		±1.2	13.8	± 0.8	6.5	± 0.6	33.1	± 1.1
Council Lik								
SSCQ		± 1.1	14.7	± 0.8	3.3	± 0.4	35.4	± 1.1
SHeS	53.6	± 2.7	11.5	± 1.7	6.0	± 1.3	28.9	± 2.4
SHS	45.1	± 1.2	15.4	± 0.9	2.7	± 0.4	36.8	± 1.2
Council Mu	ise ums a	and Ga	Illeries					
SSCQ	42.7	± 1.1	16.0	± 0.8	3.3	± 0.4	38.0	± 1.1
SHeS		± 3.3	13.8	± 1.7	6.6	± 1.4	35.9	± 2.9
SHS		± 1.2	16.4	±0.9	2.6	± 0.4	38.5	± 1.1
Council Pa								
SSCQ	72.4	± 1.0	9.0	± 0.6	6.3	± 0.5	12.2	± 0.7
SHeS	76.8	± 2.3	7.4	±1.4	9.4	± 1.5	6.5	±1.2
SHS	71.5	± 1.1	9.3	± 0.7	5.7	± 0.6	13.4	± 0.8

Table A.6: Perception of crime in local area by source survey (row % and margin of error)

	About the same/ a little or a lot less	A lot less	A little less	About the same	A little more	A lot more
SSCQ	75.1 ± 0.8	1.6 ± 0.3	$6.5 \pm 0.5$	67.0 ± 0.9	14.3 ± 0.7	5.6 ± 0.4
SCJS	73.0 ± 1.5	1.9 ± 0.5	$6.8 \pm 0.8$	64.5 ± 1.6	15.2 ± 1.2	6.7 ± 0.9
SHeS	$78.0 \pm 2.1$	$1.4 \pm 0.5$	$7.3 \pm 1.3$	$69.4 \pm 2.4$	13.1 ± 1.5	$6.4 \pm 1.2$
SHS	75.7 ± 1.1	$1.5 \pm 0.4$	$6.2 \pm 0.7$	68.0 ± 1.2	$14.1 \pm 0.9$	$4.7 \pm 0.5$

The SCJS reports a slightly worse perception of crime in the local area than the other surveys and by extension, SSCQ. It is thought that respondents answer this question more negatively in the context of an interview about crime, victimisation and policing.