The Northern Ireland Safe Community Survey: User Guide

Analytical Services Group

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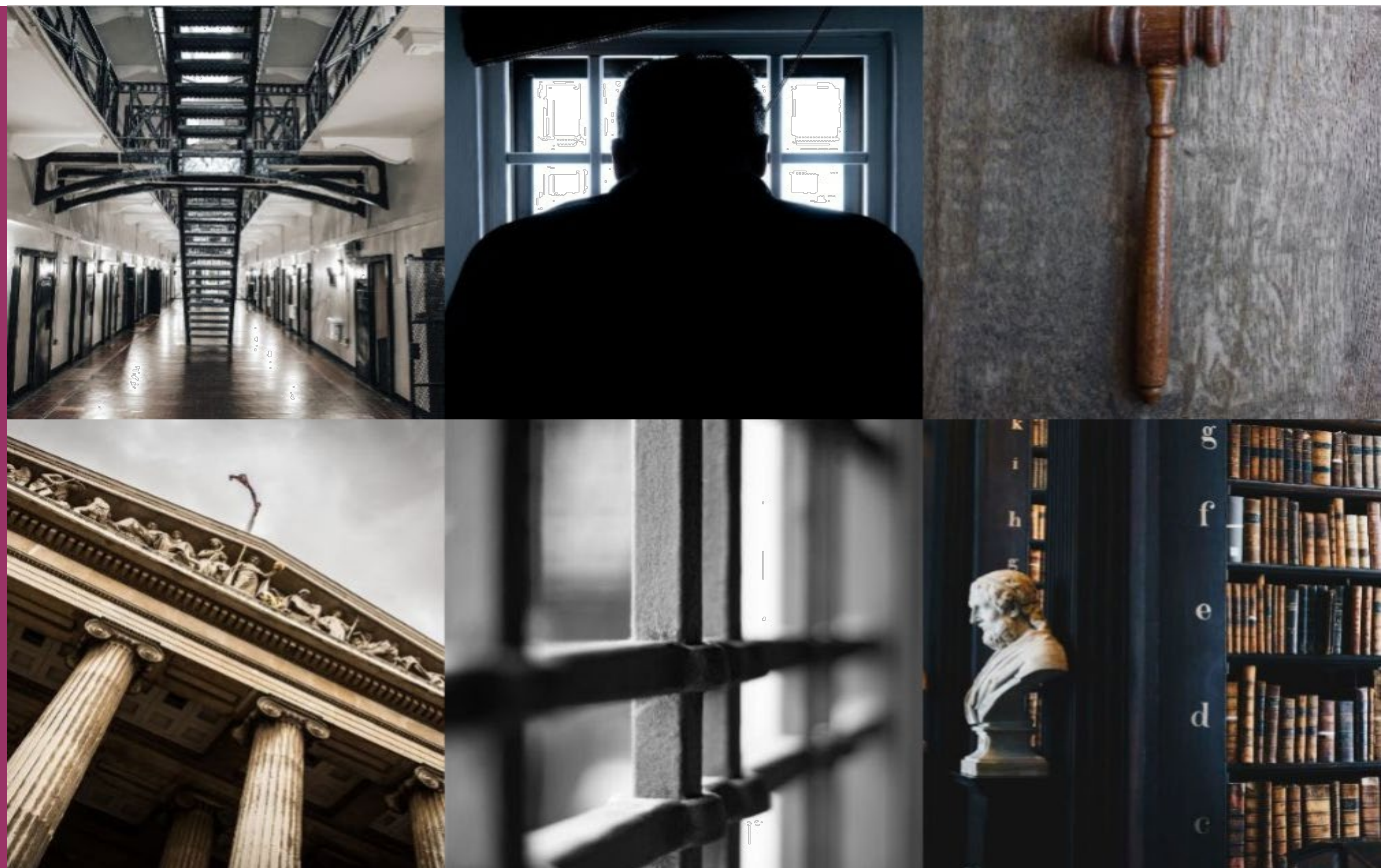
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1 | Background to the NISCS

1.1 About the NISCS

The Northern Ireland Safe Community Survey (NISCS; formerly known as the Northern Ireland Crime Survey (NICS)) is a representative, continuous, personal interview survey in which people aged 16 and over living in private households in Northern Ireland are asked about their experiences of crime in the 12 months prior to interview as well as their perceptions of crime-related issues, including policing and justice, crime and anti-social behaviour. Self-completion modules are used to elicit information on sensitive topics, such as domestic abuse.

The survey was first conducted in 1994/95, with further cycles in 1998, 2001 and 2003/04. In 2005, in light of the discontinuation of the Community Attitudes Survey and the requirement to have a more robust vehicle to track progress against Public Service Agreement (PSA) and other targets related to the criminal justice sector, the then NISCS moved to an annual format with continuous fieldwork. Since 2006/07, its reporting cycle has been aligned with the financial year.

The core modules for NISCS are generally based on the Crime Survey for England and Wales (opens in a new window) (CSEW: formerly the British Crime Survey (BCS)). However, some modification has been necessary to reflect local issues and the fact that the smaller NISCS sample size would not have generated robust results for follow-up questions asked of small sub-sections of the sample. Its results play an important role in informing and monitoring government policies and targets.

Within the Draft 2016-21 Programme for Government (opens in a new window) (PfG) and the Northern Ireland Civil Service Outcomes Delivery Plan (opens in a new window), the Department of Justice (DoJ) lead on Indicator 1 which reports the 'Any NISCS crime' prevalence rate. Change in the prevalence rate was used to quantify progress towards the desired outcome of reducing crime and the harm and vulnerability caused by crime. NISCS findings also informed the Northern Ireland Policing Board's Strategic Outcomes for Policing in Northern Ireland 2016-2020 (opens in a new window) (NIPB, 2016).

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An alternative, but complementary, measure of crime to offences recorded by the police, the main aims of the NISCS are to:

- measure crime victimisation rates experienced by people living in private households, whether or not these crimes were reported to or recorded by the police;

- monitor trends in the level of crime, independent of changes in reporting levels or police recording practices;

- measure people's perceptions about and reactions to crime (for example, the level and causes of crime, the extent to which they are concerned about crime and the effect of crime on their quality of life);

- measure public confidence in policing and the wider criminal justice system; and

- collect sensitive information, using self-completion modules, on people's experiences regarding crime-related issues, such as domestic abuse.

1.2 Review of the NISCS and Compliance Check by the Office for Statistics Regulation

During 2017/18, a review of the survey was undertaken, more specifically with regards to the scope of the survey and content of the questionnaire. The main aim was "to review the scope and content of the NI Crime Survey to ensure it meets customer requirements in alignment with Departmental and Programme for Government priorities."

Following a range of consultation exercises, a number of amendments were subsequently made to the survey.

- **Survey name**: Feedback indicated that the name, Northern Ireland Crime Survey, may deter some potential respondents from completing the survey. The survey was therefore re-named to the Northern Ireland Safe Community Survey (NISCS) from April 2018 onwards. Any publications produced from the 2018/19 survey and thereafter will refer to the Northern Ireland Safe Community Survey.

- **Sample size**: Following a reduction in the target achieved sample size from 4,000 to 2,000 annually in recent years (see 'Change to Northern Ireland Crime Survey sample size (opens in a new window)' paper), the target sample size was subsequently increased again from 2018/19 onwards. It is now anticipated that approximately 3,500 interviews will be achieved annually. This will improve the robustness of socio-demographic analyses, narrow confidence intervals and require smaller percentage point changes to achieve statistical significance.

1 | Background to the NISCS

- **Content and format**: Changes were made to the content and format of the questionnaire. Some modules such as the 'Risk of Becoming a Victim of Crime' and 'Night-time Economy' were removed, while new modules were developed relating to, for example, perceptions of 'Sentencing' and 'Modern Slavery'. In addition, the survey moved to a biennial rotation format. Core modules, such as those used to measure victimisation, will continue to be asked annually while some attitudinal-based modules will be rotated biennially and asked in alternate years. This change enabled new modules to be accommodated while reducing questionnaire length and subsequent time-burden on the respondent. Some minor wording changes were also made to existing questions. These questionnaire and format changes took effect from 2018/19.

Further information on the review of the survey (including the modules to be rotated biennially) and other related documentation can be found under the User Documentation section of the NI Safe Community Survey (opens in a new window) webpage.

A Future Programme of Work (opens in a new window) has also been published by Analytical Services Group (ASG-DoJ) which provides a high level outline of the developments that ASG aim to address in relation to the survey going forward. The aim is to assess the viability of implementing a number of developments which have been addressed in similar surveys in other parts of the UK, or have been identified as a demand through the various consultation exercises. Some of these developments were also identified by the Office for Statistics Regulation (opens in a new window) as part of a Compliance Check of the Safe Community Survey (opens in a new window).

1.3 The need for both recorded crime and the NISCS

Recorded crime statistics are produced by the Police Service of Northern Ireland (PSNI) in line with Home Office counting rules (opens in a new window) and the National Crime Recording Standard (NCRS), and are broadly comparable with those supplied by police forces in England and Wales. They provide year-on-year changes for the full range of notifiable offence categories, typically the more serious types of offence, provide a good measure of trends in well-reported crimes as well as the less common but more serious crimes (in particular, homicide, which is not covered by the NISCS) and provide data for small geographic areas (ONS, 2018 (opens in a new window)).

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The level of recorded crime can, however, be affected by changes in both police recording and counting practices and in levels of reporting incidents to the police. For example, in April 1998 the Home Office Counting Rules were expanded to include certain additional summary offences, and crime counts became more victim-based. This resulted in a substantial increase in the number of crimes recorded in 1998/99 when compared with 1997/98. In addition, in April 2001 PSNI introduced a new crime recording system which improved data collection and coverage. As a result more low level crime was identified and included in the recorded crime statistics. NCRS was then introduced by the Home Office in April 2002 but, as the impact of this new guidance was mainly experienced within PSNI through the new system introduced the previous year, crime levels were less affected. Further information on recorded crime statistics can be found in the Police Service of Northern Ireland (PSNI) User Guide to Police Recorded Crime Statistics PDF (1MB) (opens in a new window) (PSNI, 2018).

While recorded crime statistics do not include the high proportion of offences that are not reported to the police or that the police do not record, they include a wider range of crime types. The NISCS excludes, for instance, fraud, crimes against children, crime against businesses and other organisations, and those crimes termed as 'victimless', for example, possession of drugs. In addition, the NISCS does not cover the population living in group residences, for example, care homes or halls of residence, although this is thought to have little effect on estimates (see Pickering et al., 2008 PDF (0.3MB) (opens in a new window)).

Recorded crime figures cannot, by their nature, provide an impression of the extent of concern about crime (often described as 'fear of crime') among different sections of the community. Hence, it is necessary to complement the police figures with information drawn from the NISCS, which, for the crime types it covers, provides a more complete measure of the extent and impact of crime against private households and their adult occupants.

Due to methodological consistencies between sweeps, and the fact that the data collected are unaffected by police reporting and recording practices, the NISCS has the potential to become a more reliable device for measuring trends in crimes against households and their adult occupants. This would, however, require a much larger sample size to facilitate the tracking of small, statistically significant changes in the levels of particular types of crime. In the past, PSNI recorded crime figures have been used to track progress towards the achievement of crime reduction targets within Northern Ireland.

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1.4 Limitations of NISCS Data

Although the NISCS sheds light on the large proportion of crime not reported to the police:

- its coverage is restricted to non-fatal crimes against private households and their adult occupants (it excludes, for instance, homicide, crimes against children, fraud, crimes against businesses, organised crime and so-called 'victimless' crimes);

- it does not facilitate local crime pattern analysis;

- it has not traditionally been carried out annually (but see section 1.5 below); and

- it is subject to sampling and non-sampling errors.

Examples of non-sampling errors that respondents may introduce include:

- making up an offence;

- failing to realise that an incident meets the criteria of the questions;

- failing to recall all incidents;

- being unable to remember whether an incident occurred within the reference period; or

- not wanting to reveal their experiences as victims (for instance, sexual offences, domestic incidents and victimisation occurring as a consequence of a victim's own criminal involvement).

Notably, the NISCS may undercount crimes where the victim and offender know each other, either because respondents do not think of these as 'real crimes' or they do not wish to disclose the details to an interviewer. When measuring victimisation, the coverage of the Crime Survey for England and Wales has been extended to include respondents' experiences of fraud and computer misuse. The NISCS has not been extended. Victimisation figures presented in the 'Experience of Crime (opens in a new window)' publication for both Northern Ireland and England and Wales, for example the 'Any NISCS/CSEW Crime' prevalence rates, exclude fraud and computer misuse.

1 | Background to the NISCS

1.5 Frequency and sample size of the NISCS

Initially, the NISCS was conducted on an ad hoc basis, before becoming biennial in 2001. At that time, the Community Attitudes Survey (CAS) was also being conducted on a continuous basis, facilitating annual reports on topics linked to crime, policing and the criminal justice system. Increasingly, however, the CSEW was becoming a key vehicle to track progress against Public Service Agreement (PSA) and other targets related to the criminal justice and health sectors in England and Wales. Hence, interest increased among officials and Ministers in what the NISCS had to offer in terms of direct comparison, while, in light of the improved security situation, many of the issues originally covered by CAS were becoming less relevant.

Accordingly, it was decided that a more effective use of resources would be to discontinue CAS at the end of 2003 and to move fieldwork for the NISCS to a continuous basis with effect from January 2005. This would facilitate the monitoring of annual trends and more regular direct comparison with England and Wales. It was also decided to increase the target achieved sample size for the NISCS from 3,000 to 4,000. This would contribute to increased accuracy of headline results and generate more robust analyses for various socio-demographic characteristics. However, unavoidable budgetary pressures resulted in the need to reduce the target achieved sample size; a moderate decrease was first made in-year 2013/14, from 4,000 to 3,500, with a full sample reduction to 2,000 first being implemented in NISCS 2014/15. Following the aforementioned review of the survey during 2017/18 and feedback from the Draft Programme for Government 2016-2021 consultation, the target achieved sample size was increased. It was anticipated that approximately 3,500 interviews would be achieved annually with effect from April 2018 onwards.

1.6 Change in survey mode due to the pandemic

Following government advice on Covid-19, face-to-face interviews were suspended in March 2020. While they recommenced in June 2020 they have subsequently been conducted via telephone since then. These survey years are being considered as discrete years and are referred to as the Northern Ireland Safe Community Telephone Survey (NISCTS). As a result of the change in mode, a shorter questionnaire was asked and the achieved sample size and response rate was impacted. However, the main methodology by which respondents' experiences of victimisation were captured and derived, as well as how composite measures are calculated, such as the perceived high level of anti-social behaviour indicator, have remained unchanged. The related sections contained within this User Guide, therefore, will still apply to the NISCTS years. Information on sample size and so forth refer to 2019/20, the last year for which face-to-face interviews were conducted. Specific information on the impact of the change in mode on, for example, the achieved sample size and the response rate can be found in the respective NISCTS reports, available from the NISCS section (opens in a new window) of the DoJ website.

2 | Methodology

2.1 Sample design and fieldwork

For 2019/20, an initial sample of 7,500 addresses randomly selected from the NISRA Address Register (NAR). The NAR is developed within NISRA and is primarily based on the Land and Property Services (LPS) POINTER database. At each sampled address, the interviewer is required to establish whether the address is eligible (ineligible addresses include vacant properties, second homes, non-residential addresses and establishments where people are living in group residences). Where an address contains two or more households, the interviewer randomly selects which household to approach.

Once the household is determined to be eligible, individuals aged 16 or over in the selected household are listed by alphabetical order of first name and then one is randomly selected for interview. No substitutes are permitted. Selecting only one person at each address means that individuals living in large households have a lower chance of being included in the sample than those living in small households. Accordingly, data relating to personal victimisation and perceptions are weighted by household size to prevent a bias towards smaller households.

The NISCS is a face-to-face interview survey carried out by the Northern Ireland Statistics and Research Agency's (NISRA) Central Survey Unit (CSU), primarily using computer-assisted personal interviewing (CAPI), where interviewers record responses to the questionnaire on tablet. CAPI allows plausibility and consistency checks to be incorporated to improve data quality. The interviews typically last around 45 minutes for non-victims, although those involving respondents who disclose several crimes can last much longer.

2.2 Questionnaire

The NISCS questionnaire consists of a core set of modules, asked of the whole sample, and a self-completion module, asked of all respondents aged 16 to 74 (from April 2018 onwards, previously asked of those aged 16 to 64). While the victimisation-based questions have not changed and are included every year, the precise set of modules asked in each survey year has varied, partly to enable rotation and partly to reflect emerging policy priorities. As referred to in Section 1.2 above, a change in survey format has taken effect from April 2018 following the review of the survey, with some modules being included annually while others are now rotated biennially.

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A self-completion module on drug misuse was included in each sweep of the NISCS from 1994/95 to 2008/09. A domestic violence self-completion module has been included since NISCS 2001 (to date), while a sexual violence and abuse module was included in NISCS 2008/09. The domestic abuse module has been revised from 2018/19 and will now be asked biennially and rotated in alternate years with a new sexual violence and abuse module. Mainly due to the sensitivity of the topics, and the increased risk that respondents may not wish to continue with the interview, these sensitive, self-completion modules are placed at the end of the questionnaire, after the core CAPI element with respondents personally completing the modules on the interviewer's tablet by themselves (CASI, computer-assisted self-interviewing). When finished, their answers are hidden. This allows respondents, particularly victims, to feel more at ease when answering such questions due to increased confidence in the privacy and confidentiality of the survey.

Respondents are assured in advance of the interviews that any information they provide is treated as entirely confidential and that the level of detail produced in publications or in any subsequent analyses will not allow for identification of individuals. Respondents to self-completion modules are given additional assurances, as well as the option to skip questions they do not wish to answer.

2.3 Reference period

In the sweeps from 1994/95 to 2001, respondents were asked about their crime-related experiences in the previous calendar year (a 'fixed' reference period). Since 2003/04, respondents have been asked to recall all relevant incidents in the 12 previous full calendar months and the month of interview. To ensure consistency between the lengths of these 'floating' reference periods, regardless of the date of interview, data on incidents occurring during the month of interview are removed from consideration. Otherwise, those interviewed later in the month would have a longer reference period than those interviewed at the start of the month.

After studying the effects of the fixed and floating approaches running in parallel in early 2001, the Home Office concluded that the change had little effect on the then BCS victimisation rates (now known as Crime Survey for England and Wales). In addition, by bringing the reference period closer to the date of interview, it took the view that the floating approach should actually increase the accuracy of recall of incidents.

2 | Methodology

As respondents are now interviewed on a rolling basis, the time period covered by the data is not directly comparable with any calendar or financial year. For instance, for respondents to NISCS 2019/20, the valid reference periods commenced for some respondents as early as 1 April 2018 and finished for others as late as 29 February 2020 (a spread of 23 months). This makes it hard to compare the resulting victimisation rates with any specific set of annual recorded crime figures.

As depicted in Figure 1, the centre point of the period for reporting crime (in this example) is March 2019, the only month to be included in all respondents' reference periods. Averaging over the moving reference period of the NISCS generates estimates that are most closely comparable with annual police recorded crime figures to the end of the September during the fieldwork year. For example, NISCS figures from the 2019/20 survey are most closely comparable with police recorded crime statistics for the 12 months ending September 2019 (Figure 1). For questions relating to the perceptions of the respondent, for example, confidence in policing, the data correspond to the year in which the respondent was interviewed.

Figure 1: The reference period in one year of NISCS interviews (April to March)

Legend: Mid-point for survey estimates | Time period most closely comparable with recorded crime
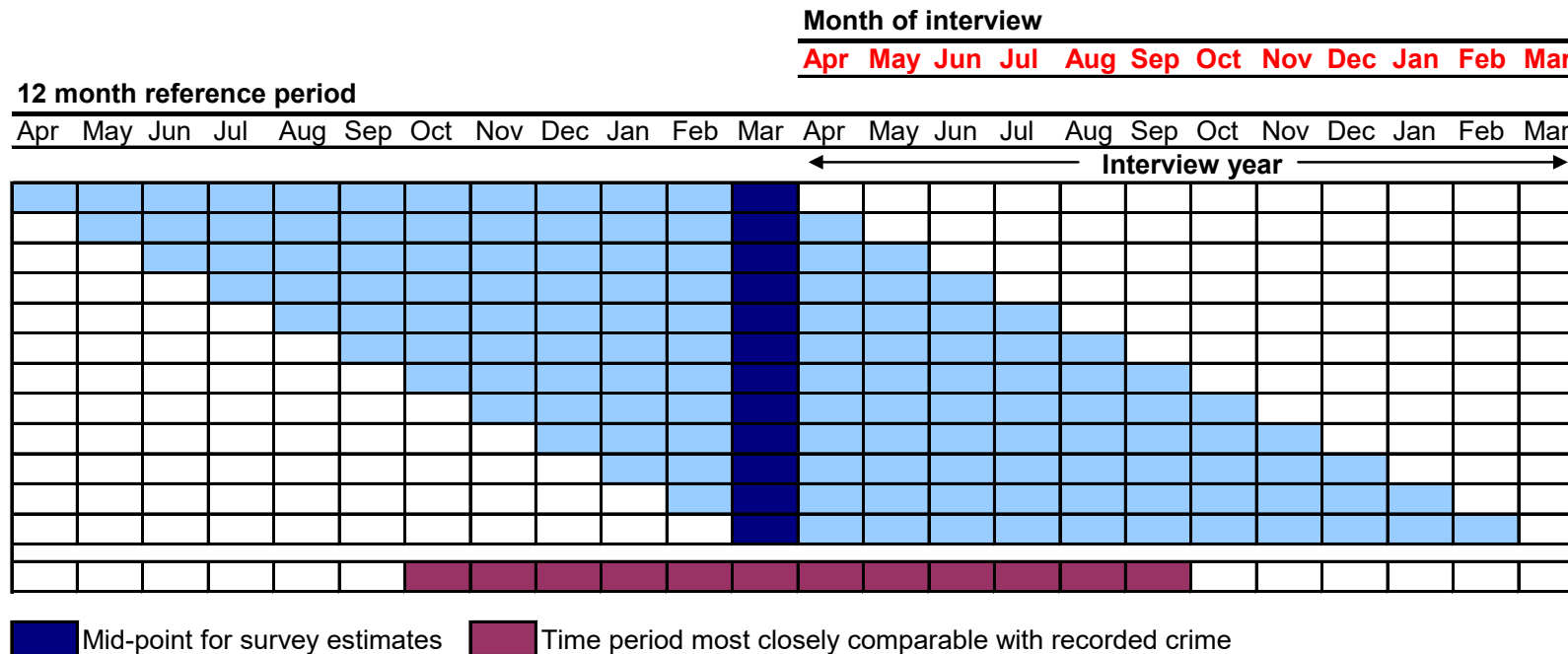
2 | Methodology

2.4 Measuring victimisation

The NISCS provides estimates of the levels of household and personal crimes experienced by respondents. Household crimes are considered to be vehicle- and other property-related crimes, and respondents are asked whether anyone currently residing in the household has experienced any such incidents within the reference period, for example, criminal damage to a car, the owner of which could be anyone in the household. Personal crimes relate solely to respondents' experiences, not those of other people in the household, for example, assaults and personal thefts.

There are two stages to the questionnaire for measuring experiences of victimisation. Initially, respondents are asked a series of screener questions within the main section of the questionnaire to assess if they have been a victim of crime. The wording of the screener questions has been kept consistent since the survey began to ensure comparability across the surveys. Screener questions do not ask respondents if they have been a victim of explicit crime types, but ask about different experiences, such as whether they have had anything stolen in the last 12 months. This design ensures the inclusion of all incidents within the scope of the NISCS, including relatively minor ones.

Following the screener questions, those who have been victimised are asked detailed questions about exactly what happened. Details of experiences of crime are recorded on a maximum of six victim forms. The first three victim forms include detailed questions relating to each incident, although they are somewhat shorter than their CSEW equivalents; the others are slightly shorter, to reduce the risk of respondent fatigue during the interview. The order in which the victim forms are asked depends on the type of crime – more serious and rarer crimes are prioritised in order to collect as much detailed information as possible.

Most incidents reported are one-off, single occurrences, but in a minority of cases, respondents may have been victimised a number of times in succession. In these cases, respondents are asked whether they consider these incidents to be a 'series', that is, "the same thing, done under the same circumstances, and probably by the same people". Where incidents are determined to be in a series, the number of incidents is recorded, but with only one victim form being completed, based on the most recent incident. NISCS estimates only include the first five incidents in each 'series' of victimisations in the count of crime.

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The restriction to the first five incidents in a series ensures estimates are not affected by a very small number of respondents who report an extremely high number of incidents and which are highly variable between survey years. The inclusion of such victims could undermine the ability to measure trends consistently. This sort of capping is consistent with other surveys of crime such as Scottish Crime and Justice Survey (opens in a new window). While used previously on CSEW estimates, the cap of five was dropped and replaced the limit with the 98th percentile. (Further information on the move of the CSEW to the 98th percentile cut-off point can be found in the crime and justice methodology on the ONS website (opens in a new window)). Prevalence rates are not affected by this procedure.

2.5 Offence coding

Based on information collected from the victim forms, DoJ statisticians determine whether the incident that has been reported constitutes a crime, and if so, what offence code should be assigned to the crime (see Appendix A for list of offence categories). Once assigned, codes are subject to further validation. Only those incidents designated as 'valid' (for example, incidents that took place within Northern Ireland and during the recall period) are included in standard NISCS analyses. NISCS crime statistics are produced from these data and presented as incidence or prevalence rates, based on incidents or victims (see Section 3).

The final offence code may not correspond to the screener question from which the Victim Form arose: for example, an incident elicited from the burglary screener may turn out to be a case of vandalism. An incident may also be double counted on the screener questions – despite careful wording of the questions respondents may report a single incident on two different screener questions. The coding process ensures that incidents are recorded as accurately as possible. Since 2003/04, victim forms have not been completed for incidents outside of Northern Ireland. Previously, although a short victim form was completed, such offences were coded as not valid.

2.6 Incident classification

Similar offence codes are then grouped together for the purpose of reporting on the incidence and prevalence rates for different crime types (see Section 3). A list of incident classifications together with their corresponding offence categories is included in Appendix A.

3 | NISCS Analysis – Experience of Crime

3.1 Types of analysis

Three main types of analysis can be carried out on NISCS data: individual-based, household-based and incident-based. Both individual and household analysis can be used to produce incidence and prevalence rates for different crime types.

▪ **Individual-based analysis**

Individual-based analysis is carried out when the intention is to make statements about the characteristics, attitudes or experiences of adults in the sample. It is important to recognise that statements about the characteristics of victims are not the same as incident-based analysis in which statements are made about incidents (see incident-based analysis). This is because a victim can experience more than one incident.

▪ **Household-based analysis**

Household based analysis is carried out when the intention is to make statements about the characteristics or experiences of households in the sample. Again, the characteristics of the households are not the same as incident-based analysis in which statements are made about incidents as a household can experience more than one incident. The most common type of household-based analysis is analysis in which statements are made about households who were victims of household crimes.

▪ **Incident-based analysis (victim form analysis)**

This comprises analyses where the intention is to make statements about the nature of incidents of crime using the information collected on the Victim Form. Incident-based analysis usually examines the nature of specific offence types or compares different types of offence.

3.2 Rates-based analysis (incidence rates and prevalence rates)

Within the annual National Statistics Publication 'Experience of Crime (opens in a new window)', the Department of Justice produces three main NISCS measures of the extent of crime in Northern Ireland: prevalence rates; incident rates; and crime count.

3 | NISCS Analysis – Experience of Crime

- **Prevalence rates**

Prevalence rates (also known as risks) give the proportions of the population who were victims of each offence type once or more during the recall period. Prevalence rates are calculated using either individual- or household-based analysis. Unlike incidence rates, prevalence rates only take account of whether a household or person was a victim of a specific crime once or more during the reference period, not the number of times they were victimised. Respondents and their households are thus designated as victims or non-victims. The proportions who are victims provide the prevalence rates, equivalent to the risk of being a victim of crime.

The overall number of victims can also be estimated based on the prevalence rate and using estimates of the population of households and adults in Northern Ireland. In this case, the proportion of households (in the case of household crimes) or adults (in the case of personal crimes) that were victims should be multiplied by the total number of households or adults in Northern Ireland to produce an estimate of the number of households or adults who were victims of a specific crime type. While there is no need to weight prevalence rate analysis based on household crimes, all prevalence rate analysis based on personal crimes are weighted accordingly.

- **Incidence rates**

 Unlike prevalence rates, incidence rates take into account multiple and repeat victimisation and provide the estimated number of crimes experienced per 10,000 households (for household crimes) or per 10,000 adults (for personal crimes).

To calculate an incidence rate, the number of incidents experienced by each respondent is aggregated together for each crime type. This is either one incident per victim form (up to six victim forms) or, where a victim form contains a 'series', it is the number of incidents in the series (capped at 5). The number of incidents for each respondent is then multiplied by 10,000 and the mean of this number produces the incidence rate for a particular offence type. An example is provided on the following page.
While there is no need to weight incidence rate analysis based on household crimes, all incidence rate analysis based on personal crimes are weighted by household size (see below). The overall number of crimes is the sum of the totals for household and personal crimes.

3 | NISCS Analysis – Experience of Crime

> **Example: Producing NISCS incident rates per 10,000 adults / households**
>
> In a dataset of 4,000 respondents, if 30 respondents have each reported three incidents of burglary, the total number of burglaries is 90. When this is multiplied by 10,000, the mean value across the whole dataset is 225 (900,000/4,000). This works out at 225 burglaries per 10,000 households.
>
> Similarly, if 40 respondents have each reported 2 incidents of assault, the total number of assaults is 80. When this is multiplied by 10,000, the mean value across the whole dataset is 200 (800,000/4,000). This means there are 200 assaults per 10,000 adults.
>
> Note: Both of these examples use unweighted figures. Analysis for personal crimes against the respondent are weighted appropriately (see below).

- **Crime count**

The overall number of incidents can be estimated for Northern Ireland, based on the incidence rate (outlined above) and using estimates of the populations of households and adults in Northern Ireland. In 2019/20, estimates of 736,470 households (household projections) and 1,497,742 adults (mid-year population estimates: aged 16+) were used to provide estimates of the number of NISCS incidents..

3.3 Repeat and multiple victimisation

The NISCS datasets contain variables which allow users to examine rates of repeat and multiple victimisation. Repeat victimisation relates to the proportion of people who have been victims of more than one crime of the same type during the reference period, while multiple victimisation is defined as the experience of being a victim of more than one crime regardless of the type. So, people who have experienced multiple victimisation include 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. Levels of repeat victimisation account for differences between published incidence rates and prevalence rates. For instance, high levels of repeat victimisation will be reflected in relatively lower prevalence rates compared with incidence rates. The reduction in sample size for recent years, however, may result in rates for some crime types not being published due to low base numbers.

4 | NISCS Analysis – Perceptions of Crime

4.1 Worry about crime indicators

The worry about crime indicator in the NISCS has three components: worry about burglary; car crime; and violent crime. Each of these components is measured by asking respondents how worried they are about becoming a victim of the following seven types of crime using a four-point scale, ranging from 'very worried' to 'not at all worried':

1. home being burgled;

2. being mugged and robbed;

3. physical attack by a stranger;

4. physical attack because of their race, religion, sexuality or disability;

5. rape;

6. theft of a car; and

7. theft from a car.

Two composite indicators for worry about car crime and violent crime are constructed from the responses to the individual car crime (numbers 6 and 7, above) and violent crime (numbers 2 through 5) questions. These additional indicators, together with the proportion of respondents who claimed to be 'very worried' about burglary (number 1) form the three components.

For the worry about car crime indicator, responses to each car crime question of 'very worried' are awarded 2 points and 'fairly worried' 1 point. Those respondents scoring a combined 3 or 4 points are considered to have a high level of worry about car crime. This measure refers only to respondents residing in households owning, or with regular use of, a vehicle.

A similar approach is used to determine the worry about violent crime indicator, with responses to each violent crime question of 'very worried' being awarded 2 points and 'fairly worried' 1 point. In this instance, the scale ranges from 0 to 8 points and those scoring 4 or more points are deemed to have a high level of worry about violent crime.

4 | NISCS Analysis – Perceptions of Crime

4.2 Likelihood of victimisation indicators

In addition to questions on worry about crime (above), the survey has previously asked respondents how likely they think it is that they will be a victim of the following offences in the next 12 months, using a four-point scale ranging from 'very likely' to 'very unlikely':

1. home being burgled;

2. theft of a car;

3. theft from a car;

4. being mugged and robbed; and

5. physical attack by a stranger.

Two composite indicators to measure the perceived likelihood of being a victim of car crime and violent crime were again constructed from the responses to the individual car crime (numbers 2 and 3, above) and violent crime (numbers 4 and 5) questions. These additional indicators, together with the proportion of respondents who say they are very or fairly likely to have their home burgled in the next year, comprised the three component groups (burglary; car crime; and violent crime).

The perceived likelihood of being a victim of car crime is a composite measure of respondents who think they are very or fairly likely to either have a car/van stolen or have something stolen from a car/van in the next year, or both. This measure refers only to respondents residing in households owning, or with regular use of, a vehicle.

Similarly, the perceived likelihood of being a victim of violent crime is a composite measure of anyone who thinks they are very or fairly likely to be either mugged/robbed or physically attacked by a stranger in the next year, or both.

These questions are asked of all respondents, irrespective of whether they have been a victim of crime in the previous 12 months. Following the review of the survey, the module was removed from 2018/19 onwards but analyses are included in earlier publications.

4   NISCS Analysis – Perceptions of Crime

4.3 Anti-social behaviour indicators

The NISCS measures the perceived level of anti-social behaviour (ASB) through asking respondents to rate how much of a problem the following seven types of ASB are in their local area, using a four-point scale ranging from 'very big problem' to 'not a problem at all':

1. abandoned or burnt-out cars;
2. noisy neighbours or loud parties;
3. people being drunk or rowdy in public places;
4. people using or dealing drugs;
5. teenagers hanging around on the streets;
6. rubbish or litter lying around; and
7. vandalism, graffiti and other deliberate damage to property.

Responses to these seven individual strands are used to form a composite measure to gauge the overall perceived level of ASB in the local area as follows: responses of 'very big problem' are awarded 3 points, 'fairly big problem' 2 points, 'not a very big problem' 1 point and 'not a problem at all' 0 points. In turn, the maximum score for the seven questions is 21. Respondents with a score of 11 or more on this scale are classified as having a high level of perceived anti-social behaviour, while those scoring 10 or less are considered to have a low level of ASB. This scale can only be calculated from NISCS 2003/04 onwards as the question on 'people being drunk or rowdy' was only introduced in 2003/04. Measures of perceptions of each of the seven individual types (or strands) of ASB, such as 'rubbish or litter lying around', are based on the proportion of NISCS respondents who consider that particular strand to be a very or fairly big problem in their local area.

4.4 Perceptions of the crime rate

Questions on the perception of change in the local and regional (Northern Ireland level) crime rates have been included in the NISCS since 1998 and 2003/04 respectively. With the focus on change in the level of crime during the two years prior to interview, and for trend comparisons, the question on local crime is presented only for respondents who have lived at their address for more than three years. In contrast, the question covering crime in Northern Ireland as a whole refers to all respondents.

5 | Statistical Conventions and Methods

5.1 Weighting

Weighting is used to ensure the representativeness of the NISCS sample and, thus, to compensate for unequal probabilities of selection as the individual's chance of participation is inversely proportional to the number of adults living in the household. Selecting only one person at each address means that individuals living in large households have a lower chance of being included in the sample than those living in small households.

Accordingly, to prevent a bias towards smaller households, all NISCS data presented in relation to personal victimisation (as opposed to household victimisation) and attitudinal (perception) data are weighted in relation to the number of eligible adults at the address, derived from the details of the 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 systematic random sample of adults rather than of addresses. A further effect of this weighting is that the proportions of males and young people, which are typically under-represented in household surveys, more closely match those in the population.

Unlike the CSEW, calibration weighting, to allow for variation in response rates by sex and age, is not applied to the NISCS. While it is acknowledged that, for instance, young people are less likely to participate in such surveys and are more likely to be victims of personal crime, tests involving the application of calibration weighting have shown little appreciable impact on prevalence rates. It was, therefore, decided that it would not have been an effective use of available staffing resource to recalculate the NISCS experience of crime time series.

5.2 Design effect

As outlined above, selecting one individual for interview at the sampled address means that each person in the sample has a different probability of selection, depending on the size of household in which they live. A design effect therefore exists for those parts of the survey data which relate to the selected respondent, namely crimes against the person (such as violent crime and personal theft) and all attitudinal components (such as worry about crime and confidence in policing). For analyses that cover the whole sample, the design effect for NISCS 2019/20 is 1.2, and the design factor is 1.1.

5 | Statistical Conventions and Methods

It is worth noting that prior to NISCS 2009/10, a design effect was not considered to exist in the NISCS as its sample is drawn using simple random sampling (Norris and Palmer, 2010). However, following examination, and subsequent recommendation, by National Audit Office as part of the CSR 2007 PSA review, it was reluctantly accepted by NISRA CSU that a design effect does exist. In turn, a design effect and associated design factor have been estimated for subsequent annual sweeps of the survey and reported on within the respective Technical Report.

5.3 Base numbers

NISCS publications include the base numbers alongside tabular output within the Tabular Annex of each report. The base numbers presented are unweighted and represent the sample upon which each relevant output is based. As these base numbers reflect the achieved sample size they are adjusted to take account of the NISCS design effect (see above), to obtain the effective sample size required for carrying out tests for significant change and confidence intervals relating to individual analyses, such as personal victimisation (e.g. assault and mugging) or attitudinal elements (e.g. worry about crime and levels of public confidence).

The number of cases upon which analysis is based is important as it influences the precision (standard error) of the estimates. The Department of Justice does not routinely publish NISCS estimates where the unweighted base is less than 100 cases, although, where felt merited, it may lower the threshold to 50, subject to a cautionary note.

5.4 Confidence intervals and statistical significance

Like any sample-based survey, the NISCS may produce estimates that differ from the figures that would have been obtained if the whole population had been interviewed, rather than a representative proportion. The extent of this difference depends on the sample size, the size and variability of the estimate and the design of the survey. It is, however, possible to calculate the range of values between which the population figures are estimated to lie, known as the confidence interval (sometimes 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 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 in 95 times out of 100.

5 | Statistical Conventions and Methods

Because of this variation, changes in estimates between survey years or between population subgroups may occur by chance. In other words, the change may simply be due to which adults were randomly selected for interview.

We are able to measure whether this is likely to be the case using standard statistical tests and conclude whether differences are likely to be due to chance or represent a real difference. Only increases or decreases that are statistically significant at the five per cent level ($p<0.05$), and are therefore likely to be real, are described as changes within NISCS publications. Within the Tabular Annex and figures these are typically identified by asterisks.

The above should be borne in mind, particularly in relation to socio-demographic breakdowns. By splitting the overall sample down into subgroups, for example into three age bands, the sample size in each band and therefore the number upon which the estimate for that age group will be based, will be lower. The lower the sample size, the wider the respective confidence limits will be around the percentage and the margin of difference between findings required to achieve 'statistical significance' will also widen accordingly. This should be taken into consideration, more so as the number of categories within a given demographic increases, such as local government district which is disaggregated by eleven areas with varying sample sizes in each. Options for providing more robust analyses at Local Government District level is one of the developments included in the Future Programme of Work (referenced in section 1.2).

5.5 Don't know and refusal responses

In most Department of Justice analyses, refusal codes are excluded. Don't know codes are also usually excluded unless there is interest in these responses, for example, in the case of some attitudinal questions. Where appropriate, Department of Justice publications exclude these responses from unweighted bases quoted and include reference to them in accompanying footnotes.

6 | Classifications

6.1 Geographical

- **Urban-rural definition**

Within the NISCS, the urban-rural definition is derived at Local Government District (LGD) and, primarily, Ward level. In determining urban and rural classifications the NISCS uses the guidelines set out in the report 'Review of the Statistical Classification and Delineation of Settlements (opens in a new window)' (NISRA, 2015). There are eight broad settlement bands specified within this report, with those most densely populated (bands A through E) classified as urban and the remainder classified as rural.

- **Northern Ireland Multiple Deprivation Measure**

Since 2007/08, NISCS data have been broken down and presented on the basis of local area deprivation. The current measure of deprivation used for NISCS analyses is the Northern Ireland Multiple Deprivation Measure (NIMDM) 2017 (opens in a new window) (NISRA, 2017), which replaced the NIMDM 2010 as the official measure of spatial deprivation in Northern Ireland.

The NIMDM 2017 provides information on seven types or 'domains' of deprivation (income; employment; health and disability; education skills and training; access to services; living environment; and crime and disorder) which were combined to produce an overall multiple deprivation measure rank of the areas.

In order to examine the relationship between experiences / perceptions of crime and deprivation the local areas are ranked according to their scores on the overall deprivation domain. The 20 per cent of areas with the highest deprivation scores are identified as the most deprived areas (1st quintile) and the 20 per cent of areas with the lowest deprivation scores are identified as the least deprived areas (5th quintile).

6 | Classifications

6.2 Household

- **Household reference person (HRP)**

For property offences, such as domestic burglary, vehicle-related theft and vandalism, it is necessary to select one person in the household to indicate the characteristics of the household more generally. Following the National Statistics harmonised classifications, the NISCS replaced head of household with household reference person (HRP) in 2006/07. The HRP is the member of the household in whose name the accommodation is owned or rented, or is otherwise responsible for the accommodation. Where this responsibility is joint within the household, the HRP is the person with the highest income. If incomes are equal, then the oldest person is considered the HRP.

- **Household structure**

The classification of households in the NISCS is based on the number and combination of adults and children living within a household. While households with a HRP (see above) aged 60 and over are treated separately, those with a HRP aged under 60 are divided into those with:

- one adult and one or more children (under 16);
- more than one adult with one or more children (under 16); and
- one or more adults with no children (under 16).

- **Household Income**

Total household income is the combined income of all members of the household. It includes income from all sources including earnings from employment and self-employment, pensions (both state and private), benefits and tax credits, interest from savings and investments, maintenance, student grants and rent payments received. Due to the nature of the question, around 12% of NISCS 2018/19 respondents gave insufficient information to classify their household income or declined to answer the question. Those cases with insufficient information may include respondents who did not know the income of other household members.

6 | Classifications

- **Tenure**

The following definition of tenure is used by the NISCS, based on the National Statistics harmonised classification:

- owners: households who own their homes outright, or are buying with a mortgage (includes shared owners, who own part of the equity and pay part of the mortgage/rent);

- social-rented sector tenants: households renting from a council, housing association or other social-rented sector; and

- private-rented sector tenants: households privately renting unfurnished or furnished property. This includes tenants whose accommodation comes with their job, even if their landlord is a housing association or local authority.

6.3 Personal

- **Experience of crime reported to the police**

The NISCS asks respondents whether they have ever been a victim of crime that was reported to the police and, if so, whether this was within the previous two years (prior to interview). In addition to collecting victimisation data, this experience of crime variable enables a respondent's 'fear of crime', such as their level of worry about crime and perceived risk of (future) victimisation, to be classified in terms of their previous victimisation history as follows:

- never been a victim;

- victim;

- victim within last two years; and

- victim more than two years ago.

7 | Methodological Limitations

It must be noted that the figures derived from the NISCS are estimates. As with any sample survey, the NISCS estimates are subject to sampling error and a range of other methodological limitations.

- **Non-response**

As in any voluntary survey, the NISCS is subject to non-response error. The eligible response rate in 2019/20 was 56%. However, non-response has implications for the measurement of crime if non-respondents have different experiences of victimisation to respondents.

- **Recall**

The NISCS asks respondents to recall their experiences of crime in the previous 12 months. The NISCS crime measure is thus dependent on respondents' ability to accurately remember their experiences in the reference period. The accuracy of NISCS estimates could be affected by recall if a respondent simply forgets a relevant incident, reports an incident that occurred outside the reference period as having happened within the reference period or fails to report an incident that occurred within the reference period because they thought it happened outside the reference period.

- **Unwillingness to report**

Respondents may be unwilling to disclose victimisation experiences in a face-to-face interview setting. This is more likely to be the case for domestic incidents (particularly if the offender is in the room during interview), rape and sexual assault. Due to the unreliability of these reports, the Department of Justice estimates of personal crime have never included incidents of rape and sexual assault reported on the victim form. Rather than continue to ask respondents about such a sensitive topic without putting the data to useful purpose, the NISCS no longer contains a screener question for sexual offences. Instead, topics such as domestic violence and sexual victimisation have been reported on using responses to self-completion modules.

7 | Methodological Limitations

- **Definitions of crime**

Incidents which are legally offences may not be reported to the survey if the respondent does not view them as such. In an attempt to overcome this problem the NISCS screener questions ask whether the respondent has experienced certain types of events. They do not refer to 'crimes', use legal terminology or refer to specific offences. The definitional problem is particularly relevant to minor incidents and some forms of violence. Moreover, different social groups may have different perceptions of what does and does not constitute an incident. Evidence suggests that better-off groups have a lower threshold of tolerance and are therefore more likely to report minor incidents to the survey (Sparks *et al.*, 1977).

8 | NISCS Publications

The Department of Justice publishes a number of web-only bulletins containing analyses from the Northern Ireland Crime Survey/Northern Ireland Safe Community Survey, all of which can be downloaded in PDF format from the Northern Ireland Safe Community Survey section (opens in a new window) on the Department of Justice website. These include:

- **Experience of Crime**

Focusing on crime victimisation (prevalence and incidence) rates in both Northern Ireland and England and Wales, this pre-announced National Statistics publication is released towards the end of each calendar year and covers the previous financial year. Containing socio-demographic data, the latest of these reports, drawn from NISCS 2019/20, together with accompanying Microsoft Excel data tables can be found in the Experience of crime section (opens in a new window) of the Northern Ireland Safe Community Survey on the Department of Justice website.

- **Perceptions of Crime**

Focusing on perceptions of the causes and levels of crime, anti-social behaviour and concern about crime, this pre-announced National Statistics publication is released around the end of each financial year and covers the previous financial year. Containing socio-demographic data, the latest report, drawn from NISCS 2019/20, together with accompanying Microsoft Excel data tables can be found in the Perceptions of crime section (opens in a new window) of the Northern Ireland Safe Community Survey on the Department of Justice website.

- **Perceptions of Policing and Justice**

Focusing on levels of public confidence in policing and the wider criminal justice system in Northern Ireland, this is a National Statistics publication. Containing socio-demographic data, the latest report, drawn from NISCS 2019/20, can be found in the Perceptions of policing and justice section (opens in a new window) of the Northern Ireland Safe Community Survey on the Department of Justice website.

8 | NISCS Publications

▪ **Quarterly Update**

These reports focused on headline statistics covering perceptions of policing, justice and anti-social behaviour, in support of the 2011-15 Programme for Government (PfG) commitments and other Departmental targets. This Official Statistics publication was released quarterly with results based on a rolling 12-month period. Information contained in these reports are now published in the annual 'Perceptions of Crime' and 'Perceptions of Policing and Justice' bulletins. The last publication, covering 2016/17, can be found in the Perceptions of policing, justice and anti-social behaviour section (opens in a new window) of the Northern Ireland Safe Community Survey on the Department of Justice website.

▪ **Experience of Drug Misuse**

Focusing on lifetime and recent prevalence of drug misuse, the latest of these Official Statistics publications, drawn from NISCS 2008/09, can be found in the Drug misuse section (opens in a new window) of the Northern Ireland Safe Community Survey on the Department of Justice website.

▪ **Experience of Domestic Violence**

Focusing on lifetime and recent prevalence of domestic violence and abuse in Northern Ireland, within both an intimate partner relationship and a wider family setting. The latest of these Official Statistics publications, drawn from NISCS 2011/12 to 2015/16, can be found in the Domestic violence section (opens in a new window) of the Northern Ireland Safe Community Survey on the Department of Justice website.

For all Department of Justice statistics and research publications, please see the statistics and research section (opens in a new window) on the Department of Justice website.

Appendix A: Classification of NISCS incidents and offence categories

Incident classification	Individual offence category
Vandalism Vehicle vandalism Other vandalism	**All vandalism offences below** Criminal damage to a vehicle Arson Criminal damage to the home Other criminal damage
Burglary (including attempts) Burglary with entry Attempted burglary	**All burglary offences below** Burglary in a dwelling (nothing taken) Burglary in a dwelling (something taken) Attempted burglary in a dwelling
Vehicle-related theft Theft of a vehicle Theft from a vehicle Attempted theft of or from a vehicle	**All vehicle-related theft offences below** Theft of a car or van Theft of a motor-bike, -scooter or moped Theft from a car or a van Theft from a motor-bike, -scooter or moped Attempted theft of or from a car or van Attempted theft of or from a motor-bike, -scooter or moped

Appendix A: Classification of NISCS incidents and offence categories

Incident classification	Individual offence category
Bicycle theft	Bicycle theft
Other household theft	Attempted or actual burglary of non-connected domestic garage or outhouse Theft inside / outside a dwelling
Stealth theft from the person	Other (non-snatch) theft from the person Attempted theft from the person
Other thefts of personal property	Other theft (item may not be held by person) Other attempted theft
All NISCS violent crime Common assault Wounding Mugging	**All violent offences below** Assault with minor injury Assault with no injury Attempted assaults Serious wounding (including sexual motive) Other wounding (including sexual motive) Robbery Attempted robbery Snatch theft from the person

Appendix B: References

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