YOUNG PERSONS' BEHAVIOUR AND ATTITUDES SURVEY TECHNICAL REPORT

Background

The Northern Ireland Statistics and Research Agency (NISRA) was commissioned by a consortium of government departments and public bodies to design, conduct and report on a study of the behaviour and attitudes of young people in Northern Ireland.

The Young Persons' Behaviour and Attitudes Survey (YPBAS) is a school- based survey carried out amongst 11-16 year olds and covers a wide range of topics relevant to the lives of young people today. The main aim of the YPBAS is to gain an insight into, and understanding of, their behaviour and lifestyle. It also aims to influence various government policies and practices relating to young people and to facilitate access to research findings and expertise.

The YPBAS was first carried out in 2000 (62 schools, 6,297 pupils), then again in 2003, 2007, 2010, 2013, 2016 and most recently in 2019 (80 schools, 8,118 pupils). This technical report documents the various stages of the eighth round of the YPBAS, conducted in the period September 2022 to March 2023.

Sampling Method

A three stage sample design was used:

Schools
The Department of Education (DE) provided NISRA with a list of all post-primary schools in Northern Ireland (excluding independent schools and those which catered solely for pupils with special needs). All 192 post-primary schools were contacted and invited to participate, and the Education and Library Board were informed that schools were being approached. Follow up efforts were made to encourage non responding schools to take part.

Classes
Participating schools provided details of the number of classes in Years 8-12. One class in each of the five year groups was then randomly selected to take part in the study.

Pupils
All pupils in each sampled class were selected for the survey. Once pupils in participating schools had been selected, they and their parents/guardians were notified of the survey in writing. They were informed that participation was voluntary and that they could contact NISRA if they had any queries about the survey. If a selected pupil refused to participate or was absent on the day of the survey, no other replacement was accepted for that individual.

Questionnaire Design

As in previous years, two versions of the questionnaire were created to accommodate demand for topics on the 2022 survey. With the assistance of steering group members and children of NISRA staff, draft questionnaires were tested for understanding, length and flow. NISRA provided feedback from this group to departments, allowing for changes to be made before the content was finalised. The content and structure of each questionnaire was agreed upon in consultation with clients. Schools were randomly assigned one version of the questionnaire.

The overall format was similar to that used in 2019. A number of new topics were added into the 2022 questionnaire including Future Intentions, Gambling and Equality. The full set of questions in each questionnaire can be found at https://www.nisra.gov.uk/publications/young-persons-behaviour-and-attitude-survey-2022

Data Collection

The data was collected using a Blaise 5 computer-assisted self-completion questionnaire on Microsoft Surface Tablets. In most instances, children were surveyed one class at a time, often in a classroom setting. Some schools requested that the questionnaire be administered to multiple classes at once and in some instances, all selected pupils at the same time; in these cases the survey was usually carried out in the school gym/assembly hall.

After all selected pupils were surveyed at each school and as each machine was shutting down, the tablet performed a backup to send the data directly to a NISRA server.

Fieldwork

The fieldwork for the 2022 YPBAS took place from September 2022 to March 2023.

Seventy-four schools agreed to participate in the study, accounting for 39% of all post-primary schools in Northern Ireland. Some of the schools that refused to take part were sympathetic to the research but stated that they did not have the time to participate, while others refused specifically due to the fact that they were participating in other surveys. The majority, however, gave no reason for their decision not to participate.

Table 1   **School Response Rate**

	Number	Response Rate
Participated	74	39%
Refused	35	18%
Non-responding	83	43%
Total Sample	192	100%

Three of the 74 participating schools allowed just some year groups to complete the survey. The reason for certain year groups being omitted was 'exam pressure' or 'controlled assessments'.

A total of 7,498 pupils were surveyed out of a possible 8,806, giving a pupil response rate of 85%.

Table 2   **Overall Pupil Response Rate**

	Number	Response Rate
Sample	8,806	-
Responses Achieved	7,498	85%
Refusal (parents or pupils)	98	1%
Absent	1,131	13%
Removed*	79	1%

*Reasons for this include pupils opting on the day not to take part and questionnaires being completed incorrectly.

Weighting

Before analysis, the data are weighted to adjust for differences in the composition of the achieved sample compared to the same characteristics in the population, known as non-response weights. The non-response rates were applied sequentially to calibrate the characteristics of the achieved sample to the school population distribution (from the 2021/2022 School Census, DE) in respect of year group, sex and religion. Given that there are two versions of the questionnaire, three different sets of weights were calculated for (1) questions/modules common to both questionnaires, (2) questions/modules only appearing in Version A and (3) questions/modules only appearing in Version B.

Once the data was weighted, the achieved sample became more representative of the population the survey aimed to reflect. Annex 1 provides a breakdown for a number of demographic characteristics which show the impact of non-weighting and weighting on the demographic composition of the achieved sample.

All figures published in the Key Findings are weighted estimates.

Sampling Error

No sample is likely 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 of any percentage, p, can be calculated by the formula:

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

Where n is the number of respondents on which the percentage is based.

Since a three stage sample design was used in YPBAS: schools, classes and pupils, the required assumption of random sampling is not met. However, a methodological review conducted in 2013 which used a formula for complex samples to calculate standard errors for some of the variables in the survey showed that there was little difference to the precision of the estimates than when assuming a simple random sample. As sampling and post stratification methods have remained consistent on the survey, this is therefore assumed to still be the case and no design effect has been calculated.

A confidence interval for the population percentage can be calculated by the formula 95 per cent confidence interval = *p+/- 1.96 * 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.

Table 3 provides confidence intervals for a range of percentages based on the number of achieved cases in the 2022 YPBAS.

For example, if we assume a survey estimate for a particular variable in the Young Persons' Behaviour and Attitude Survey asked of all respondents is 20%. Based on the number of pupils participating, we can be 95% confident that the true population measure is +/- 0.9% of that survey estimate. In other words, we can be 95% confident that the true population figure lies in the range 19.1%-20.9%.

Table 3 Illustrative confidence intervals for YPBAS 2022 estimates

Range of error (+/-) for 95% CI - for range of percentages by achieved sample size on YPBAS 2022 (assumes a systematic random sample)					
Range	*5% or 95%*	*10% or 90%*	*20% or 80%*	*30% or 70%*	*50%*
Combined (7,498 cases)	0.5	0.7	0.9	1.0	1.1
Questionnaire A (3,726 cases)	0.7	1.0	1.3	1.5	1.6
Questionnaire B (3,772 cases)	0.7	1.0	1.3	1.5	1.6

Strengths and Limitations

The main strengths of the Young Persons' Behaviour and Attitudes Survey include:

It meets user needs. The questionnaire was developed by NISRA following a high level of customer engagement. Furthermore, questionnaire design expertise was applied in the development stages.

Robust methods were adopted for the survey's sampling and weighting strategies to limit the impact of bias.

The data was collected with a Blaise 5 CASI questionnaire which has set ranges for closed questions, automated routing and internal consistency checks with reduces data input error. Quality assurance procedures are undertaken throughout the analysis stages to minimise the risk of error.

A total of 7,498 young people participated in the survey. This scale of participation results in high levels of precision around the survey estimates from the survey.

The main limitations of the Young Persons' Behaviour and Attitudes Survey include:

In any survey there is the 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.

Weighting for non-response (post-stratification) as applied to the YPBAS data should reduce bias, but it must be acknowledged that it will not eliminate bias. Post-stratification works on the assumption that, by aligning the survey to the population along a small number of dimensions, such as year group, sex and religion, many of these biases will reduce. However, it would be misleading to suggest that they will be eliminated.

Table A1 Characteristics of the achieved sample by year group, gender and religion

All respondents		Non-Weighted		Weighted*		School Census 22/23	
Year Group	**Religion**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**
Year 8	Protestant	3%	3%	3%	3%	3%	3%
	Catholic	6%	6%	5%	5%	5%	5%
	Other	2%	2%	2%	2%	2%	2%
Total		**10%**	**11%**	**10%**	**10%**	**10%**	**10%**
Unweighted base		*757*	*836*	*757*	*836*	*12,862*	*12,586*
Year 9	Protestant	3%	3%	3%	3%	3%	3%
	Catholic	6%	6%	5%	5%	5%	5%
	Other	1%	2%	2%	2%	2%	2%
Total		**10%**	**11%**	**10%**	**10%**	**10%**	**10%**
Unweighted base		*714*	*818*	*714*	*818*	*12,715*	*12,410*
Year 10	Protestant	3%	3%	3%	3%	3%	3%
	Catholic	6%	6%	5%	5%	5%	5%
	Other	1%	1%	2%	2%	2%	2%
Total		**10%**	**10%**	**10%**	**10%**	**10%**	**10%**
Unweighted base		*754*	*752*	*754*	*752*	*12,930*	*12,384*
Year 11	Protestant	3%	4%	3%	3%	3%	3%
	Catholic	5%	6%	5%	5%	5%	5%
	Other	1%	1%	2%	2%	2%	2%
Total		**9%**	**11%**	**10%**	**10%**	**10%**	**10%**
Unweighted base		*671*	*809*	*671*	*809*	*13,012*	*12,544*
Year 12	Protestant	3%	3%	3%	3%	3%	3%
	Catholic	5%	5%	5%	5%	5%	5%
	Other	1%	1%	2%	1%	2%	1%
Total		**9%**	**10%**	**10%**	**9%**	**10%**	**9%**
Unweighted base		*667*	*720*	*667*	*720*	*12,254*	*11,677*
All respondents		**48%**	**52%**	**51%**	**49%**	**51%**	**49%**
Unweighted base		**3,563**	**3,935**	**3,563**	**3,935**	**63,773**	**61,601**

* Weighted by year group, gender and religion.