

Community Attitudes Survey

Technical Report

for

January to December 2003



CENTRAL SURVEY UNIT

TECHNICAL REPORT

THE SAMPLE

The Community Attitudes Survey (CAS) was first carried out in 1992 following a review of crime survey needs in Northern Ireland. In accordance with the recommendations of the review, the Central Survey Unit (CSU) of the Northern Ireland Statistics and Research Agency (NISRA) was commissioned to conduct a continuous survey of community attitudes towards law and order named the Community Attitudes Survey.

From January 2003 – December 2003, 2,400 addresses were issued. The issued sample accounted for the possibility of non-eligible properties on the sample list and assumed a response rate of 65%, to achieve a minimum of 1,400 interviews during the field period.

The survey was designed to yield a representative sample of all adults aged 16 or over living in Northern Ireland. The sample is drawn from the Valuation and Lands Agency (VLA) list, the most up-to-date listing of private households, which is made available to the Northern Ireland Statistics and Research Agency for research purposes. People living in institutions (though not in private households in such institutions) are excluded. The sample for the 2003 survey consisted of a random sample of addresses selected from the VLA list.

The VLA list provides a good sampling frame of addresses, but contains no information about the number of people living at an address. Further selection stages are therefore required to convert the listing of addresses to a listing of individuals from which one person (the ‘selected respondent’) is chosen to complete the questionnaire.

Interviewers are instructed to call at each address issued in their assignments. At the first stage of the survey, they have to identify the number of households resident at the address and, where necessary, select one using a selection table (Table 1).

Table 1 *Household selection table*

Number of households	1	2	3	4	5	6	7	8	9	10	11	12
Household selected	1	1	2	3	4	4	2	7	6	8	6	6

The interviewers then list all members of the household who are eligible for inclusion in the sample: that is, all persons currently aged 16 or over living in the household. From this listing of eligible adults, the computer selects one adult by a random selection procedure. This person, the selected respondent, is then asked to complete the interview. Should the selected respondent refuse to participate or no contact be made with them, the interviewer can accept no other replacement for that person.

THE QUESTIONNAIRE

Before the 2003 survey, there was a review of the Community Attitudes Survey questionnaire that resulted in some questions and sections being removed. A number of questions were amended and there were new questions added into the questionnaire. The sections in the survey are:

Satisfaction with local area

Frequency of certain crime types, crime trends and comparisons

Policing problems

Reporting crime, contact with and by the police

Fairness, effectiveness and balance of police

Complaints against the police, changes in the police, roles of OPONI, NIPB and DPPs, local involvement in policing issues

Accessibility, effectiveness and fairness of the courts and the criminal justice system

THE FIELDWORK

Addresses were issued to a panel of around 50 interviewers on a monthly basis. The response rate (eligible addresses) between January 2003 and December 2003 was 73% (Table 2). Productive interviews, containing both household details and interview with a selected respondent were obtained at 68% of eligible addresses.

Table 2 *Response rate*

	Number	Relative Frequency	Response Rate (Eligible Sample)
Issued Addresses	2400	100%	
Eligible sample	2157		
Interview Achieved	1570	65%	73%
Household details and interview	1464	61%	68%
Household only	106	4%	5%
Refusal	373	16%	17%
Non Contact	214	9%	10%
Non Eligible	243	10%	

REPRESENTATIVENESS OF THE SAMPLE

In any survey, there is a possibility of non-response bias. Non-response bias arises if the characteristics of non-respondents differ significantly from those of respondents in such a way that they are reflected in the responses given in the survey. Accurate estimates of non-response bias can only be obtained by comparing characteristics of the achieved sample with the distribution of the same characteristics in the population at the time of sampling. Such comparisons are usually made to current Census of Population data.

To assess how accurately the Community Attitudes Survey sample reflects the population of Northern Ireland, the sample has been compared with characteristics of the Northern Ireland population from the 2001 Census of Population (Table 3). The CAS sample has also been compared to the achieved sample of the Continuous Household Survey (CHS).

Table 3 *Representativeness of the sample – Persons Aged 16 Years and Over*

	I	II	III	IV	V
	2001 Census	CHS 2002/03 (all members of Household 16+)	CAS (all members of Household 16+)	Selected Respondent	Selected Respondent (Participant)
Age					
16-24	16	16	15	11	15
25-34	19	18	15	16	14
35-49	27	28	28	27	29
50-64	20	22	23	22	23
65 and over	17	17	19	25	19
Gender					
Male	48	48	47	44	46
Female	52	52	53	56	54
Base = 100%	1,292,169	5401	3050	1570	1464

WEIGHTING

Selecting only one individual for interview at each sampled address means that the probability of selection for the survey is inversely related to the size of the household. In other words individuals living in large households have a lower chance of being included in the sample than individuals in small households.

Before analysis, the data are weighted in relation to the number of eligible adults at the address, derived from the details of household structure recorded by interviewers on the questionnaire. This weighting process adjusts

the results to those which would have been achieved if the sample had been drawn as a simple random sample of adults rather than of addresses.

Some 35% of households contained only one adult, 47% were 2 adult households, 11% were 3 adult households, while the remaining households containing between 4 and 9 adults accounted for 6% of households. In the analysis, the individual selected from a 2 person household will contribute a greater weight than an individual selected from a single person household (Table 4).

Table 4 *Weighting of the Sample*

Number of Adults	Weight	Number	%	Scale Weight
16 and over				
1	1	475	35.1	0.52
2	2	640	47.3	1.04
3	3	152	11.2	1.57
4	4	57	4.2	2.09
5	5	18	1.3	2.61
6	6	6	0.4	3.13
7	7	3	0.2	3.66
8	8	0	-	-
9	9	1	0.1	4.70

To demonstrate the effects of weighting on the responses given by the selected respondents, the question: ‘How common would you say it is for people’s homes in this area to be burgled?’ was analysed both weighted and unweighted (Table 5).

Table 5 *Effects of weighting*

All persons Aged Sixteen and Over

	Total weighted	Total Unweighted
Base = 100%	1464	1464
Very common	4%	4%
Fairly common	23%	22%
Not very common	51%	51%
Not at all common	20%	21%
Don’t know/Refusal	2%	2%

SAMPLING ERROR

Any sample is unlikely to reflect precisely the characteristics of the population it is drawn from because of both sampling and non-sampling errors. An estimate of the amount of error due to the sampling process can be calculated. For a simple random sample design, in which every member of the sampled population has an equal and independent chance of inclusion in the sample, the sampling error (s.e.) of any percentage, p, can be calculated by the formula:

$$\text{s.e.}(p) = \sqrt{p*(100-p)/n}$$

where n is the number of respondents on which the percentage is based. The sample for the Community Attitudes Survey is drawn as a simple random sample, and this formula can be used to calculate the sampling error of any percentage estimate from the survey. A confidence interval for the population percentage can be calculated by the formula

$$95\% \text{ confidence interval} = p \pm (1.96 * \text{s.e.}(p))$$

If 100 similar, independent samples were chosen from the same population, 95 of them would be expected to yield an estimate for the percentage, p, within this confidence interval.

The absence of design effects in the survey, and therefore of the need to calculate complex standard errors, means that standard statistical tests of significance (which assume random sampling) can be applied directly to the data. Table 6 provides examples of the sampling errors and confidence intervals for typical percentage estimates from the Community Attitudes Survey, based on the sample size achieved in the fieldwork period. These can be used as a rough guide when interpreting the results from the survey.

A percentage estimate of 10 per cent (or 90 per cent) which is based on all respondents to the survey has a standard error of 0.8 and a 95% confidence interval of +/-1.6%. A percentage estimate of 50% has a standard error of 1.3 and a 95% confidence interval of +/-2.6%. Sampling errors for proportions based on subgroups within the sample (e.g. women) are larger than they would be if the questions were asked of everyone.

Table 6 *Sampling errors*

	(%) (P)	Standard Error of (P)(%)	95%Confidence Interval +/-
Stated Religion n=1352			
Protestant	58.5	1.3	2.6
Catholic	41.5	1.3	2.6
Attitudinal n=1464			
Approached by police in last 2 years	12	0.9	1.7
Police deal fairly with everyone	72	1.2	2.3
Lived in area for over 2 years n=1346			
Area better to live in	16	1	2.0

DETAILS OF SELECTED RESPONDENTS

Classification information relating to the selected respondents in the Community Attitudes Survey is always collected. This not only enables a more thorough analysis of the data but also provides useful information relating to the participants of the survey.

The age and gender breakdowns of the selected respondents within the survey, both selected respondents and selected respondents (participants) are detailed in Table 3. Of those respondents who participated in the survey, 54% were Protestant, 39% were Catholic while 7% did not identify with either religion (Table 7). For comparison, figures for religion are included from the Continuous Household Survey (CHS) 2002/03.

Table 7 *The defined religious denomination of the selected respondents*

All persons Aged Sixteen and Over	CAS 2003	CHS 2002/03
Base = 100%	<i>1464</i>	<i>5401</i>
Protestant	<i>54%</i>	<i>54%</i>
Catholic	<i>39%</i>	<i>41%</i>
No religion/religion not stated	<i>7%</i>	<i>5%</i>

Of those respondents who participated in the survey, some 51% were in employment (Table 8) while 3% were unemployed and looking for work, compared with 43% classified as economically inactive.

Figures derived from the 2003 survey compare favourably with those derived from the CHS.

Table 8 *The employment status of the selected respondents*

All persons Aged Sixteen and Over	CAS 2003	CHS 2002/03
<i>Base = 100%</i>	1464	5086
Worked last week	51%	52%
Away from work last week	2%	2%
Waiting to take up work	0%	0%
Looking for work	3%	3%
Not looking for work – sick	1%	1%
Economically inactive	43%	41%

The largest proportions of those respondents who were in employment were classified as working in skilled trade occupations (15%). Some 14% of respondents were classified as working in administrative occupations and 13% as working in professional occupations. For comparison purposes, figures are included from the 2001 Census.

Table 9 *The Standard Occupation Codes of employed selected respondents*

All persons Aged Sixteen and Over	CAS 2003	2001 Census
<i>Base = 100%</i>	750	686,644
Managers and senior officials	11%	11%
Professional Occupations	13%	11%
Associate Professional and Technical Occupations	11%	13%
Administrative Occupations	14%	15%
Skilled trade occupations	15%	16%
Personal services occupations	8%	7%
Sales and customer service occupations	6%	7%
Process plant and machine operatives	11%	10%
Elementary occupations	11%	12%
Inadequately described/not stated	2%	0%

In terms of the industrial sector in which the employed respondents worked (Table 10), the greatest proportion of these respondents (15%) were classified as working in the wholesale sector. A further 14% were classified as working in manufacturing and 13% were classified as working in the health services sector. Results from the 2001 Census have been included for comparison purposes.

Table 10 *The Standard Industrial Classification of employed selected respondents*

All persons Aged Sixteen and Over	CAS 2003	2001 Census
<i>Base = 100%</i>	750	686,644
Agriculture	3%	3%
Fishing	0%	0%
Mineral and ore extraction	0%	0%
Manufacturing	14%	14%
Electrical and gas	1%	1%
Construction	12%	9%
Wholesale	15%	17%
Hotels and restaurants	4%	5%
Transport and communication	5%	5%
Financial intermediaries	3%	3%
Real estate	6%	8%
Public administration	12%	9%
Education	9%	9%
Health	13%	13%
Other community services	5%	4%
Private household	0%	0%
Insufficient information	0%	0%
Don't know/Refusal	1%	0%

Tables 11 and 12 compares the figures derived from National Statistics Socio-Economic group in the 2003 Community Attitudes Survey with those derived Socio-Economic Grouping from the Continuous Household Survey.

Table 11 *National Statistics Socio-Economic classification of employed selected respondents*

All persons Aged Sixteen and Over	CAS 2003
<i>Base = 100%</i>	750
Higher managerial and professional occupations	10%
Lower managerial and professional occupations	24%
Intermediate occupations	14%
Small employers and own account workers	14%
Lower supervisory and technical occupations	8%
Semi-routine occupations	16%
Routine occupations	13%
Insufficient/Don't Know/Refusal	2%

Table 12 *Socio-Economic Grouping*

All persons Aged Sixteen and Over

	CHS 2002/03
<i>Base = 100%</i>	<i>5401</i>
Professional	3%
Employ, manager	6%
Intermediate non manual	15%
Junior non manual	17%
Skilled manual	20%
Semi-skilled manual	17%
Unskilled manual	5%
Insufficient/Don't Know/Refusal	17%

NOTE ON THE ANALYSIS OF RESULTS

Although not explicitly mentioned in the bulletin, all percentages are based on tables that reflect the full range of responses given by respondents, including "don't know" and "refusal". These responses can be seen in the tables accompanying the bulletin.