

Background Quality Report – Engagement in culture, arts and sport by adults in Northern Ireland 2020/21

This report provides information on the quality of the data used to produce the official statistics: <https://www.communities-ni.gov.uk/publications/engagement-culture-arts-and-sport-by-adults-northern-ireland-202021>. It informs users about the quality of the information upon which they may be drawing conclusions and making decisions.

The report is structured around the five quality dimensions for statistical outputs (from the [European Statistics Code of Practice, PDF \(458 KB\)](#)). The UK Statistics Authority's [Code of Practice for Statistics](#) requires that:

Q3.3 *The quality of the statistics and data, including their accuracy and reliability, coherence and comparability, and timeliness and punctuality, should be monitored and reported regularly.*

Introduction

Context for the quality report.

Five Official Statistics bulletins presenting findings from the Continuous Household Survey (CHS) are commonly published annually presenting findings for the preceding financial year. However, due to the coronavirus (COVID-19) pandemic data collection for the 2020/21 CHS moved from face-to-face interviewing to telephone mode reducing the number of questions. The output from the survey, in terms of the range and depth of topics covered, has consequently been reduced from that of previous years. As a result, one summary report has been published for 2020/21.

The CHS is a representative, continuous, personal interview survey of adults, aged 16 and over, living in private households in Northern Ireland. The survey is administered by Central Survey Unit of the Northern Ireland Statistics and Research Agency (NISRA). Respondents to the CHS are asked about a variety of subjects including their engagement in the previous 12 months with culture, arts and sport activities.

The CHS has been running continuously since 1983. Questions on culture, arts and leisure were included for the first time in 2003/04. Since then, the module of questions has been developed and is now a key source of information for the Department for Communities.

The survey is based on a random sample of 9,000 domestic addresses drawn from a list of private addresses managed by Land and Property Services of the Department of Finance. This list of addresses is used for most of the main government surveys conducted in Northern Ireland. Interviews are sought with all adults aged 16 and over in these households.

Due to the coronavirus (COVID-19) pandemic data collection for the 2020/21 moved from face-to-face interviewing to computer-assisted telephone interviewing (CATI), where interviewers record responses to the questionnaire on tablets over the telephone. CATI allows plausibility and consistency checks to be incorporated to improve data quality.

The target response rate for the CHS is 55%, approximately 4,300 participating households. In 2020/21, 1,403 households participated in the survey and 1,885 individuals aged 16 and over completed an individual interview; the overall response rate was 17%.

Relevance

The degree to which the statistical product meets user needs in both coverage and content.

The bulletin provides data for Northern Ireland for engagement in culture, arts and sports. For each of these indicators, the bulletin includes a population level analysis and also a breakdown by various sections of society, including Section 75 categories, where possible.

The bulletin includes infographics, charts and associated commentary to communicate the findings to the end user. In addition, all data are provided in both Excel and OpenDocument spreadsheets. Explanatory notes within the tables and a technical annex have been included to provide the end user with additional information on the methodology and definitions used in the presentation of statistics.

Consultation is carried out annually with a key user group to agree the questions to be included in the CHS to ensure they continue to cover the key requirements for users.

Due to the coronavirus (COVID-19) pandemic data collection for the 2020/21 CHS moved from face-to-face interviewing to telephone mode reducing the number of questions. The output from the survey, in terms of the range and depth of topics covered, has consequently been reduced from that of previous years.

Accuracy and Reliability

The proximity between an estimate and the unknown true value.

The target response rate for the CHS is 55%, approximately 4,300 participating households. In 2020/21, 1,403 households participated in the survey and 1,885 individuals aged 16 and over completed an individual interview; the overall response rate was 17%

Analysis of the culture, arts and sport modules of the CHS have been weighted for non-response. A chi square goodness-of-fit test showed that the CHS sample was not representative of the population by age, sex and deprivation quintiles when compared with the 2020 Mid Year Population Estimates for Northern Ireland (NISRA 25 June 2021). As a result, separate weights were produced for age, sex, deprivation quintile and combinations of these variables. It should be noted that this is the first year that weights for deprivation quintiles have been produced.

Non-response weighting sometimes increases standard errors and sometimes decreases them, although the impact tends to be fairly small, i.e. the adjustment may be less or greater than 1, but will generally be reasonably close to 1. In the case of the analysis for these publications, the values of the adjustment for all three weighting systems are so close to one, it is not necessary to take account of this in the calculation of standard error and confidence intervals.

While weighting for non-response (also called post-stratification) should reduce bias, it must be acknowledged that it will not eliminate bias. The reasons individuals choose to take part in surveys are complex and depend on lots of factors specific to the individual. As a result, the non-response biases in surveys are likely to be complex. Post-stratification works on the assumption that, by aligning the survey to the population along a small number of dimensions such as age and gender, many of these complex biases will reduce. However, it would be misleading to suggest that they will be eliminated.

The 95% confidence intervals for each estimate have been included in the additional data tables which accompany the bulletin (in Excel and Open Document formats). These confidence intervals represent the ranges either side of the CHS proportions which are 95% certain to include the true values for the population.

For example, we estimate that 87% of the population of Northern Ireland had engaged in culture, arts and sport in 2020/21, we can be 95% certain that the true proportion falls between 85.4% and 88.4%.

Some estimates are based on a small sample size with wider confidence intervals. These estimates are highlighted to be used with caution as they may result in less precise estimates.

Any statements in the reports regarding differences between groups such as males and females, different age groups, level of deprivation, etc., are statistically significant at the 95% confidence level. This means that we can be 95% confident that the differences between groups are actual differences and have not just arisen by chance. Both the base numbers and the sizes of the percentages have an effect on statistical significance. Therefore on occasion, a difference between two groups may be statistically significant while the same difference in percentage points between two other groups may not be statistically significant. The reason for this is because the larger the base numbers or the closer the percentages are to 0 or 100, the smaller the standard errors. This leads to increased precision of the estimates which increases the likelihood that the difference between the proportions is actually significant and did not just arise by chance

Timeliness and Punctuality

Timeliness refers to the time gap between publication and the reference period. Punctuality refers to the gap between planned and actual publication dates.

Professional Services Unit of the Department for Communities, who produce this bulletin, usually receive a provisional CHS dataset by mid-May of each year with the final validated CHS dataset received by the end of June.

DfC normally publish provisional headline results from the CHS within six weeks of receiving the dataset with final results and additional breakdowns available within six months of receiving the data. For 2021, the results have been delayed to allow for additional quality assurance of the data given the relatively smaller sample size.

This bulletin is published on the planned date, as pre announced on the Department for Communities website and GOV.UK.

Accessibility and Clarity

Accessibility is the ease with which users are able to access the data, also reflecting the format in which the data are available and the availability of supporting information. Clarity refers to the quality and sufficiency of the metadata, illustrations and accompanying advice.

This bulletin is published in PDF format on the Department for Communities website on the pre-announced publication date in line with the Public Sector Bodies (Websites and Mobile Applications) (No. 2) Accessibility Regulations 2018 (<http://www.w3.org/TR/WCAG21/>). The bulletin is also available in alternative formats on request. Within the bulletin, a number of charts have been provided with titles, axis names and footnotes added to help clarify certain information where applicable. Additionally, the bulletin includes an annex which provides summary background information, definitions and methodological explanations.

Accompanying data tables, in Microsoft Excel and Open Document format, are also available on the Department for Communities' website.

The key findings from the bulletin are summarised by infographics that have been included within the bulletin.

The contact details of the responsible statisticians have also been included in the bulletin and in the Excel and Open Document spreadsheets.

In addition, the data from the CHS is available on the UK Data Service (<https://www.ukdataservice.ac.uk/>).

Coherence and Comparability

Coherence is the degree to which data that are derived from different sources or methods, but refer to the same topic, are similar. Comparability is the degree to which data can be compared over time and domain.

The statistics contained within the bulletin are derived solely from the CHS. Questions on engagement in culture, arts and sport have been included since 2003/04. The current range of questions had been included on a consistent basis since 2007/08 allowing for comparability over time, however due to the coronavirus (COVID-19) pandemic, data collection for the 2020/21 survey moved from face-to-face interviewing to telephone mode with a reduction both in the number of questions and the response categories for some questions. The results from the CHS 2020/21 are, therefore not directly comparable to previous years due to the significant changes to the survey in terms of methodology and content.

Data for engagement in culture, arts and sport are available from a range of sources for the United Kingdom, such as Taking Part for England, the Scottish Household Survey and the Active Adults Survey in Wales. However, due to differences in the definitions and survey methodologies used many of these are not directly comparable with the estimates in this bulletin for Northern Ireland.

Trade-offs between Output Quality Components

Trade-offs are the extent to which different aspects of quality are balanced against each other.

Some estimates are based on a small sample size with wider confidence intervals. These estimates are highlighted to be used with caution as they may result in less precise estimates.

Assessment of User Needs and Perceptions

The processes for finding out about users and uses, and their views on the statistical products.

Contact details for the responsible statisticians have been provided in the bulletin and in the Excel and Open Document spreadsheets.

Consultation is carried out annually with a key user group to agree the questions to be included in the CHS to ensure they continue to cover the key requirements for users.

Performance, Cost and Respondent Burden

The effectiveness, efficiency and economy of the statistical output.

The overall cost of running the CHS cannot be provided as this is commercial-in-confidence.

The production of the bulletin is carried out by an Assistant Statistician (0.1 FTE) and managed by a Deputy Principal Statistician (0.05 FTE).

It is estimated that the responses to the Department for Communities questions on which the bulletin is based take on average 11.5 minutes for a respondent to complete.

Confidentiality, Transparency and Security

The procedures and policy used to ensure sound confidentiality, security and transparent practices.

Professional Services Unit of the Department for Communities follows the 'National Statistician's Guidance: Confidentiality of Official Statistics' in the collection and dissemination of these statistics. This can be found at: <http://www.statisticsauthority.gov.uk/national-statistician/ns-reports--reviews-and-guidance/national-statistician-s-guidance/index.html>.

Standard disclosure control methodology is applied to the data. This ensures that information attributable to an individual is not identifiable in any published outputs and that the outputs are only seen by authorised staff prior to their publication.