United Nations Office on Drugs and Crime
United Nations Economic Commission for Europe

Manual on Victimization Surveys

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UNITED NATIONS OFFICE ON DRUGS AND CRIME
UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE

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NOTE

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PREFACE

This manual is the first attempt to develop methodological guidelines at the international level for the design of victimization surveys. The Manual provides a comprehensive source of information for developing national victimization surveys and will be particularly useful for those countries who may be embarking on a survey of this type for the first time. The ultimate goal of the Manual is to improve the comparability of victimization survey results. The Manual provides a minimum dataset of suggested key topics for inclusion in national crime victimization surveys that will further facilitate international comparability of crime survey results.

The Manual does not attempt to be prescriptive about which methods to use, but rather illustrates examples of the types of methodologies available, including the pros and cons of the various methods. It also illustrates the experiences encountered of countries with extensive experience in designing national crime victimization surveys. These examples will assist people to make informed choices to suit their particular circumstances.

This is the first step toward the broader long-term objectives of improving the international comparability of crime statistics in general and developing an integrated system of victim data collections alongside police, prosecution, court and corrective services statistics.* The Manual has been endorsed by the Conference of European Statisticians.

The Manual on crime victimization surveys has been developed through a joint effort of the UNODC-UNECE Task Force on crime victim surveys which consisted of the following members:

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* See the report of the Joint UNECE-UNODC Meeting on Crime Statistics, held on 3-5 November 2004 in Geneva (http://www.unece.org/stats/documents/ces/2004/48.e.pdf) and also the report of the Joint UNODC-UNECE Meeting on Crime Statistics held on 21-23 October 2008 in Vienna (http://unece.org/stats/documents/ece/ces/ge.14/2008/10.e.pdf).

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CHAPTER I. INTRODUCTION TO VICTIMIZATION SURVEYS

1. Chapter I of this Manual provides an introduction to the manual and its purpose, a brief history of crime victimization surveys, key messages for policy makers and some discussion on the limitations of crime victim surveys.

A. Purpose of the Manual

2. Administrative sources (such as police or judicial statistics) cannot provide a sufficiently reliable and comprehensive analysis of crime on their own. Victimization surveys (or victim surveys, crime victim surveys as they will be interchangeably referred to throughout the Manual) are now a recognized tool that help governments and their public understand their crime problems and how better to address them. The United Nations Office on Drugs and Crime (UNODC) - United Nations Economic Commission for Europe (UNECE) Manual on Victimization Surveys provides a comprehensive source of information for developing a national victimization survey and the key issues which need to be considered, including the approach to take, available methods, some key analytical issues and the presentation of results. This Manual is the first attempt to develop methodological guidelines at the international level for the design of national victimization surveys.

3. The Manual answers typical questions faced when designing and planning a victimization survey, such as: What are the minimum requirements for a victim survey? How frequently should victim surveys be repeated? How should a survey be organized? What types of crime should be included? What period of time should be covered? The best sampling design to adopt? How do interviewing methods affect the comparability of results? How should interviewers be selected and trained? How should the quality and limitations of a survey be monitored and reported?

4. These questions are particularly relevant for countries that are in the process of developing victim survey programs for the first time and have limited experience in this field. In this Manual, countries with extensive experience in designing national victim surveys share their knowledge and experience with the international community.

5. No one source will provide a definitive measure of victimization in society. When a criminal victimization occurs, there are a number of ways in which this can be measured and a number of stages at which a measurement can be taken. Measurement can occur at the time a person perceives that they have been a victim of crime, when the crime is reported to the police and/or at the point at which charges are laid. Perfect comparability between these different statistics is not possible because victim surveys reflect the experiences of victimization as perceived by the victims, whereas the other sources are the product of different administrative systems and operational processes which will vary due to differences in legal codes, operational systems and the differing cultural contexts.

6. The Manual focuses on national household victimization surveys but references are included where relevant to international surveys such as the International Crime Victim Survey (ICVS — see paragraphs 20-21) and other surveys of sub-national populations. The ICVS plays an important role in providing more harmonized victimization data allowing comparisons between countries while national and some sub-national victim surveys will often have a larger scope and sample size to allow a closer focus on topics of particular relevance to a specific country.

7. The Manual will cover the end-to-end business process for developing and conducting crime victimization surveys as well as disseminating information from these surveys. These concepts are introduced later in this introductory section.

B. History of victim surveys: evolution and where we are today

8. Victim surveys were developed as a methodology quite late, and were part of the general growth of positivism and quantitative methods in the social sciences relating to the establishment of the nation state and the desire of modern forms of government to understand their population and environments, and to provide an evidence base for the development of policy interventions.

9. Early social surveys, such as Henry Mayhew's 'London Labour and the London Poor' (1851) and Charles Booth's 'Labour and Life of the People' (1889-1903) involved interviewing their subjects about their social conditions and attitudes. The earliest known occasion on which the collection of crime statistics at an international level was considered was at the General Statistical Congress held in Brussels in 1853. The next known major effort was made at the International Congress on the Prevention and Repression of Crime, held in London in 1872. At these meetings a factor emerged which has continued to remain in the foreground through all subsequent efforts, namely, the problem of comparability of definitions.[1]

10. Government measurement of crime initially focused on administrative sources, such as police and court statistics. In the international arena, the United Nations Survey of Crime Trends and Operations of Criminal Justice Systems (also known as the 'Crime Trends Survey' – CTS) was established in 1978 and aimed to conduct a more focused inquiry into the incidence of crime worldwide. This far-reaching worldwide study draws on administrative sources and regularly collects statistics on police, prosecution, courts and prisons. Data collected cover the period 1970-to date.[2]

11. Early criminological work, e.g. in the 1930s, focused on studies of offenders rather than victims, in order to better understand their motivations and the causes of offending. Within government and in much public debate, discussion of crime was still reliant on evidence from official statistics, principally those collected by the police. Government interest in looking beyond its own administrative sources to surveys of the population increased during the Second World War. In Finland, a question on property stolen was introduced into Gallup opinion surveys in the 1940s.[3] In the UK, the increasing interest in the views of citizens was reflected in the launch of the Government Social Survey.

12. The Government Social Survey began life in the spring of 1941 as the Wartime Social Survey. It was originally part of the UK Ministry of Information's Home Intelligence Division and consisted of a handful of researchers, mostly recruited from the new field of market research.[4] These early surveys focused on health and economic questions, along with certain public attitudes. There were initial fears that government asking the public questions about their life and attitudes would be greeted with some suspicion, but these fears proved to be unfounded.

13. During the 1960s criminologists began to understand the weaknesses in administrative sources and sought alternative methods which might provide a more accurate and informative description of crime problems. The first victimization surveys were carried out in the 1960s and 1970s, designed to examine what became termed the 'dark figure' of crime i.e., crimes that were not reported to or recorded by the police. By the 1970s these surveys were also influenced by the growth of feminist theory, and later victimology, which emphasized the importance of victims' views in relation to their victimization and the 'invisibility' in official statistics of certain types of crime, such as sexual offending and domestic violence. Early victimization surveys were mainly small-scale and experimental, for example a survey carried out in Britain in the early 1970s only covered three small areas in London (Sparks, Genn and Dodd, 1977).

14. In addition to seeking to understand crimes not well identified by police statistics, these surveys were an important research tool to assist in identifying aspects of crime and victimization that could not be easily captured by the administrative sources. This additional information was thought essential to support the development of crime prevention strategies. Surveys also captured public attitudes in relation to crime. As the surveys matured and started to produce long-run time series, they became increasingly useful in the measurement of trends and influential both inside and outside government as a measure of success or failure in reducing crime.

1 United Nations Crime and Justice Statistics http://www.uncjin.org/Special/history.html

2 UNODC website: http://www.unodc.org/unodc/en/data-and-analysis/United-Nations-Surveys-on-Crime-Trends-and-the-Operations-of-Criminal-Justice-Systems.html

3 Kauko Aromaa and Seppo Leppä, Omaisuusrikosten yksilöuhrien tarkastelua [A survey of individual victims of property crimes] (Helsinki: Institute of Criminology, Series M:26)

4 Office for National Statistics (UK) http://www.statistics.gov.uk/downloads/theme_compendia/SSD_Anniversary/SSD60AnniRD_v2.pdf

15. In the UK, the first Government Social Survey study relating to crime only occurred as late as 1972 (Durrant, Thomas and Willcock's 'Crime, Criminals and the Law') following a rapid and significant rise in the study of criminology in the preceding decade. However, a number of other countries had also begun to explore new and better ways to measure crime through interviewing members of the public. In 1970 (and again in 1973) Finland undertook probably the first national victimization survey in partnership with Gallup Finland. In 1973, the Netherlands also launched their first crime survey, which ran from 1974 until 1980 as an extended survey from the Ministry of Justice's research centre, and from 1980 to 2005 as the Statistics Netherlands' annual National Crime Survey. In 2005, this survey and the Police Population Monitor were combined to form a new regular National Safety Monitor.

16. Probably the most important and influential innovation with respect to victimization surveys was the launch in 1972 of the United States' National Crime Survey, developed from work done by the National Opinion Research Center and the earlier President's Commission on Law Enforcement and the Administration of Justice. The purpose of this Commission was to investigate the nature and causes of crime in the United States and to recommend policies to address the crime. A key recommendation of the Commission was the implementation of a new source of crime statistics – a victimization survey. Pilot studies beginning in 1966 found significantly more crime than was captured in official police records. And these pilot studies demonstrated that self-report victimization surveys were a suitable method for identifying victimizations not reported to the police.

17. Australia conducted its first victimization survey in 1975 and further surveys were carried out in 1983, 1993, 1998, 2002 and 2005 with the intention now being to run a survey each year to provide 'headline measures' about a select range of personal and household crimes. More in-depth measurement of crime victimization in Australia is conducted on a less regular basis. In Sweden, the national living conditions survey first carried a module on victimization in 1978-9 and in Israel, a victim survey was carried out in 1979 and some subsequent years.

18. In 1981, the United Kingdom launched the British Crime Survey to better understand victimization in that country. The first BCS (1982) was carried out in England, Wales and also Scotland. Subsequently, Scotland has carried out its own survey, as has Northern Ireland. Further surveys of England and Wales were carried out in 1984, 1988, 1992, 1994, 1996, 1998, 2000 and 2001. Since April 2001, the BCS has become an annual fixture in England and Wales providing information on trends in victimization as well as detailed information on the nature of those crimes.

19. Victim surveys are regularly conducted in many other countries, including, for example, Canada, Italy and Switzerland. Many other countries have explored the feasibility of victimization surveys through pilot studies or the inclusion of questions on crime in the questionnaires used for already existing household surveys on other social issues.

20. As victimization surveys became more widely adopted across the globe, it also became possible to use them for international comparative studies. However, the biggest problem in comparative studies remained the differences in definitions of crime between countries. The development of the International Crime Victim Survey (ICVS) in 1987 was aimed at addressing this weakness.

21. The first ICVS was launched in 1989 and the surveys were repeated in 1992, 1996, 2000 and 2004/2005. Initially focusing on developed nations, with the involvement of UNICRI and UNODC the surveys expanded to developing countries and Eastern Europe. More than 70 countries have carried out at least one survey over the years. Not only do these studies now provide comparative data, but thanks to the longitudinal aspect they also provide some data on trends in crime for a number of participating nations.

22. Victimization surveys are now an important tool in helping governments and their public to understand their crime problems and how better to address them. Furthermore, in the last decades much attention has also been given to studying the subjective aspects of criminality: Fear of crime, worries, defence strategies are collected in the main victimization surveys. They are not without their

critics however. Some point out that national averages lack some of the impact that a focus on specific local areas or problems can bring, or the weaknesses in a sample survey approach in addressing the rarer but more serious crimes. However, it is now widely recognized that administrative sources cannot provide a sufficiently reliable and comprehensive analysis of crime on their own.

BOX 1: THE 2005 UNODC-UNECE INVENTORY OF VICTIMIZATION SURVEYS [SEE APPENDIX D FOR MORE INFORMATION]

In 2005, the UNECE-UNODC Task Force on Victim Surveys collected information on victimization surveys conducted or planned in the 56 ECE member countries and in selected other countries. The information was used to create an inventory of victim surveys in the region, to be used as a tool to analyze differences and communalities in the methods and definitions adopted. The information contained in the inventory was also used extensively for the preparation of the present manual.

Surveys included in the inventory

The inventory contains data on 58 surveys (not including specific surveys on violence against women and non-national surveys) conducted in 31 countries. These include 32 victimization surveys (conducted in 23 countries), 24 multipurpose surveys with the inclusion of a module on victimization (conducted in 16 countries), and two surveys of other types.

Historical development

The oldest survey included in the inventory is the US National Crime Victimization Survey, started on 1972 and still ongoing. In the late 1970s and early 1980s surveys were launched in a few countries including Nordic countries (Sweden, Finland and Norway), Israel, the Netherlands and the UK. From the late 1980s, new surveys were increasingly launched in many countries, with 21 new surveys launched in the 1990s and 24 launched between 2000 and 2006.

Frequency

With regard to the frequency, half of the 32 victimization surveys are irregular (12 surveys) or one-time (4) surveys. Only one fifth are conducted frequently: continuously (3), yearly (2) or every 2 years (2). The remaining 30% of the victimization surveys are conducted regularly but less frequently, every 4 (6), 5 (2) or even 10 years (1).

Among the 24 multipurpose surveys, on the contrary, more than half are conducted frequently: continuously (1 survey) yearly (10), or every 2 years (2). Only 25% are irregular (4) or one-time (2), while the remaining surveys are conducted regularly but not frequently: every 3-4 years (3) or every 8-10 years (2).

Countries with most victim surveys

The countries with most surveys reported are Australia (6 surveys) and Switzerland (5 surveys), while 3 surveys were reported in Bulgaria, Israel, New Zealand, Norway and Sweden.

C. A message for policy makers

23. The nature, degree and consequences of criminal activity, as well as people's perceptions of their safety, are issues that influence directly and indirectly the quality of people's lives. Crime can take many forms and can have a major influence on the well being of victims, their families, friends and the wider community. Those most directly affected may suffer financially, physically, psychologically and emotionally, while the fear of crime itself can affect people and restrict their lives in many ways. Crime also can result in significant economic costs such as the provision of law enforcement services and corrective services as well as costs to businesses and households either as a consequence of crime or implementation of preventative measures.

24. Increases in evidence-based policy-making and holistic approaches to social problems have driven demand for social indicators that support the measurement of progress, well being and social inclusion. Crime is no longer seen as a problem in isolation, and policy-makers, researchers and service providers now view crime as relational to other social and economic conditions. As such, statistics that relate only to the criminal justice system can provide a partial and incomplete picture of crime in society.

25. As crime can have a significant economic and social impact, governments invest heavily in the prevention of criminal activity and promote personal and community safety, including community confidence in law and order.

26. A sound evidence base is essential in the development of crime prevention policy and programmes aimed at preventing or reducing crime, improving community safety and reducing fear of crime in communities. This evidence base can also be used to assess the effectiveness of crime prevention programmes by government.

27. National crime victimization surveys provide a valuable source of information to policy makers and can be used to understand the level and nature of both personal and household crime, as well as people's perceptions of safety in the community and their confidence in law enforcement agencies. Both actual and perceived risks of crime can be indicators of community well-being.

28. Surveys can cover a range of incidences and experiences not all of which may be actual crimes according to the law, or as recognized by criminal justice agencies as being within their area of responsibility. We use the term crime to encapsulate the focus of a survey of crime victims but in some cases the term can be understood to cover a wider range of events. Administrative sources, such as the statistics obtained from the police or courts, will only measure incidents which are brought to the attention of the authorities and which are subject to their influence. Hence, a victimization survey can identify experiences which would not normally be identified through those administrative sources.

29. Depending on the budget availability a range of questions can be answered from a survey of this type such as:

- How much crime is there and what are its characteristics?
- What are the characteristics of victims and perpetrators?
- Has the level of crime changed over time?
- What are the risks of becoming a victim?
- Have perceptions of safety changed over time?
- How much crime is reported to authorities and if it is not, why not?
- Are crime prevention policies working?
- Is there a relationship between fear of crime and actual levels of crime?
- What is the impact on vulnerable groups in the community such as migrants, indigenous people, the elderly or those with a mental illness?

D. Limitations of crime victimization surveys

30. Crime victimization surveys are one measure and can be particularly valuable in that they ask people in the community directly about their experiences of crime. Counts of victims identified through surveys may not appear in official police statistics, as the crime may not be reported and/or recorded by police, therefore victimization estimates produced from surveys are likely to be higher than data sourced from police records.

31. It should also be noted, however, that, due to certain methodological constraints, crime victimization surveys cannot provide a definitive measure of the total number of illegal acts that occur in society. Aside from the issue of under-reporting of crime experienced by victims to interviewers, victim surveys can only identify criminal incidents where there is an identifiable victim. Crimes sometimes perceived to be 'victimless', such as drug offences or acts forbidden by the law but carried out by agreement between the 'offender' and 'victim' (such as, for example, sex with a minor or the payment of a bribe) may not be captured where the respondent does not consider that they have been the victim of a crime. Whereas some crime victimization surveys accept the respondent's view as to whether an incident was a crime, others may use the assessment of the interviewer based on answers to a set of questions about the occurrence of particular incidents.

32. Victim surveys deal with incidents which may not necessarily match the legal definition of crime. And, as has been stated, data on victimization is not the same as data on recorded crime. Although data from crime victim surveys are likely to elicit better disclosure of criminal incidents than data from police records, they can also be subject to undercounting as some victims may be reluctant to disclose information, particularly for incidents of a sensitive nature, such as sexual assault. Some criminal incidents are more difficult to measure as often they rely on a person realizing they have been a victim of crime. For example, personal fraud is aimed at deceiving people and a victim may never discover a fraud that was perpetrated against them, or they may discover the fraud long after it took place. A more

detailed discussion of the relationship between crime victimization surveys and police statistics is provided in section III.

33. The accuracy of statistics is influenced by the ability of people to recall past victimizations. The longer the elapsed time period, the less likely it is that an incident will be recalled accurately. Surveys are also subject to sampling and non-sampling errors. Sample surveys can produce estimates for a population of interest, but these are still estimates and may be different from the true count which would be produced if the whole population was surveyed. Criminal offences that are not as prevalent in the community will require large enough samples to be representative of the population, however, data for low prevalence offence types can still be subject to higher error rates than offences that are more common, and sometimes will not be reliably measured by survey methods. The wording or structure of screener questions may also influence responses. The accuracy of survey estimates is also influenced by the response rate.

34. These are some of the methodological issues that clients need to be aware of and which are described in more detail throughout this Manual. However, it is important that those commissioning a survey understand both the strengths of the survey method, in supplementing administrative sources and providing greater detail on victim experience, and also their limitations.

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CHAPTER II. PLANNING A CRIME VICTIMIZATION SURVEY

35. Chapter II of this Manual describes the relationship between information obtained from conducting crime victimization surveys and that obtained from police-recorded crime statistics. It discusses the differences between victim surveys and police-reported data and suggests good practices in attempting to compare data from the two sources. Finally, it proposes a draft list of key topics which should be considered for inclusion in a national victim survey.

A. Victimization surveys and other types of official crime statistics

36. Victimization surveys can illuminate and expand the information that would otherwise only be available from police statistics. Victim surveys have advantages in uncovering a range of crimes that are less well reported to or recorded by the police, as well as other information on the nature of these crimes and respondents' views. Police statistics provide important information on the activity and attention of the criminal justice system as well as providing information on more serious and other types of crime that cannot be measured using surveys of the general public. Victim surveys and police statistics are therefore complementary sources, each of which has specific advantages and weaknesses.

37. Frequently headlines appear in the news media that report on differing trends in crime depending on the source of data from which the reports are derived – police-reported statistics, often referred to as official crime statistics, or victim survey data. This apparent discrepancy can challenge the credibility and motives behind each data source and lead to questions concerning which, if either, set of crime statistics is correct. However, the expectation that police-reported crime statistics and victim surveys should produce similar figures originates from the belief that the two measure the same phenomena, and are based on identical objectives, methodologies and populations when, in fact, they produce two distinct sets of crime indicators. It is important to be aware of the fundamental differences between these statistics to understand why these two measures can and do sometimes diverge, and why they should be seen as complementary rather than mutually exclusive.

About police statistics

38. Police statistics are typically a count of all criminal offences reported to, or detected by, the police and subsequently recorded as crimes. However, only a small portion of all criminal events are reported to the police. To become 'known to the police' a crime must survive a succession of victim and police decisions, including recognition by the victim that a crime has occurred, police notification, and, entering the occurrence into official police records. Each decision is based on individual perceptions of the circumstances surrounding the event and on the victim's and/or witness's estimation of the seriousness of the crime and the costs or benefits associated with reporting it. In addition, a 'crime' may disappear or be redefined at any point in the process, for example, as a result of operational rules, classification decisions, recordkeeping failures or a decision by the victim or the police to drop charges. In some countries crimes are counted at the point when they are first reported to the police, but in other countries the numbers reflect only those crimes that are accepted by the police, or which are passed on for prosecution.

Factors related to varying levels of police-reported crime over time and between countries

39. Many factors have been associated with changes in the proportion of crimes reported to the police. Changes in the legal system and societal attitudes to certain acts or changes in culture, for example the reduction of sexual taboos, can have an important impact on the number of police-reported criminal incidents. A change in the public's tolerance for certain acts, such as spousal assault, can lead to a change in reporting rates and subsequent crime statistics. The introduction of a new offence or a modification to an existing offence can impact the number of criminal incidents. Changes in enforcement practices or special targeted operations will impact the prevalence rates for certain offences, for example, drug crimes, prostitution and impaired driving.

40. In addition, differences in the organizational arrangements for police and other justice services can

influence the number of incidents recorded by police. Some police services maintain call centres to receive and record criminal incidents, while others require victims to report crimes in person. Some types of crime come to the police's attention only as a result of police operational decisions, for example to attend public drinking establishments or to police sporting events. The ease of public reporting can consequently impact whether a relatively minor criminal incident is recorded by the police.

Why people report offences to the police

41. There are a number of reasons why victims may choose to report a crime to the police. Victims sometimes report a crime out of a sense of duty, or because the victim wants the offender arrested or punished, or seeks protection from the offender. Some offences are reported to the police because a police report is mandatory in order to submit an insurance claim for compensation.

42. Other factors that appear to influence police reporting of a crime may relate to the severity or seriousness of the offence, including whether the victim was injured, whether a weapon was present and whether the incident resulted in the victim having to take time off from their main activity because of the criminal incident. The value of stolen items will also affect the willingness of a victim to report an incident.

43. Victimization surveys have found that one of the primary reasons that an incident does not come to the attention of the police relates to the fact that the victim felt that the incident was not important enough. This suggests that the crime may have been too minor to warrant police involvement. Other reasons for not reporting include not wanting the police involved and feeling that the incident was a private or personal matter.

44. In addition, victims in some countries may not want to get involved with the police, either because they feel the police could do nothing to help, or because they fear the police would be biased or would not be willing to intervene. Still others fear publicity or news coverage that could result from police contact.

Counting rules

45. Counting rules vary from jurisdiction to jurisdiction. There are few standards to permit international comparability. However, many jurisdictions count offences in the following manner:

- An offence must be recognized as such before it is recorded. For example, the police must have found evidence of an offence having been committed. Some jurisdictions count offending only when certain processes happen, such as an arrest is made, ticket issued, charges laid before a court or sometimes only upon securing a conviction.
- Multiple reports of the same offence. Some jurisdictions count each report separately while others count each victim of an offence.
- Where several offences are committed at the same time, it is common for only the most serious offence to be counted or for related offences to be counted only once. Some jurisdictions record and count each and every offence separately while others count cases, or offenders, that can be prosecuted.
- Where multiple offenders are involved in the same act of offending often only one act is counted when counting offences but each offender is counted when apprehended.

46. These differences mean that even if the definition of a criminal event is the same, different jurisdictions may still produce different statistical counts for the same actual number of incidents.

About victim survey data

47. Victim surveys capture both criminal incidents reported to the police and those not reported to the police by randomly selecting a sample of the population and asking them directly about their experiences of criminal victimization. These surveys can also measure more than criminal incidents and often include questions about fear and attitudes toward crime and the justice system, as well as various socio-demographic characteristics that help to assess at risk populations.

48. Given the sensitive nature of criminal victimization, there may be some reluctance on the part of victims to report victimizations to a general population survey. It is important for survey questions to be carefully worded and tested, and for survey interviewers to receive specialized training on how to deal with this sensitive subject matter. Interviewers first need to have general awareness of issues surrounding victimization and to become familiar with the strategies and tools for dealing with issues which may arise during and after interviews with the survey respondents on the subjects of victimization and, for example, spousal abuse. Interviewers should reassure respondents of the confidentiality of the responses, and remain empathetic and non-judgemental.

B. Differences between victim surveys and police-reported data

Data sources

49. The most basic difference between the two types of crime measurement is the method of data collection. Police-reported statistics obtain data from police administrative records either at the aggregate or micro-data level. In contrast, victim surveys collect personal information from individuals about their victimization experiences, often through telephone or face-to-face interviews. The survey covers victims' experience of crime at the microdata level, including the impact of the crime on victims.

Coverage

50. Police-reported statistics normally collate information on all incidents reported to a variety of police agencies. Victim surveys ask a sample of the population about their experience, and if well-designed this sample should be representative of the population as a whole. Although police statistics and victim surveys normally cover comparable geographic areas, if appropriately nationally representative, victim surveys may exclude some categories of victims, such as very young children or persons residing in institutions such as a prison, hospital, care centre or military barracks. And depending on the mode of surveying, victim surveys may exclude from the sample individuals or households without landline telephones or those who for various reasons may not respond to face-to-face contact.

51. Police statistics are typically collated and published on an annual basis and include most types of criminal offences, although not necessarily all of the less serious crimes. While some victim surveys are conducted continuously through the year (e.g., the United States' National Crime Victimization Survey and the British Crime Survey), many victim surveys operate on a less frequent basis, for example every two or three years, and do not measure all types of crime. By their very nature, surveys of the general population do not collect information on homicides or crimes committed against businesses. In some instances, crimes against businesses are covered in specialized surveys of businesses. Moreover, information on consensual or 'victimless' crime (i.e., drug use, prostitution, gambling), and corporate or white-collar crime, is typically not collected through victimization surveys, although it is feasible to collect some indicators of such activity in this way.

52. It is commonly assumed that all events that come to the attention of the police will be recorded in official crime statistics, but this is not usually the case. Police exercise discretion in the formal recognition and recording of a crime. In some cases, the police may conclude that no 'crime' actually took place, and thus the original report is pursued no further, and is not included in the total number of offences. Victimization surveys, on the other hand, typically use a set of screening questions to ascertain whether incidents fall within the survey's scope. Nevertheless, the final count in a victim survey may include a number of victimizations that had been counted as having been reported to the police but which would not be regarded as a recordable crime by the police.

Sources of error

53. All surveys are subject to 'statistical error'. This does not mean the numbers they produce are wrong, but that by their nature they are only able to provide an estimate of real events rather than a precise count.

54. Survey errors can be divided into two types: sampling and non-sampling errors. Sampling errors

represent the difference between an estimate derived from a sample of a population and the result that would have been obtained if the entire population had been asked the same question. All other types of errors, such as coverage, response, processing and non-response errors, are non-sampling errors. While the size of the sampling error can be estimated using standard statistical methods, non-sampling errors are more difficult to quantify. One important type of non-sampling error is the respondent's ability to recall relevant events and report them accurately to the interviewer. Errors may arise because respondents are simply unaware of the event, are forgetful, are unwilling to report a crime to an interviewer because of embarrassment or shame (e.g., where the victim and offender are related), or are unable to correctly place the incidents in time, either moving them into or out of the survey reference period. Other sources of non-sampling error include mistakes introduced by interviewers, the misclassification of incidents, errors in the coding and processing of data, and biases arising from non-response. These can be minimized through careful training and supervision, but can never be entirely eliminated.

55. While the above sources of error apply to victimization surveys, there are similar sources of error in official police-recorded statistics. For example, changes and biases in victim reporting behaviour, changes in police reporting and recording practices or rules, new laws, processing errors and non-responding police departments affect the accuracy of police-reported crime statistics.

BOX 2: TYPICAL DIFFERENCES BETWEEN POLICE STATISTICS AND VICTIM SURVEYS

Police data	**Victim survey**
Data source	
Administrative police records	Personal reports from individual citizens
Data collection method	
Comprehensive coverage of police agencies	Sample survey
Data recorded in an operational logbook or computer system	Data captured by a survey interviewer
National, according to the scope of the police service	National, if nationally representative sample
Continuous throughout the year	Periodic survey
All recorded criminal incidents regardless of victims' age	Target population usually excludes some children and full-time residents of institutions
Counts only those incidents reported to and recorded by police	Collects all crimes, regardless of whether reported to police
Scope and definitions:	
Primary unit is the criminal incident	Primary unit is criminal victimization (for persons and households)
A wide range of crime categories, usually reflecting the broad legal categories covered by the courts but sometimes excluding less serious offences	A core set of a smaller number of more commonly occurring crimes
'Most serious offence' rule results in an undercount of less serious crimes; 'multiple offence' rules result in similar crimes occurring at the same time to be counted only once.	Multiple or repeat victimizations can be captured, although there will normally be a limit to the number of such incidents recorded in order to prevent outliers overly affecting the estimates
Often includes attempts within the main category	Includes attempts, but usually able to separately identify these
Sources of error:	
Reporting by the public	Sampling error
Processing error, edit failure, non-responding police department	Non-sampling error related to: coverage, respondent or recall error, non-response, coding, edit and imputation, estimation errors
Legal changes, police discretion, changes in policy and procedures	

Comparing victim survey data and police-reported data

56. Some countries publish police statistics and victim survey estimates in separate reports, while other countries have attempted to incorporate both sets of statistics in a more unified presentation of the pattern of crime in a country. Joint publication can contribute towards providing the public with a

more comprehensive picture of the full nature and extent of crime. Data from victimization surveys can be used to contextualize information from police-reported surveys. However, in many cases organizational issues or a desire to release information as quickly as possible, might argue against combining the two sources. In either case, it is essential to clearly describe the data, how it has been derived and its appropriate uses. Neither administrative statistics nor victimization surveys alone can provide comprehensive information about crime.

57. It is also possible to make more precise comparisons between the total count of crimes in the police data and the estimates provided by a victimization survey. However, because of the significant differences in scope between these two sources, several 'global' adjustments are required before making such comparisons.[5] These adjustments may include the following:

- For comparison purposes, police or victim survey data should exclude any geographic areas that are not included in the other. Only those geographic areas common to both data collection efforts should remain.
- Police reports of 'unfounded' incidents or incidents that are not considered actual incidents of crime that come to police attention should be excluded from official police statistics.
- Police data should be adjusted to account for any populations that are excluded from the victim survey (i.e. children under the age of 15, crimes against corporate or business victims) and adjusted, if possible, so that the data refer to the same reference period.
- Only those crime incident types common to both sets of data should be included in the comparative analysis. For example, when comparing the two national crime sources in the United States, homicide would be removed from Uniform Crime Reporting Program (police data), and simple assault would be removed from National Crime Victimization Survey data.
- Any victimization estimate has to be evaluated together with the corresponding sampling error or confidence interval level in order to really appreciate differences and similarities with the corresponding statistics from police data.

C. Elements for international comparability: draft list of key topics

58. Victim surveys provide useful indicators of experiences of crime among citizens, which – to some extent – may be comparable across countries. Although perfect comparability is impossible to achieve, data from victim surveys are likely, for the reasons discussed in section II.B to be more easily internationally comparable than police records.

59. Some items are likely to be more easily compared than others. Questions with detailed wording and processes of questioning will usually have a higher level of cross-national comparability of information due to the specific nature of the incident asked about. Comparability does not depend exclusively on the questionnaire however, but is also affected by a countries culture. What may be deemed to be a serious criminal incident in some countries may be considered minor in some other countries, while in others this same incident may be considered not to be criminal at all. An international standard classification of offences may assist in further improving international comparability in this area. Comparability is also affected by a number of other methodological issues. These are discussed in section IV.I of the manual.

60. Table 1 presents a number of high-level headings representing issues which might normally be included in a victim survey, particularly one where some international comparability may be sought. A tentative list of core issues may include, on the one hand, selected types of crime and on the other, selected measures referring to them. For example, topics could be 'measure of household burglary victimization in the past twelve months' or 'robbery crimes involving weapons'. In addition, some topics which are not related to any specific crime experience, such as 'public confidence/trust in the police' or 'feelings of safety' may also be useful to inform policy discussions.

5 An example of the process used by Canada to achieve comparability is found in Appendix A of Ogrodnik, L. & Trainor, C. (1997). The British Crime Survey has also published the method it uses to produce its comparable estimates, for example see page 37 of Crime in England and Wales.

61. For international comparability, it is important that the topic for comparison is being defined in the same way (so a country measuring only burglaries without attempts would not be able to compare its burglary rate including them). In view of international comparisons, it is also important to bear in mind that basic socio-demographic information should be collected in a way that facilitates international comparison, for example by considering internationally agreed categories of responses on employment and education.

Table 1: Key topics for international comparability

Crimes and victimization	Property crime			Contact crime / violent crime			No crime specified
	Household burglary	Theft of vehicles	Other theft	Robbery	Physical Assault	Sexual offences	
Measure of victimization in the past 12 months	x	x	x	x	x	x	
Measure of repeat victimization in the past 12 months	x	x	x	x	x	x	
Reporting to the police	x	x	x	x	x	x	
Crimes involving weapons				x	x	x	
Victims who suffered physical injury				x	x	x	
Victim-offender relationship				x	x	x	
Public confidence/ trust in police							x
Feelings of safety							x
Basic socio-demographic variables							x

D. References

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CHAPTER III. METHODOLOGICAL ISSUES

62. Chapter III of this Manual provides an overview of the survey process, the main differences in the type of victimization survey that are available to the survey manager, the key goals and objectives which could be identified for any victimization survey along with some of the methodological issues in relation to achieving such objectives using a social survey. It describes the process of organizing a survey and discusses target populations, sampling options and frequency of enumeration.

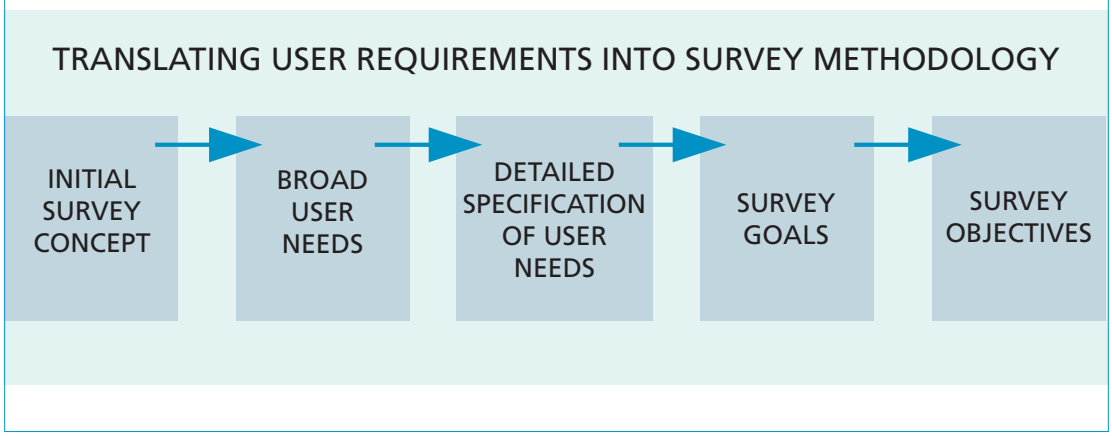
A. Introduction - The crime victimization survey process

63. Surveys to measure crime victimization can consider a wide range of topics and take a variety of different forms. The variety of methods used and options available can sometimes seem bewildering to the prospective survey manager. However, there are a number of clear stages which all surveys should pass through in moving from the initial idea for a survey through its planning to the data capture, analysis and the dissemination of results. At each step, there are decisions that need to be taken, balancing requirements with resources.

64. As outlined in Parts I and II of this manual, crime victimization surveys are conducted for a variety of purposes. Victimization surveys as a statistical activity are generally quite innovative activities given their reasonably short histories. The requirements for running a victimization survey also tend to be very different to the routine statistical activity of a National Statistics agency. A wide variety of options relating to methodology, process and approach are available to an agency looking to design a new victimization survey. If working with areas of new or emerging areas of victimization, or areas which have not been surveyed before, methodologies may not be well developed at all. As a result, it is vital that when considering the methodological design of a crime victimization survey, the focus remains upon the identified goals and objectives of the survey. The methodologies employed in design, enumeration, processing and output processes will vary depending upon the survey's goals and objectives. Acting without full appreciation of the needs and requirements for the survey will result in data that are not relevant to the policy context, and potentially an inefficient use of resources.

65. Figure 1 illustrates the process required to identify user survey needs and to establish the goals and objectives of a survey. It shows how consideration of broad user needs is required once the initial survey concept (for example, assessment of experience of crime at the national or municipal level) has been developed. In turn, a broad recognition of such needs should be used to develop a detailed specification of user needs. The survey goals and objectives should aim to meet this detailed specification.

Figure 1: Process used to translate user requirements into survey methodology



66. Once the survey goals and objectives have been set through consideration of user requirements, a detailed process is then required to design and implement the survey and analyze, disseminate and evaluate its results. This 'end-to-end' process can be described in nine steps, beginning with the evaluation of user requirements, and finishing with the survey evaluation (Figure 2).

Figure 2: Crime victimization surveys end to end process

1. Examine user requirements

- Identify internal and external stakeholder and user needs (what are the policy/research questions that need to be answered?)
- Prioritise information needs
- Determine broad survey parameters, sample and technology
- Determine broad output requirements
- Identify data constraints and data quality requirements
- Identify issues and risks
- Obtain first stage approval

2. Design and test

- Clarify and obtain more detailed data item requirements
- Develop survey strategy
- Define scope and coverage
- Develop frame and sample specifications
- Develop concepts (re-use or create, definitions, classifications, etc.)
- Develop collection instrument
- Determine testing and QA strategies
- Test and evaluate concepts, definitions, questions, procedures, training, documentation, instrument and methodologies
- Finalise data items, questions, collection instrument and collection procedures; specify derivations
- Develop and test input and output systems/other systems or databases

3. Acquire data

- Prepare survey frame and sample
- Select sample
- Allocate interviewer workloads
- Conduct interviews and field editing
- Manage field operations
- Resolve field queries
- Capture responses and repair data
- Extract management information about the collection process

4. Process inputs

- Clean field data
- Code selected items (for example, offence data)
- Perform special coding (of diaries, paper forms, etc.)
- Identify and treat significant unit record anomalies

5. Transform inputs into statistics

- Produce aggregate estimates
- Impute data
- Identify and correct deviation anomalies
- Identify and treat significant aggregate level anomalies
- Identify and resolve outliers
- Weight data
- Validate weighted data
- Confidentialise data

6. Analyze and explain

- Undertake special analysis
- Compile clearance documentation
- Analyze and write up key findings
- Measure and explain comparability with other results
- Produce relative standard errors and other reliability measures

7. Assemble and disseminate

- Assemble statistical products (reports, web content, supplementary tables, etc.)
- Draft manuscript
- Obtain clearance to release survey information
- Release products
- Prepare media release to accompany the dissemination of main survey outputs

8. Decision support

- Manage stakeholder and user requests for information from the survey
- Undertake customised consultancies to meet specific user needs
- Produce special articles
- Maintain links with key stakeholders and users
- Provide insight into the meaning of the numbers for key stakeholders and users

9. Evaluate

- Evaluate the entire survey cycle
- Document issues and improvements for next cycle

Which methodology should I use?

67. Measuring crime phenomena can yield different results depending on a range of factors:

- purpose of the collection
- sample design and selection
- questionnaire format and content
- mode of the data collection and other survey procedures
- response rate

68. Decisions on the appropriate sample size, distribution and survey method are dependent on a number of considerations. These include the aims and content of survey, the level of disaggregation and accuracy at which the survey estimates are required, and the costs and operational constraints of conducting the survey.

69. An Australian Information paper[6] illustrated the differences in the measurement of crime from a range of Australian surveys, including the factors that were expected to have contributed to the differences between survey results. Not all of these factors however, could be quantified.

70. The present victimization survey manual, in the sections that follow, provides the reader with an array of information about the different methods used in the conduct of crime victimization surveys. This information will assist policy makers in determining what methods could be used and what issues need to be considered when making a decision to proceed with a crime victimization survey.

B. Goals/objectives/purposes of survey/collection history

Stakeholder and user needs and priorities

71. The first major step in designing a victimization survey is to establish the needs and priorities of stakeholders and users. The first step when presented with an initial survey concept is to focus on the broad needs of these groups. These represent an overview of the policy, political, societal and public needs to be met by the survey. The second step involves the delineation of a *detailed specification* of stakeholder and user needs. This step covers the use of the data, the data items required and the varying levels of disaggregation. It is at this step that the level of precision of the data needs to be determined. The level of precision is ascertained by reviewing the intended use of the data as well as the time frames in which users intend to make decisions based on the data. These requirements vary according to intended uses of data. For example, timeliness may be crucial to the work of stakeholders or major decision-making windows may be missed. Or in other instances time frames may be more flexible. Timeliness of data is often related to the complexity of the data required. It is crucial in determining methodologies and resource requirements to be clear about whether users are only interested in broad indicators for policy making and evaluation of programmes, or if users require data that provide a more in-depth understanding of the concepts for research purposes. In general, broad indicators tend to be needed on a timely basis (i.e., 6 to 12 months) if being used for performance measures and evaluation. In contrast, more in-depth studies may only be needed on a less frequent basis where timeliness is less crucial. With large, in-depth surveys this may include lead times of years, with outputs based 15 to 18 months after enumeration.

Survey goals

72. Clearly identified goals provide the backbone to the development of the survey, placing broad parameters around the work to be completed. The most fundamental questions to be asked are about the data needs to be addressed by the survey. What are the policy questions that need to be answered? What data are available in the area(s) of interest, and what information needs remain unmet? These fundamental pieces of intelligence can be determined through understanding the potential stakehold-

6 Interested parties should consult: ABS Information Paper: *Measuring Crime Victimization, Australia: The Impact of Different Collection Methodologies, 2002, cat. no. 4522.0.55.001.*

ers in the victimization survey, and by conducting sufficient consultation to understand the information needs that need to be addressed.

73. One of the benefits of understanding the information needs of key stakeholders is that it enables an appreciation of the analytic requirements of users. It is important to have in mind the kinds of uses to which the output will be put when designing the survey vehicle, in order to ensure that outputs will be fit for the specified purpose when delivered. For instance, if users require broad indicators to conduct their analyses and answer the outstanding policy questions, then the data required to service these needs will differ substantially if the need is for longitudinal or detailed and integrated datasets for more complex exploratory analysis.

74. In a similar vein, the level of precision required in data is an important need to understand before proceeding with the development of the methodology. Depending on the purposes to which the data will be put, different levels of error may be acceptable for some data. The level of acceptable error may also vary between data items or topics within the one vehicle, or national and regional estimates, depending on the intended use of the data. This is an important parameter to set in the goals for the survey, as it informs a range of decisions about the survey process relating to definition of sample size, costs and resources, as well as vehicle design.

75. Victimization surveys are costly to conduct, and these costs can vary considerably with different methodological decisions. Parameters need to be set that define the amount of resources available for the conduct of the survey. On the one hand, this may refer to the financial budget associated with the enterprise, but can also include the amount of personnel resources that can be dedicated to a project through to the technological resources available through the data design, collection, processing and dissemination phases. Setting clear goals about the maximum resources that can be expended on the survey at an early stage can guide development and design of these subsequent phases, and make it more likely that the resulting survey will be a feasible exercise.

76. Consideration should be given to any other constraints that can be expected to be encountered during the conduct of the survey. These should form part of the goal setting process determined at the beginning of the survey wherever possible, enabling subsequent methodologies employed to anticipate constraints and maximise the data that can be generated within those constraints. For instance, if there are legal requirements, policies or limitations on the data that can be collected, this should be clearly understood and stated. Examples of this may be restrictions on the types of persons who can be questioned (children or persons under or over a certain age), situations in which data can be collected (in private settings or with other persons present), or subject-matter that can be dealt with through specific methodologies (i.e. sensitive topics such as sexual assault). In many countries, legislation covers the activities of official statistical agencies or government departments, and it is vital that the planned survey activities do not contravene any of the requirements set out in statute or policy.

BOX 3: QUESTIONS TO BE ANSWERED IN DEVELOPING SURVEY GOALS

- What questions/issues is the survey intended to address?
- What kinds of analyses are anticipated?
- What level of precision is required?
- What resources (financial or otherwise) are available for the survey?
- What constraints may influence the ability to implement the desired methodologies?
- What are the limitations that can be accepted (in terms of coverage, generalization, etc)?

Survey objectives

77. The establishment of survey objectives is a process of translating the survey goals into a more tangible and concrete range of concepts. This process specifies the statistical outcomes to be achieved by the survey. This more specific planning of statistical activity works to ensure that the detailed methodological decisions made reflect the overarching goals of the survey, and the data needs of users. The principal information to be used in determining these objectives will be the goals of the survey, the information required to meet the data needs of stakeholders, and how this data needs to be utilized. For example, the survey objectives may be different if users wish to formulate or monitor policy, provide input into operational processes, input into lobbying of industry or government agencies, or support decision-making by businesses and organizations.

78. A primary purpose of most crime victimization surveys is to establish the prevalence of a particular kind of victimization within a certain population. This may be victimization experienced by persons, households or businesses, such as the estimated number of persons experiencing physical assault within a particular period of time. Data from victimization surveys can be used to supplement official police recorded statistics, and as such, an object of the survey may be to determine a prevalence rate for particular offences dealt with by the formal criminal justice system. Part of the requirement for outputs of the survey to meet this objective would be to produce survey data that are complementary to official police statistics. However, this may not be possible for all offence types, and the reliability of the estimates produced will also vary depending on how commonplace a particular crime might be.

79. Victimization surveys provide an alternative insight into actual levels of offending than those provided by police data. As such, a goal may be to generate figures of crimes not reported to police, or seek additional information about those incidents which are reported, but where detailed characteristics may not be available. In these instances, it may be necessary to look for alignment with existing collections or definitions, and keep these data sources in mind when considering survey goals and subsequent methodologies. Victimization surveys will never be totally comparable with any administrative or official statistics in form or function, but if consideration is given in the design phase, they can become a complementary dataset to provide more extensive analysis.

80. When victimization surveys are conducted in new or emerging areas of crime where data has not previously been gathered, or the offences are not thought to be well represented in recorded crime statistics, the objective of the survey may be to establish a baseline crime victimization rate. An example of this type of objective may be for the survey to provide an estimate of the number of victims of specific electronic or white collar crimes.

81. Where crime victimization surveys have been conducted on a topic in the past, the survey may be commissioned at a later date to re-examine the changes in experiences of crime over time and explore trends in victimization. In these situations, comparability with previous surveys to create a time series is necessary, and the stated survey objectives should include these requirements. If the survey is to have repeating elements to enable comparability and monitoring over a period of time, this too should be specified in the survey objectives. Stability of methodology and question structure are important components of enabling comparability across survey enumerations. Changes to survey design and methodology can adversely impact the ability to make robust comparisons over time.

82. Victimization survey data can be used to reveal specific details about victims, offenders, and other characteristics of criminal incidents. Expectations of key characteristics should be established in the survey objectives to ensure that the most appropriate methodologies to gather this information are utilized. Additionally, objectives relating to these detailed data should be set in a way that is realistically achievable. Methodological decisions will be made easier if these requirements are stated specifically, such as: 'The survey should aim to collect data about women's experience of domestic violence.' If objectives are specific, priorities are clearer to the survey manager which assists in the determination of data collection, and how much data needs to be disaggregated. This can have major impacts on the size of the sample and the resources needed to produce the survey outputs required.

BOX 4: SURVEY OBJECTIVE EXAMPLES

- Prevalence of a particular phenomenon (i.e., persons, households, or businesses experiencing victimization)
- Estimate the number of crimes occurring during a specified period
- Establishing baseline crime victimization rates
- Exploring movements in crime victimization rates
- Replicate past surveys in order to create comparable time series data
- Monitoring trends in victimization
- Gathering details relating to characteristics of victims, offenders and criminal events
- Collect respondent attitudes
- Gauge respondent perceptions of the criminal justice system, and official responses to crime
- Determine respondents' fear of crime or feelings of safety
- Collate information about implementation of safety measures and effects

BOX 5: AN EXAMPLE OF ESTABLISHING SURVEY GOALS AND OBJECTIVES

The following is an example of the identification of the needs of stakeholders and users as well as the establishing of goals and objectives. This example utilizes the Survey of consumer and mass marketed fraud victimization (ABS, Personal Fraud, Australia, 2007, catalogue number 4528.0).

- Initial client needs were for survey data to inform policing, policy and education activities in relation to consumer fraud victimization. There was a lack of data on this topic, and no reliable information about the size of the problem or the type of fraud being encountered by consumers in particular.
- In order to provide more direction to the data needs, further consultation with clients formed the basis for setting survey objectives. As mass marketed frauds and scams generally require the victim to respond or interact to an invitation of some sort, it was also important to gather a measure of exposure (where people received an invitation that they could respond to), as well as when they actually did respond, and where they subsequently lost money. Clients had a range of frauds and scams that they were most interested in knowing about in detail, as they were the most common frauds that were reported to authorities (credit card fraud, identity theft, lotteries, phishing, advance fee fraud, fake financial advice, fortune telling scams, chain letters and pyramid schemes). As little was known about this form of crime victimization in this jurisdiction, clients were keen to get a wide range of details about incidents and the socio-demographic characteristics of victims and non-victims. They were also interested in elements of electronic security employed, behaviour change over time, detailed geographic locations, etc.
- These information needs were prioritized, with core requirements stated as: prevalence of exposure, prevalence of response, prevalence of financial loss, amount of financial loss. A range of key characteristic requirements about specific incidents, such as whether reported, mode of invitation, amount of money lost, amount of time lost, and behaviour change.
- Survey outputs were discussed with the clients, who required a formal publication, in addition to supplementary tables relating to large geographical/administrative regions. Access to confidential unit record data from the survey was also desirable.
- It was determined that this survey required a representative national sample. As the expected prevalence based on international work suggested that the prevalence for this offence is quite low, the sample needed to be quite large to increase the likelihood of generating useful results. A major risk to the survey data was the possibility that the prevalence of these frauds may be even lower than expected, and that data quality would suffer due to increasing error rates. Other issues identified related to problems in defining some of the frauds, and overcoming confusion amongst respondents and their inability to recognise some of these frauds. Determining the appropriate reference period for frauds (particularly identity theft which can take some time to be discovered) was also considered.
- The clients were presented with a survey proposal, and memorandums of understanding were signed to secure funding for the survey and outline the required outputs and delivery dates.

Based on client interaction, the **survey goal** was identified as 'determine a benchmark of the level and characteristics of consumer and mass marketed fraud victimization'.

The **objectives of the survey**, therefore, were to meet as many of the detailed needs described above as was possible, given the resources available and practical constraints.

Collection history and consideration of other data

83. Once objectives are identified, it is necessary to identify other sources of data that may be available to meet these needs. This will enable the refinement of the stated data needs and verification of whether or not there is a need for any new or expanded collection activity or if there are existing surveys where the scope can be reconsidered or extended. By using existing data wherever possible to meet user needs, and focusing on meeting genuine information needs as a priority, unnecessary use of resources and provider load are reduced. Part of this analysis should include whether or not administrative by-product information from justice or other related agencies may prove to be a sufficient source of data to meet user needs. These sources can prove efficient and cost-effective ways to boost information gained from surveys, and contribute to a broader statistical programme in relation to crime and victimization.

C. Quality assurance

84. Quality or 'fitness for use' of statistical information may be defined in terms of six constituent elements or dimensions: relevance, accuracy, timeliness, accessibility, interpretability, and coherence (Statistics Canada, 2002c).

85. The *relevance* of statistical information reflects the degree to which it meets the real needs of clients. It is concerned with whether the available information sheds light on the issues that are important to users. Assessing relevance is subjective and depends upon the varying needs of users. The agency's challenge is to weigh and balance the conflicting needs of current and potential users to produce a programme that goes as far as possible in satisfying the most important needs within given resource constraints.

86. The *accuracy* of statistical information is the degree to which the information correctly describes the phenomena it was designed to measure. It is usually characterized in terms of error in statistical estimates and is traditionally decomposed into bias (systematic error) and variance (random error) components. It may also be described in terms of the major sources of error that potentially cause inaccuracy (e.g., coverage, sampling, non-response, response).

87. The *timeliness* of statistical information refers to the delay between the reference point (or the end of the reference period) to which the information pertains, and the date on which the information becomes available. It typically involves a trade-off against accuracy. The timeliness of information will influence its relevance.

88. The *accessibility* of statistical information refers to the ease with which it can be obtained from the agency and understood by its users (who may not be statistically adept). This includes the ease with which the existence of information can be ascertained, as well as the suitability of the form or medium through which the information can be accessed. The cost of the information may also be an aspect of accessibility for some users.

89. The *interpretability* of statistical information reflects the availability of the supplementary information and metadata necessary to interpret and utilize it appropriately. This information normally includes the underlying concepts, variables, questions and classifications used, the methodology of data collection and processing, and indications or measures of response rates and accuracy of the statistical information.

90. The *coherence* of statistical information reflects the degree to which it can be successfully brought together with other statistical information within a broad analytic framework and over time. The use of standard concepts, classifications and target populations promotes coherence, as does the use of common methodology across surveys. Coherence does not necessarily imply full numerical consistency.

91. These dimensions of quality are overlapping and interrelated. There is no general model that brings them together to optimize or to prescribe a level of quality. Achieving an acceptable level of

quality is the result of addressing, managing and balancing these elements of quality over time with careful attention to programme objectives, costs, respondent burden and other factors that may affect information quality or user expectations. This balance is a critical aspect of the design of the Agency's surveys.

D. Budget, time frame and other constraints

92. There is a strong relationship between frequency, timelines, survey goals and available resources when conducting a victim survey. In order to control these factors through the survey process, a survey manager needs to be aware of, and able to estimate the influence of, a range of operational constraints. Simultaneously, the survey manager must also understand the expectations of clients and stakeholders, and the primary focus to produce data that is fit for its intended purpose. It may not always be possible to meet all client needs, as there are many factors that need to be taken into account before proceeding with a survey. These include:

- Available resources/budget
- Time available to deliver 'fit for purpose' data to clients
- Technology/system requirements
- Size of sample which impacts on workloads
- The precision levels required of the final data
- Organizational and operational constraints
- Low prevalence of selected offence types or events
- Questions that may not be appropriate for surveys
- Provider load
- Competing work programme priorities
- Design of surveys to ensure appropriate coverage of those in scope.

Budget

93. One of the most fundamental constraints upon a survey enterprise is the budget available. In some instances, the agency conducting the survey is in a position to fund the survey from internal resources. In other instances, the agency's efforts in conducting a survey are funded from multiple agencies or organizations. The size of the available budget influences virtually every area of the survey process from scope, design, time frame, available methodologies, as well as the sophistication and extent of outputs and further analysis.

94. Other key factors to consider when embarking on a crime victimization survey include whether an organization has the infrastructure available and capability to undertake a crime victimization survey. In some cases some or none of the infrastructure or capability may be available. Therefore one option may be to outsource some or all of the components of a survey.

95. Depending upon the particular policies in place in a jurisdiction, one option may be to have an external market research agency or other related business take over part of the work of the survey. Keep in mind that outsourcing offers both advantages and disadvantages. For instance, outsourcing may result in possible reductions in response rates, restrictions upon the type of information that can be collected, the range of people that can be reached by the organization, the protection of the privacy and confidentiality of respondents' personal information, and the need to monitor and evaluate an external agency. On the other hand, outsourcing may offer a faster and less expensive alternative. For agencies which do not maintain panels of interviewers or other forms of infrastructure necessary to conduct population-based surveys, outsourcing can be an important option to cost and consider.

96. Depending upon the specific expertise of the survey managers, it may be necessary to also pay for external consultants to work on various elements of the project. For example, if a survey is being run

from within an area specializing in justice policy and administration, it may be necessary to consult with survey methodologists when designing the survey, processing and analysing data. This can add significantly to staff costs on a survey, and should be budgeted for in advance wherever possible. Alternatively, if a statistical agency is commissioned to run the survey but does not have access to persons with specialist substantive experience in criminology or justice-related backgrounds, then this expertise may also have to be brought in from outside the organization.

BOX 6: CAUTION!

A risk strategy should be developed if outsourcing is used to ensure that the results are not compromised in any way. Outsourcing adds a level of complexity to the survey process, with less ability to control and monitor the process and quality. Care should be taken to ensure that certain principles are not compromised (e.g., confidentiality, privacy and copyright).

97. Although outsourcing is an option, there are advantages in developing and maintaining in-house capability if these do not already exist within an organization. These include maintaining tight control over the survey, building expertise and staffing capability over time, which can minimize costs.

98. Depending on the infrastructure available within an organization, costs can also be kept to a minimum by utilizing existing survey vehicles. Crime victimization surveys do not have to be conducted in their own right. Depending on the client needs, it may be appropriate to add specific questions to an existing omnibus survey.

99. A number of other components need to be considered when preparing a budget estimate for a crime victimization survey. One of the most prominent is the feasibility of the scope stated in the survey goals and objectives given the available resources. If the stated aim of the survey is too broad, or by contrast, contains too many elements of 'essential data', it may be that it is not feasible to conduct a survey of the size required given the available resources. Value for money can be provided if the survey manager is able to prioritize the essential content of a survey and scope of a collection – what is really *required* to answer the question, and how does this balance with available resources? Answering these questions can help direct the manager to limit the scope of the survey if necessary, based on the resources available. By assessing the cost of various aspects of the survey process, it is possible to start balancing the two.

100. The time taken for development, and the amount of development required are important areas to budget appropriately. If the topics to be covered in the victimization survey are relatively new and emerging areas, sensitive topics, or merely topics that may not have been collected within a jurisdiction or using a particular methodology, development costs in time and resources are likely to be significant. By way of comparison, however, development costs for an ongoing survey collection, or where essentially a previously conducted survey is being repeated, tend to be less. Creating a budget to cover development costs should take into account a range of activities, which may all have greater or lesser drains on resources. For example:

- Scoping studies, including desktop research, may extend to focus groups or roundtable exercises with panels of experts to determine key items and definitions
- Design of questionnaires and questions
- Cognitive testing, or other forms of questionnaire testing, which can be very beneficial but labour intensive
- Preparation of materials required to go into the field (coding for use with technology; preparation of printed materials)
- Creation of training required for interviewers or other staff to enable them to work with the particular survey.

101. Crime victimization surveys can be conducted using a variety of modes including face-to-face interviewing, mail surveys, telephone surveys, and internet-based surveys. Each of these methods is

associated with different budget needs. Generally the most expensive method is the face-to-face interviewing due to greater personnel involvement required in data collection. Thus more resources will need to be allocated to the effort should one select this method.

102. With survey data collection, processing and output increasingly utilizing new technologies, a significant proportion of the budget may be required to purchase or maintain new computer systems, networks or other tools if undertaken in-house and no other survey vehicle is being utilized. Depending on the size and nature of the victimization survey to be conducted, specialized technology applications may be required for designing forms or questionnaires, the collection of data (particularly if computer assisted interviewing is to be used), processing and collation of data and the generation of various outputs. Additional related costs may include: network, telephone and internet charges, the cost of physical technology hardware, and support costs.

103. Staff costs are generally essential components of the budget. As mentioned previously, there are a number of variables here: Existing staff within the agency in salaried positions, management costs, costs of interviewers if necessary, and costs that may be involved with external consultants or experts. If utilizing focus groups or cognitive testing exercises in survey development, it may be necessary to factor the nominal payments generally made to participants into the budget. The inclusion of specific cultural groups or remote areas may require specialized strategies that can add considerably to the cost of a survey.

104. Depending upon the topic, and the stakeholders identified, there may be a wide range of consultation required. This may involve travel to key clients, paying for the costs of hosting round tables or other forums, travel to communicate with community leaders or groups about the survey prior to enumeration, etc. The costs of maintaining communication with clients, and undertaking necessary liaison to ensure the survey runs successfully should be considered.

105. Raw materials should also be included in a survey budget. This can include the cost of printing and distribution of forms, survey instructions and other materials. If outputs are to be disseminated in printed paper format, then this cost should also be estimated. Increasingly, victimization survey results are made available in electronic formats, which can be cheaper from a resource perspective. They can, however, limit the access of clients and other users to the survey outputs, depending on the availability of such services.

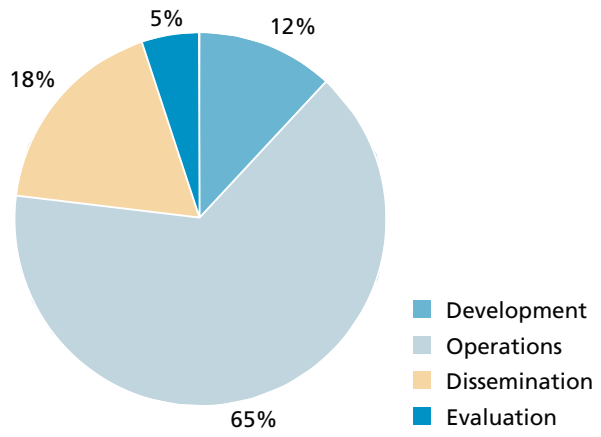
106. All of the costs outlined above, where applicable, comprise the base operation costs of running a survey. In addition to that, there are costs which increase or decrease depending upon the number of persons, households or businesses to be sampled in the victimization survey. These could be considered unit-based costs, and are important to consider when determining if a sufficient sample is affordable given the available budget. It is also important to note that the budget required to conduct a survey may run over more than one financial year's budget and this needs to be understood and factored in advance.

107. There may be additional unit-based costs depending on the focus of the victimization survey. For example, when making a survey on domestic violence there is a need for additional measures to ensure the privacy of the interviews and safety of the respondents, which might involve making several appointments. Surveys of minorities may require the translation of the fieldwork documents or recruitment and training of multilingual fieldwork staff.

108. Figure 3 presents an estimated proportion of budget which can be expected to be required for different stages of survey development, enumeration and output. Specific costs will vary based on subject matter, sample size, methodology, resource availability, local conditions and the amount of experience the agency has with running surveys. The mode of interviewing may affect the overall budget, but the proportions of the various components within the budget will remain more or less the same. This presentation assumes that the survey is being run for the first time, by one agency, and therefore requires significant development. If a survey was to be run on a repeat basis, this stage may require a much smaller outlay of funds in comparison to other activities. The majority of funds will be

required for the operational aspects of the survey (interviewers, materials, processing and other survey infrastructure), which actually generate the data. It is recommended that a small portion of resources be retained to enable evaluation of the survey processes, outputs and outcomes – particularly if there is a possibility of having the survey run again in the future. This step adds accountability, as well as allowing for the improvement of processes and avoidance of problems in the future. Should the survey be run under any other circumstances than 'in-house', such as via contract or external agency agreement, then the funding required for different stages will depend upon the experience of the agency with running surveys, how well established the organization's survey infrastructure and interviewer workforce may be, as well as other commercial issues such as competition, supply and demand.

Figure 3: Illustrative proportion of budget for each survey stage



109. Once the expected costs of various components of survey operation have been calculated, the survey manager is in a good position to determine whether the goals and objectives of the survey can be met with the likely available resources, and consider negotiating for or seeking additional funding. If this is not possible, it may be necessary to consider changes to scope, sample size or complexity, size of outputs or time frames.

Time frame

110. The time frame involved in a survey is an important constraint upon the survey process and resources required. If the crime victimization survey planned has not been conducted before it is important to establish how much lead time will be required to develop the survey to the point where it can be put into the field for enumeration. If this is both a new survey and a new or emerging topic, lead times may be longer given the additional work required to scope the topic and devise a survey which can measure the constructs of interest. If this is a new version of an existing survey, or a continuous survey, it may be able to operate on a shorter lead time, but it may become more important to adhere to a regular timetable of data collection, processing and output.

111. The timeliness of outputs is a crucial measure of success for most victimization surveys. This is particularly the case for those specifically required for purposes of policy formulation or evaluation. Again, time frames should be primarily specified with reference to the information required from the survey, and the purpose for which the data may be required. For instance, if the information need is an urgent one, then a survey that produces a highly accurate measure of the data items of interest may be pointless if it is provided in three years' time. In some instances, it may be appropriate to produce a smaller dataset or less detailed output within a shorter time frame in order to meet the requirements of users. However, if the information need is an ongoing one, and it is important to spend the necessary time obtaining detailed and high quality data, then this may be an acceptable time frame, and the results may still be relevant. Striking an appropriate balance between the quality and depth of outputs, the timeliness required for the data to be relevant and useful to users, and the resources required, is a tension survey managers need to be aware of when setting parameters for the survey process.

112. One important consideration when estimating the necessary budget and time frame is the influence of timeliness. In some instances, it is less expensive to take longer to complete a process, and in other instances, it can be less expensive if activities are conducted intensively. For example, it is important for survey managers to consider whether or not savings can be made by the staggered delivery of outputs. It may be necessary to compromise timeliness in order to achieve the survey aims and goals.

Other considerations

113. A number of other constraints can affect the survey process and should be considered early on in the survey development process. Policies of the statistical agency or other agencies involved in the

survey can impose a number of restrictions on survey activities. Examples of these potential restrictions are limits on interview times or the types of topics that can be addressed via various methods. For example, one must assess whether there are particularly sensitive topics such as sexual assault or domestic violence, limits to the links that can be made between surveys or datasets, types of acceptable outputs and access to data by users, etc. In addition, the organizational structure of the statistical agency and the governance of the survey project may impose some restrictions on decision-making or other aspects of the survey process.

114. The maintenance of the privacy and confidentiality of respondents is paramount to any statistical agency, as without the confidence of respondents, an agency cannot hope to gain support for survey activities, maintain high response rates or generate data which can be considered the result of honest reporting. As a result, policies designed to protect data and the identity of respondents should be given considerable weight. In addition to the specific policies of a statistical agency, there are often ethical responsibilities and legal controls around personal data (for example, through acts of law protecting the privacy of individuals).

115. Limitations may exist around who can, should or must be brought into the survey development and operational process. Commercial arrangements between agencies may impose restrictions on access to survey instruments or raw data and the implications for the work of the statistical agency under these arrangements should be carefully managed. If the statistical agency has strict guidelines and policies in relation to the privacy of respondents and the protection of data, the involvement of external persons or agencies may be restricted to consultative interactions only, or additional control measures might be necessary to ensure that any subcontractors also fulfil the same privacy requirements.

116. Cultural considerations may be an issue to be considered that might impact the survey. For instance, in some situations it may be necessary to obtain the permission of one particular person for other family members to be interviewed or for another person to be present during an interview. It may not be appropriate to deal with some topics in certain ways, cultural factors may impact on the methodology. Methods, content and questions may need to be adjusted to accommodate the needs of different respondents from different cultural backgrounds.

117. Logistical difficulties may need to be considered if the survey specifications include the collection of data from persons living in geographically remote areas or areas without certain technologies available. The availability of persons who may otherwise fall within the scope for the survey can be limited by these considerations, and bias may be introduced into the sample frame if these issues are not appropriately understood and managed. This can also occur in highly-developed and urban areas where technologies are changing and evolving. For instance, surveys that rely on telephone interviewing can encounter difficulties since the advent of mobile phones as primary points of contact. If relying on public contact lists or random-digit-dialling of landlines, many people who have adopted mobile phones as their primary contact point will be excluded. Given that these shifts in the use of technology generally do not occur at even rates throughout the population, this will create bias in a sample. Consideration should be given to developing strategies to overcome these issues such as initial face-to-face contact and letters of introduction.

118. A primary concern for statistical agencies is to minimize respondent burden when conducting surveys. This is generally done in the form of minimizing the time taken to complete any survey and generate data needed to meet the stated statistical objectives. This is a particular concern when dealing with smaller population sub-groups or heavily sampled communities, where a number of statistical activities may be operating on a continuous basis. In order to maintain the goodwill necessary from public respondents, placing an undue surveying load on those sampled should be avoided.

119. In order to minimize the effects of heavy surveying load, statistical agencies must ensure that collections are not conducted more frequently than is necessary to meet the needs of users. It is helpful if an explanation of the reasons for the data collection is provided to respondents. Some agencies may have particular limits on the burden that can be placed upon respondents, either individually or collectively. These constraints need to be managed in relation to other surveys and the survey under

consideration. In order to measure the impact of surveys upon respondents and therefore monitor respondent burden, it is recommended that survey collections include a standard question on the time taken which should be placed at the back of the questionnaire for paper- or computer-based instruments. Where telephone interviews are to be utilized, it is recommended that the data collector monitor interview lengths. This information is generally required for payment and other management functions, but is also an important indicator of respondent burden.

120. In summary, a survey manager needs to understand the resources that are available, identify the priority user needs, and identify the key characteristics that will make the data fit for the specified purpose. If that is not possible given the available environment and resources, then communication with the client is necessary to manage expectations, gather additional funding, refine major purposes of the survey and/or select alternative methodologies.

E. Target populations

121. The 'target population' is the complete set of units to be studied. This target population should be defined according to the identified goals and objectives of the survey. For example, the target population may be the general population of all individuals in a particular country or all businesses currently operating in the country. While the choice of target population is strictly related to the problem under study, the actual population that will be studied may nonetheless also be constrained by different, and sometimes competing, factors such as the sample frame, costs and availability of resources, accessibility of population and the attributes of the population. Subject to these constraints, the survey coverage should aim to achieve a representative sample of the target population. In addition to the target population as a whole, surveys may define target sub-populations. A sub-population may be defined by characteristics such as age, gender, citizenship status or ethnicity. Where information, such as crime victimization prevalence rates, is required about particular sub-populations in addition to the target population as a whole, it is important that this is taken into account in the survey sample design. Sample design is discussed in greater detail in section III.G.

122. With respect to crime victimization, the target population is the set of units that could be victims of the crimes under study. The target population in victimization surveys is usually defined by age or gender, as well as their geographic location, for example:

- All adults (specify lower age limit. For example: 14 in Italy; 16 in England and Wales, 18 in some other countries);
- All persons between ages 12 and 65 (when considering children, the use of a proxy respondent is needed, e.g. to provide household information);
- All women (specify lower age limit. For example, 16 in Italy and England and Wales. Specify upper age limit. For example, 70 in Italy);
- Other groups such as ethnic minorities, immigrants, the disabled, the lesbian and gay community or people living in special circumstances.

123. When identifying the target population, the method of sampling needs to be considered as it is likely that there will be sub-groups that will be more difficult to sample. In the example of a survey of adults aged 18 or older, people living in institutions (e.g. care homes, hospitals and prisons) or the homeless will be more difficult to include in the overall sample. In these cases it is usual to exclude such groups from the sample. This means that the survey population may not fully match the target population and this will need to be taken into account when presenting estimates. In the example above, it is possible that some of the missing sub-groups (e.g., those in prison and the homeless) will have higher levels of victimization so their exclusion may affect the overall estimates. These additional sub-groups can be the focus of specially designed surveys, the findings from which can then be used to complement a more general victimization survey.

124. According to different legal and/or cultural rules or habits, specific sub-groups can be excluded from the target population. For example difficulties in accessing or interviewing people over a certain age could result in their being missed in the sample. Sometimes a specific sub-population might be

interviewed indirectly using proxies. Proxies are people who respond on behalf of the actual respondent. While it is advantageous to get the interview via a proxy versus no interview at all, the extent to which proxies have full knowledge of the victimization of those they are reporting on can be questionable. Further, in some cases (such as family members or care-givers) the proxies may themselves be the perpetrator of the victimization against the respondent.

125. For certain types of victimization, quite different target populations may be required. For example, a study of workplace violence may require a sample of those employed in particular occupations. Or a study of corruption may seek a sample population working in specific industries or sectors.

126. Including young people (aged less than 16 or 18 years) in the sample adds additional considerations about the design of the survey. Parental and/or school permission may be necessary, the confidentiality of the young person's answers will need to be ensured, question wording may need to be amended for younger people and the survey design, and format and mode of delivery may need to be changed. Schools are often used as a place of conducting surveys on young people, causing the exclusion of those who do not attend school. Similar considerations are needed for surveys targeting other sub-groups, such as the physically and mentally disabled or those with low literacy.

127. When selecting the target population there are a range of factors to be considered. First, the nature of the problem being addressed and attributes of the population must be measured. Will a general population sample be suitable or is there a particular group that is more important? For example, if young people are the most heavily victimized would it be more efficient to cover young people only or is it more important to obtain an overall picture of victimization? Second, the accessibility of the population must be considered. A general population sample is the most easily obtained. Sub-groups are by definition more difficult to sample and find, especially if the members of a group are spread evenly over an area. Coverage defined by age incurs additional costs because not all persons approached are eligible, while coverage defined by other attributes such as race incurs extra costs and is less likely to result in a fully representative sample. Finally, the availability of resources is a vital consideration in selecting the target population. The resources available both in terms of funding and people to conduct the survey contribute to the decisions on coverage particularly in relation to accessibility of some groups.

BOX 7: THE IMPORTANCE OF THE TARGET POPULATION

The target population must be carefully considered in terms of designing the sampling frame and interpreting the results. For example, measuring victimization within a particular geographic area such as a city must account for differences between those who *live* within the area's boundaries, and those who are in the city area for work or leisure only. Such transient populations would also be at risk of victimization but would not be captured in a standard household survey focused on a city. This will also affect any comparisons between victimization survey results and police report statistics, since the latter are also likely to include cases that have happened to non-residents.

F. Survey sample frames

128. The identification of the population of interest is the basis for determining how to select the sample for the survey. The sample selection method will depend on the existence or absence of population lists or registers, such as telephone or address listings. This section discusses the concepts of a sampling frame and identifies issues to be considered and ways in which the frame can be constructed so that a representative sample can be selected for the survey.

129. The survey sampling frame refers to a complete list of the population from which the target population will be sampled. It defines the technique and methods of sampling units, the design of which also affects the estimates and their statistical significance.

130. Sampling frames include lists of:

- population registers, electoral registers, birth registers and medical registers can be used as sampling frames for individuals.
- postal address files or electoral registers could be used as a sampling frame for households.

- driving licence lists may be used as a sampling frame for persons old enough to have such a licence.
- phone number listings may be used as a frame for homes with phones.
- a list of businesses or organizations in a business directory may be used as a sampling frame for businesses.

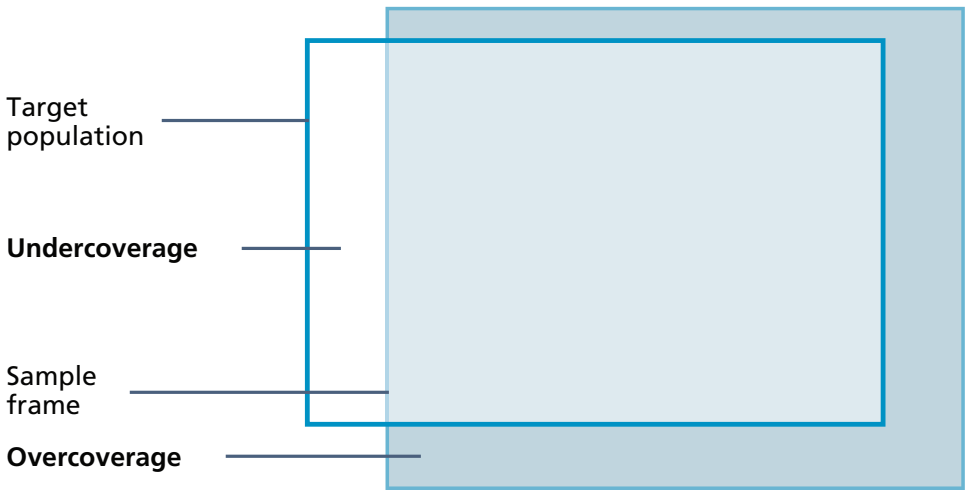
131. Sample frames are very often not an exact representation of the target population as they may not include some elements of the target (under-coverage) or may contain non-target elements, e.g. misidentified sample units (over-coverage). Examples of under-coverage would be the exclusion of people living in group or shared residences, such as student halls of residence or old people's homes, from a general household survey, or the exclusion of households who only use a mobile phone or who have not registered their telephone number in order to be excluded from unrequested calls from a general household telephone survey. An example of over-coverage might be the inclusion of visitors from foreign countries in a survey of victimization of the normally resident population.

132. In order to avoid non-relevant units from being included in the sample, the first part of an interview normally includes some questions used to check the eligibility of the person or unit being contacted. For example, depending on the sampling frame, the field representative may ask the respondent if they are of a particular gender, age, or if they are a full-time resident of the home.

133. Figure 4 illustrates the relationships between target population, the sampled population and the sample frame. They show the related problems of under- or over-coverage, with the corresponding main reasons, related to the interview mode (e.g., telephone, face-to-face, mail, email or internet survey).

134. The smaller box in Figure 4 represents the target population. The larger box, including both the dark and light portions, represents the sample frame which includes all the available units listed to be sampled. Only the light part of the sample frame box is useful to study the target population, but we do not know it in advance, as errors on the sample frame list are not always easily detected. Furthermore the dark part of the sample frame is not useful to study the target population, and represents the over-coverage of the list. The white part of the target population represents the under-coverage part of the population not listed and therefore not sampled.

Figure 4: The relationship between target population, sampled population and sample frame



Issues to be considered

135. Coverage and mode of data collection determines the type of sampling frame that is required. If the coverage refers to people in the general population then lists of people, addresses or phone numbers may be appropriate. If the survey is of businesses then some sort of business register is required. Face-to-face surveys require a list of people with their addresses, a list of addresses where individuals are not identified or a list of phone numbers to make initial contact. Postal surveys require a list of addresses (which may or may not identify an individual) and telephone surveys require either a list of phone numbers or the use of random-digit-dialing (see below).

136. Some countries have population registers which provide useful sampling frames for different purposes as they tend to have good coverage of the population, are regularly updated, and contain useful additional information or can be linked to other databases to acquire additional data. Such resources decrease the burden on respondents when information is available elsewhere.

137. Postal address files can provide a comprehensive list of addresses but coverage should be verified. Does the list include all private addresses? Are business addresses included? Is it possible to identify multi-household addresses? Electoral registers can provide a list of addresses or individuals at those addresses but coverage is limited to those who register to vote and in some countries (e.g. United Kingdom) people can ask for their details not to be listed. Education authorities have comprehensive lists of children of school age but there may be issues of confidentiality and access which need to be considered.

138. Frame imperfections such as under-coverage (e.g. the list of addresses does not include new houses) and over-coverage (e.g. the list of persons includes people who are deceased or have moved away) are likely to bias or diminish the reliability of the survey estimates and to increase data collection costs, so it is important to establish the following information:

- What information is available on the frame about sample units? (e.g. name, address, gender, age, date of birth, territorial area). This sort of information can be useful in stratifying the sample (see section below), identifying sub-groups, data processing, imputation, estimation, record linkage, quality assessment and analysis.
- What is the quality of this information - what are the levels of missing data and what is known about the accuracy of the records?
- How complete and accurate are the sampling lists? Lists created from administrative sources may not be as accurate as survey researchers would hope. There may also be omissions.
- How often does the sample frame get updated? The most recent version should be used, taking into account any available updates. Countries where census data is the main source of population data available, as opposed to regularly updated population registers, face particular challenges when trying to construct an up-to-date sample frame.
- How will the survey frame be updated in the future?
- How are duplicates treated? All frames are likely to include duplicates. These need to be identified in order to ensure equal probability of selection. If there is no standard procedure to identify duplicates for the chosen frame this will need to be incorporated into the sample design.
- Of which type is the list and is it available to be used? Many lists are now available electronically but special software may be required. If lists are not electronic, resources will be a particular issue for the selection of the sample which will require considerably more time than an electronic selection. Some lists may be restricted to certain groups of users, and access may need to be specially negotiated.

139. It is possible to use multiple sampling frames in certain circumstances. When several frames exist, some of which are incomplete but less expensive to use and others more complete but prohibitively expensive, the use of multiple frames should be considered. This can be particularly valuable in addressing issues of under-coverage. In practice, a multiple frame design may also entail a multiple mode interviewing design. For example, people not reachable by phone can be interviewed by face-to-face

interviews, using other lists such as addresses, births, driver's licenses or electoral registers, in case of household surveys. However, pooling results from different methods and different sampling design to provide overall estimates needs to take into account their each specific measurement error and the overall error is likely to be higher.

BOX 8: CASE STUDY: SAMPLING USING GENERAL POPULATION TELEPHONE SURVEYS

Most countries have lists of landline users though they have become progressively less comprehensive in terms of population coverage with the increase in the households using only mobile phones. A 2008 Special Eurobarometer 'E-Communications Household Survey' report indicates households with only mobile phone access are growing rapidly in Europe. This instrument surveyed mobile versus landline telephone coverage in the European Union's (EU) 27 Member States (plus Croatia and Turkey) during the period November-December 2007 and compared results with an earlier sweep in November-December 2006, (see p. 32 in report - http://ec.europa.eu/public_opinion/archives/ebs/ebs_293_full_en.pdf). Findings show that almost one quarter of households in the 27 Member States have 'mobile only' telephony, and many central and east European countries have particularly high shares of mobile-only households. In both cases, the number of such households is continuing to grow. Czech Republic has the highest rate of mobile-only households at 64 per cent while among the 'old' EU Member States Finland has the highest rate at 61 per cent. In Italy, the percentage of households having only a mobile phone increased from 3.3 per cent in 1998 to 17.1 per cent in 2005. In addition, many households with a landline only are not listed in their directory and some countries (e.g. United Kingdom, Italy, and Finland) also operate a service where people can ask not to be contacted by businesses (although social researchers can negotiate access to these numbers in certain circumstances). Coverage can also vary by region, and specific social and demographic characteristics. Some households have more than one phone number listed, so they are over-covered, and have a higher chance of being sampled. Substitution in cases of replication can be considered.

The exclusion of households with only a mobile phone from a sample frame is a particular problem in victimization surveys since these households tend to be younger and young people are more likely to experience victimization. Random-digit-dialing (RDD) overcomes the problems of non-listed numbers. RDD can also be used to include mobile phones, but often this is not done because of higher costs, a lack of information available from telephone companies concerning the number sets in use (to limit the number of unsuccessful calls), and an inability to stratify the sample due to unavailability of information about the owner of the mobile phone number (particularly in countries with a large number of unregistered pre-paid subscriptions). RDD is also plagued by difficulties in establishing non-response since it is impossible to calculate accurately eligibility when calls are not answered. An additional problem is found in some countries that do not permit interviewing over cell phones (e.g. Canada and the USA). In the USA interviews are conducted by the Census Bureau (the agency that conducts National Crime Victimization Survey interviews). The Census Bureau will not interview via mobile phones for a number of reasons. First, the Census Bureau does not want to inflict the costs of mobile phone use on the respondent. And second, because mobile phone calls are conducted over 'public' airwaves, confidentiality is potentially jeopardized.

Additionally, where mobile phone numbers can be identified for sampling purposes, consideration must be given to the fact that people move from one address to another and retain their mobile phone number. This poses problems for city or region-specific surveys that attempt to contextualize findings with respect to location. Although mobile phone companies keep addresses for billing purposes, which might be utilized by survey researchers at some point in the future, in the case of European countries, the possibility of locating mobile phone subscribers is currently limited for two reasons: First, the majority of European countries are dominated by pre-paid mobile phone subscriptions that do not necessarily require subscribers to give their addresses. And second, because existing data protection laws allow only the police and intelligence services to locate users of pre-paid phones. Finally some people may also own several different mobile phone numbers, while actively using only some of them, whilst others actively use more than one mobile phone.

In telephone surveys using phone lists, little information is available about the sample units. In household surveys, address files usually supply no more than the name and the address which can be at times out-of-date or incorrect. The main difference with RDD is that the probability of sampling a household is higher when using the list instead of the RDD. In both cases demographic characteristics about household members can be collected during the interview. This generally occurs at the start of the interview when respondent eligibility is verified.

Many countries are content to use telephone surveys. In fact, this is the method used in the International Crime Victimization Survey. However, some have experienced problems in obtaining a representative sample using telephone surveys. The issues are illustrated by Scotland's pilot telephone victimization survey described in detail in: Steven Hope, *Scottish Crime and Victimisation Survey: Calibration Exercise: A Comparison of Survey Methodologies* (Research report for The Scottish Executive by MORI Scotland, 2005)

Coverage error

140. Coverage error is the extent to which the sample frame is not representative of the target population. Several guidelines are useful in identifying and addressing coverage error. First, possible frames should be tested at the planning stage of a survey for their suitability and quality. Second, the target population should be defined as precisely as possible in order to enable the selection of the best sampling frame and sampling procedures (this is particularly important in surveys of minority groups). Third, for area frames, map checks may be implemented to ensure clear and non-overlapping geographic areas used in the sampling design.

141. Fourth, determine how the coverage provided by the frame differs from the target population. Find out how the frame is created and investigate possible omissions. Fifth, ascertain whether segments of the population may have been systematically excluded from the sampling frame and explore ways of including them if possible and the possible effect of exclusion. Make adjustments to the data or use supplementary data from other sources to offset coverage error of the frame. Sixth, identify duplication if multiple frames are used. And finally, conduct interviews as soon as possible after the sample has been selected to reduce the effect of changes in the frame.

Other general guidelines for sampling frames

142. Aside from the material above, there are several strategies recommended regarding sampling frames. First, retain and store information about sampling, rotation and data collection so that coordination between surveys can be achieved and respondent relations and response burden can be better managed. Second, monitor the frame quality by periodically assessing its coverage and the quality of the information on the characteristics of the units. Third, incorporate frame updates in the timeliest manner possible. And finally, include descriptions of the target and survey populations, any differences between the target population and the survey population, as well as the description of the frame and its coverage errors in the survey documentation.

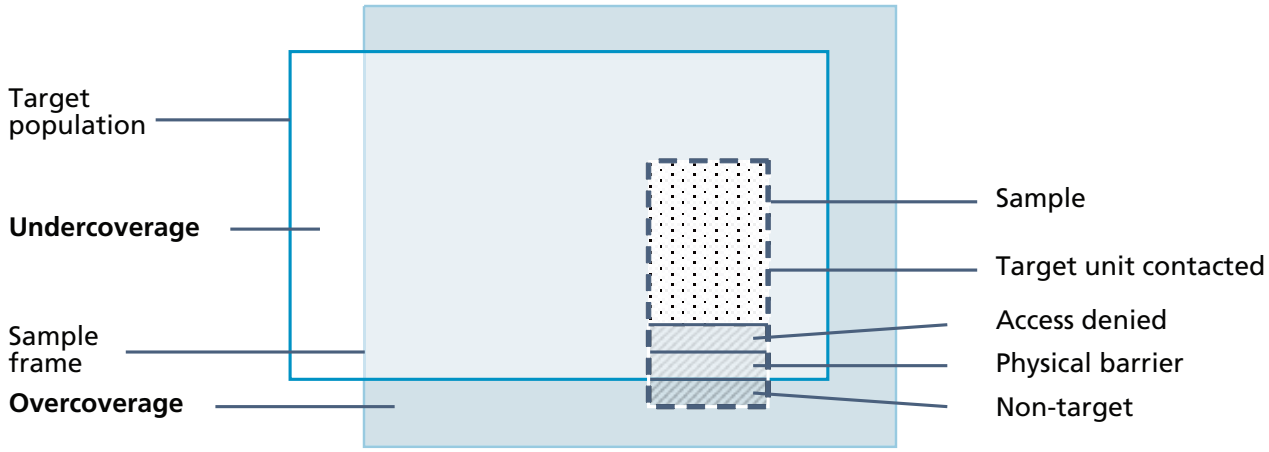
G. Sample design

143. There are many complexities involved in designing survey samples. This section describes the various types of survey samples that can be created and discusses sampling theory and basic concepts associated with sample design. The section includes a summary of guidelines for designing survey samples. Because this section can only provide a basic overview of the subject, a list of more comprehensive references on sample design is included at the end of the section.

144. Sample design is the method used to select the sample from the target population. Selecting the sample design is the third step in drawing the sample, after determining the target population and selecting the appropriate sampling frame, although in reality the survey developer must have a sample design in mind when creating the sampling frame. There are several ways to select statistically viable samples. For example, of the 58 victimization surveys inventoried in 2005 by UNODC-UNECE, 11 (19%) utilized simple probability samples, while 42 (72%) used some kind of multistage stratified sample.

145. This section provides an overview of sample design concepts and pertains to the initial sample drawn to represent the population. This should not be confused with the achieved sample or final sample, which represents the survey respondents actually contacted and enumerated for the survey. Figure 5 expands upon the sampling frame example presented at paragraph 134. The box with the dashed outline represents the initial sample, and the dotted portion of the box represents the achieved sample. Excluded from the achieved sample (denoted by the cross-hatching) are the cases that could not be contacted for a variety of reasons, for example because they were never at home (denoted as access denied), or because there was insufficient time during the enumeration period (denoted as physical barriers) as well as cases that were contacted but not interviewed because they refused or were otherwise unable. Also excluded are cases that may have been contacted and possibly interviewed, but, for whatever reason, are out of the target population (i.e. too old, etc.)

Figure 5: Sample components



146. Survey researchers should consult a much more comprehensive discussion of sample design in developing a victimization survey in order to ensure that the sample selected will be statistically representative of the target population. It should be noted that a survey can incorporate more than one type of sample design, for example a stratified sample of addresses and a probability sample of telephones. When such a technique is used, a means for ensuring no duplication of respondents must be incorporated to account for the probability that the sampled units may be present in both sampling frames.

147. There are two broad types of sample designs: probability samples and non-probability samples. Probability samples, with their property of random selection and their basis in probability theory, allow to estimate population statistics with a known level of confidence. Non-probability sampling provides data that are not necessarily representative of an entire population. For probability samples it is possible to assess the validity and significance of estimates based on probabilistic tools, while for non-probability samples it is not possible, despite the fact that some sort of evaluation of results is reported. A non-probability sample theoretically could be representative of the population, but it is very hard to evaluate it. When the survey aim is to provide representative estimates at some territorial level, a probability sample is required.

Probability samples

148. A probability sample is one based on a sampling plan that has the characteristic that every element in the population has a known and non-zero probability of being included in the sample. In order to use probability sampling, a list, or sampling frame, is needed.

149. In using probability samples, the intention is to gather useful information from the sampled units to allow inferences about the survey population. Probability sampling implies a probabilistic selection of units from the frame in such a way that all survey population units have known and positive inclusion probabilities. Sample size is determined by the required precision and available budget for observing the selected units. The probability distribution that governs the sample selection, along with the stages and units of sampling, the stratification, and so on, is collectively called the sampling design or sample design. A combination of sampling design and estimation method (see section on Estimation) is chosen so that the resulting estimates attain the best possible precision under the given budget, or so as to incur the lowest possible cost for a fixed precision. Information collected for sampled units may, where appropriate, be supplemented at the estimation stage, with auxiliary information from other sources than the survey itself, (such as administrative records and census projections) to improve the precision of the estimates. The choice of sampling design will take into account the availability of such auxiliary information. These concepts are discussed in Särndal, Swensson and Wretman (1992) and Tillé (2001).

150. There are many forms of probability samples. A number are appropriate for use in a victimization survey. These include simple random samples, systematic random sample, cluster samples, stratified samples and multistage sampling.

Simple random samples

151. Simple random samples represent the simplest sample design and they provide unbiased estimators of population statistics. However, when the population list from which the sample is drawn is large, simple random sampling may not be practical and more systematic sampling procedures should be considered.

152. A simple random sample is a sample from a population in which each element of the population has the same probability of selection. This probability is n/N – the ratio of the sample size (n) to the population size (N). Random samples are often generated using random number tables. Random numbers from 1 to N are assigned to the population list, and the selected numbers are chosen from the list.

$$f = \frac{n}{N} = \frac{\text{sample n° of units}}{\text{population n° of units}}$$

153. Simple random sampling yields unbiased estimators of the corresponding population means, totals and proportions. About one fifth of the surveys identified in the 2005 UNODC-UNECE victimization survey inventory were conducted using simple probability samples.

154. Simple random samples are generally created without replacement, meaning that no person or sample unit is selected more than one time for inclusion in the sample. Once a case has been selected for the sample, the next case is selected from the remaining unselected cases in the population. Selecting without replacement produces a more efficient sample. For example, the sample mean for simple random samples is an unbiased estimator for the population mean, but the corresponding variances for estimates derived from a without replacement sample is lower than the variances for equivalent estimates from a with replacement sample. The variance of an estimator is inversely related to the information capacity of that estimator; having a higher variance means having a lesser capacity of information. The higher variance for a random sample with replacement is associated with the fact that a specific unit can be sampled more than one time, always providing the same information and nothing more. So avoiding having repetitive units in a sample provides better information, that is, estimates with lower variances.

155. In probability theory, when a sample is selected with replacement, the selection probability for each unit remains constant. In sampling without replacement the selection probability for each subsequent unit changes as each subsequent case is selected for the sample. Probability for selection in the sample increases as the sampling fraction decreases. When considering an infinite population (or one akin to such), the two sample designs are equivalent.

Systematic random sampling

156. Systematic random sampling is a technique used to achieve a random sample and is often more convenient and feasible than simple random sampling. This approach is useful when a list of elements is available, when the sample is large, or when lists of sampling units are already grouped into subgroups or classes. Compared to simple random samples, this method is easier, saves time and money and still yields accurate estimates.

157. There are many possible systems for creating a systematic random sample. One method is as follows: if the population is designated as N units and the desired sample of n units, each unit within the population can be assigned a number between 1 and N. The sampling interval can therefore be calculated as int(N/n) and can be denoted as K. A starting point, k, can be randomly selected from within the first sampling interval. The sample is then selected by starting at unit k and then selecting every K'th unit for inclusion in the sample. It is very important to be careful not to introduce bias, for example, by using a sampling step which is related in some way to particular unit characteristics relevant to

the problem under study. Systematic sampling is almost identical to simple random sampling if the population list is randomized.

158. For large scale surveys such as national victimization surveys, simple random samples may not be viable options. They can be more expensive than other sampling methods particularly when the units are dispersed or when they are difficult to trace due to migration or marriage etc. In addition, they may not be viable because complete lists of the sampling frame may not exist. For telephone surveys, the geographic dispersion issue may not be as important.

159. Other forms of probability samples discussed below, including cluster samples, stratified samples and multistage samples offer economies and may be less costly to enumerate.

Cluster samples

160. When it is difficult to gather a complete list of elements in the target population or when the population is geographically dispersed, grouping elements into subpopulations, called clusters, and sampling within the clusters is an efficient way to draw a sample. When a complete list of elements in the population is not available, clusters can be substituted. A disadvantage of this sampling method is the loss of accuracy in the results, as each cluster is characterized by sampling error. In general, the total error increases as does the number of clusters.

161. Clusters are usually defined by geographical boundaries, which can also include particular social categories. The main assumption in cluster sampling is that there should be similarity across clusters and heterogeneity within each cluster. In this sample design, clusters are sampled and the elements within each cluster can also be sampled. Simple one-stage cluster sampling is where elements are grouped into clusters and the clusters are chosen by simple random sampling. All the listing units in each chosen cluster are selected in the sample.

162. When items within clusters tend to be similar, a better option could be more sample clusters and fewer measurements within clusters. A simple two-stage cluster sample is when clusters are selected at first stage by simple random sampling and the listing units within each cluster are also selected by simple random sampling. The sampling fraction is the same for each sample cluster. There are more complex cluster sampling methods that involve multistage and various stratifying methods. Cluster sampling can be efficient and less expensive, but can lead to higher standard errors. Whereas a simple random sample is subject to a single sampling error, a two-stage cluster sample is subject to two sampling errors.

163. When geographical boundaries also imply particular different characteristics in the populations they contain, special care should be taken to ensure the sample in each area is representative. In this case a telephone interviewing technique can be a reasonable solution as it ensures reaching and covering all the interested areas at lower costs.

Stratified random samples

164. Stratified random sampling combines the simplicity of simple random sampling with gains in precision. A reduction in sampling error yields from the fact that the samples are drawn from subsets of the population with homogeneous, meaningful characteristics. A stratified random sample derives from a sampling plan in which the population is first divided into mutually exclusive and exhaustive groups, called strata, and then a simple random sample is taken from each stratum.

165. The choice of strata is determined based on the objective of the survey, the distribution characteristics of the variable of interest, and the desired precision of the estimates. Most surveys are used to produce estimates for various domains of interest (e.g. provinces, counties, etc.). If feasible, this should be taken into account in the design by stratifying appropriately (e.g. by province, county, etc.). Otherwise, it will be necessary to consider special methods at the estimation stage to produce estimates for these domains (see section on Estimation). To achieve statistical efficiency, strata should be created in such a way that each stratum contains units that are as homogeneous as possible with respect to the

information requested in the survey. For longitudinal surveys, stratification variables that correspond to characteristics that are stable through time should be chosen.

166. For highly skewed populations, some strata can be included in the survey with certainty. For example, in the USA, some large counties and cities form their own strata in the US NCVS and are in the sample with certainty. Large areas included in the sample with certainty would normally account for a significant part of the estimates of the population totals. This may also be the case in surveys on crimes against businesses; particularly in smaller countries, very large enterprises may be selected with certainty, since excluding them might make the results unrepresentative to reality.

167. By stratifying on subdomains of special interest, the desired precision within those domains can be managed. To estimate population values, such as mean or proportion, the strata results must be combined. In the surveys in the 2005 UNODC-UNECE inventory that utilized stratified samples, the most common stratifiers used are geographical areas, degrees of urbanization, and respondent age and gender.

168. Sometimes the information needed to stratify the population is not available on the frame. In such a case, a two-phase sampling scheme may be used, whereby a large sample is selected in the first phase to obtain the required stratification information. This first sample is then stratified and in the second phase, a subsample is selected from each stratum within the first sample. Implementing such a sampling strategy should involve consideration of the cost of sampling at each phase, the availability of the information required at each phase, and the gain in precision obtained by stratifying the first-phase sample.

Multistage sampling

169. In multistage sampling, samples are selected and sub-selected from the resulting sample, in stages. This technique is useful in reducing costs and assuring a better representativeness of the sample. The first stage involves selecting clusters (called primary sampling units or PSUs). A list of these PSUs is compiled and perhaps stratified. A sample of those units is then selected. The selected units are then listed and perhaps stratified. The list of secondary sampling units is then sampled. This sampling technique is often used when a list of population elements is incomplete as it reduces the size of the list by choosing sub-samples.

170. Multistage sampling is useful, particularly in case of area frames, in situations where it is difficult or not cost-effective to select or inconvenient to directly select the sample for the survey. In large areas, for example, it would be very expensive to conduct a face-to-face survey using a random sample because of the distance between selected respondents. Multistage sampling allows for clustering of respondents to reduce enumeration costs. Budgetary or other constraints may necessitate more than two stages. Designing such a sample involves determining how many stages of sampling are needed and which sampling units are appropriate at each stage. For each possible type of unit, decisions must be made concerning the availability of a suitable frame of such units at each stage or the possibility of creating such a frame for the survey, ease of contact and of data collection/measurement, the quality of the data provided by the unit and the cost of collection.

171. About two thirds of the surveys identified in the 2005 UNODC-UNECE victimization survey inventory were conducted using a multistage stratified sample. Stratified multistage samples were also the most common type of sample used for surveys on a variety of subjects in developing and transitional countries, according to a 2005 study completed for the United Nations.

172. One survey that utilizes a multistage sample design is the Italian victimization survey conducted by telephone. This survey uses a two-stage stratified sample. First, using a telephone technique, the sample can be more scattered without increasing costs and enumeration can be controlled more easily and efficiently. Clusters of units are identified according to demographic characteristics but also considering particular urban and metropolitan definitions; clusters are stratified, that is classified, according to those characteristics considered relevant to the victimization phenomenon and ranked by territorial characteristics.

173. At the first stage in each defined stratum, a sample of households is randomly selected using a systematic random sample design, where telephone numbers are the units to be selected based on the phone number list. Different sampling steps are randomly selected in each stratum. At this stage, telephone numbers are over sampled, to ensure the possibility to substitute numbers not belonging to the target population until an eligible household is selected. Units with numbers close to those of selected units are selected as reserves, to ensure that reserves are as similar as possible to the first choice in the event of substitution. Finally, an individual is randomly selected to be interviewed in the eligible household.

174. The random selection is based on a selection matrix of l random numbers defined as follows: l is the maximum households dimension, each record of the selection matrix represents a household, and each selection matrix element has l digits. The first digit refers to households of two members, the second of three members, the *lth* of l+1. In the first digit a random number between 1 and 2 is inserted, in the second a random number among 1,2 and 3 is inserted, and so on, in the *lth* digit a random number among the l+1 integers 1,2,…, l+1, is inserted. When calling a household the respondent will be asked to indicate the number of the household members and the main demographic characteristics of each member, in the order he/she will provide starting from the respondent itself. So a table of the household eligible members is made. The member in the table corresponding to the random number in the selection matrix digit corresponding to the actual household size will then be interviewed. Another way to select the individual when interviewing only one member in the household is the *first birth* method, that is, interviewing the member whose birthday is next.

Random walk

175. Random walk technique is one example of a sampling technique that can be used when no lists are available to identify sample units, as in the case, for example, of not reliable lists, or even non-existent ones. In this technique, the interviewer follows specific instructions: take the *hth* road on the left, then the *jth* house on the right and so on. When this method is used, procedures must be created a priori for how to canvass the area to avoid bias, for example ignoring very small side streets and alleys.

Non probability samples

176. Non-probability sampling cannot produce estimates that are representative of the population being measured, but can be useful, especially when it is difficult or impossible to create a probability sample for the population of interest. For example, when studying the victimization experience of a very particular and sparse group of people, such as the homeless or prostitutes, a non-probability sample is advised. Non-probability sampling methods can be divided into two broad categories: purposive and accidental/haphazard/convenience.

Purposive samples

177. A purposive sample is done with a particular purpose in mind. In other words, the research needs to sample a predefined group such as non-Hispanic white females between the ages of 16 and 24. There are several types of purposive samples. One commonly used type is snowball sampling. Snowball sampling begins by identifying a person who meets the criteria for inclusion in the study. This individual is interviewed and then asked to identify other people who also meet the criteria. These other people are contacted and (hopefully) interviewed, and so on. The sample increases in size in a snowballing fashion. A related approach is network sampling, where people who are contacted are asked to list other people they know who might be interviewed. Network sampling may be conducted in two stages, where in the first stage people are contacted and asked to provide information on other eligible respondents they know of. In relatively small settings this can be continued up until practically all such persons have been identified. Sampling for the actual study can then be based on the list of eligible respondents which was collected based on the network mapping stage. Sometimes the number of times that an individual has been referred to may be used to adjust sampling probabilities, so that persons who are part of many peoples' networks would not be over-represented in the sample. Another approach is location-based sampling, where people are interviewed in selected places. This may be

useful for interviewing hard-to-contact populations, who can be characterized as using specific services or visiting certain places. For example, in some studies this approach has been used to interview immigrants at shops, call centres or underground stations. Adjustments can be made according to factors such as the number of times respondents say they visit the location of interview or the time of day in an effort to reduce selection bias. For more details see later section about sampling minority groups and other special population groups.

178. Quota sampling is yet another approach. Quota sampling specifies the proportion of the sample that has particular characteristics. Interviewers interview respondents with particular characteristics until they have reached the quota for that category of respondent. Quota sampling can be proportional or non-proportional. Quota sampling is a valuable tool when fielding a pilot victimization survey. For instance, this method was used in Italy to evaluate questionnaire wording and performance across different ages in the target population. However, it is not normally a suitable method for creating a representative sample for the final survey which requires a probability-based sample design.

BOX 9: EXAMPLE OF USE OF RANDOM WALK TECHNIQUE IN POLAND

The 2004 Polish victimization survey utilized random walk sampling to gather its sample, as well as EU-MIDIS in most EU Member States. In this exercise, the sampling was based on a list of regions and districts and did not require personal addresses. The Polish national sample was selected in multiple stages. The sampling frame was based on information created by the Central Statistical Office and covered the most updated set of statistical regions and census districts.

In the first-stage of sampling, first-stage sampling units (FSU) were designated. Poland was divided into sampling units in which city and rural areas were accounted for. The cities were divided into census units called census clusters (CC) and the rural areas were accounted using enumeration districts (ED). The basic assumption was made that the first-stage sampling units (FSU) should consist of a minimum of five dwellings. In some cases, this assumption was too restrictive and the original sampling units did not contain five dwellings. Therefore in some cities, two or more 'original' city clusters were joined into one, and in rural areas, districts which contained less than five dwellings were merged with the neighbouring ones so that the joint enumeration district contained at least five dwellings.

FSU were then sorted by strata. The strata were related to location size (i.e. village – up to 20,000 inhabitants; town – 20,001 to 100,000 inhabitants; city – 100,001 to 500,000 inhabitants; large city – over 500,000 inhabitants) or to a given city/town in the *voivodship* (administrative unit of Poland).

To begin the random walk sampling, starting points had to be designated. Starting points were selected using multistage random sampling of household addresses. The interviewers had strict instructions on how to move from the starting point to the target respondent. The interviewers were not allowed to interview at the starting point, but only in the first (or the second or the following) household which was chosen in compliance with the specified rules (for example: the fifth address - dwelling to the right from starting point). According to the rules of the sampling frame only one interview could be carried out at one address. In case of difficulties (wrong address, no one at home, upfront refusal, selected respondent's refusal, respondent unable to be interviewed etc.), the interviewer continues his/her route (according to the ascribed digit) to the next household as long as he/she is successful in completing the interview. These digits are specified as follows: five for urban areas and three for rural areas (villages).

After the household is selected via random walk, a respondent within the household must be selected for the interview. In the case of the Polish victimization survey, one respondent in each household was selected for interview. Sampling within each household was conducted using random numbers according to the Lesley Kish grid.[7] This step was performed by the interviewer. The interviewer's task was to enumerate all household members who were eligible respondents (i.e. at least age 18) on a special table in a particular order: from the oldest male to the youngest female. Then, using the random digits table, the respondent to be interviewed was identified. If the selected person was unavailable or refused the interview, the interviewer was not allowed to interview any other household member.[8] Instead the field representative was instructed to arrange an appointment with the unavailable respondent. If the selected respondent refused, the random route walk was continued to the next household.

7 The Kish grid (random digits table) consists of combination of digits, which is unique or almost unique for every household. They are generated through a randomized process (there are more than 3.5 millions of possible combinations), assuring random selection of a respondent. This process takes place for each sample (project) independently. The randomly selected numbers are put into grids and each grid is randomly ascribed to the specific initial address and delivered to the respondents.

8 See: Nemeth, R. 'Respondent selection within the household – A modification of the Kish grid' http://www.math.uni-klu.ac.at/stat/Tagungen/Ossiach/Nemeth.pdf.

179. A third purposive approach is expert sampling. With this approach, the researcher assembles a sample of persons with known or demonstrable experience in the topic of interest. In the case of victimization surveys, the researcher may wish to gather victimization researchers or research methodologists. This approach is useful in the development phase of fielding a victimization survey, and may also be useful in evaluating particular initiatives or policies alongside the results from a full probability-based victimization survey.

180. Fourth, heterogeneity sampling is another purposive sample. This purposive approach views ideas, not people, as the main interest of the study. Thus, in order to include as many diverse and relevant ideas as possible, a broad and diverse range of participants is sampled. Heterogeneity sampling is valuable in the development phase of fielding a victimization survey.

181. And finally, another form of purposive sampling is termed modal instance sampling. This approach involves identifying the most frequent or 'typical' case, classified by some variables arbitrarily chosen and related with the phenomena under study.

Accidental/haphazard/convenience samples

182. The second broad class of non-probability samples are referred to as accidental, haphazard or convenience samples. These samples are developed by interviewing any person willing to be interviewed. An example of a convenience sample would be to provide a telephone number for people to call to express his or her experience with victimization. Convenience samples are often used in internet surveys which allow anyone accessing a website to complete a questionnaire. These samples are not useful in producing representative estimates because they are representative only of the people who choose to participate in the survey. And unless those who choose to participate differ in no important ways with respect to the survey's aims from those who choose not to participate, the information gathered cannot be generalized to the general population.

Cross-sectional versus longitudinal designs

183. An important decision in designing a victimization survey based on a probability sample regards the time dimension. One may choose to field a cross-sectional victimization survey. This type of study is a one-time survey in which data are gathered at a single point in time. A second option is the longitudinal study. Longitudinal studies gather data over an extended period of time. There are three types of longitudinal studies: trend studies, cohort studies and panel studies. Trend studies examine some phenomenon in the general population over time. An example is given in police records. These data reveal trends in crime over time. A cohort study also examines something of interest over time, but it focuses on a more specific population such as graduating college students observed in different periods. One may for instance wish to investigate changes in fear of crime over time for graduating college students. The third type of longitudinal study is a panel study. This type of study gathers information from the exact same set of people over time. That is, the same respondents are interviewed over time. With the panel design, sample attrition is a concern.

184. The US National Crime Victimization Survey utilizes a rotating panel design. The sample is an address sample selected using a stratified multistage design. Households selected for the survey remain in sample for three years and are interviewed seven times at six month intervals. Interviews are conducted with all household members age 12 or older. Movers are not followed; the survey is address-based, and interviews are conducted with whoever is residing at the address during the particular enumeration period.

Sampling theory

185. Sampling theory provides ways to individualize the sample selection method to achieve the goals of the survey. Probability sampling theory is based on a random selection process. Random selection reduces bias and is based on probability theory. As multiple samples are drawn from a population, a sampling distribution can be considered. If the samples are independent and random, the sample parameters will most likely be distributed around the corresponding population parameters. The resulting estimate can be evaluated by the probability theory and will be based on a point estimator or an interval estimator.

186. The purpose of research is to learn something about a population. For instance, the research may be interested in understanding the extent to which a population is victimized. Because gathering information from every element, or person, in the population is not feasible, the research draws a sample. Using this sample, statistics are calculated. Sample statistics are used to estimate the unknown population values, also called population parameters. Population parameters include values such as the mean, total, proportions, ratios and percentiles.

187. Probability sampling methods seldom produce sample statistics that exactly equal the population parameters they aimed to estimate. Probability theory provides the estimate of the error to be expected for a given sample design. There are two types of sampling error: sampling bias and sampling variance.

188. Sampling bias refers to the extent to which the sample does not exactly represent the target population. If some members of the population have no chance or a reduced chance of being selected for the sample, the resulting statistics will be a biased representation of the population because some members have been excluded. This would occur, for example, if a victimization survey used a list of telephone numbers as a sampling frame. People without telephones would have no chance of being selected for the survey and hence, any estimates of crime produced by the survey would be biased by the extent to which the experience of crime among people without telephones differs from that of people with telephones. Bias is defined in term of the difference between the expected value of the estimator and the true population value of the parameter that the estimator is intended to estimate.

189. Sampling variance refers to the variation in estimates that would arise from different samples selected from the same sampling frame. Each sample would have its own set of estimates. Sampling theory dictates that the estimates from each sample have a distribution with a mean and a standard deviation. If the sampling variance is low, the sample mean will be close to the true population mean. If the sampling variance is high, the sample mean will be relatively far from the true population one.

190. The design of the sample influences the survey's sampling error. The design effect relates to the variance of the estimator for complex sample designs compared to the corresponding variance if a simple random sample design was used. The ratio between these two variances is called the design effect or deff. In deciding how large a sample is needed to assure significance of estimates, deff can be used as a multiplier of the sample size needed for a simple random sample. Sampling attributes such as clustering and stratification contribute to the design effects. Stratified and clustered samples generally have design effects greater than 1 meaning that the variances of the clustered or stratified design estimators will be greater than the corresponding ones for a simple random sample of equal size.

Sampling minority groups and other special population groups

191. When wishing to sample minority groups such as ethnic minorities and people with an immigrant background, a general population survey is generally not going to work. Unless the general population survey is enormous (or the minority group is a very significant percentage of the population), too few of the desired minorities will be sampled via standard random sampling to allow for any meaningful breakdown of results by minority background. Instead, surveys that want to look at minorities either need to incorporate a booster sample of the group or groups they are interested in as part of a survey on the majority population, or consideration needs to be given to the development of a dedicated minority survey. These options require the use of alternative sampling frames as minorities tend not to be evenly distributed in the population. However many countries do not have local population data from which random samples of minorities can be readily drawn or even any population data which includes information on minority status.

192. When looking to develop a random sample of minorities, a number of options exist that require a multistage sampling frame. The first stage randomly screens households/individuals to identify if they match the groups defined for survey purposes while the second stage randomly selects individuals to take part in the survey.

193. Random-digit-dialing (RDD) can be used to identify minorities by randomly dialing telephone numbers either for a CATI survey or for a follow-up CAPI or PAPI survey. Computerized call-man-

agement systems are able to identify inactive or fax numbers, with repeat and relatively cheap call backs of live numbers possible. However, as with surveys on young people, the use of landline-only screeners is increasingly problematic because of high mobile phone usage and low landline coverage among minority groups. In addition, mobile phone listings are not yet available in all countries, and, where they are, they cannot be used to pinpoint respondents by geographical area (e.g. for sample stratification).

194. A second option is random route or random walk sampling. The random walk method can be used when not much information is known about the minority or special population group to be sampled. It does, however, require at least data at the local level on the broad geographic distribution of minority groups. By knowing the percentage of minority groups in different areas, the share of interviews in each area can be calculated and subdivided into clusters for carrying out a pre-determined number of interviews. Clusters are then selected at random for sampling, with standardized random routes for household selection drawn up from a central or randomly identified point in a settlement. If a household is identified as belonging to the minority group for surveying in an initial screening with the first contacted member of the household, standardized random selection procedures can be employed (such as last birthday) to identify potential respondents for interviewing.

195. A third possibility is the use of focused enumeration. This method asks interviewees, who are either from the majority or a minority population, to identify whether their neighbours, described as living a certain number of doors either side or above or below them (in the case of flats), are from a minority background. If so, interviewers call on identified neighbours, screen them to confirm whether they belong to the group for interviewing and ask if they are willing to take part in the survey. This approach can be combined with a survey on the majority population as a means of boosting the minority sample.

196. A fourth option for reaching 'difficult to sample' or rare minorities is to use name lists, such as telephone directories, to select persons whose name refers to a minority population. However, this method has significant limitations. First, many minority groups will not have different family names to those of the majority population. Second, women from minority backgrounds who have married men from majority backgrounds cannot be identified using such lists. And finally, women from majority backgrounds who marry into a minority family name will be misidentified.

197. A fifth method to identify 'difficult to sample' or rare minorities is through network sampling. Once members of a minority group have been identified through means such as name lists, information is collected from them about other potential respondents that are linked to their household in some way, such as friends or relatives. A random sample can then be drawn from individuals identified as part of the network. In small areas this approach may attempt to identify nearly all members of the target group before drawing the sample. Snowball sampling is a variation of this approach, whereby members of a minority group refer researchers on to other minority individuals, who may or may not be part of a network. However, the implications of these non-probability approaches are that the results cannot be generalized as representative of the target population.

198. Sixth, institutional linkage can be utilized as a means of locating 'difficult to sample' or rare minorities. This suggests that researchers approach institutions that have links to minority groups, such as charities, non-governmental organizations and community organizations, and ask them to draw up a list of contacts. Statistical agencies may also have access to the records of government agencies responsible for paying subsidies or financial support to particular groups e.g. for disability. However, as with network sampling, this approach has its drawbacks because members of minority groups who are not affiliated in some way to the minority community, either through community groups or family links, are not represented in any sample that is derived through group affiliation and therefore the results from such surveys could risk being unrepresentative.

199. And finally, 'difficult to sample' or rare minorities may be found via centre sampling. This method samples visitors at locations regularly used by the minority group of interest. These locations include shops, internet/telephone call centres and local parks. As a method it can be used in conjunction with

available local population data and can account for the representation of certain individuals within a group at particular locations and at certain times. A 'popularity index' can then be computed allowing for the design of sample weights. Yet once again, as with some of the other approaches described above, this method will not reach those members of minority groups who do not visit locations where other members of the group tend to congregate.

200. Although the above methods have been described with respect to the particular example of ethnic minority and immigrant populations, in many cases they can also be transferred to research on other 'difficult to sample groups', such as the disabled and the gay and lesbian community. In addition, there are other survey research methods that are increasingly being used, such as web-based surveys, which might be suitable for sampling some rare populations; although means of controlling 'who' is responding to online surveys are still in their infancy and therefore there is a risk that such samples, again, are not truly representative.

BOX 10: CASE STUDY: SURVEYING MINORITY GROUPS

A number of considerations need to be taken into account when conducting survey research on minority groups in the population. First, a definition of which minority groups are of interest is required. The designation of these groups will largely depend on the history of migration and recognition of 'minority' status in each country. In general, minority groups are defined by their ethnicity, immigrant status or background, race, disabilities or faith.

Once the minority group of interest is identified, a clear definition is required to determine who should and should not be included in the group. It is important to recognize that how individuals define themselves may be very different from the way government officials or researchers define them. For some groups such as racial or ethnic minorities, research experience suggests that respondents' self-identification is the preferred method. For other groups, however, self-identification is not practical. For instance individuals may vary greatly in defining themselves as immigrants or disabled. In cases like these, the researcher needs to implement basic exclusion criteria for defining persons in these groups. For instance, criteria for immigrants may include limiting respondents to those who are legal residents and have been in the country for a minimum period of time. Or criteria for disabled persons may require that their disability has certain characteristics (e.g. be permanent).

When deciding on which minority groups to survey, regard must be given to constraints on and availability of population data for these groups. The availability of this information must be considered in the development of sampling frames and the subsequent application of weights to the survey population. Where information on individual minority status is collected, it is often protected by laws so that name and/or address lists are not available.

Population data that includes 'ethnicity' and 'race' are widely used and generally accepted in English-speaking countries. In comparison, data collection that distinguishes people on the basis of their 'ethnicity' or 'race' is considered to be a discriminatory practice in some countries. In other countries, this practice is forbidden. Further, in some countries the legal status of 'national minority' is afforded to some groups but not others with implications for population data collection. Yet, given these differences, many countries do collect population data about country of birth, country of birth of an individual's parents. And typically many countries record the nationality or citizenship of resident populations which can be used to identify population groups for surveying. This information can be used as proxy data for 'difficult to sample' minority groups in the absence of data on, for example, ethnicity.

In the European Union (EU) dedicated surveys of ethnic minority and immigrant populations are limited. This situation reflects a number of factors including the fact that significant minority populations are a relatively new phenomenon in a number of European countries. Traditionally, many European countries have been countries of emigration. A second factor associated with limited surveys of ethnic and immigrant populations is that survey research on minorities has not been given prominence by policy and funding authorities. Among EU Member States, the British Crime Survey is currently the best example of a large-scale survey on the majority population that includes a significant booster sample of ethnic minority respondents. However, inroads into survey research on minorities have been made by the European Union's Fundamental Rights Agency (FRA). FRA conducted a pilot victim survey research in six Member States at the end of 2006 and beginning of 2007 to test different probability sampling approaches on selected ethnic minority and immigrant groups in countries where population data on minorities is often limited. The results of the FRA's pilot survey exercise are intended to aid the Agency's development of a full-scale survey instrument to look at immigrants' and other minorities' experiences of discrimination and victimization in EU Member States.

In consideration of both majority and minority populations for sampling, once coverage is agreed then a suitable method or methods of selecting a sample can be planned. Then there will be subsequent requirements for large enough samples of relevant groups to be identified in analysis and possibly special arrangements for interviews; for example, in the case of surveys on minority groups there may be the need to translate the original questionnaire into different languages and to provide bi-lingual interviewers, including the provision of minority interviewers from the same background as the groups being surveyed.

Sample size considerations

201. Victimization surveys differ from many other surveys in that only a fraction of the overall sample will possess the characteristics of interest. In other words, only a percentage of the sample will have been a victim of a measured offence during the survey's reference period. For this reason, victimization sample sizes must generally be quite large to achieve the survey's goals. How large a sample is needed for any survey depends primarily on the desired precision of the survey estimates and time and monetary resources available for the survey. Within these overarching concerns are a number of issues that must be addressed before the survey's sample size can be determined. There are many issues that determine the desired sample size.

Survey goals

202. In order to calculate the size of the sample required for a survey, it is necessary to understand the survey's goals and to know what measures the survey will produce. Surveys that measure attitudes require relatively small samples because, presumably, every respondent can provide a response. Larger samples are required to enable measures of crime victimization because victimizations are relatively rare events and fewer people will be able to provide the desired information. The rarity of the event will impact the required sample size. Larger samples are needed to measure rape than are needed to measure overall violent crime. Larger samples are also required in order to provide estimates for sub-populations. The need to provide information about the characteristics of victims of crime or crime incidents can also increase the size of the sample required for the survey.

203. Other common goals of victimization surveys have impacts upon required sample sizes. Surveys designed to measure year-to-year changes in crime will require larger samples than those that examine characteristics of crime events.

Available resources

204. The amount of money available for the survey will ultimately drive the sample size determination. If insufficient funding is available, the goals or sampling methodologies will have to be altered. Generally, sample size is a compromise between what the survey designer would really like to accomplish and what the available level of funding will support.

Sample design

205. As discussed above, the sample design has an impact upon the precision of the estimates. Multistage, stratified samples have larger variances than do simple random samples, and hence will require larger samples to achieve the same precision of the estimates.

Desired precision of estimates

206. What level of precision is desired for the primary estimates to be produced by the survey? For example, if a primary goal of the survey is to measure year-to-year changes in the rate of violent crime, the decision must be made as to what degree of change in the violent crime rate will be accepted as a real change.

Anticipated response rate

207. If a high response rate is expected, the initial sample can be smaller than if a lower response rate is expected and still provide the same number of completed interviews. The anticipated response rate can be calculated through a variety of techniques, including pilot tests, past experience or the experience of other similar surveys.

Anticipated victimization rate

208. This is a fundamental issue for victimization surveys. If the goal is to measure specific types of crime at a given level of precision, more sample cases will be required than if the goal is to measure aggregated categories of crime. Similarly, it will require a larger sample to produce a reliable estimate of a more rarely occurring crime such as rape than it will to produce an estimate of theft at the same level of statistical precision.

209. The length of the survey's reference period will impact the size of the sample. The shorter the

reference period, the larger the sample that is required to obtain sufficient number of cases to produce reliable estimates for any given crime or population characteristic.

Subpopulation estimates

210. If it will be important to examine the experiences of sub-populations such as minorities or respondents by gender or age or other characteristics, these sub-populations must be accounted for in the evaluation of required sample size. It may be possible to oversample sub-populations of interest to reduce overall costs and still achieve the survey's goals.

Key variable yield

211. As with sub-population estimates, if it is important to have estimates for key variables, these variables must be accounted for in the evaluation of required sample size. For example, one of the goals of a survey on violence against women might be to evaluate the use of victims' services. The developers must determine how many cases they might expect to obtain in order to estimate the overall number of sample cases required for the survey.

212. The survey developer must evaluate the trade-offs between conducting long interviews (to maximize the information collected by the survey) and the potential impact longer questionnaires may have on survey costs and sample size. Long questionnaires can affect respondents' willingness to participate, driving down response rates. Additionally, longer interviews increase survey costs, thereby possibly decreasing the funds available for fielding a larger sample.

Anticipated sample loss for panel surveys

213. Sample loss or attrition is the loss of respondents that occurs in later waves of a panel or longitudinal survey. Some respondents participating in earlier iterations of the survey might not be willing or able to participate in subsequent surveys. The developer must, therefore, estimate whether later waves will have sufficient numbers of sample cases for the panel to continue and possibly add cases to the earlier waves to anticipate the sample loss.

214. In calculating the desired sample size for each of the sub-populations, types of crime and other important variables, the survey designer may find that the desired sample size will not be supported by available financial or other resources. In such a case, the designer must re-evaluate whether to reduce the sample size, which will reduce precision, or revise the goals of the survey. In the end, survey designers must understand that the final sample size will be suitable for some estimates but insufficient to produce reliable estimates for every sub-population or type of crime for which an estimate is desired. For example, in the USA, when producing annual victimization estimates by race of victim, the data can support estimates for white and black victims, but not for Asian and American Indian victims. For Asian and American Indian victims the data must be aggregated and displayed a joint 'Asian or American Indian' category.

Oversampling

215. It is often necessary to produce estimates for sub-populations that represent very small proportions of the overall sample. In many instances, the number of sample cases for the sub-population will be inadequate to produce estimates possessing the desired precision. One solution is to oversample the sub-population, using a larger sampling fraction to select the cases for the sample.

216. If oversampling is used, the researcher must account for the higher probability of some portions of the population to be included in the sample by adjusting the weights used to make the estimates representative of the total population.

Sampling unit selection

217. The samples used for victimization surveys are composed of households or individuals. When the sample is comprised of a sample of households, additional decisions must be made regarding who is interviewed in the household. One option is to interview all household members. A second option is to interview all household members within a specified age range. A third approach is to interview household members with specific demographic characteristics, such as women. And finally, a choice can be made to interview only one person in the household.

218. Each of these options has advantages and disadvantages. Interviewing everyone in the household (or everyone within a specified age range) enables both household and personal measures of crime. For example, crimes such as burglary and motor vehicle theft impact everyone in a household, and therefore, it may be useful to understand how these offences impact the household as a whole. Moreover, the person selected for the sample may not be knowledgeable of such offences, whereas another household member might be a better respondent for events that impact the entire household.

219. Interviewing one person about the victimization experiences of all household members can contribute to a non-sampling error, because people may also not be knowledgeable about the experiences of other household members and may either filter information or not know what victimization experiences they have had. Research conducted for the development of the US National Crime Victimization Survey found that interviewing the entire household produced higher victimization rates than interviewing one person per household. This is true for crimes against the household in general, such as burglary as well as crimes against other household members.

220. Attempting to interview everyone in the household (or everyone within specified age ranges) can be quite expensive, however. The need to conduct multiple follow-up interviews for the additional household members is costly, and the increased non-response associated with the additional household members increases the overall non-response rate for the survey which is the sum of the household and individual non-response rates. Moreover, it is necessary when interviewing multiple household members to unduplicate events that both might report. For example, two respondents may both report that the burglars broke into the house and stole some property. The survey protocol must include some procedure to evaluate and compare the information to determine whether the events were the same event or different events.

BOX 11: RESPONDENT SELECTION IN PAST VICTIM SURVEYS

Out of 58 surveys in the UNODC-UNECE inventory, the sample was composed of households in 39 surveys (67 per cent) and of individuals in 19 surveys (33 per cent). The type of survey seems to influence the respondents' selection procedure to a certain extent: for ad hoc victimization surveys the sample composed of households seems to be the prevailing practice (75 per cent of the surveys), while for multipurpose surveys with a victimization module the sample is based on households only in 58 per cent of the surveys.

Among the 39 surveys with household based sample, in 26 surveys (66 per cent) only one person was interviewed in each household. The person was selected randomly in 14 surveys, while in 12 surveys the birthday method was used (that is, the person was selected whose birthday was next or last). In seven surveys all household members were interviewed, generally with a minimum age between 14 and 16, while in four surveys there was a limit to the number of household members interviewed.

221. If the survey involves personal interviews, interviewing more than one household member can achieve economies because of the costs associated with travel to and from the sample address. However, if multiple visits are required to complete interviews with additional household members the costs of the survey can increase dramatically.

222. Interviewing one person per household eliminates the need to unduplicate information provided by more than one respondent, and also eliminates the need for follow-up attempts to obtain interviews with remaining household members. A pre-test conducted in Italy found that despite the inability to obtain information about the victimization of all household members, interviewing one person provided more accurate estimates of victimization.

223. Surveys focusing on minorities – meaning here ethnic minorities and immigrants - often face the problem that good sampling frames are unavailable. It may therefore be necessary to add to the eligibility screening process the necessary items to identify minority respondents. In some cases, it may be possible to select the respondents based on just one question (e.g. persons who have immigrated to the country in a given period), but often more questions may be needed. Table 2 describes some variables which are often used to identify minority respondents (either as a part of the screener or in selecting a list-based sample).

Table 2: Factors commonly used in screening for minority respondents, and their scope:

Citizenship	Persons who have recently immigrated to the country are likely to still have the citizenship of their country of origin, but as years go by more and more may apply for a new citizenship. Depending on the country, children of immigrants born in the country may automatically receive the citizenship.
Language	It may be possible to successfully identify recent immigrants based on mother tongue (assuming that there is a difference between the country of origin and destination), but this is not always the case with second-generation immigrants.
Country of birth	Respondent's country of birth does not reveal minority background beyond the first generation. As an alternative, the parents' country of birth can be used, but this helps only in the case of second-generation immigrants.
Self-declaration/ -identification	This is currently used in collecting information on ethnicity in many censuses (where information on ethnicity can be lawfully collected in countries). However, respondents' identities may shift over time, and some may be unwilling to identify with a particular group for fear of stigmatization and inferior treatment (for example, in the case of Europe's Roma populations).

Addressing survey error associated with sample design

224. As discussed above, sampling bias and sampling variance are two types of sampling error. Sampling bias is caused when some members of the sampling frame have reduced or no chance of being selected for the sample. If a sub-population is completely omitted from the sampling frame, there are no adjustments that can be done to produce an estimate for them. The overall estimates will be biased to the extent that the omitted population differs in the variables of interest from the overall population. In such cases, it is the responsibility of the survey developer to acknowledge the existence of the potential bias when presenting the results of the survey.

225. If, however, a sub-population is under-represented in the sampling frame, it may be possible to apply weights to the sample cases to compensate for the unequal representation in the sample. The weights are used in the estimation process and also in the calculation of standard errors of survey estimates.

226. Sampling variance is associated with doing a sample survey rather than a census. It is beyond the scope of this section to provide a detailed discussion of sampling variance. There are many texts that can provide instruction on the impact on sampling variance of various kinds of sample designs. The survey designer must understand the design effects so that they can be taken into account during the analysis stage.

Summary of guidelines for designing survey samples

227. Sample design is an integral part of any survey. In order for survey results to be 'generalizable' representations of the population of interest, the sample must be designed to accurately represent the population. The following summarizes the general guidelines for designing survey samples:

- Samples can be probability and non-probability samples. Probability samples can produce estimates that are representative of the population. Non-probability samples cannot produce such representative estimates, but may be useful under certain conditions;
- Samples can be stratified to achieve statistical efficiency by dividing the population into subsets (called strata) within each of which an independent sample is selected;
- When determining sample size, take into account the required levels of precision needed for the survey estimates, the type of sample design and estimator to be used, the availability of auxiliary information, budgetary constraints, as well as both sampling factors (e.g. clustering and stratification) and non-sampling factors (e.g. non-response, presence of out-of-scope units and attrition in longitudinal surveys). For periodic surveys, expected births and deaths of units within the changing survey population must also be taken into account;

- It is important to remember that most surveys produce estimates for many different variables and optimizing the sample for one particular variable may have detrimental effects on other important variables. Handle this problem by first identifying the most important variables and then using this subset of variables to determine the sampling strategy to be adopted, which often requires a compromise between optimum strategies for the variables in the subset;
- In determining sample allocation and size for stratified samples, account for expected rates of misclassification of units and other deficiencies in the frame. If not properly considered at the sampling stage, survey estimates will not be as precise as planned. This problem can be addressed at the estimation stage;
- Conduct studies to evaluate alternative sampling methods, stratification options and allocation possibilities. The usefulness of these studies depends on the availability and vintage of data used to conduct the studies, whether from previous censuses, surveys or administrative data and their relation to the variables of importance to the survey;
- At the implementation stage, compare the size and characteristics of the actual sample to what was expected. Compare the precision of the estimates to the planned objectives;
- For periodic surveys that use designs in which the sample size grows as the population increases, it is often appropriate to develop a method to keep the sample size and therefore collection costs, stable. The precision of survey estimates is usually influenced more by the total sample size than by the sampling fraction (ratio of the sample size to the population size);
- For periodic surveys, make the design as flexible as possible to deal with future changes, such as increases or decreases in sample size, restratification, resampling and updating of selection probabilities. If estimates are required for specified domains of interest (e.g. sub-provincial estimates), form the strata by combining small stable units related to the identified domains (e.g. small geographical areas) if possible. Future changes in definitions of the strata would then be easier to accommodate;
- For periodic surveys, if efficient estimates of change are required or if response burden is a concern, use a rotation sampling scheme that replaces part of the sample in each period. The choice of the rotation rate will be a compromise between the precision required for the estimates of change and the response burden on the reporting units. Lowering the rotation rate will increase the precision of the estimates of change, but may lower the response rate over time. A low rotation rate has the additional benefit of reducing costs if the first contact is substantially more expensive than subsequent contacts (e.g. first contact is made in person, and later interviews are done by telephone or using mail-back questionnaires);
- For periodic surveys, develop procedures to monitor the quality of the sample design over time. Set up an update strategy for selective redesign of strata that have suffered serious deterioration;
- For longitudinal panel surveys, determine the length of the panel (its duration of time in the sample) by balancing the need for duration data versus attrition and conditioning effects; use a design with overlapping panels (i.e. with overlapping time span) when there is a need to produce cross-sectional estimates along with the longitudinal ones;
- Use generalized sample selection software instead of tailor-made systems. One such system is the Generalized Sampling System (GSAM) developed by Statistics Canada. GSAM is especially useful for managing sample selection and rotation for periodic surveys. Another option is the software MICROSTRATE developed by Eurostat to control sample overlap. By using generalized systems, fewer programming errors can be expected as well as some reduction in development costs and time.

H. Frequency of enumeration

228. There is a relationship between enumeration frequency, survey goals and available resources. Determining the frequency of enumeration depends upon the type of data required, the timeliness of outputs required, the resources available to support the survey and the effect these decisions may have upon the ability of respondents to provide accurate data. More frequent surveys have the advantage of providing timely and responsive information to policy makers, particularly in establishing whether the level of crime is increasing or decreasing for particular crime types.

Irregular surveys

229. Irregular surveys are sometimes conducted once only in response to the need to collect information on a specific policy question or some other specific need of users at a given point in time. Often funding is provided on a one-off basis to collect such information. In other circumstances, such surveys may be repeated at irregular intervals. This may occur many years apart, resulting in intermittent time series. Alternatively, irregular surveys could act as a means of expanding regular, frequent data collections through more in-depth investigation of a particular topic. Irregular surveys may function, for instance, to supplement general prevalence figures of persons experiencing household burglary. A detailed irregular survey may be conducted to find out additional information about security measures taken before and after, characteristics of the incident, material damages and losses, and the effect on feelings of safety and routine activities.

Periodic surveys

230. In some instances it may be desirable to have survey data gathered to establish a time series, but not necessary or practical to collect this data every year. In these situations, a periodic survey strategy may be introduced where surveys are conducted at fixed intervals such as every two years, three years, or five years. This can be an efficient way of balancing user needs for regular data with more restricted resources. Additionally, periodic surveys can give over-sampled sub-populations an opportunity to 'rest' from the survey cycle and manage the respondent burden. If the periods between surveys are kept consistent, this strategy can be an effective way of creating a regular time series for clients to use as reliable benchmark or evaluative data.

Annual surveys

231. Annual surveys, as the name suggests, are conducted every year. The biggest advantage of surveys conducted annually is that there is usually a high degree of relevance to the data when released, as the data are collected and disseminated in a regular and timely manner. These surveys are very well suited to the collection of headline indicators and information required by governments and other agencies for performance indicator and evaluation processes. These surveys are used to demonstrate trends and they can be used to calibrate the 'official' police statistics collected through administrative data. This can be particularly valuable if 'report to police' data items are included. Given the regular enumeration, processing and output generation required by these surveys, they are often quite expensive. Given the greater cost, the amount of detail that can be collected and number of topics or items that can be covered may be restricted to save resources. This is an example of the trade-offs that are required between timeliness, resources, and answering the client information need.

Continuous surveys

232. These surveys are also known as ongoing, rolling panel or rotating panel surveys. As these names suggest, these surveys are constantly in the field and collecting data from respondents, which are then processed and periodically collated according to a specified reference period for analysis and dissemination. These surveys have the advantage that they tend to smooth out seasonal variation, as they can cover an entire 12-month period. It also means that a smaller number of people can be used to carry out interviews over a longer period of time, which can be helpful when managing workloads and resources. However, such an approach does, by the same token, require a constant utilization of resources, which may not be practical for some organizations. A rotating design also has the benefit of lending itself to 'pooling' of data over time to accumulate a larger sample and possibly reduce the level of standard errors. This can become complex when conducting analyses using the data, however, as the reference period can become convoluted. As an example, if the data item 'experiences of robbery in the last 12 months' is collected for three years continuously and this data is pooled together to create a total, users may be confused as the 'in the last 12 months' may refer to any particular 12 months over three years.

Other frequency considerations

233. A number of seasonal factors that can affect the enumeration of any survey must be considered. For example, what is the availability of people to respond to surveys during peak holiday times? An additional factor specific to crime victimization surveys is the established correlation between higher

family violence incidents, break-ins and national holidays or festivities. Additionally, warmer months have been found to correlate with higher levels of violence. If a short recall period is used, it is possible that the results may be affected if one of these seasonal periods is the only one included. Generally a longer time frame for respondent recall can be expected to smooth the impact of these effects.

234. There are more specific considerations in relation to recall, such as the length of reference period to be covered by any one crime victimization survey. Determination of the reference period the survey should cover must be determined in part by the needs of the intended users. For instance, are users interested in crime victimization experiences in the past six months, 12 months, five years, 15 years or lifetime victimization? Different reference periods can have different pros and cons, however, and a number of implications for the quality of respondent recall.

235. There are a number of issues that may arise if the reference period is too long, and these generally revolve around the difficulty respondents will have in remembering accurately. Over time, it is to be expected that memory decay will occur, and if dealing with long reference period, this needs to be allowed for in data analysis. Telescoping is also an issue that arises, where respondents have difficulty accurately locating events within the appropriate reference period. Forward telescoping refers to events that are moved forward in time in the respondent's mind to seem more recent than they really are, while backward telescoping occurs where events are recalled as occurring further in the past than reality. As a result, some events which should be included may be excluded, and some events that should be excluded may be included. In most international surveys, 12 months is considered an acceptable average reference period.

236. The frequency of enumeration and the time frame within which users require the data needs to be balanced with the practicality of collecting data on such a basis, in addition to the possible effect that reference periods may have on the resulting data.

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CHAPTER IV. COUNTING OFFENCES AND VICTIMS

237. Chapter IV of this Manual looks at how offences and victims might be counted by crime victimization surveys. It considers the concepts of prevalence and incidence and discusses the issues of multiple and repeat victimizations. This chapter also provides a guide to the typical structure of a crime victimization survey and examines, in depth, forms of questions commonly asked, including those relating to respondent's fear of crime, experience of household crime, personal victimization experience, reporting of crimes to authorities and general attitudinal questions. This chapter continues with an examination of survey modes, covering face-to-face interviews, telephone interviews, self-administered interviews, internet-based questionnaires and mixed-mode interviewing. It concludes with a discussion on methods of data capture and survey reference periods.

A. How to count offences and victims

238. Among the most commonly stated goals for conducting victimization surveys are producing estimates of the prevalence and incidence of crime. Prevalence estimates include the percentages of people or households victimized by measured offences. Incidence measures include estimates of the numbers of crimes and victims as well as crime rates, which are based on the numbers of offences or victims per unit of population.

239. The issue of whether the sample should be person-based or household-based, and the pros and cons of the possible options are discussed in the sample design section (see section III.G).

240. The decision concerning the types of offence and victim-related estimates the survey will produce must be made during the sampling design and questionnaire development stages of the survey design process. During the sample design stage, the developer must determine whether the estimates will be based on persons or households in order to develop the appropriate sampling frame. During the questionnaire design stage, the question sequences must be created to enable differentiation among different incidents of crime, different types of crime and account for multiple victims in crime incidents.

241. For many of these decisions, there is no one right or wrong way of proceeding. The decision becomes a determination of which estimates best address the survey's goals. In making these decisions, there are a number of factors that must be considered to avoid creating counting problems during the analysis process. The following sections discuss the issues concerning counting of offences and victims.

Counting offences

242. Counting crimes is not a simple procedure. Offences can be complex, involving multiple victims, multiple offenders and multiple offences. Crimes are not necessarily discrete events, but may transpire over a period of time. Counting them requires the creation of a set of protocols for addressing each of the complicating factors. Surveys can incorporate a variety of techniques for doing so.

Prevalence versus incidence measures

243. As described in the introduction to this Manual, one of the principal roles of a victimization survey is to produce estimates of the prevalence of crime. For a victimization survey, prevalence is the percentage of people or households (or for a commercial victimization survey, businesses) that experience one or more of the measured offences occurring during a given time period; most often one year. If a person were victimized multiple times, they would only be counted one time in a prevalence measure.

244. An incidence measure measures the number of offences occurring during a given time period; most often one year. In the context of victimization surveys, incidence has a different meaning than it does in the medical context, in which incidence is a measure of risk of developing a new condition within a specified time period. With the exceptions described below, for persons victimized multiple times, victimization survey incidence measures count each time a person was victimized in the measure. For example, if a person was the victim of two robberies during a year, they would be counted once in a prevalence measure, but twice in an incidence measure of robbery.

BOX 12: EXAMPLES OF VICTIMIZATION SURVEY MEASURES OF CRIME

(1) Absolute measures of the extent of crime

A. The **number** of **crime events** occurring during a given time period (i.e. a year) within a specified population. For example:
- Number of rapes
- Number of motor vehicle thefts

B. The **number** of **victims of crime** during a given time period within a specified population. This can differ from the absolute number of crime events to the extent some crimes may involve more than one victim. For example:
- Number of victims of rape
- Number of robberies

(2) Prevalence measures

The **percentage** or **proportion** of the **specified population** (of persons, households or crime targets such as motor vehicles) experiencing the crime during a given time period. Each victim is counted only once, irrespective of the number of times victimization for that type of crime was experienced. For example:
- The percentage of women aged 18 or older raped during the past five years
- The percentage of households experiencing burglary in a year
- The percentage of motor vehicles stolen in a year

(3) Incidence rate measures

A **rate of occurrence of offences** during a given time period. Incidence rate measures are normally event focused and count the number of reported individual crime victimization events during the specified time period. For example:
- The number of rapes in a year per 1,000 people
- The number of robberies in a city in a year per 1,000 people residing in the city
- The number of motor vehicle thefts in a year per 1,000 households
- The number of motor vehicle thefts in a year per 1,000 motor vehicles

(4) Other measures

Victimization rate measures

A measure used in the USA is a count of 'victimization' as it affects one individual victim. For crimes with multiple victims, each victim is counted in the measure. For victims of repeated crimes, each crime is counted in the measure. This measure differs from the measurement of 'prevalence' in that it includes multiple victimization. For example:
- The number of rape victimizations in a year per 1,000 women
- The number of robbery victimizations in a year per 1,000 persons
- The number of assault victimizations in a year among persons aged 20-24

Crime 'density' measures

A measure used in the Italian Citizen Safety Survey is that of crime 'density'. This is defined as the number of incidents of a particular crime divided by the number of victims of that same crime during a specified period. This measure is capable of demonstrating the level of repeat victimization. For example:
- The number of reported household burglaries divided by the number of households victimized

245. A third measure, used by at least one victimization survey, the US National Crime Victimization Survey, is a 'victimization.' A victimization is a victim-event measure in that it counts each crime as it affects each victim. If three people are victimized in a robbery it would be counted as one robbery incident, but three robbery victimizations in the survey, one for each victim. Because the survey interviews every household member, each victimization is counted by the survey.

246. The crime 'density' measure used by the Italian Citizen Safety Survey provides a measure of the extent of repeat victimization. A crime density measure of 140, for example, indicates that 40 victims out of every 100 suffered more than one incident of the particular crime type during the reference period. Results from the Italian Citizen Safety Survey show interesting variation between types of crime, with repeat victimization rates higher for violent crimes than for property crimes.

247. Counting crimes is not a simple procedure. Offences can be complex, involving multiple victims, multiple offenders and multiple offences. Crimes are not necessarily discrete events, but may transpire over a period of time. Counting them requires the creation of a set of protocols for addressing each of the complicating factors. Surveys can incorporate a variety of techniques for doing so.

Multiple and repeat victimizations

248. Most surveys treat criminal offences as discrete events, lasting a relatively short time and having a beginning and an end. For example, a robbery begins with some overt action by the offender and ends when the offender or victim leaves the scene. However, some offences actually may not have discernable beginnings and/or endings and may continue for an extended period. Some criminologists believe that such victimizations may be better understood as ongoing offences (see Biderman and Lynch). Some intimate partner violence and workplace violence may, for example, take this form, with the periodic threats or attacks being elements of an ongoing state of being victimized.

249. It is generally difficult to characterize such ongoing offences in victimization surveys, so some surveys count the different attacks and threats as individual incidents even when part of an ongoing situation; and most surveys generally have some sort of cut-off to limit the number of incidents recorded (see Box 13). Respondents are generally asked to recall the detailed circumstances of each event they experienced during the survey's reference period.

250. Some respondents report being victim of more than one victimization during a survey's reference period. If the victimizations are unrelated, they are called 'multiple victimizations' and if similar in nature or circumstance they are denoted as 'repeat victimization.' An example of multiple victimizations is a person who was victim of one robbery and one burglary during the reference period. A person who was assaulted three times during the reference period by their intimate partner has experienced repeat victimization.

251. The issue of how to treat repeat or multiple victimization is problematic, primarily for estimates of victimization incidence, for which it is important to know how many times an individual was victimized. To a lesser extent, this is also an issue for prevalence estimates. While prevalence estimates are based on the victim experiencing a crime at least one time, prevalence estimates for specific types of crime require protocols that can accurately differentiate the various types of crime.

252. To a degree, multiple and repeat victimization are artifactual in that the amount of multiple or repeat victimizations measured by a survey will be related to the length of the survey's reference period. A survey with a short reference period will encompass smaller amounts of these victimizations than one with a longer reference period. While some multiple or repeat victimizations may be random – a person just happens to experience more than one crime during a given period of time – much of it is associated with a person's employment, lifestyle or relationship with the offender.

BOX 13: EXAMPLES OF CAPPING

The British Crime Survey allows up to five incident reports to be filled out for any respondent. The US NCVS utilizes an alternative protocol to cap repeat victimization called 'series incidents' which allows the interviewer to fill out one incident report if the respondent was victimized six or more times during the reference period in a similar manner (i.e. by the same offender or in the same general sort of way), and the respondent cannot recall the details of every incident.

The Canadian Victimization Survey (General Social Survey Cycle 18) limits the number of incident reports to 10 per respondent for each individual crime type and to a total of 20 per respondent. In addition, the Canadian survey also utilizes a series protocol, incorporated in the survey's weighting procedure which caps the number of similar incidents in the series at three.

The US and Canadian surveys differ in their treatment of repeat victimization in the production of annual estimates of crime. In the US NCVS, 'series incidents' are entirely excluded from annual published estimates, while in estimates from the Canadian survey, the incidents in the series are included up to a maximum of three.

253. While many victimization surveys have incorporated procedures for addressing situations in which victims have been victimized repeatedly during the reference period, generally these procedures have been developed to reduce either cost of interviewing or the burden on respondents rather than to produce estimates of people who are subject to ongoing states of victimization. This can be done in a variety of ways. Most national surveys restrict the number of incidents for which information is obtained.

254. The capping of incidents clearly impacts the resulting survey estimates of the numbers of crimes by limiting the number of separate criminal incidents that are included in the total estimate of crimes. Placing an upper limit on the number of incident reports or excluding or limiting the inclusion of series of similar crime incidents has been regarded by some as undercounting the extent of crime victimization. However, it is a common practice applied in most victimization surveys that is regarded by survey methodologists as providing more consistent comparisons and trend measures that are less impacted by relatively rare extreme outliers. In the United States, the inclusion of series victimizations, counting each series as one victimization, would increase the estimate of crimes of violence and theft by about six per cent. In the United Kingdom, the British Crime Survey has been estimated to undercount crime by somewhere in the order of around 30 percent as a result of capping the number of incidents that it counts (Farrell and Pease 2007, pp. 33-54). However, the alternative, not restricting or capping recurring victimizations presents the opposite problem, potentially overcounting the extent of victimization. People who experience repeated victimization may not be able to accurately count the number of times that they were victimized. Moreover, criminologists speak of treating such victimizations as enduring conditions rather than as discrete events (Biderman 1975). It is also worth noting that the impact of capping is on estimates of total numbers of crimes, rather than the prevalence of such victimization - and it is the latter that is best estimated by a victimization survey.

255. However, for some specialist studies (such as those looking at domestic violence) it may be desirable to try to count the numbers and rate of incidents of violence and therefore to seek to capture each occurrence rather than to cap their number. However, issues exist as well with the counting of repeat victimizations. Data from the US NCVS show evidence that people tend to round estimates of the number of times victimized to a number ending in 5 or 10 or corresponding to a fraction of the reference period, such as daily, weekly, or monthly. In addition, counting every separate incident for people who report frequent victimization may introduce inaccuracies in the classification of these large numbers of crimes. It is not possible to obtain detailed information for each separate incident for a person reporting being victimized many times during a survey's reference period. Attempting to do so would tax the respondent's patience as well as their cognitive abilities.

256. One method for addressing this issue is to ask how many times a person experienced a given type of crime and inflate the estimate by the number of times victimized. This procedure inherently assumes that every victimization shares the same underlying circumstances and consequences as the victimization incident for which detailed information is collected, an assumption that may or may not be accurate. This estimation procedure can inflate estimates of measured crimes based on insufficient information or based on only a few actual incident reports. For example, when the estimate of rape from the National Violence Against Women Survey, a survey conducted in the USA in 1996, was weighted up to population levels, one victim reporting 24 rapes during the previous year accounted for 34 per cent of the overall estimate.

257. If the survey developers opt for selecting a subset of incidents to measure or obtain information about, a protocol must be developed for such selection. Some surveys utilize a hierarchy, obtaining information about the most serious incidents. Others opt for obtaining information about the most recent. Using the first protocol, that is, obtaining information on the most serious victimizations, can lead to overestimating the proportion of crime that involves more serious offences. Conversely, obtaining information about the most recent incident may introduce a recency bias, as people may tend to remember as more recent offences that are more serious.

258. To date, consensus has not been reached on how to handle multiple and repeat victimizations across victimization surveys. The methods that each survey cited has used to address the problem have both positive and negative aspects. Each takes into account issues of available resources and burden and the ultimate goal of the survey. There is growing survey literature about issues related to counting multiple and repeat victimization, and the impact of various methods upon survey estimates. Ultimately, as long as the methodology is transparent and made public, data users can evaluate the methodology and, if they so desire, calculate alternative measures of crime victimization.

Classifying types of crime

259. In designing the victimization survey questionnaire, the developers must be careful in mapping their operational definitions of offences to survey questions. The terms used in questions that determine whether respondents were victims of crime must be crafted to be understandable to the respondents, yet define the offences in ways that approximate to the legal definitions of crimes as closely as possible. An exact mapping may not be possible; for example, a statute may look to an offender's intent in defining an offence; something that a victim may not know. However, the developer should look for a surrogate for the portion of the statute. As an example, many laws in the USA define burglary as illegally entering a building with intent to steal something or commit a crime. Because the respondents might not know the offenders' intent, for the US NCVS the definition of burglary was modified to be 'entering an apartment or house or other structure on the respondent's property by someone who does not have a right to be present in the home.'

260. Another issue concerning crime definitions that must be addressed in designing the questionnaire is associated with the problem that offenders may commit more than one type of crime during the same incident. For example, an offender may break into someone's house and, finding two people home, assault the man and rape the woman. This is one incident, but encompasses elements of burglary, assault and rape against two different people. How this incident is counted in a victimization survey may depend on who is interviewed and how such incidents are treated.

261. One method commonly used is to create a hierarchy of offence seriousness and count the incident as the most serious offence. To enable creation of a hierarchy, the questionnaire must obtain information on what occurred during the incident. The attributes of the incident are then used to place the incident into a hierarchy based on the basic elements of the offence. For example, the National Crime Victimization Survey in the USA incorporates the following hierarchy, beginning with the most serious offence and ending with the least serious crime against persons, then continuing with the most serious crime against the household as an entirety:

- Rape/sexual assault
- Robbery
- Aggravated assault
- Simple assault
- Purse snatching/pocket picking
- Household burglary
- Motor vehicle theft
- Theft

262. If an incident incorporates elements of more than one offence, it is categorized as the type of crime higher in the hierarchy. Thus, in the examples provided above, for the US NCVS, the incident in which a victim was robbed during a rape, the crime would be counted in the rape category. The burglary in which the victim was attacked would be categorized as a robbery. By obtaining information about what occurred during the incident, the ability remains to produce alternative categorizations of crime to examine their various attributes, for example, how many rapes also involve robbery, or what proportion of burglaries involve victim injury. If all the elements of the incident are captured, the other crimes committed during the incident can be extracted during analysis as required.

263. If the survey utilizes a person-based sample, that is, interviews a selected person in the household, and obtains information only about offences experienced by him or her, the offence measured by the survey may depend upon who in household is interviewed. In the above example, if the man is interviewed, the crime would be classified as an assault if a hierarchy rule was used; while if the woman was interviewed, the crime would be classified as a rape. The incidents that would have been reported by people who are not interviewed (the woman in the first case and the man in the second) are accounted for in the sample design; they are treated like any other person who is not in sample who may have experienced a crime.

264. If the survey utilizes a household-based sample, and interviews all household members (or all household members within a specified age range), the counting procedure would differ somewhat. In

the above example, if both victims met the survey's age criteria, then the crimes against each would be counted. Because there were two victims of two different crimes in a single incident, some adjustment to the weighting protocol would be required to produce an estimate of crime incidents. Otherwise, the survey estimate would appear to state that there were two separate unconnected incidents of crime – an assault and a rape. (The US NCVS uses the concept of victimization to enable such counting.)

B. Structure of the survey

265. Victim surveys may cover several victimization and non-victimization issues, which may take the form of modules. The placement of different modules within the survey structure may depend on strategic/organizational decisions based on the overall purpose of the survey, the method of interviewing and the target population. The sequence of modules and questions in the questionnaire is very important and needs to be taken into account in the pilot-testing phase. In order to make the respondent feel comfortable, some questions not directly related to his/her crime experience could be asked upfront.

Table 3: Content of the survey according to survey purpose

Module	Purpose
Fear questions	To measure fear of crime and insecurity
Crime experience	To measure victimization
Follow-up for victims	To measure dark figure/unreported crimes To get knowledge of the context of victimization
General attitudinal questions	To measure attitude towards the police and the criminal justice system
Prevention, safety and security	To measure crime prevention measures, security systems and/or strategies

266. The UNODC-UNECE inventory identified the most frequently mentioned purposes of victim surveys. Each of these issues can be surveyed by relevant sets of questions/modules in the questionnaire, which will have more or less prominence depending on the established primary purpose of the survey. Victim surveys are likely to be designed having in mind one or more main purposes. The content of the survey may be compiled through different modules in view of serving the various purposes of the survey itself. Taking into account the main purposes, this section will provide examples and suggestions regarding the possible content of several 'modules', each of them aimed at providing information matching the relevant purpose (see Table 3).

267. It should be noted, however, that in order to obtain complete information, for example, on fear of crime and insecurity, it may be necessary to ask direct questions about the respondents' experiences of victimization. There may therefore be the need to expand the areas covered by the questionnaire beyond the primary purpose of the survey. In order to do that, it may be necessary to balance the different modules placing more or less emphasis on the different areas. As an example, Box 14 shows the structure of the 2004 victimization survey in Canada.

BOX 14: STRUCTURE OF CANADA'S 2004 CRIMINAL VICTIMIZATION SURVEY

2004 GSS ON VICTIMIZATION SECTIONS

Section 1: Perceptions, history and risk

Section 2: Criminal victimization screening section

Sections 3 and 4:
Abuse by current or previous spouse / partner
- Emotional and financial abuse
- Physical and sexual violence

Sections 5 and 6: Abuse reports

Section 7: Stalking of respondent

Section 8: Crime incident reports

Section 9: Other crime events

Sections 10, 11 and 12: Main activity and education

Section 13: Housing characteristics of respondent

Section 14: Other characteristics

Handling sensitive issues in household surveys

268. Victim surveys address a wide range of issues, some of which may be particularly sensitive or disturbing for the respondents. In many cases, the offender and the victim used to know each other. According to the ICVS aggregated results from 30 countries[9] 'offenders were known to the victim in about half of the incidents described as both offensive behaviour and sexual assault (… and) in about half of the incidents of both assaults and threats'. This confirms that the stereotype of the offender as a stranger is very often false. Victims may be very reluctant to share their experiences with the interviewer, on the basis of the involvement of somebody they knew in the crime as the offender.

269. Furthermore, according to some criminological theories, a certain portion of crime can be considered victim-precipitated, i.e. incidents 'in which the victim is a direct, positive precipitator' (Wolfgang, 1958). Even if this was not the case, victims may feel blamed for what happened, either because they had not been careful enough in their behaviour or were too confident, or because somebody actually did blame them after the incident. A specific form of victimization, called secondary victimization, has been defined by criminologist to describe the process in which a victim seeking assistance from the authorities (in general, the police and people working in the judicial system) is blamed as a result. The Council of Europe defines secondary victimization as 'the victimization that occurs not as a direct result of the criminal act but through the response of institutions and individuals to the victim'.[10] A victim of secondary victimization may also be unlikely to talk about her experience to the interviewers, fearing that this would result in further blame and victimization.[11]

270. It is therefore important to consider such sensitivities when starting a victim survey and to take into account that different persons may react differently to the interview. While some people may look forward to the possibility to talk about what happened to them (they may feel that the survey is finally giving them a voice), others may feel very disturbed by the content. Sometimes, this may also be the case with non-victims, especially if the questions are considered culturally and/or socially inappropriate to the context in which they are asked. Training of interviewers should take these aspects into account and prepare them to act appropriately in response to respondents' reactions. Respondents who have been victims of serious crime may ask interviewers for help. In some cases, interviewers may be trained to provide such respondents with telephone numbers or addresses of specialist services or helplines.

271. For example, including a question on theft of livestock may be crucial in a rural developing setting, but the same question may be considered irrelevant or even ridiculous in urban industrialised areas. The theft of a bicycle may appear a negligible loss in many instances, but in some cases and societies a bicycle may be an indispensable working tool, therefore its loss may have serious consequences for the victim in monetary and practical terms.

272. It is therefore very important to develop a credible questionnaire to match the target population group in terms of concepts and language used. A focus group may represent a useful approach to developing a questionnaire that effectively communicates the information that the survey is supposed to capture. Participants may discuss items to be covered by the survey and provide useful contributions to determining how to deal with such items in form of questions. Pilot testing will be crucial in order to assess whether the questionnaire is effective in establishing a dialogue with respondents and obtaining the desired information.

9 ICVS report 2004-05, pages 79-80.

10 Council of Europe, Committee of Ministers. Recommendation Rec(2006)8 of the Committee of Ministers to member states on assistance to crime victims (Adopted by the Committee of Ministers on 14 June 2006 at the 967th meeting of the Ministers' Deputies). Definitions (1.3). https://wcd.coe.int/ViewDoc.jsp?id=1011109&BackColorInternet=DBDCF2&BackColorIntranet=FDC864&BackColorLogged=FDC864 (12/9/08).

11 'Victims should be treated with compassion and respect for their dignity. They are entitled to access to the mechanisms of justice and to prompt redress, as provided for by national legislation, for the harm that they have suffered.' United Nations, General Assembly Declaration of Basic Principles of Justice for Victims of Crime and Abuse of Power (General Assembly resolution 40/34, annex, of 29 November 1985). Art. 4.

C. Survey components

273. Victim surveys not only deal with the personal experience of respondents with crime, but also represent an opportunity to capture perceptions and expectations of households about a wider range of issues related to safety. This section of the Manual describes the various components of the survey in terms of sections dealing with fear of crime, feelings of safety, perception of likelihood of becoming a victim of crime and experience of victimization by different types of crime.

Respondent's characteristics (socio-demographics)

274. Victimization surveys can collect information on a wide array of socio-demographic characteristics from the respondent to enable analysis of potential risk and protective factors associated with victimization. Examples may include: gender, age, educational attainment, main activity, housing characteristics, birthplace, immigrant status, ethnicity, religion, income and sexual orientation. In some countries, topics such as ethnicity may be sensitive and would not be asked in large-scale surveys.

Fear questions

275. This section introduces respondents to the survey and is designed to measure the extent to which people worry about their personal safety in everyday situations, the extent to which fear imposes limits on their opportunities and freedom of movement and how they manage threats to their safety in their daily lives. Information may be collected on a variety of issues dealing with perceptions of the crime situation. Fear questions included in victims surveys generally deal with the following three main areas: feelings of safety, the likelihood of becoming a victim of crime, and perception of the crime problem and trends. Many surveys place fear questions at beginning of questionnaire, considering it advisable to ask them before those on victimization in order to reduce the risk that respondents may be influenced by the previous conversation with the interviewer.

Feelings of safety

276. Issues that may be covered in this part of the questionnaire include a wide range of questions dealing with feelings of safety and fear of crime. The most frequently used question in victim surveys is one that has been used by the BCS for many years and subsequently adopted by many other surveys for comparability purposes ('How safe do you feel walking alone in this area after dark?'). A number of other issues related to feelings of personal safety may be surveyed in this respect, including feeling safe in walking during the day; feeling safe at home alone; avoiding walking in some specific areas for fear of crime; or identifying on a map areas or specific locations that are perceived unsafe by the respondent. It should be taken into account that feelings of safety and public perception of crime may be influenced by external variables other than crime (experienced or perceived). For example, respondents' perception may be influenced by their frequency of going out or pattern of television viewing.[12] Surveys may therefore include questions aimed at getting information on a number of lifestyle patterns and their relation with safety concerns. It should be noted, however, that responses to the general fear questions may also reflect non-crime related worries - such as overall dissatisfaction with their own life or income, unemployment, migration issues or environmental decay of the area in which the respondent lives. For this reason, some surveys also include questions aimed at measuring respondents' satisfaction with their life or health in general, or overall happiness, in view of making a distinction between their responses to this set of questions and those on fear of crime.

12 Research findings suggest that television broadcasts that include fictional or factual treatment of crime stimulate the perception that violent crime is more frequent than in reality (Pfeiffer et al., 2005).

BOX 15: MEASURING 'FEAR OF CRIME'

A standard 'fear of crime' question in many victims surveys is 'How safe do you feel walking alone in your neighbourhood after dark?'

A number of issues are inherent in this question:

- The question does not explicitly refer to 'crime', but rather it is implicit in the question;
- The question assumes that respondents do the following: (i) go out, (ii) go out alone, (iii) go out in their neighbourhood, and (iv) go out after dark.

For many respondents, their reasons for not going out alone in their neighbourhood after dark may have nothing or little to do with crime and more to do with personal and circumstantial issues. These may include: a preference for staying at home at night; lack of mobility that keeps them at home; commitments that do not allow them to go out (such as childcare); preference for shopping/socializing in other areas; nothing to do in their 'neighbourhood'; the use of a car that allows them to travel further afield in pursuit of leisure, etc.

In addition, the question does not specify the meaning of 'neighbourhood', which may mean different things to different respondents living in the same street.

Despite such limitations, the 'fear of crime' question has emerged in victim surveys as an important measure of the public's perception of crime and safety. Alongside the actual measurement of criminal victimization, 'fear of crime' is used by policy makers to gauge trends in the public's perception of safety and well-being.

Since the 1980s, in order to address concerns over the somewhat abstract concept of 'fear', research has looked at alternative measurements of vulnerability or 'worry' in an effort to capture and better understand people's diverse reactions to crime.[15]

For example, the 1988 British Crime Survey included results on respondent 'anger' in relation to victimization, and in the 1990s Ditton et al (1999)[16] explored respondents' reactions to experiences of imagined and actual victimization by giving them a range of emotive reactions, including 'anger'. The results of their research indicated that anger plays an important role, more than 'fear', for certain groups. As with research on 'fear of crime', their research also showed that emotive responses tend to change according to respondents' gender and age. At the same time, although both sexes may experience a range of emotions, 'gender-typical' expressions of 'fear' may be seen as appropriate for females, while expressions of 'anger' may be seen as appropriate for males (Goodey, 1997).[17]

The same limitations on certain emotive expressions may exist in some cultures more than others, which should be taken into consideration when exploring cross-cultural responses to 'fear of crime' questions. In this regard, close attention should be paid to translation of words such as 'fear' and 'anger', as subtle changes in meaning can significantly impact on how people respond to questions.

Likelihood of becoming a victim of crime

277. Another area to be surveyed is the respondents' perception of likelihood of specific incidents to happen to them, generally within a given time period. This can be the case of questions such as 'How worried are you about....'. The advantage of using such specific fear questions versus more general questions is the opportunity to focus the respondents' attention on concrete examples. Some surveys ask how worried the respondent is about becoming a victim of crime in general. Other surveys include specific questions on likelihood of certain types of crime happening, such as, for example, having someone breaking into the respondent's home and stealing something; being mugged, robbed, raped, or physically attacked by strangers; having property stolen, such as a car, items from a car, a mobile phone; or 'being insulted or pestered by anybody, while in the street or any other public place'; or being discriminated against and subject to a physical attack because of the respondent's skin colour, ethnic origin or religion.[16]

Perception of crime problem and trends

278. In this section it is possible to measure the perception of the respondents as regards the overall crime problem and trends in crime. Typical questions to this end may ask 'How much of a problem do you think is/are…', followed by descriptions of different types of situations or profiles of different

13 See the international library of criminology, criminal justice and penology reader on 'The Fear of Crime', edited by Ditton and Farrall (2000), which contains a number of articles from the 1970s through to the 1990s on 'fear'.

14 Ditton,J., Bannister,J., Gilchrist, E. and Farrall, S. (1999) 'Afraid or Angry? Recalibrating the 'Fear' of Crime', International Review of Victimology, 6: 83-99.

15 Goodey, J. (1997) 'Boys Don't Cry: Masculinities, Fear of Crime and Fearlessness', British Journal of Criminology, 37(3): 401-418.

16 Most examples given are from the BCS.

behaviours. This may include criminal and non-criminal situations and behaviour and also serve to assess levels of tolerance to environmental degradation and antisocial behaviour. A possible list may include several different types of crime, the presence of youth gangs, loiterers, homeless, drunk people as well as garbage, broken, vandalised or burnt property in the street. Reference may be made to problems with the neighbours. This section may also deal with concern with people using or dealing with drugs. This aspect is covered by some surveys as an issue of exposure to illegal drugs, thus falling into the victimization experience section of the questionnaire.

279. Trends question are those asking the respondent whether crime has gone up or down in his/her area over a certain period of time, either a fixed period (for example, over the past two years) or since an important social event which the respondent is likely to remember well (for example, a major public or religious holiday or sports event, etc.). It is debatable whether it is appropriate to relate such questions to political situations or government changes, since this may lead to attributing any variations to such changes, while it may be preferable to limit the scope of the questions to trends over time.

Experience of crime

Crime types and categories

280. The experience of the respondents represents the crucial part of victim surveys. Household victim surveys may deal with a wide range of offences. It is important to note that the legal definitions and offence types will vary from country to country. The legal definitions of offences within a given jurisdiction will provide the key focus in the development of questions around criminal victimization. This chapter illustrates the range of offence types that could be included as part of a crime victimization survey. It will be necessary to identify a desired set of offences to be surveyed, depending on the purpose of survey and its target population. It may also be considered whether to include or exclude some types of crime, especially the most sensitive ones such as those related to personal violence, depending on the method of interviewing.

281. A first principle to be taken into account is that victim surveys enable the problem of crime definition to be overcome. Crime definitions from criminal codes apply when victims report to the police, thus crime records reflect the police interpretation of victims' accounts of what happened to them. In victim surveys, some scenarios are given as examples of possible crime situations in which the respondent may have been involved as a victim or a witness. Different ways to define crime situations limit comparability between victim surveys and police data.

282. Survey definitions may contain simple wording to clearly explain to respondents the characteristics of incidents that may have occurred to them. Wording such as '[over a given time period] has anyone taken something from you, using force, or by threatening you?' may easily convey the concept of an incident that would fall into the broad crime category of robbery. Simple definitions can be translated into different languages and cultures more easily than the legal concept of robbery. Crime definitions used in victim surveys are therefore not related to exact criminal code articles. Questions on crime experience should avoid legal terminology and convey a clear concept. It is important therefore not to ask whether respondents have been victims of a specific crime, but whether certain incidents – described in the survey in non-legal terms – happened to them. This will ensure a more clear description of the circumstances, which is likely to be reflected in common understanding by the respondents, irrespective from their age, education, experience and cultural background.

Table 4: Types of crime included in victim surveys

	percentage of surveys		percentage of surveys
Assault with force	95	Attempted burglary	62
Threat of using force	83	Non-contact personal thefts	60
Burglary with entry	78	Vandalism	59
Theft of car	76	Theft of bicycles	55
Sexual assault	76	Theft of mopeds/motorcycles	55
Pickpocketing	74	Fraud/cheating	34
Robbery	69	Psychological violence	28
Theft from car	66	Bribery/corruption	21
Rape	64	Exposure to illegal drugs	16

Source: UNODC-UNECE inventory, 2005

283. Table 4 shows a list of the types of crime more frequently included in the surveys examined by the UNODC-UNECE inventory. More than 70 per cent of the surveys included questions on the main categories of crime, i.e. assault with force, threat of using force, burglary with entry, theft of car, robbery, pickpocketing and sexual assault. Some sub-categories of crime, often involving theft of specific types of property (such as objects from cars, bicycles, motorcycles) were included in 50-70 per cent of surveys.

284. Finally, less than one-third of surveys dealt with types of crimes about which it is particularly difficult to obtain information, including questions on fraud, corruption, psychological violence and exposure to illegal drugs. Questions on such types of incidents may be difficult to ask and the results are more difficult to interpret than those for more 'conventional' types of crime. However, information obtained through surveys on such illegal behaviour may prove useful in understanding more about the context surrounding the incidents and the victims' profile. Section IV.D will deal with each type of crime in more detail.

285. Different categories of crime may be included in the survey. A first important distinction exists between crimes that affect the entire household and personal victimization experience. The first category refers to incidents, especially related to property (for example theft of a vehicle or house burglary), of which the entire household may consider itself a victim. Any member of the household who is interviewed may have knowledge of and report to the survey about such incidents. Personal victimization experiences are those that affect only one person and about which only the direct victim can report to the survey. They include crimes with contact between offender and victim (such as assault, sexual assault, street robbery) but also non-contact crimes in which the victim is deprived of personal property such as a wallet or a mobile phone.

286. The wording of questions in the two categories may be different, taking into account the level of knowledge that respondents may have of the various incidents, whether they affected them personally or the entire household. Table 5 shows examples of types of crime falling into the categories of household crimes and personal victimization experiences.

Table 5: Types of crime that may be included in general household surveys, by category of victim

Household crimes	Personal victimization experiences
Vehicle theft (motor vehicle, car, motorcycle, bicycle); theft from vehicles	Theft of personal property (pickpocketing, other thefts)
Housebreaking (domestic burglary, attempted burglary)	Robbery (theft by using violence)
Vandalism (damage to cars, graffiti)	Assault and threat
	Psychological violence (mobbing, stalking)
	Sexual offences (sexual assault, rape)
	Fraud (cheating, credit card fraud, internet frauds)
	Corruption/bribery
	Exposure to illegal drugs

287. Another important distinction exists between contact and non-contact crimes (see Table 6). The first category includes all incidents that involve a contact between the offender and the victim, irrespective of whether violence was used or not. In such situations, even if the victim was not threatened, he or she was directly exposed to the offender(s), which can be considered as a form of victimization per se. Non-contact crimes, in turn, include all incidents in which the victim did not face the offender, such as thefts of unattended property. Contact crimes are generally considered as more harmful for the victim than non-contact crimes.

Table 6: Examples of contact and non-contact types of crime that may be included in general household surveys

Contact crimes	Non-contact crimes
Robbery (theft by using violence); mugging	Vehicle theft (motor vehicle, car, motorcycle, bicycle)
Theft from persons: bag snatching, pickpocketing	Theft of items from vehicles
Assault and threat; psychological violence (mobbing, stalking)	Housebreaking (domestic burglary, attempted burglary)
Sexual offences (sexual assault, rape)	Vandalism (damage to cars, graffiti)
	Theft of personal property
	Fraud (cheating, credit card fraud, internet frauds)
	Corruption/bribery
	Exposure to illegal drugs

Screeners

Establishing ownership or exclusive use of property

288. It is good practice to establish whether the respondent and/or the household were in possession or had exclusive use of the property concerning questions about theft. For this purpose, it is desirable to include in the questionnaire as many screeners as necessary to ascertain possession of the relevant property. This may be the case with vehicles, motorcycles, bicycles, mobile phones, or any other object the theft of which the survey concerns. In this way, it will be possible to assess the prevalence of victims not only on the basis of the entire sample, but also on the basis of the sub-sample of owners of the specific property. Such sub-sample may show large variations in size among different surveyed areas, depending on the rate of ownership of the different goods. The wording used to describe the goods need to be simple and generally understood by the respondents in their spoken language. It is important that words used to describe the various goods are exactly the same in the screener and in the actual

question on theft (for example: 'Over the [reference period], has anyone in your household had a car, van or truck for private use?' may be followed by 'Over the [reference period], have you or other members of your household had any of their cars/vans/trucks stolen?').

Establishing victimization experience

289. Most victim surveys address the experience of victimization in two steps, starting by using screeners that describe the incidents to establish which respondents have been victims. The second step is limited to those who have been victims and includes all questions aimed at capturing details of the incident. In general, follow-up questions are asked for each type of crime covered by the survey. Thus, respondents who were victims of more than one type of crime will be asked follow-up questions as many times as the number of crimes they were victims of. Some surveys group all screeners for each type of crime covered by the survey in one section, asking relevant questions in sequence, and going back to details of the incidents only upon completion of the entire series. Other surveys prefer go through all questions related to one particular type of crime at once, thus asking relevant follow-up questions immediately after the screener (see section V.B).

D. Household crimes

Vehicle-related crime

290. Most households own vehicles and their value, be that of a motor vehicle or of a bicycle, is generally known and shared among the population surveyed. For this reason, many surveys consider victimization suffered as a consequence of theft of vehicles or parts of it as a good indicator. The questions should provide a description of the vehicles in words that can be easily generally understood by the respondents in their everyday spoken language. This gives origin to a variety of local definitions of the types of vehicles most frequently used in the surveyed area, such as cars, tricycles, quads, mini-vans, etc. It is also important to make sure that the question is consistent with the wording used to describe the various types of vehicles in the ownership screener(s). Separate sections may deal with cars, motorcycles, bicycles and/or any other vehicles that are frequently used in the surveyed area. Some surveys specify that vehicles should have been for private use of one or more persons in the household.

Theft of motor vehicles

291. It should be noted that 'theft of motor vehicles' is probably the type of crime for which the 'dark figure' is smallest. Most victims report to the police because of vehicle registration and for insurance reasons. This makes statistics on this type of crime relatively easier to compare between victim surveys and police records and for this reason in some surveys the wording of the question is designed to correspond to definitions used by the police in the country.

292. Many surveys probe whether the vehicles were eventually recovered. This aspect may be very important, since the actual disappearance of a car – be that through dismantling it into various parts or shipping abroad - requires a certain level of organization on the part of the offenders and may indicate the presence of organized crime groups. One important distinction has to do with the presence or not of the car driver or any other passengers on board. In some contexts, this type of crime (called car hijacking – see below) occurs more frequently than theft of unattended cars, thus a separate question needs to be asked in this respect.

Theft from vehicles

293. Theft from vehicles could include theft of car parts or of items from inside a car (e.g., radio, car mirror, spare tyre or luggage, etc.) is among the most frequent types of crime experienced by citizens. Irrespective of the country in which surveys may be carried out, this form of victimization affects large portions of the population and is a good example of a type of crime that frequently goes unreported.

Bicycle theft

294. A question on theft of bicycles is frequently asked in victim surveys. Some surveys may record

bicycles stolen during the course of another offence (e.g. housebreaking where other items are stolen). Different societies, however, experience crime in different ways, thus the theft of a bicycle may represent a more or less serious crime in different contexts. Bicycles may be used for transportation to the workplace or school, or for sports and leisure. Some bicycles may have very high value to the respondent, for example as a working tool or as highly sophisticated sports equipment. The theft of a bicycle may affect different victims in different ways.

Housebreaking and domestic burglary

295. The most relevant (and complicated) issue for household crime is housebreaking. Definitions and wording of questions vary among surveys. One important aspect is the identification of the physical boundaries of the household. In most jurisdictions, illegal entry of a garage, shed, or any other structure on the premises also constitutes trespassing the household boundaries. Several surveys, however, in their questions on housebreaking make exceptions for cellars, garages, attics and second houses on the assumption that surveillance at such premises cannot be as high as at the 'main' premises, thus breaking into them may be easier, resulting in an inflated number of incidents. However, the inclusion or exclusion of such premises from the survey may depend on different country/regional life styles and should also be taken into account when comparing survey results with other surveys.

296. Questions on housebreaking should aim to assess whether there was unlawful entry or attempted entry of a residence, with or without force. The use of force generally involves damage to doors, windows or fences, which is a form of victimization per se, irrespective of the offender's successful entering the premises. This crime is generally motivated by the intention of stealing something.

297. Some surveys also ask respondents whether any members of the household were at home when it happened, and if they were aware of the presence of the burglars. This is an important question, since it may establish whether what happened involved contact between the offender and the victim, and the use or threat of violence to persons.[17]

298. Some surveys aim to cover both illegal entry and theft of property (domestic burglary) in one question, which may read, for example, '[over the reference period], did anyone GET IN without permission and STEAL or TRY TO STEAL' property?[18] It should be noted that the more complicated the question, the more difficult it will be to obtain clear responses. Furthermore, results obtained from questions that combine more than one incident in their wording may be difficult to compare over time or across countries. Some surveys, such as the US NCVS, include in their definition of housebreaking a requirement that the offender does not have the right to be present on the premises. Thefts by someone entitled to be in the premises, such as a family member, workman or visitor, are counted as thefts, rather than housebreaking. In contrast, wording used by the Italian Citizen Safety Survey includes stealing by a person already lawfully in the house, such as a guest or servant, within the definition of burglary.

299. Victim surveys covering housebreaking and domestic burglary may therefore take into account that there are several issues to be expressed in the wording of the questions aimed at establishing what happened. Such issues can be summarized in the following scheme:

1) identification of the premises
   - main residence
   - cellars, garages, attics and second houses
2) entry or attempted entry
   - successful entry
   - attempted entry

17 In some countries/surveys, the case of theft at home when the victim was present is considered as *robbery*. The Italian Citizen Safety Survey, for example, classifies an event described in response to the survey question on burglary as *robbery* where either the perpetrator used violence against the victim in order to enter the house, or the perpetrator made use of drugs or sleeping pills to render the victim unconscious prior to stealing or attempting to steal something from the house.

18 BCS.

3) use of force
   - force was used to gain entry to a residence
   - no force used

4) victim-offender contact, threat or use of violence
   - household members present at home:
     - violence was used or threatened against them
     - no violence used or threatened
   - nobody was present

5) actual theft
   - something was stolen
   - nothing was stolen

6) damage to the household
   - something was damaged
   - nothing was damaged

Vandalism

300. Questions on vandalism may address damage to household and other property, involving, for example, graffiti, damage to external parts of buildings, gardens and cars. It may also include incidents involving arson. Some surveys ask separate questions on damage to households and cars. Damage to households maybe a result of attempted burglary, so some surveys only ask questions on intentional damage to vehicles and deal with damage to households within the housebreaking section.

E. Personal victimization experience

Theft of personal property

301. Sixty percent of the surveys in the UNODC-UNECE inventory include questions on non-contact personal thefts, i.e. those involving property that was not being carried by the victim. This is the case, for example, with handbags, purses, wallets, mobile phones, documents left in changing rooms or on trains or other means of transportation, or at the beach, at the office, etc. A broad definition of this category may refer to thefts (including attempts) from the victim, but without the use of physical force or the threat of it. For example, theft committed by a person who has the permission/right to be in the household premises would fall within this category rather than domestic burglary.

302. The wording of the question may include a list of items as example of the circumstances and/or types of property that may have been stolen. It should be taken into account that different lists may produce different results in terms of response, thus affecting the resulting victimization rate.

303. Incidents involving theft without the use of force may be easily forgotten by victims, thus making responses to this question very much depending on memory decay, and the results not very useful for analysis.

304. Some surveys make a distinction between theft of personal property and pickpocketing, which involves theft of property that the victim was carrying or wearing at the time. This may or may not include mugging and bag snatching, which in turn are often categorised as robbery (see below). In general, a distinction can be made between simple theft and pickpocketing via the follow-up questions aimed at ascertaining if the victim was, for example, holding, carrying or wearing (any of) the property that was either stolen or the offender tried to steal. The British Crime Survey specifies that this includes 'items in pockets of clothes being worn at the time'.

Theft of mobile phones

305. In all parts of the world mobile phones have become an item accessible to large portions of the population. Victim surveys often include questions on the theft of mobile phones, either in addition or as an alternative to the general question on theft of personal property. A mobile phone is a well identified object, the value of which is likely to be commonly understood in any given society. Ques-

tions on theft of mobile phone may produce more precise results than the general ones, because they have the advantage of clearly indicating the type of property at stake.

306. The completed or attempted theft of mobile phone may occur in a variety of circumstances, with or without personal contact between the victim and the offender. As an example, Box 16 provides a detailed list of the circumstances as included in the relevant British Crime Survey question.

BOX 16: THEFT OF MOBILE PHONE (BCS)

Can I just check, under what circumstances was the mobile phone stolen?
1. While it was being used by someone
2. While it was being carried by someone in their hand, but not being used
3. While it was on the person, and visible (e.g. on a belt or clip, in an open pocket, etc)
4. While it was on the person, but not visible (e.g. in a bag/briefcase being carried, in an inside pocket, etc)
5. While it was unattended, and visible (e.g. on a table, a desk, etc).
6. While it was unattended, and not visible (e.g. in an unattended bag/briefcase, in a locker, etc.)
7. Some other way (do not specify)

Robbery[19]

307. Almost seventy percent of the surveys in the UNODC-UNECE inventory included questions on robbery. Robbery offences known to the public may be divided into two broad categories, namely robberies against institutions such as banks or post offices, and 'street-robberies', i.e. robberies against persons. Although respondents may have been involved in robberies against institutions as victims or witnesses, in general questions in victim surveys only address street-robberies, which may be defined as completed or attempted theft, directly from a person, of property or cash by force or threat of force, with or without a weapon and with or without injury. Although the term 'street robbery' is used, such robberies may, in fact, occur in a variety of locations, including parks, on buses or trains, and in commercial locations as long as it was the person who was the victim of the robbery. Most victimization surveys, however, exclude from robbery thefts with force occurring at home. These are generally categorized as domestic/house burglary.[20] The variety of definitions of robbery from the legal point of view makes the comparison between victim survey results and police records very difficult. Many surveys have found that robbery was among the types of offences that victims tended to report to the police less frequently.

Assaults and threats

308. Incidents of assault and threat are covered by most victim surveys. Most victim surveys make a distinction between three types of assault and address each type through separate screeners: 1) a general category of interpersonal aggression (assault and threat); 2) sexually motivated assaults (rape, attempted rape and sexual assaults); and 3) assaults aimed at stealing property (robbery and attempted robbery). However, different surveys may use different formats to address relevant questions, thus obtaining results which may be difficult to compare (for example, some surveys deal with sexual assault and robbery as subsets of assault).

309. Important elements to be considered in question formulation are whether the aggression was physical or psychological and whether force was actually used or threatened. Questions on assault may make reference to any deliberate physical assault, with or without a weapon, which harms the recipient in any way. Assault may or may not result in visible injury and may include a variety of actions against the victim, such as kicking, hitting, slapping, choking, burning, stabbing and shooting. The offender may be a stranger, but also somebody the victim knows well or a family member. The incident may happen in a variety of locations, such as the respondent's home or in the street, in a public place, at work or school, on public transport, at the beach, etc. Some surveys also include incidents in the respondent's line of work (for example, security guards). In general, incidents occurring while playing on a sporting field are excluded.

19 Robbery may be defined as the act or instance of unlawfully taking the property of another by the use of violence or intimidation.

20 The safety survey in Italy and the U.S. NCVS represent exceptions. (Robbery includes theft with force in the home).

BOX 17: ANTISOCIAL BEHAVIOUR

It is often desirable to measure events that affect community feelings of safety but which might not be entirely criminal, or which impact on victims' perceptions rather than actual victimization. These events are often known as 'antisocial behaviour' or 'quality of life' issues. Although it is possible to measure these quasi-criminal incidents in the same way as criminal victimizations, it is also desirable to measure perceptions of such events in order to capture feelings of insecurity amongst particular communities or sections of the population. Such measures do not provide an estimate of the quantity or prevalence of such behaviours (see end of this text box), but they can provide an indicator of community concerns.

In England and Wales, the British Crime Survey routinely measures high levels of perceived antisocial behaviour from responses to seven individual antisocial behaviour questions. The BCS asks the following:

'For the following things I read out, can you tell me how much of a problem they are in your area. By your area I mean within 15 minutes walk from here. How much of a problem are/is...

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

Perceptions of anti-social behaviour are measured using a scale based on answers to the seven questions as follows: 'very big problem' = 3, 'fairly big problem' = 2, 'not a very big problem' = 1 and 'not a problem at all' = 0.

The maximum score for the seven questions is 21. Respondents with a score of 11 or more on this scale are classified as being subject to high levels of perceived antisocial behaviour.

The BCS also asks about a number of other similar types of behaviour that are reported less frequently, including speeding traffic, inconvenient or illegal car parking, unofficial firework displays, uncontrolled dogs and neighbour disputes. In addition, the BCS asks respondents about their experience of these disorders, in order to be able to make an assessment of whether the perceived problems are a significant issue for individuals or reflect actual events. This latter measure can provide an indicator of how frequently such events are experienced by respondents.

310. Wording of the relevant questions may therefore include elements of the location in which the incident occurred, list possible behaviour of the offender and mention that the offender may have been somebody known to the victim. For example, '[over the reference period] has anyone, including people you know well, deliberately hit you with their fists or with a weapon of any sort or kicked you or used force or violence in any other way?'[21]

Assaults without force (threat)

311. The severity of assault may range from a minor threat to incidents which are almost fatal. The absence of physical contact may generate the impression that the crime was less serious. However, in many jurisdictions, the use of words or a behaviour resulting in a declaration of intent to injure another by perpetrating an unlawful act is a crime per se. There may be threats made with the intent to blackmail[22] or extort money or property. Other threats may be aiming at obtaining the victim's consent to acts he or she would not normally accept, thus becoming the beginning of further victimization. Surveys may wish to capture the prevalence of threats through a separate question (for example '…Did the person(s) threaten you with physical harm in any way? How were you threatened? Was it: ... face-to-face? Did you think the threat was going to be carried out?'[23]). As an alternative, it is possible to establish whether force was actually used or the victim was just threatened through a screener question for assault (for example 'have you [over the reference period] been personally attacked or threatened by someone in a way that really frightened you…'[24]).

21 BCS.

22 Blackmail may be defined as the act of extorting money or other valuables from a person by threatening to reveal discrediting information about him or her.

23 GSS.

24 ICVS.

Psychological violence

312. Specific questions on non-physical threats may take into account several aspects of psychological violence or emotional abuse. This is more frequent in surveys on violence against women, but is also encountered in some surveys of general population or quality of work life. Threats by telephone or by mail,[25] which may be considered 'indirect' since they do not involve a face-to-face encounter between the victim and the offender, can also be included in this category.

313. Many surveys cover various forms and levels of harassment, physical and verbal, with our without sexual implications. Among the various forms of harassment, some victim surveys consider those occurring at the workplace, such as 'mobbing' and bullying by co-workers, subordinates or superiors, which undermine the morale of employees and represent an important cause of emotional distress among the working population. According to the International Labour Organization (ILO), mobbing and bullying at work are forms 'of psychological harassment consisting of persecution through vindictive, cruel or malicious attempts to humiliate or undermine an individual or groups of employees'.[26] Results of surveys on quality of work life have identified some direct and indirect indicators of mobbing experienced by workers at their place of work, such as those presented in Box 18.

BOX 18: MOBBING AT THE WORKPLACE

In 2006, the Institute for Labour and Family Research of the Slovak Republic (Stredisko pre štúdium práce a rodiny, SŠPR) carried out a survey on the incidence of mobbing or bullying and sexual harassment at the workplace, the reactions of victims of harassment and the outcomes of harassment cases. The research also examined general opinions on the reasons for mobbing and sexual harassment at the workplace and methods of prevention. The table below shows direct and indirect experience of mobbing at the workplace as reported to the survey.

Indicators of mobbing	*No. of workers*	*% of workers*
Task overload and pressure to perform well	739	70.9
Slander and deception	634	60.9
Threatening and frightening a person	587	56.3
Use of provocative notes and jokes	530	50.9
Making derogatory comments about a person's work	472	45.3
Isolating and ignoring a person	458	43.9
Inappropriate work assignment	439	42.1
Withholding information	415	39.8
Unjustified warnings or hidden monitoring	411	39.4
Vicious remarks	362	34.7
Unrealistic and meaningless work assignment	339	32.5
Physical violence, aggression	42	4.0

Notes: Total number of respondents = 1,041 workers.
Source: Institute for Labour and Family Research, 2006 - http://www.eurofound.europa.eu/ewco/2007/09/SK0709019I.htm

314. Some surveys take into account the problem of stalking, which is generally defined as a conduct or action – or a mix of different conducts and actions – directed at a specific person, usually repeated or persistent and without an apparent purpose if not harassing that specific person. This behaviour results in substantial emotional distress for the victim, making them feel frightened and/or intimidated.

25 Italy, Citizen's Safety Survey.

26 ILO Thesaurus 2005 - http://www.ilo.org/public/libdoc/ILO-Thesaurus/english/index.htm.

BOX 19: EXAMPLE LIST OF ELEMENTS OF STALKING

According to the stalking survey of the University of Leicester,[27] the most common methods of stalking experienced by victims can be summarized as follows:

- Following the victim
- Sending unsolicited letters/other written material
- Making unsolicited phone calls
- Sending unsolicited e-mails
- Sending unsolicited text messages on mobile phones (SMS)
- Trying to communicate in other ways against the victim's will
- Taking photographs of the victim without her agreement
- Abused the victim's pet(s)
- Threatened to harm the victim's pet(s)
- Vandalised the victim's home
- Vandalised the victim's car
- Vandalised other property/destroyed something valuable to the victim
- Harassed the victim's family/friends/neighbours/ colleagues
- The victim was physically assaulted
- The victim was threatened of being physically assaulted
- The victim was sexually assaulted
- The victim was threatened of being sexually assaulted
- Harassed the victim's children
- The offender threatened to harm the victim's children
- The offender broke into the victim's home
- The offender made unsolicited visits to the victim's home / Stood outside the victim's home
- The offender made unsolicited visits to the victim's workplace/school/university / Stood outside the victim's workplace/school/university
- The offender spied on the victim
- The offender left unwanted items for the victim to find
- The offender turned up at places where the victim was even though s/he had no business being there
- The offender sent unwanted 'presents' (e.g. flowers)
- The victim felt being manipulated by the offender
- The offender spread lies about the victim

Hate crime

315. The following operational definition of hate crime was developed by the responsible team of the National Crime Victim Survey (USA): 'A hate crime is a criminal offence committed against a person or property motivated, in whole or in part, by the offender's bias against a race, religion, ethnicity/ national origin, gender, sexual preference, or disability. The offence is considered a hate crime whether or not the offender's perception of the victim as a member or supporter of a protected group is correct'.[28] In other jurisdictions the notion of 'hate crime' is more narrowly defined in the criminal law and in its criminal justice application, and either relates to specific prohibited acts such as 'incitement to hatred' or is focused on data collection with respect to historically vulnerable groups in society.

316. In England and Wales a strong victim-centred working definition of a 'racist incident' has been employed by the police since the 1999 MacPherson Report,[29] which reads as - 'any incident which is perceived to be racist by the victim or any other person'. This victim-centred definition is useful to employ in the context of victim surveys, as it focuses on the victim's perception of an incident as 'racist' (given that an offender's motivation is often difficult to gauge).

317. Hate is increasingly recognised as a motivation for committing a crime. At the same time, the concept of 'hate crime' is gaining public recognition in some countries. For this reason, some surveys ask respondents whether they have reason to believe that the incident(s) they had been victims of was motivated by prejudice against their personal beliefs, characteristics or religion. As a result, respondents

27 Between October 2004 and September 2005 1,300 victims of stalking completed an on-line questionnaire for a survey coordinated by Dr. Lorraine Sheridan for the University of Leicester. The questionnaire and key findings are accessible at http://www.le.ac.uk/pc/aa/stalking/index.html.

28 Meredith Lee, Denise Lewis, Melinda Crowley, Elaine Hock, Christopher J. Laskey, Colin Loftin, Wayne Logan, and Lynn Addington, 'Developing Hate Crime Questions for the National Crime Victimization Survey', Paper Presented at the 54th Annual Conference of the American Association for Public Opinion Research, 1999. Available from the American Statistical Association website https://www.amstat.org/sections/srms/Proceedings/.

29 MacPherson, W. (1999) The Stephen Lawrence Inquiry, report of an inquiry by Sir William MacPherson, London: HM Stationary Office.

who indicated that that was the case may be asked to provide details of what occurred that made them feel they were the victim of a hate crime. For example, the US NCVS provides a list of additional questions that describe circumstances/scenarios aimed at helping the respondent remember details of what happened and that may help to qualify the incident as hate motivated. This may include whether specific negative words were used or hate symbols shown, or whether the incident happened close to any specific holiday or date that would have a meaning for the offended group.

BOX 20: ASKING ABOUT 'HATE CRIME' IN RELATION TO IMMIGRANTS AND ETHNIC MINORITIES

In an EU-wide survey on selected immigrant and ethnic minorities' experiences of discrimination and criminal victimization by the European Union Agency for Fundamental Rights (FRA) – the 'European Union Minorities and Discrimination Survey' (EU-MIDIS) – respondents were asked the following with respect to each of five crime types:

Do you think that this incident or any incident like this in the last 12 months happened partly or completely because of your immigrant/minority background? [EU-MIDIS]

At the very outset of the survey, respondents were asked to self-identify themselves as belonging to a particular immigrant or minority group with a series of questions, preceding those on criminal victimization, having introduced the concept of discriminatory treatment in access to goods and services on the basis of the respondent's minority background.

In addition, with respect to crimes of assault, threat and harassment, female respondents were specifically asked:

Do you think that [this incident/any of these incidents] in the last 12 months happened partly or completely because you are a woman? [EU-MIDIS]

Respondents were also asked the following to further establish whether there was evidence to indicate a 'racist' motive by the perpetrator/s:

[Of the last incident] Was racist or religiously offensive language used? [EU-MIDIS]

Sexual offences

318. Among the various forms of victimization, sexually motivated incidents play a prominent role. These crimes include a wide range of physical and psychological aggressive actions involving unwanted sexual contact between victim and offender. As for the general assaults, even though the absence of physical contact may give the impression of a less serious crime, threats are important because through them the offender may constrain the victim to consent to behaviour that she would not normally accept. Because of their sensitivity, questions related to sexual offences require specific training of the interviewers and special attention being paid to their wording and contextualisation. This behaviour most frequently involves a male offender and a female victim. For this reason, victim surveys should pay special attention in determining whether the various forms of aggression are sexually motivated or not. Questions on sexual offences may be embarrassing for the respondents, so a special warning should be inserted before the relevant section of the questionnaire starts. This is reflected in instructions for the interviewers and reassuring wording preceding or following the actual question (for example 'There may be some questions that you have difficulty answering so please take your time').

319. According to findings of several surveys, approximately one out of four women who experience violence is a victim of sexual violence, while this is the case in less than one out of ten men.[30] This justifies a separate course of interviewing for sexual incidents and other personal (non-sexually motivated) assaults. The majority of surveys in the UNODC-UNECE inventory include specific questions on sexual offences, frequently to be addressed exclusively to the female respondents in the sample. It is only recently that in some countries surveys have started addressing questions on sexual victimization to male respondents. In the past, including sexual victimization of males in a survey could have caused a loss of credibility of the research, which would have not been considered serious. The screener question may be very broad, as for example in the ICVS ('People sometimes grab, touch or assault others for sexual reasons in a really offensive way. This can happen either at home or elsewhere, for instance in a pub, the street, at school, on public transport, in cinemas, on the beach or at one's workplace.

30 See for example the US National Center for Victims of Crime.

[Over the reference period] has anyone done this to you? Please take your time to think about it'), and then try to establish what really happened through follow-up questions.

320. Depending on the cultural environment and sensitivity of the context, such a broad screener may capture more or less serious incidents. For example, in areas where women feel more free to talk about such issues there may be high reporting of sexual incidents/sexual harassment. However, such incidents of a less serious nature are different from sexual assault, notably rape and attempted rape, and the questionnaire should be able to make a clear distinction between them.

321. Sexual assault may be understood as a sexually motivated physical aggression. For example, the US NCVS covers this aspect of victimization by asking a direct question: 'Incidents involving forced or unwanted sexual acts are often difficult to talk about. [Other than any incidents already mentioned,] have you been forced or coerced to engage in unwanted sexual activity by (a) Someone you didn't know before; (b) A casual acquaintance; (c) Someone you know well?'[31] Further details of the incident are explored through follow up questions that use neutral/legal language, assuming that the victim is aware of what happened to her and had a possibility to come to terms with the incident and define it somehow. However, if the victim describes what happened as a rape, the interviewer is instructed to ask a follow-up question ('Do you mean forced or coerced sexual intercourse?') to make sure that indeed the victim knows what she means.

322. Another option, especially in case of dedicated surveys on violence against women, is to use very technical and detailed wording to describe exactly what happened. This may be considered more appropriate for surveys with a particular focus on personal victimization than general population surveys. For example, specialised surveys on rape contain screening questions aimed at establishing whether the victim was raped, which use very explicit medical/graphic language.[32]

31 US NCVS.

32 http://www.cdc.gov/ncipc/dvp/Compendium/Measuring_IPV_Victimization_and_Perpetration.htm.

BOX 21: ONGOING WORK TOWARD THE DEVELOPMENT OF AN INTERNATIONAL SET OF INDICATORS ON VIOLENCE AGAINST WOMEN

On 19 December 2006, the General Assembly of the United Nations adopted without a vote a resolution entitled 'Intensification of efforts to eliminate all forms of violence against women' (A/RES/61/143). The resolution requested: the Statistical Commission to develop and propose, in consultation with the Commission on the Status of Women, and building on the work of the Special Rapporteur on violence against women, its causes and consequences, a set of possible indicators on violence against women in order to assist States in assessing the scope, prevalence and incidence of violence against women.

To address the request of the General Assembly, a UN Expert Group Meeting (EGM)[35] initiated some work in the area and identified the first nucleus of indicators to be used as the basis for a comprehensive international set. The EGM reviewed existing indicators initiatives targeted to measure violence against women, established criteria to define indicators and identified the major methodological issues related to indicators on violence against women which included:

- **Prevalence and incidence.** Prevalence and incidents are different ways of measuring extent of violence (reference to the chapter on prevalence and incidence). In measuring the extent of violence against women over a lifetime (or adult lifetime), the concept of prevalence is usually preferred to that of incidents, as it is unlikely that there would be accurate recall of each and every incident over such a long period. The meeting noted that the use of prevalence rates risks misrepresenting the different experience women and men have with violence. Prevalence rates can only say that the number of women and men who experience violence may not be very different. It has been suggested that the gender-specific differences of repeated and multiple victimization and impact can be better measured by looking at the number of incidents or the consequences of the violence.
- **Severity and impact.** In addition to prevalence/incidents, violence against women can be measured by its severity and impact, most commonly in categories such as: the nature of the action; the frequency of the action; and whether or not there is an injury, and if so its seriousness.
- **Time period.** Two main time periods have been used for measuring the extent of violence against women: over a lifetime, and over a recent period. Lifetime measures are important for establishing the extent of the problem, and for raising awareness and advocacy purposes This measure is particularly pertinent to those forms of violence against women that occur only once in a life-time, or are unlikely to occur more than once in a lifetime. Most data collection in other policy fields is based on a one-year time period, and trends can more easily be monitored using prevalence in the last year.

Subsequent to the EGM, the UN Statistical Commission established the 'Friends of the Chair Group on VAW indicators' (FoC) to produce the final set of indicators. At the time when this Manual was finalized, the FoC Group had produced its first interim report evaluating the initial indicators suggested by the EGM from a statistical point of view.[36]

The revised list proposed by the FoC Group includes the following core indicators:

- *Total and age-specific rate of women subjected to physical violence in the last twelve months by severity of violence, relationship to the perpetrator(s) and frequency;*
- *Total and age-specific rate of women subjected to physical violence during lifetime by severity of violence, relationship to the perpetrator(s) and frequency;*
- *Total and age-specific rate of women subjected to sexual violence in the last twelve months by relationship to the perpetrator(s) and frequency;*
- *Total and age-specific rate of women subjected to sexual violence during lifetimeby relationship to the perpetrator(s) and frequency;*
- *Total and age-specific rate of women subjected to sexual or physical violence by current or former intimate partner in the last twelve months by frequency;*
- *Total and age-specific rate of women subjected to sexual or physical violence by current or former intimate partner during lifetime by frequency.*

The EGM included two additional indicators that the FoC recommended to further evaluate before they are considered universally relevant:

- *The percentage of women (over the total number of women) subjected to female genital mutilation/cutting;*
- *The percentage of women (over the total number of women) whose age at marriage is below 18 years.*

Both the EGM and the FoC Group recognized that the above identified indicators are only the initial step toward the development of a more comprehensive set of indicators measuring all forms of violence. They both recommended more research on methodology and definitions related to other forms of violence including: psychological and economic violence, stalking, physical and sexual violence in childhood, forced marriage, discrimination and economic violence at work, trafficking in women, impact of incidence of sexual violence against women on sexually transmitted diseases (STD) and HIV-AIDS.

33 UN Expert Group Meeting on Indicators to Measure Violence Against Women, organized by UN Division for the Advancement of Women, UNECE, and UNSD in collaboration with UNECA, UNECLAC, UNESCAP, and ESCWA, 8-10 October 2007, Geneva. Documents and Report of the meeting can be found at: http://www.unece.org/stats/documents/2007.10.gender.htm.

34 http://unstats.un.org/unsd/statcom/sc2009.htm.

Fraud

323. From the legal point of view it should be noted that in almost all countries, legislation limits 'fraud' to cases where the victim suffered financial loss. However, 'fraud' is also commonly used to describe conduct involving the use of dishonesty or deception, but not necessarily any financial or other material loss or benefit. From the point of view of victim surveys, the most relevant types of fraud are those affecting individuals and households, such as consumer fraud, credit card fraud and identity theft. The Federal Trade Commission of the USA conducts a dedicated survey of consumer fraud among the population[35] addressing a wide range of incidents. Victim surveys in many countries include questions on this type of incidents.

Identity theft

324. Theft of identity occurs in cases when an offender steals and/or uses information about the identity of another person, generally to get financial gain or to provide the thief with false credentials. This type of crime partially overlaps with credit card fraud, since the offender frequently uses credit card information to commit the crime, and with consumer fraud/cheating. The information may be used to obtain credit (frequently to open bank accounts), goods, and services in the name of the victim. Two types of crimes can be included in this category, i.e. the actual stealing of identity information or documents (proper 'identity theft'), and the use of the identity to deceive others ('identity fraud').[36] Although impersonating someone else has always been an illegal means of obtaining economic and practical advantages, this type of crime has become much more frequent due to the use of internet, especially through 'phishing'. Phishing is a scam aimed at deceiving internet users and recipients of e-mails, inducing them to disclose credit card numbers, bank account information, passwords, or other sensitive information. A well known form of phishing is the so-called 419 scam, named after the number of the relevant criminal code article in Nigeria, which consists of e-mails from Nigerians requesting the recipient assist them in getting money out of Africa. Surveys including questions on identity theft may face several problems, including the likelihood of victims being reluctant to admit having been cheated. Questions should be formulated in a way that properly describes what is being measured and possibly deal with direct experience rather than perceptions. For example, the question used by the Eurobarometer in 2006 only dealt with perceptions.[37] In the first place, surveys may wish to ascertain how the victim has become aware of the theft of personal information. As a next step, the survey may probe exactly what happened. An example of including identity theft issues in a household victim survey was provided by the US NCVS (2004), which covered credit card thefts, thefts from existing accounts, misuse of personal information, and multiple types at the same time.[38]

Consumer fraud/cheating

325. Consumers' awareness of their rights implies that they expect, for example, a product or service to perform in the manner in which it was advertised. Citizens may feel cheated when their rights as consumers are not respected or they have to pay too much for poor service. In such cases they call themselves victims of 'consumer fraud'. The UNODC-UNECE inventory found that questions on this type of incidents were included in 20 out of 58 surveys. In many cases, the wording of the question was that of the ICVS, i.e. 'last year, [in…], were you the victim of a consumer fraud. In other words, has someone - when selling something to you, or delivering a service - cheated you in terms of quantity or quality of the goods or services?'. Further probing for the type of incident may include asking which type of product or service was involved in the transaction.

35 http://www.ftc.gov/opa/2007/10/fraud.shtm.

36 UN Commission on Crime Prevention and Criminal Justice - Results of the second meeting of the Intergovernmental Expert Group to Prepare a Study on Fraud and the Criminal Misuse and Falsification of Identity - Report of the Secretary-General. E/CN.15/2007/8. http://daccess-ods.un.org/access.nsf/Get?OpenAgent&DS=E/CN.15/2007/8&Lang=E.

37 'Identity fraud is the act of stealing somebody else's identity for illegal activities (for example, illegal use of bank data or personal social security data). In your opinion, is this problem of identity fraud very widespread, fairly widespread, fairly rare or very rare in (respondent's country)?'.Special Eurobarometer 264/ Wave 65.4 - 'The role of the European Union in fighting against organised crime', 2006. http://ec.europa.eu/public_opinion/archives/ebs/ebs_264_en.pdf.

38 http://www.ojp.usdoj.gov/bjs/abstract/it04.htm.

Credit card crime

326. The fraudulent use of credit cards is very frequent and becoming more and more disturbing for citizens. There are several types of fraud related to credit cards. The first type is the use by the offender of lost and stolen cards, i.e. the card is either lost by or physically stolen from the victim, then used by the offender who has it in their possession. Offenders may also counterfeit cards by cloning or encoding them without permission. In such type of crime, data present on the magnetic band of a credit card is extracted and 'cloned' or reproduced on an illegal copy of the card, which is used by the offender to make purchases for which the legitimate card's owner is charged. A third type is the card-not-present (CNP) fraud, in which the offender uses card details obtained in trivial ways (such as discarded receipts or by copying numbers during a transaction) to purchase goods, mostly over the internet, by telephone, fax and mail order. Survey questions on credit card crime may require several layers of screening to contextualise the incident and identify into which of the above categories it may fall. Furthermore, understanding of the question may depend on the local use of credit / debit cards.

Corruption

327. About one fifth of the surveys in the UNODC-UNECE inventory included questions on bribery/corruption. The interest in assessing the extent and estimating the impact of corruption is very high. Several attempts have been made at measuring corruption in victim surveys, starting from the assumption that in most jurisdictions corruption is a crime and citizens are the victims of it. Being a crime, corruption shares the same data collection and methodological problems with other illicit behaviour. As in the general crime area, surveys (of general population, businesses and/or special groups of respondents) may provide important insights as regards the prevalence of the phenomenon. It should be noted however that many public opinion surveys address the issue of corruption from a perception point of view. This generates a different type of information, which may also be captured – as reference and control – through a victimization survey. In this respect, surveys may include questions on the perceived extent of corruption, categories of public employees who are likely to receive bribes, etc. The analysis of responses to such questions compared to those on the real experience of corruption may provide useful information on the extent of the gap between the two measures. Questions on perceived corruption are generally formulated in simple language, thus a response (perception) is normally obtained from all those interviewed. This produces the advantage that even a small sample can produce a sizeable basis of data. On the other hand, these questions are too often susceptible of being vague, leading, and/or biased. This represents a serious obstacle for the validity of the inferences that can legitimately be made from the data obtained, especially when used in different cultural settings.

328. Experience of corruption as a crime may be addressed in surveys through questions aimed at measuring the prevalence of experience of paying bribes among the surveyed population. The following is an example of a question on experiencing corruption:

'In some areas there is a problem of corruption among government or public officials. During [reference period] has any government official, for instance a customs officer, police officer or inspector [in your country], asked you or expected you to pay a bribe for his service?' [39]

329. In general, the longer and more detailed the question, the more precise the response. Of course this may also generate limitations in term of inferences that can be made, but they are likely to be less sensitive to the different cultural contexts. Follow-up questions may require victims to indicate the specific sector of the public administration from which the request was made. However, it may be expected that very few cases are reported to the survey, thus the opportunity of including any follow-up questions in the questionnaire should be carefully considered from the point of view of time and cost.

330. It should be noted that addressing corruption in victim surveys may be affected by the cultural and social environment in different countries, where the levels of tolerance of the phenomenon, irrespective of existing legislation, may be higher or lower. As a consequence, citizens may consider bribery and corruption more or less acceptable behaviour in everyday life and be more or less willing to acknowledge that they have any experience of it. Furthermore, the experience of paying a bribe may

39 ICVS.

result either in suffering a loss or enjoying a privilege, thus not all respondents may see corruption as a form of victimization. It is also difficult to assess if increased awareness and stigmatization of corruption in a country would result in increased readiness to provide open responses to such surveys or if the opposite is true.

331. A question on experiencing corruption has also been included in a special *Eurobarometer*,[40] in which the question used was: 'Over the last 12 months, has anyone in (OUR COUNTRY) asked you, or expected you, to pay a bribe for his or her services?'.

Exposure to illegal drugs

332. Nine surveys in the UNODC-UNECE inventory included questions on exposure to illegal drugs. Since this is not a clear type of crime/victimization, definitions vary among surveys and range from simply being in contact with drug related problems to the direct experience of having been offered drugs or using drugs. In the first category, the most frequently used question is taken from two special issues of the Eurobarometer,[41] and reads 'Over the last 12 months, how often were you personally in contact with drug related problems in the area where you live? For example seeing people dealing in drugs, taking or using drugs in public spaces, or by finding syringes left by drug addicts? Was this often, from time to time, rarely or never?'. This question has also been included in surveys following the ICVS design and has the advantage – in EU countries - that historical data are available. As regards illicit drug use, the BCS has included this issue in a self-completion part of the questionnaire aimed at estimating the prevalence of use of several types of drugs.

Examples of other forms of victimization included in household surveys if relevant in the country

Theft of livestock

333. Theft of cattle or other livestock is very frequent in rural areas and represents a serious problem for the large portion of population living as farmers. The financial loss may vary from the theft of one or two backyard animals to the abduction of cattle in large numbers. Surveys targeting rural areas should take into account the impact of this form of victimization and possibly include questions aimed at capturing its prevalence.

Arson

334. Experience of having been a victim of burning or destruction of dwellings may be considered worth including in a survey. This can be seen as a modification and specification of the vandalism questions.

Kidnapping for ransom

335. Kidnapping, i.e. capturing and/or keeping a person hostage and requesting money to release him or her, is unfortunately so frequent in some countries that it is included in victim surveys. This is particularly the case with the so-called 'express kidnapping'(from the Spanish 'secuestro express'), frequent in Latin America, in which offenders request a small ransom that the family of the victim may be able to pay relatively easily and quickly. The National Survey of Perception of Public Security in Mexico[42] included questions on experience of kidnapping.

Carjacking

336. The theft of a car (or any motor-vehicle) normally happens when the car is unattended. In some countries, it may also occur when the vehicle is occupied. Typically, the carjacker is armed, and the driver is forced out of the car at gunpoint. This type of crime occurs in some countries with a frequency that justifies its inclusion in victim surveys. The national victim survey carried out in South Africa in 1998 included questions on carjacking and attempts.[43]

40 Special Eurobarometer 245 / Wave 64.3 (Nov-Dec 2005) on Opinions on organized, cross-border crime and corruption, http://ec.europa.eu/public_opinion/archives/ebs/ebs_245_sum_en.pdf .

41 Public Opinion Regarding Security and Victimization in the EU - Contact with Drugs Related Problems - Eurobarometer surveys n° 44.3 (1996) and 54.1 (2000) http://ec.europa.eu/public_opinion/archives/ebs/ebs_145_100.pdf.

42 Encuesta nacional sobre inseguridad, INEGI, http://www.inegi.org.mx/inegi/default.aspx.

43 Statistics South Africa; Victims of Crime, 1998. http://www.statssa.gov.za/publications/statsdownload.asp?PPN=P0341&SCH=798.

Witnessing violence

337. Being exposed to violence and physical abuse, even without having been a victim of it, may be considered a serious form of victimization. For example, the General Social Survey in Australia includes the following question: 'Have any of these been a problem for you or anyone close to you during the last 12 months? 1) Alcohol or drug related problems. 2) Witness to violence. 3) Abuse or violent crime. 4) Trouble with police.' This may even be the case of murder. In some countries, it has been considered important to include a specific question on having witnessed murder of someone close to them. In violence against women surveys, for example, respondents have been asked whether children were witness to the violence and/or whether children were also directly victimized. Similarly, child victimization surveys have asked children directly whether they have witnessed violence at home or elsewhere.

F. Follow-up for victims

Reporting to the police

338. A fundamental part of a crime victim survey questionnaire deals with the issue of reporting to the police. This part of the questionnaire is crucial in establishing whether the incident reported to the survey was actually reported to the competent authorities as a crime. In most cases, victims of crime have to decide whether or not to report to the police. This decision goes through several steps, such as: a) establishing whether indeed it was a crime; b) deciding whether or not to report it to the police; c) having the means to reach the police; d) having their report received and heard by the police. Depending on the purpose of the survey, the questionnaire may wish to explore this process in more or less depth. Most surveys analyse the reasons for reporting or not reporting to the police. Furthermore, victims may be asked whether they were satisfied with the way the police dealt with their report and the assistance received. Furthermore, it may be relevant to know who notified the police and by what means this was done. Adults may for instance act on behalf of dependents. Family members, friends, neighbours and employers may also notify the police on behalf of the victim. In some countries, police may be notified in writing, by telephone or internet, while others require the victim/complainant to do this in person.

339. It is important to consider that any attempts at reconciling victim survey data with police records goes through this section of the questionnaire. Victim surveys aiming at comparing with police data may be particularly keen to focus on this part of the questionnaire.

Relationship between the victim and the police

340. Citizens who have experienced crime as victims may have an image of the police that differs from that of other citizens. Victims or witnesses of crime may call the police for assistance. Some surveys ask about the quality of the service provided by the emergency number, or the response time, i.e. how long did the police take to react to an emergency call. Most surveys will ask victims whether they reported their crime or not. This is essential if you need to understand the differences between police and survey crime measures. It can also be an indication of the relationship between the police and their public. However, there are many reasons why people do not report incidents to the police and some of these may not be indicative of poor policing or lack of confidence. In many cases, crimes remain unreported because the victim did not feel it was sufficiently serious to warrant police action, or they could deal with the incident in other ways. It is important for surveys to identify the range of reasons why some crimes go unreported.

341. At the level of the individual, several reasons for non-reporting have been identified, including those related to the profile of the victim, fear of revenge from the part of the offender, as well as practical obstacles between the victim and the police (distance to the police station, language problems, unwillingness of victims to approach the police and – in some extreme cases – the police being the offenders). In addition, especially for violent and sexual crimes, victims can be ashamed, embarrassed and afraid that the police don't believe them.

342. Patterns of reporting also vary between countries, thus the extent of the 'dark figure' (the estimated number of unreported cases) is likely to differ in different countries. In some cases, the presence

of alternative mechanisms for dispute resolution, such as a justice of the peace or traditional leaders, may divert victims from formally approaching the police.

Victim support services

343. In some countries, surveys may ask respondents who have been victims about their awareness of the existence of victim support services and whether they had the opportunity to use them. Depending on the availability of services, they may be mentioned in survey questions by name or making general reference to 'victim support services'.

BOX 22: EXAMPLE OF FOLLOW UP QUESTIONS FOR VICTIMS OF PHYSICAL ASSAULT (IRELAND)

Physical assaults

Q. In the past 12 months has anyone physically attacked you?
1. Yes
2. No

Q1. if Q= 1 (if respondent physically assaulted in past 12 months)
How often did this occur (in the past 12 months)?
1. once
2. twice
3. three times
4. four times
5. five times or more

Q2. if Q= 1 (if respondent physically assaulted in past 12 months)
(For the last incident,) can you remember the month it took place? __

Q3.. if Q= 1 (if respondent physically assaulted in past 12 months)
(For the last incident,) did this occur:
1. in your home
2. in vicinity of home
3. at work
4. near workplace
5. at school/college
6. near school/college
7. in/near pub/dance hall/disco
8. at/near other public place (shopping area, church etc.)
9. elsewhere

Q4. if Q= 1 (if respondent physically assaulted in past 12 months)
Was a weapon used or threatened by the attacker?
1. Yes
2. No

Q5. if Q4= 1 (if respondent physically assaulted with a weapon in past 12 months)
Was it a……
1. knife
2. gun/rifle
3. syringe or needle
4. club or stick
5. bottle/glass
6. other

Q6. if Q= 1 (if respondent physically assaulted in past 12 months)
Were you physically injured?
1. Yes
2. No

Q7. if Q6= 1 (if respondent physically injured in assault with weapon)
What kind of treatment, if any, did your injuries require:
1. cuts/bruises not requiring medical attention
2. visit to doctor/G.P.
3. needed medical treatment, but not hospital stay
4. injuries requiring overnight hospital stay
5. hospitalisation for more than one night

Q8. if Q=1 (if respondent physically assaulted in past 12 months)
(For the last incident,) was it reported to the Gardai (*police*)?
1. Yes
2. No

Q9. if Q8=2 (if assault not notified to Gardai)
What was the main reason for not reporting the incident to the Gardai?
1. not serious enough/no loss
2. solved it myself (knew the perpetrator/thief)
3. reported to other authorities instead
4. no insurance claim anticipated/could not claim insurance
5. believed Gardai could do nothing/lack of proof
6. believed Gardai wouldn't do anything about it
7. did not wish to involve the Gardai
8. fear of reprisal
9. other reasons

Counselling

Q10. if Q=1 (if respondent physically assaulted in past 12 months)
As a result of any incident you have mentioned, have you received any counselling from a professional or a support group?
1. Yes
2. No

Source: Crime and Victimization module, Quarterly National Household Survey, Q4 2003, Central Statistics Office, Ireland (modified by UNODC).

Context of victimization

344. Further to screeners to establish the prevalence of victimization, respondents who have been victims will be interviewed on the impact of crime. Since this area of the questionnaire deals with the perceptions and attitudes of the subset of respondents who have been victims of a crime, it should be taken into account that the number of respondents will depend on how many were victims of each specific type of crime. In particular, in deciding the size of their sample, survey organizers should consider that the number of victims may be small. It is important to ensure that the basis for analysis of responses to questions in this section is not too small to provide reliable indications.

345. Questions in this section will aim to provide more details on the context of the incident, such as, for example, where it happened, when, how many times, at what time, how many offenders were involved and whether they were known to the victim. Further questions may assess the severity of offence, for example by asking whether any weapons were used and if the victim was physically injured. Finally, an important component of the questionnaire will deal with victims' reporting to the police and their experiences.

Victimization abroad

346. Questions on victimization experience generally provide respondents with the option to indicate whether the incident happened abroad, that is in another country, different from the one in which the respondent resides and the survey is conducted. Although this may happen with a relatively small frequency, the relevant information should be considered when analysing the results. Incidents that happened abroad cannot be counted in the prevalence rate attributable to the location of the interview. For example, during the reference period the respondent may have been on vacation abroad and become a victim of robbery. This robbery incident should not appear as adding to the number of incidents that occurred at the survey location. Specialist victimization surveys targeting tourists are carried out in some popular holiday locations. Nevertheless, due to crime consequences that may affect the victims' lives and safety perceptions, the prevalence rate of those victimized abroad should also be considered.

BOX 23: TOURIST SURVEYS

Victimization surveys targeting tourists are becoming more and more frequent, and are parallel to the literature within the tourism field on crime, insecurity and tourism. Specialist victimization surveys for tourists have been attempted in various contexts. For example, in 1998 a national survey was conducted to assess British tourists' experiences and perceptions of crime on holiday.[46] The survey was based on a random sample of 1100 subscribers with a holiday magazine was conducted in 1998. A postal questionnaire with a supporting letter was included in the magazine mailed to subscribers included in the sample. The questionnaire covered 90 questions relating to holidays, perceptions and experiences of crime and the socio-demographic characteristics of the respondents. A total of 514 responses were received (47% response rate). The survey results showed that, if compared with the British Crime Survey, tourists were much more likely to become victims of crime while on holiday than at home.

Similar surveys have been carried out in popular tourist locations, for example Malaga,[47] and deal with issues related to becoming a victim, bearing the consequences of victimization and accessing the police in unfamiliar surroundings.

Researchers concur that sampling for tourist surveys usually represents a challenge, because of the need to target respondents who have recently travelled abroad.

G. General attitudinal questions

347. Victim surveys represent an important tool to capture the attitudes of respondents on a variety of issues that are not immediately related to their crime experience, but can help to understand the social context surrounding them and provide important indications for the development of crime prevention policies. Several issues, such as those presented in Table 7, are typical features of victim surveys and appear in many of the surveys included in the UNODC-UNECE inventory.

44 Tourist victimization and the fear of crime on holiday, by Paul Brunt, Rob Mawby and Zoe Hambly, http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6V9R-401RX8S-9&_user=5235131&_rdoc=1&_fmt=&_orig=search&_sort=d&view=c&_version=1&_urlVersion=0&_userid=5235131&md5=af3c5b2df7e206b3ecbf98f9685b4ef2.

45 Stangeland, P. (1995), Chapter 11, Tourists as crime target.

Table 7: Non-crime issues included in victim surveys

	percentage of surveys
Attitudes toward the police	66
Crime prevention and protection	52
Attitudes toward corrections	17
Attitudes toward courts	14

Source: UNODC-UNECE inventory, 2005

General attitudes toward the police

348. Questions on general attitudes towards the police are useful to determine how the population, irrespective of their having been victims of a crime, perceives law enforcement and their operations. The majority of surveys in the UNODC-UNECE inventory covered this item, at least with one question on the overall perception of police performance, which can be formulated as follows: 'Taking everything into account, how good do you think the police in your area are at controlling crime? Do you think they do a very good job, a fairly good job, a fairly poor job or a very poor job?'[46] If the survey has a specific interest in gauging police performance on different aspects of its work, questions may be more detailed and probe, for example:[47]

Do you think your local police force does a good job, an average job or a poor job:

... of enforcing the laws?

... of promptly responding to calls?

... of being approachable and easy to talk to?

... of supplying information to the public on ways to reduce crime?

... of ensuring the safety of the citizens in your area?

... of treating people fairly?

BOX 24: VICTIMS OF CRIMINAL ABUSE OF POWER

According to the UN Declaration of Basic Principles of Justice for Victims of Crime and Abuse of Power (General Assembly resolution 40/34 of 29 November 1985), 'victims' means persons who, individually or collectively, have suffered harm, including physical or mental injury, emotional suffering, economic loss or substantial impairment of their fundamental rights, through acts or omissions that are in violation of criminal laws operative within Member States, including those laws proscribing criminal abuse of power.

It should be taken into account that respondents to victim surveys may also have been victims of incidents involving abuse of power by law enforcement officers. The victim is therefore in the weakest position, because the authority who should provide access to justice is the same one that perpetrated the crime. Victims of abuse of power are frequently found among the weakest groups of population (women, irregular migrants, homeless).

Surveys may capture this type of incidents through detailed follow up questions on the offender's profile.

349. Another aspect that may be covered by victim surveys is the experience of having been stopped and searched by the police. This can happen on foot or in a vehicle. Survey questions on this matter may be used as useful feedback tool to check that routine operations of the police are supported by the public and not perceived as an intrusion in their private life, or, even worse, as a victimization experience. The results are an important indicator of public confidence in the police. The formulation of the question may begin with a screener asking, for example, 'Have you EVER been stopped and asked questions by the police when you were on foot?'.[48] Follow-up questions may deal with when it happened, what happened afterwards, what were the feelings of the respondents, etc.

46 ICVS.

47 Canada, General Social Survey on Victimization.

48 BCS, A5.

Crime prevention and protection

350. Victim surveys frequently deal with issues of safety and crime prevention by asking respondents which type of precautions they use to protect themselves and prevent crime. About one half of the surveys in the UNODC-UNECE inventory include this item. Typical issues covered by questions in this section include the presence of physical deterrents at the household such as burglar alarms, fences, security locks, windows grids and – if relevant in the context – guard dogs. In the case of victims of burglary who state they own a burglar alarm it may be interesting for the survey to check whether the alarm was installed before or after the burglary occurred. Questions may also cover the presence of physical measures to deter crime on vehicles, such as special locks on cars, motorcycles or bicycles.

351. Another set of questions in this area has to do with community based crime prevention schemes, such as taking part in neighbourhood watch or community alerts, or informally asking the neighbours to look after the house when nobody is at home. A final set of questions may deal with any type of measures or behaviours adopted by the respondents to protect him/herself or property from crime. This may include reducing the frequency of going out, especially at night, avoiding certain places/areas, changing itineraries/routines, registering for self-defence courses, carrying sharp objects to protect themselves, etc.

Attitudes towards the criminal justice system (courts, corrections)

352. Victim surveys may ask about respondents' opinions on the functioning of various parts of the criminal justice system. This may be particularly the case with courts and corrections, which are frequently mentioned in general debate with reference to crime issues.

BOX 25: ATTITUDES TOWARDS COURTS AND CORRECTIONS, EXAMPLE FROM CANADA

The General Social Survey on Victimization in Canada deals with respondents' attitudes towards courts and corrections the same way as with the police, by asking a series of questions on several aspects of interest to the general population, as well as a question on having been in contact with courts:[51]

- Now I would like to ask you a similar question about the Canadian Criminal courts. Are they doing a good job, an average job or a poor job:

... of providing justice quickly?
... of helping the victim?
... of determining whether the accused or the person charged is guilty or not?
... of ensuring a fair trial for the accused?

- In general, would you say that sentences handed down by the courts are too severe, about right or not severe enough?
- Have you ever had contact with the Canadian Criminal courts? (INT: Contact with a criminal court may have been for any reason. Respondents may have had contact with a criminal court because they, their friends, or family members were charged with a crime, were witnesses to a crime or were victims of a crime. Contact could also be in the form of jury duty.)
- Do you think that the prison system does a good job, an average job or a poor job:

... of supervising and controlling prisoners while in prison?
... of helping prisoners become law-abiding citizens?

- Do you think that the parole system does a good job, an average job or a poor job (INT: The responsibility of the parole system is to decide which prison inmates can serve part of their sentence in the community under supervision and to make sure the conditions of parole are being met. If offenders don't meet parole conditions they can be returned to prison):

... of releasing offenders who are not likely to commit another crime?
... of supervising offenders on parole?

49 Canada, General Social Survey on Victimization.

353. A particular aspect that can be dealt in this area is to assess the opinion of respondents about punishment. This can be done, as in the ICVS, by providing an example of a situation in which a crime is committed and the offender should be sanctioned by the respondent, who can choose from a range of sanctions ranging from a fine to many years imprisonment. Results may provide important indicators of the level of tolerance of citizens about crime issues.

H. Determining whether information can be obtained from other sources and linked to survey data

Victimization module within a social survey

354. It is possible to include a victimization module within an already ongoing household survey dealing with social issues. This may be the case with surveys dealing with broader safety issues or general social/health issues. The UNODC-UNECE inventory found that 13 surveys of the latter type had included victimization modules at least once (see Table 8).

Table 8: Household surveys that included victimization modules in the UNODC-UNECE inventory

Country	Survey	Institution
AUSTRALIA	General Social Survey	Australian Bureau of Statistics
AUSTRALIA	2002 National Aboriginal and Torres Strait Islander Social Survey	Australian Bureau of Statistics
FRANCE	Periodic survey on living conditions	INSEE
ISRAEL	Social survey 2003	Central Bureau of Statistics
ITALY	Multipurpose Survey - Everyday Life Aspects	ISTAT
NORWAY	Health survey in Northern Trgnculeg, Norway	Norwegian centre for violence and traumatic stress studies
ROMANIA	Living Condition Survey	National Institute of Statistics
SWEDEN	Living Condition Survey (ULF)	Statistics Sweden
SWITZERLAND	Swiss Health Survey	Swiss Federal Statistical Office
SWITZERLAND	Household Budget Survey	Swiss Federal Statistical Office
SWITZERLAND	Swiss Household Panel (SHP)	Swiss Federal Statistical Office
SWITZERLAND	SILC Statistics on income and living conditions	Swiss Federal Statistical Office
UKRAINE	Social-economic security of the Ukrainian people	State Statistics Committee of Ukraine

355. Victimization modules have to take in to account the need to save time and to avoid stressing the respondent with oversensitive questions, also taking into account that it may not be possible to provide interviewers with the same amount and type of training as would be the case for a standalone victimization survey.

356. In general, victimization modules include questions on personal safety, as well as crime experience (theft, burglary and assault), but normally do not contain questions on sexual offences.

BOX 26: INTERNATIONAL SURVEYS INCLUDING VICTIMIZATION ISSUES

European Working Conditions Surveys (EWCS)

Every five years, the Foundation conducts a survey to study working conditions in Europe. The survey has been carried out four times: in 1990/91, 1995/96, 2000 (extended to cover the 10 new Member States, Bulgaria, Romania and Turkey in 2001/02) and 2005 (31 countries). Fieldwork for the Foundation's most recent instance of the European Working Conditions Survey was carried out in all EU25 countries (plus Bulgaria, Romania, Turkey, Croatia, Norway and Switzerland) during autumn 2005. The full descriptive report of the EWCS 2005 is available.

The surveys provide an overview of the state of working conditions throughout Europe, and indicate the extent and type of changes affecting the workforce and the quality of work. The recurring nature of the survey gives a picture of trends in working conditions throughout Europe.

The European surveys on working conditions use the random walk procedure, a method of selecting a random sample in door–to-door surveys. The respondents (employees and self-employed people) were interviewed face-to-face in their own homes outside normal working hours.

The survey questionnaire has expanded from twenty questions in the first edition to nearly one hundred questions and sub-questions in 2005. Topics covered in the survey include working time, work organization, pay, work-related health risks and health outcomes as well as access to training.

Question 29 (see below) deals with violence and harassment at work.

Q29 — Over the past 12 months, have you or have you not, personally been subjected at work to...?

A — Threats of physical violence

B — Physical violence from people from your workplace

C — Physical violence from other people

D — Bullying / harassment

E — Sexual discrimination / discrimination linked to gender

F — Unwanted sexual attention

G — Age discrimination

H — Discrimination linked to nationality

I — Discrimination linked to ethnic background

J — Discrimination linked to religion

K — Discrimination linked to disability

L — Discrimination linked to sexual orientation

Source: http://www.eurofound.europa.eu/ewco/surveys/index.htm.

The Information and Communications Technologies (ICT) Eurostat surveys

Based on the European Commission Europe 2005 Action Plan, Eurostat established two annual Community surveys for information society statistics (one on enterprises and one on households & individuals). The ICT (Information Computer Technology) module for households and individuals started in 2005, including several questions regarding computer security, internet crime, misuse of credit cards and personal data. Further questions about hackers and virus attacks were added in 2005 and 2007; questions about internet frauds were asked in 2006 and 2009. The survey is carried out annually.

Source: http://epp.eurostat.ec.europa.eu/portal/page?_pageid=2973,64549069,2973_64553608&_dad=portal&_schema=PORTAL.

I. Comparability of victimization surveys

357. Comparability issues can represent a particular challenge for crime victimization surveys. The accurate comparison of results derived from victimization surveys with other (survey or non-survey) data is difficult and should always be approached with caution. It is necessary to be clear about exactly what is being compared and why. A number of different comparisons may be required in any given context. For example:

1. Comparisons between different surveys carried out in the same country:
   - i at the same time,
   - ii at different points in time;

2. Comparisons with administrative (police) data in the same country; or
3. Comparisons between different surveys carried out in different countries.

Comparisons between different surveys carried out in the same country

358. Individual countries may have different surveys carried out at the same time, each with different objectives but with partial overlapping of content. This can be the case, for example where a general household survey contains a victimization module and a standalone crime victim survey is also carried out separately. Different results may be obtained by each survey for a variety of reasons. The design of the survey questionnaire plays a key role in this respect and comparability of different surveys within the same country may be enhanced by following a number of key principles. These are summarized in Box 27.

BOX 27: ENHANCING COMPARABILITY IN THE CONTENT OF THE SURVEY

- Include similar modules covering key offences
- Use the approach of asking about victimization experience using colloquial language containing consistent core elements
- Recall periods should be consistent and include screener questions before narrowing down to the last calendar year or 12 months immediately prior to the date of the survey in respect of any crimes initially reported. Comparability may be higher for the period after the screener questions.
- The more detailed the wording and accurate description of incidents, the higher the likelihood of obtaining comparable results.
- The details of additional information provided by the interviewer should be similar, in order to minimise the influence of individual interpretation of the question's meaning. At the same time, slight variations in terms used to describe objects in a way that is familiar to the respondent in different contexts may increase comparability.
- The sequence of questions, or at least questionnaire areas, should be similar. In particular, it is suggested that questions concerning sensitive offences, such as sexual assault, should be asked towards the end of the questionnaire to allow time for the interviewer to build a rapport with the respondent.

Comparisons with administrative (police) data

359. As regards comparing with administrative (police) data, it should be taken into account that victim surveys differ from official police statistics in a number of ways, including in the source of the data, its coverage, the manner of identification of criminal incidents, and in sources of error. Victim surveys eliminate the effect of a range of police decisions that may otherwise affect the data, come closer to the 'dark figure' of crime than official police statistics and have the advantage of transcending different national legal definitions of crime by seeking the view of victims directly. A number of comparability challenges are summarized in Table 9.

BOX 28: ADMINISTRATIVE DATA

Information on crime incidents can be obtained from administrative data. The statistical category of criminal incidents reported to police provides data that should be at the same level of victimization incidents reported to the police. It should be noted, however, that police records include crimes reported to, or detected by, police, which were subsequently considered serious enough to be recorded on police administrative systems. Different recording methods exist in different countries. The most important difference depends on the point in time at which the crime is recorded, i.e. following and initial report (*input* statistics) or following an initial investigation (*output* statistics). Crime categories may also depend on criminal code articles or police classification systems, thus information on specific types of crimes should be checked against definitions and aggregate categories (such as violent crime, property crime, drug offences, etc.).[52]

50 See UN Manual for the Development of a System of Criminal Justice Statistics, ST/ESA/STAT/SER.F/89, 2003.

Table 9: Comparability challenges of administrative police statistics and crime victim surveys

	Administrative police statistics	Crime victim surveys
Nature of data	Existing records.	Information exists only in personal memories.
	Decision as to event recording already taken.	Decision as to recall taken during survey data collection process.
	Data collection process aims to capture existing information as accurately as possible.	Data collection process aims to prompt recall and record information in a standardized way.
Comparability challenges	Identification and correction for existing differences affecting records captured.	Consistent recall of equivalent events with equivalent accuracy.

Cross-national comparison of crime victimization surveys

360. The reasons why it may be desirable to compare results of crime victimization surveys across countries can include:

- Fostering the exchange of information relating to crime and to the functioning of criminal justice systems at regional and international levels;
- Transparency and accountability in crime prevention and the operation of law enforcement and criminal justice systems;
- The development of common benchmarks and indicators for assessing the nature, extent and public perception of crime.

361. When comparing results cross-nationally, it must be remembered that respondents to crime victim surveys perceive (and remember) that they have been the victim of a crime. The interpretation of what constitutes a crime may vary from country to country. For example, respondents may be more or less used to violent crime, which may occur in diverse contexts. Juvenile gangs may be more or less active and organized, the availability and use of weapons may differ greatly from country to country. The challenge is to ensure that the events people are asked to recall are of close equivalence across cultures and countries, are recalled with equivalent accuracy, and that the people asked are equally representative of the cultures and countries of which they are a part.

362. The same applies to property crime. While theft and burglary may affect citizens in affluent societies by depriving them of cash, jewellery, hi-tech equipment, art and furniture, the same type of crime in developing countries may entail theft of basic household items such as crockery, cutlery and linen. Even though the monetary loss may be small, the impact on the victim is significant.

363. In many developing countries where cattle are a vital resource, theft of livestock is perceived by victims as one of the most serious victimization experiences. The same may apply to the theft of a bicycle in a context in which that is the main means of transportation. Questions on bribery and corruption for example, are very susceptible to the different interpretation of respondents from different countries as to what constitutes such events.

364. To some extent, the identification of inherent differences in a target population – such as acceptance of petty theft for example, and its subsequent under-reporting in a crime victim survey – is a valid criminological finding of the survey, and does not prevent comparison with surveys from other countries *per se*. Nonetheless, such differences must always be borne in mind and figures should never be compared in isolation from the qualitative context.

365. If comparisons with results from other countries are to be made, the context in which the surveys have been carried out must be made clear. Otherwise, results (such as very low reported levels of minor theft in particular countries) may be especially misleading. The blind 'ranking' of quantitative results from different countries, with little or no explanation as to the context or factors that may affect comparability, is generally not therefore appropriate.

366. Overall, crime victim surveys may be considered most 'comparable' where the methodology used in each survey aims to consistently capture information about equivalent crime events, and population perceptions and cultural practices are recognized and clearly described.

367. The range of factors that may affect the cross-national comparability of results from crime victimization surveys is large. From the method used to collect data, whether in-person interviews or telephone interviews, to the wording of survey questions, to sample composition and size, to the content of the questionnaire, it is no easy task to ensure that cross-national differences between each are as small as possible.

Factors that affect comparability

368. Problems of comparability arise from two principle sources:

(i) Methodological differences in the conduct of the survey itself, such as sample selection and method of interviewing (these may be controlled for as far as possible); and

(ii) Inherent differences between target populations, including different perceptions of crime or widespread cultural acceptance of criminal practices (difficult to control).

369. Methods to increase the cross-national comparability of surveys can be divided into two types: 'output harmonisation' and 'input harmonisation'. Input harmonisation involves action taken to enhance comparability by considering aspects of the questionnaire design and survey implementation process itself. Output harmonisation involves selecting particular variables for comparison or making adjustments to the estimates after the data have been collected (such as performing age and gender standardization or using adjustments such as purchasing power parity). Choosing to compare only survey results from countries that share common characteristics, such as geographic location, social structure and culture or degree of human development is a form of output harmonisation.

370. Output harmonisation may be a valuable method of increasing comparability between victim surveys. However, its application is highly dependent upon the individual variables and characteristics of each survey.

371. In the following paragraphs, specific issues that affect comparability are discussed. As a result of their inter-related nature, the problems of methodological design and population differences are dealt with jointly under each issue.

(i) Data collection methods

372. There are many theoretical reasons why different survey modes may affect cross-national comparability. Conversation and prompting during a face-to-face interview, for example, may lead to better overall recall of events than during completion of a self-administered survey. Survey non-response rates – and the resultant bias this might introduce – may also differ between survey modes. Persons may be harder to contact if face-to-face interviews are the only survey mode than if telephone interviews using landlines and mobiles are also used.

373. Research is somewhat inconclusive as to the significance of such differences. Some studies show that responses to questions on victimization from telephone interviews are similar to those obtained face-to-face.[51] On the other hand, split sample tests with a national crime victim survey in the United States have demonstrated higher victimization rates in CATI-based interviews than in either face-to-face or telephone interviews.[52] A study in Germany showed that face-to-face interviews recorded less incidents of victimization as opposed to written (postal) surveys.[53] Reports also document rather unpredictable effects. When a switch was made from face-to-face interviewing to CATI in the international crime victim survey carried out in Spain and Northern Ireland in 2005, the results showed a

51 Van Dijk, Mayhew, 1992; Lynch 2005; Catalano 2007.

52 Lynch, 2006.

53 Kury, 1993.

substantial decrease of victimization rates in Spain and an equally substantial increase in Northern Ireland. There is little way of knowing whether and to what extent the new interview mode has affected these changes.[54]

374. What is commonly known, however, is that survey mode effects are likely to be greater with respect to sensitive crime areas such as domestic violence and sexual assault. Higher victimization rates for rape, for example, have been reported where the survey mode is self-completion as opposed to face-to-face interviewing, due to a reluctance to share information of a personal nature with the interviewer.[55] It is important to be aware that the choice of survey mode may affect comparability with other surveys in respect of such questions in particular.

375. As is discussed in section IV.J, the choice of survey mode and information recording for any particular victim survey is dependent upon a number of factors, including cost, availability of resources, the goals of the survey and the possible sources of survey error. For the purposes of the future comparability of the survey with other crime victim surveys, possibly the most important factor is that the standard of data collection work is the same, whichever mode is used. Two surveys both using face-to-face interviews but where one has little or no training of interviewers and the other uses well-trained interviewers are likely to be significantly less comparable than two well organised surveys, one using face-to-face interviewing and the other telephone interviewing.

(ii) Questionnaire design

(a) Wording

376. The basic principle behind standardised crime victim surveys is that they ask respondents about incidents that, by and large, coincide with the legal definitions of common offences, but using colloquial language. Careful wording and tight definition of the event to be captured may be considered the backbone of comparability between crime victim surveys.

377. The starting point for comparability should be identical wording of questions. Minor differences, for example, in the handling of attempted burglaries previously proved to make comparisons between USA and British burglary rates derived from national crime surveys virtually impossible.[56] It is crucial for comparability of results from crime victim surveys that questions on common household crimes, at a minimum:

1. Use recall time period(s) that are either the same or equivalent.
   - For example, last calendar year
2. Contain the same core elements to the offences described.
   - For example, for assault: (i) 'personally attacked or threatened', (ii) 'in a way that really frightened you', (iii) 'either at home or elsewhere'.
3. Manage counting of incidents in a consistent manner.
   - For example, if a respondent was a victim of a particular crime more than once in the recall period, the survey wording should ensure that the number of events is accurately recorded but that details of the crime are consistently obtained with reference to the last event or the most serious event.
4. Manage attempts to commit the offence in a consistent manner.
   - For example, many crime victim survey questionnaires count burglary and attempted burglary as separate crimes but deal with robbery and attempted robbery as one crime.

378. It may be the case that respondents in different countries have different cultural thresholds for defining certain behaviours as crime. Careful control of the four question wording elements above, however, should greatly increase cross-national comparability through prompting recall of the same, tightly defined, event wherever it has occurred.

54 Van Dijk, Van Kesteren, Smit; 2008.

55 Johnson, Ollus, Nevala, 2008.

56 Van Dijk, Van Kesteren, Smit; 2008.

379. As always, however, a number of exceptions may still exist and the wording of questions may well need to be slightly adapted to fit the local context. Such adaptations are likely to relate to questions that seek further detail of the core crimes, rather than the basic screener questions themselves. Terms used to describe the perpetrator of a crime, such as 'spouse/partner', 'intimate partner', 'boyfriend/girlfriend', 'relative', or 'family member' may contain slight variations depending upon the most commonly accepted form in a particular cultural context. Questions concerning corruption may also select particular officials, whether customs officers, police officers, judges, building inspectors, court officials, or magistrates, depending upon whether the victim survey wishes to find out about particular groups of public officials.

380. Where survey questionnaires need to be translated, this must be done particularly carefully in order to preserve the meaning of terms in local languages. Particular caution should be exercised when terms in the same language are used in different cultural contexts. As set out in section V.C of the Manual, qualified professional translators should be engaged in order to ensure that translated versions are as accurate as possible. An independent back-translation into the original language is also considered necessary to ensure that the meaning of concepts is unambiguous and that the meaning of the survey question is rigorously retained.

381. In summary, the wording of crime victim survey questionnaires should follow standard event definitions that include standardized recall time periods, core offence elements and equivalent counting of incidents and treatment of attempts.

(b) Sequence of questions and recall period

382. As set out in chapter III of the Manual, a major source of error in crime victim surveys is the problem of non-recall and telescoping – the tendency of respondents to place an event within the recall period when it in fact occurred before the recall period (forward telescoping) or to mentally place an event that did occur within the recall period at an earlier point in time (backward telescoping). These effects are shown in Table 10:[57]

Table 10: Memory effects in victimization surveys

		True categorization	
		Victim in recall period	Not a victim in recall period
Survey estimate	Victim in recall period	Correct recall	Forward telescoping
			Exaggeration or lying
	Not a victim in recall period	Non-recall, lying, underestimation of situation	Correct recall
		Backward telescoping	

383. For the purposes of cross-national comparison, it is desirable to focus on the one-year prevalence rates as the main result reported from crime victim surveys. When doing so, however, it is important to ensure that the sequence of screener questions used in each of the surveys being compared is equivalent. Omission of the 'five-year' victimization screening question in a 1992 crime victim survey in Japan, for example, resulted in one-year victimization rates three times those found by the same survey in 1989.[58] This was likely due to the telescoping effect. Adhering to a set sequence of screener questions is key to minimizing recall error, particularly in the form of backward or forward telescoping, and a crucial variable when comparing cross-national survey results.

384. Completion of all screener questions first, before moving on to detailed questions, is also important in preventing respondents with many incidents of victimization from avoiding positive responses to an initial question about victimization in order to prevent further questioning about details. Indeed,

57 Table derived from Schneider, A.L., *Methodological problems in victim surveys and their implications for research in victimology*. Journal of Criminal Law and Criminology, Vol 72, No. 2, 1981.

58 Oda, 1993.

more generally, the interviewer must build rapport with the respondent prior to asking questions that may be particularly sensitive or personal. Perhaps the most widely known error in victimization surveys is the relationship between failure to recall incidents of assault and the relationship of the victim to the offender. Whilst it is known that approximately half of assaults involve a known offender, victimization which involved family members, persons who knew each other or juveniles is not as likely to be reported as where the perpetrator is a stranger.[59] Sensitivity in this respect may vary from country to country. As a result, cross-national comparison of crimes such as assault perpetrated by a spouse/partner or family member is especially difficult. If such results are desired, a very detailed and possibly standardized question sequence must be rigorously adhered to.

385. Question sequence is a further factor that may also affect comparability. Crime victim surveys almost always begin with the least emotive crimes, such as auto theft and household crimes before moving to personal crimes, such as assault and sexual assault. This gives the interviewer time to gain a measure of the respondent's trust, giving the respondent time to become accustomed to speaking about unpleasant experiences. It can be expected that surveys asking sensitive question at the beginning may capture less incidents than those in which the interviewer has the time to gain the confidence of the respondent.

(iii) Sample design

386. Sample design consists of a number of elements: the population used to represent the target population (the sample frame), the number of respondents chosen, and the method of selection of respondents. When it comes to cross-national comparability, each of these elements plays an important role.

(a) Sample frame

387. In general, two samples, each from a different country, may be considered 'comparable' if they are reasonably equivalent in the extent to which they represent the target population. Where this is the case, any differences in results between the two surveys can confidently be attributed to 'real' differences between the target populations as opposed to arising from bias introduced by one sample or the other.

388. One major difficulty in cross-national comparisons of crime victim survey data is that results are frequently presented simply as quantitative data, with little or no information about the extent to which the sample frame used is representative of the country population as a whole. Indeed, the relationship between survey sample frame, representativeness and comparability is not necessarily straightforward. Table 11 shows a number of possible such situations.

Table 11: Sample design and comparability challenges

Country characteristics	Target population	Comparability
Significant population of hard to reach groups (such as internally displaced persons, ethnic minorities)	Defined to include hard to reach groups	Legitimate comparability vis-à-vis other country populations but potential comparability difficulties due to greater non-response or non-random sampling
	Defined to exclude hard to reach groups	Prima facie 'methodological' comparability with surveys in which the sample frame is similarly defined, but low comparability vis-à-vis other country populations
Comparatively small population of hard to reach groups	Defined to exclude hard to reach groups	Prima facie 'methodological' comparability and reasonable comparability to other countries with similar characteristics

389. When comparing survey results between countries, it is important to identify whether each survey sample frame is in fact representative of the whole country population. It must be made clear exactly which sample frames are being compared. The use of a postal address file in a developing coun-

59 Schneider, 1981.

try as a proxy for the entire country population for example, would exclude significant internally displaced and rural populations. The resultant survey may be 'methodologically' comparable with an identical survey carried out in a second country (insofar as the second country sample also excludes such groups), but the serious limitations in comparing results at the country level must be made clear.

(b) Sampling method

390. In addition to decisions concerning the sample frame, choice of sampling method must also be borne in mind when it comes to cross-national comparability. For samples taken using random-digit dialling of telephones or random selection from a telephone book, the primary comparability issue derives from telephone penetration. In particular, the emerging trend among specific population groups – notably young people – to use exclusively mobile phones must be taken into account. In such countries (of which Finland is a good example[60]), the use of fixed telephone lines as a sampling frame introduces a serious problem of under-coverage. Where young people are underrepresented in an original, fixed line, sample, it may be possible to draw an additional sample of persons owning exclusively mobile phones. The two samples must then be combined and re-weighted for age, gender, geographical area and mobile-only ratio in order to restore comparability with (for instance) a country where mobile-only ownership is not an issue.

391. It is important in any registration, telephone or address-based method to understand the coverage of the sample frame with respect to the target population. In principle, a telephone-based sample frame could be comparable with a registration-based sample frame if both represent equivalent coverage of the target population: ie. if the population of persons appearing on the civil register can be expected to be broadly equivalent to the population of persons owning a landline telephone - vis-à-vis experience of and attitude towards crime. Indeed, as discussed earlier, evidence from a comparison of CAPI and CATI surveys suggests that samples drawn in these two ways can be compared cross-nationally with some success, at least in developed countries. In reality, the interview technique, for example telephone or face-to-face, may also affect the sample composition. For example, less educated people are less available to be interviewed by phone than face-to-face. This may generate a bias and produce samples that are not comparable anymore, even though the original lists are. Weighting data is one possible solution.

392. Comparing samples from developing countries may be more problematic. Greater numbers of persons are likely to be missing from civil registration lists. Postal address files are also more likely to be incomplete, particularly in rural areas or unregulated municipal suburbs with informal, self-constructed housing. In order for surveys in developing countries to be comparable with other countries, it is likely that a method such as the random walk procedure from a defined starting point must be employed to select household respondents. Such a method stands a better chance of producing a representative sample of the target population than reliance upon existing administrative lists.

393. Sampling designs may also make use of clustering and stratification. The aim of cluster sampling is usually to make data collection easier through the selection of a reduced number of data collection points ('clusters') where the population is expected to be relatively homogenous. The aim of stratified sampling is to increase the precision of estimates by dividing the sample frame into categories that are expected to show some similarity (such as urban/rural). In so far as stratified sampling aims to improve the overall precision of the sample, it will usually have no effect per se on the comparability of the survey. For example, an un-stratified random telephone survey in one country could be compared with a stratified random telephone survey in another country (given the same degree of telephone penetration in each). The confidence limits attached to results from each may differ. However, this only affects survey comparability insofar as such limits must be taken into account when considering the results side by side.

60 According to the Statistical Yearbook of Finland, in 2006 92% of Finish households had at least one mobile phone and landline was in 47% of households. This represented an increase of 10% in mobile phones and 27% in landlines since 2001.

(c) Sample size

394. When comparing results to individual questions from different cross-national surveys, it is important that results to each question compared from all surveys are deemed representative of the relevant target population or sub-population. Two surveys may be able to generate statistically relevant figures for overall victimization, however, results for a particular low-prevalence crime may not have achieved statistical significance. In particular, when it comes to specific victim groups – such as women or ethnic minorities – it is possible that both sample designs do not have the necessary statistical power to produce significant results for these groups. Where this is the case, the comparison of results becomes meaningless.

395. A further important point is that sample size may have a significant effect on confidence limits. In general, the larger the sample, the greater the accuracy of the estimate and the smaller the confidence limits. Confidence intervals are an important factor to be taken into account in the interpretation of comparisons. Overlapping confidence intervals, for example, indicate that a difference in estimates between two countries is not statistically significant.

396. In summary, sample design is crucial to the cross-national comparability of crime victim surveys. Broadly speaking, two samples may be considered 'comparable' if they are reasonably equivalent in the extent to which they represent their target populations. Where a sample is not representative of the whole country population, this must be made very clear in any attempt to carry out cross-national comparisons.

(iv) Non-response

397. Closely related to the issue of sample design is the problem of survey non-response. Survey non-response is a problem due to the increased potential for bias that it introduces. Low response rates raise the issue as to how far respondents who are successfully interviewed differ from those who refuse to co-operate or who cannot be reached.

398. The issue is not straightforward. Although the possibility that low response rates introduce bias in victimization counts is real, the effect could operate in either of two directions. Where low response is due to high rates of non-contact, people may be omitted who are more liable to victimization because they are residentially more unstable or simply away from home more. Victims could therefore be under-represented in the sample, with the effect that victimization rates in countries where non-contact is high are underestimated. Non-contact may be a particular problem in developing countries where socially marginalised groups, especially those residing in informal housing may be difficult to contact for face to face interviews. This factor may contribute to underestimation of victimization rates in developing countries.[61]

399. On the other hand, the concern is often raised that refusals to cooperate give rise to the selection of respondents who 'have more to say', with the result that victimization rates are said to be overestimated in countries with low response rates due to non-cooperation. At least one study has shown that there is no statistical relationship in developed countries between the number of attempts needed to reach a respondent and overall victimization rates.[62] This suggests – at least insofar as initial refusal may be taken as a proxy for eventual refusal – that this effect may not have a serious impact on cross-national comparability.

400. However, non-response remains a tricky problem for comparing victim surveys results. By definition, there is almost no way of telling whether non-respondents have different experiences of and attitudes towards crime than respondents, potentially introducing bias into the sample. Where samples in countries suffer from significant non-response (particularly non-contact), the possibility of bias is increased. As a result, the confidence with which cross-national comparisons can be made is significantly reduced.

61 Kury, Obergfell-Fuchs, Wurger, 2001.

62 Gallup, 2005.

401. Where surveys are desired to be internationally comparable, it is important, as with the survey mode, that the standard of data collection work is as similar (and high) as possible. This includes the efforts made to reduce non-contact. Enhancement of response rates may be achieved with thorough preparation, careful selection of interviewers and the consistent use of letters of introduction and call-backs.

(v) Timing of interview

402. The time of year in which crime victim surveys are undertaken may have an effect on comparability due to both its impact on the availability of respondents and the tendency to telescope events during recall. Interviewing during the summer months, for example, may lead to increased non-response due to persons being away from home, either on holiday, travelling or staying with relatives. Any increase in the level of non-response will have implications regarding potential bias in the survey estimates. When comparing across countries, timing of the interview should also be taken into account. For example, two surveys carried out at the same time in different hemispheres may not be comparable because of the different season in which they were conducted in the two countries.

403. With respect to recall and telescoping, interviewing in the latter half of a year, when asking respondents to recall events in the previous *calendar* year, may lead to greater memory decay and more forward time-telescoping. Where surveys that have been carried out at different times in the year are compared, this may lead to reduced comparability of one-year victimization rates, although researchers report, at least in respect of developed countries, that there is no concrete evidence of major distortions due to memory decay and/or forward time telescoping.[63] Comparability may be higher if surveys ask about incidents which occurred in the 12 months preceding the survey. The possibility of bias may nonetheless be minimised by instructing interviewers to assist respondents in accurately placing the time of events, such as with reference to significant times of year, including festivals, holidays or relevant personal life events.

(vi) Content

404. Crime incidents included in victim surveys are generally understood in most cultures. The wording of questions reflects definitions of behaviours related to common offences, but using colloquial language. A core group of offences can be found in most surveys, typically related to theft and assault. Various definitions may apply. A number of key issues related to non-crime content may also be identified.

405. If comparability is desirable, the wording used should, subject to limited exceptions where necessary for cultural or social reasons, be formed in very simple language that does not allow for ambiguity in different contexts and/or languages.

406. This is not to say that all crime victim survey questionnaires should be identical. It is possible to consider a 'module' containing the issues for which comparability is sought, while additional questions may easily be added according to local needs by way of additional modules.

407. It may be desirable for a national victim survey to include all key content elements, in view of increasing its cross-national comparability. The essence of comparability of victim surveys is that standard indicators may be calculated and presented. The content of the questionnaire is crucial to ensuring that sufficient data for such indicators is collected and every effort should be made to ensure that crime victim surveys contain these standard minimum question elements.

Summary – Steps towards enhancing comparability

408. As the preceding discussion has demonstrated, achieving full cross-national comparability between crime victim surveys is no easy task. Crime victim surveys are usually conceived locally, with

63 Van Dijk, Van Kesteren, Smit; 2008.

national needs often (and somewhat understandably) prioritized over international comparability. Moreover, as the state of the art develops and survey questions evolve, the standard which crime victim surveys must achieve for comparability amongst each other can sometimes seem like a constantly shifting goal.

409. Making survey design adjustments for cross-national comparability should not prevent national goals for a victim survey from being met. Rather, elements of cross-national comparability should fit with, and indeed enhance, the effectiveness of a national crime victim survey.

410. It is possible to identify a number of key areas in which a relatively small investment has the potential to produce significant returns, both in terms of cross-national comparability and the technical standard of the victim survey in its own right.

411. Finally, it should be noted that comparability may also be obtained if presentation of the results provides adequate information on the context in which data were collected, including all details and metadata which may facilitate understanding by the reader.

J. Data collection and capture operations

412. This section reviews the various modes of interview and methods for entering survey information that can be used in victimization surveys. The selection of the mode or modes of interview and information capture methods for any survey will depend on a number of considerations, including societal characteristics, available funds, and the type of information being collected. The section includes a summary of the advantages and disadvantages of the various survey modes.

413. Of the 58 current surveys included in the 2005 UNODC-UNECE victimization survey inventory, 38 (66%) were conducted fully or partially using face-to-face interviews (see Table 12). Some of the surveys utilized more than one survey mode. Face-to-face (or 'in person') interview remain the most common mode and of the 43 surveys with national coverage in the UNODC-UNECE inventory, 21 (49%) were conducted solely using face-to-face interviews at the respondent's home, either using paper (15 surveys) and / or electronic questionnaires (12 surveys). Additionally, in eight of the remaining surveys (19%), face-to-face interviews were used in combination with other modes.

414. Telephone interviews are also a popular survey mode, used in 16 surveys (28% of the total) as the only survey mode and in five surveys (9%) in combination with other modes, mostly face-to-face interview.

415. Four surveys used electronic self completion, always combined with some form of face-to-face interview. Postal questionnaires were used in three surveys, and 'other self completion' in two other surveys (including for instance school surveys).

416. No country reported using internet based victimization surveys at the time that the inventory was created, but this is a mode that some countries are beginning to experiment with and which is likely to become more common in the future. Although a self-completion method, a properly programmed online survey can provide some of the more complex routing and detailed probing that would in the past have only been possible using a face-to-face method.

Table 12: Survey mode for victimization surveys in the UNODC-UNECE inventory, 2005

	Number of surveys where the survey mode was used…			
Survey mode:	as the only survey mode:	together with other modes:	Total	% of the total no. of surveys*
Face to face interviews at the respondent's home using paper questionnaire - PAPI	15	7	22	38%
Face to face interviews at the respondent's home using electronic questionnaire - CAPI	7	7	14	24%
Face to face interviews elsewhere (place of work or study, etc.) - PAPI	1	1	2	3%
Telephone interviews - CATI	16	4	20	34%
Self-administered questionnaires -CASI	0	5	5	9%
Self-administered questionnaires (Postal questionnaire)	2	2	4	7%
Self-administered questionnaires (other)	2	2	4	7%
Combinations or various modes	8			
Total no. of surveys:	58			

* The total of the values for this column is higher than 100 because in 15 surveys multiple modes were used.

417. Before the introduction of computer assisted interviewing technology, the three modes of interview – face-to-face, telephone, and mail surveys – were all accomplished by either an interviewer or respondent filling answers to questions on a paper questionnaire. Technology has enhanced the survey operation and expanded the means for conducting surveys. Mail surveys are no longer the sole means for conducting a self response survey, as a variety of methods are now available to enable respondents to provide information without an interviewer actually reading the questions.

418. Personal visit and telephone interviews can be conducted using paper and pencil questionnaires or with computer assisted technology, which involves entering responses directly into a computer. Some forms of self administered surveys are also enabled by computer technology. While computer assisted personal interviews (CAPI) and computer assisted telephone interviews (CATI) are increasingly used in survey operations, paper and pencil instruments are still widely used. Self response surveys, which include mail out/mail back surveys, can now be conducted using paper and pencil, or using computer or telephone technology. In general, self response surveys (as opposed to face-to-face surveys with an element which requires self-completion) are not recommended for victimization surveys. However, internet technology is now able to provide alternative approaches to self-completion surveys which can build in some of the structure and checks inherent in a face-to-face method and so may provide greater opportunities for this mode, although at the time the inventory was created no country had followed this path.

419. A number of factors impact the choice of interview mode for any survey, including cost, availability of technology and cultural conditions in the nation or region. Each of the various modes and methods has advantages and disadvantages, as well as different costs. A cost-benefit assessment of the different modes tends to be the main driver in choice of mode, with consequent trade-offs in terms of quality. Developers of surveys must determine which mode and data capture method is appropriate for their purposes and must understand the impact that the various modes and methods can have on the resulting data and costs of enumeration. In addition, the various modes and methods will impact upon the interviewers and respondents and their interactions in ways that can affect the quality and accuracy

of the data being obtained. The circumstances within a nation or region may impose constraints on the suitability or utility of the various interview modes. These constraints may also change over time, dictating whether a particular survey mode may be viable for use.

420. This section briefly reviews each of the modes of interview and data capture methods and discusses the advantages and disadvantages of each.

Survey modes

Face-to-face interviews

421. Face-to-face interviews, also called 'in person' interviews, are generally done in surveys that utilize an address-based sample. In countries or regions in which most households do not have telephones, it is likely that face-to-face interviewing will be the mode of choice for contacting respondents. In many countries in which telephone coverage is extremely high, face-to-face interviews may have been supplanted by telephone interviews because of the high cost of travelling to conduct the interviews in person. However, telephone coverage can also present its own issues (see box 30).

422. Face-to-face interviews have a number of advantages over other modes. Face-to-face interviews have been shown to produce higher response rates than other modes of interview. Personal contact between interviewer and respondent is believed to build a rapport and therefore increase the likelihood that the respondent will participate in the survey. This benefits victimization surveys which require a large number of interviews because of the relative rarity of the events being measured. This personal contact also increases the likelihood that respondents answer the complete questionnaire and do not drop out of the survey half-way through. Furthermore, the interviewer can determine that the person being interviewed is actually the selected respondent.

423. Personal visit interviews have other advantages over telephone and mail surveys. Personal visit interviews allow interviewers to use materials such as information cards and other interviewing aids to help respondents understand concepts and the information they are being asked to provide. As a result, face-to-face interviews can be longer and more complex than telephone interviews. Interviewers can collect information about the respondent's living quarters and their neighbourhood without having to ask the respondent. This reduces the burden on the respondent and increases the accuracy of such information by eliminating any biases the respondent may have about these characteristics, resulting in face-to-face interviews being less tiring for both the respondent or the interviewer. Finally, in face-to-face interviews respondents may refer to household records for information more easily than in telephone interviews.

424. Face-to-face interviews may allow for more control of the interview environment than telephone interviews. For example, the interviewer can determine who else may be present during the interview and ask the respondent if he/she wants to go to a different location or conduct the interview at another time to ensure that the interview is conducted privately. In telephone surveys, it can be difficult or impossible to determine who is present with the respondent during the interview.

425. Face-to-face interviews are expensive, however, because of the time and costs associated with interviewers travelling to and from the respondent's home or other location to conduct the interview. Some surveys that use face-to-face interviews therefore cluster sample addresses to decrease these travel costs. Clustering respondents decreases the travel time between interviews. It does, however, impact variances associated with estimates. These effects can be accounted for in the estimation process. Often this clustering is one component of a multistage stratified sampling process.

426. In addition to its higher cost, face-to-face interviewing has other disadvantages in comparison with telephone interviewing. Interviewers work with less supervision than they might if they conducted telephone interviews from a central facility. Generally, interviewers who do personal visit interviews are observed for only a small fraction of the interviews they conduct. While other forms of quality control can be used to ensure the accuracy of the responses, the interviewer's manner and interactions with respondents may have a major impact upon the survey results.

427. Cultural and social conditions may also constrain the use of face-to-face interviewing. For example, in small communities, interviewers may know respondents; a situation that can affect the likelihood of respondents participating or providing information about their experiences. This may also be the case if minority interviewers are recruited to interview respondents from relatively small minority populations. Additionally, interviewers may influence respondents' responses to survey questions by their actions or the attitudes they present to respondents during the interview, thereby introducing bias into the survey results. This potential bias can be present for telephone interviews as well, even if the different communication mode would decrease the biased effect.

428. It also may be difficult to find interviewers willing to travel to some locations, especially after dark, because of concerns for their safety. Safety requirements in some areas require interviewers to travel in pairs, increasing costs of enumeration; this may be of special concern for surveys on violence against women which generally require female interviewers. When interviewing minorities, interviewers may also need to conduct interviews in areas which they feel are unsafe and they may be reluctant to carry expensive equipment such as laptop computers for fear of mugging.

429. Some respondents may be more reluctant to provide information on sensitive subjects in a face-to-face interview than they might be in a different mode of interview because telephone interviews, for example, are less personal and therefore afford respondents more anonymity than do face-to-face interviews.

430. While historically, face-to-face interviewing has been associated with higher participation rates, it is possible that changes in society are making people more reluctant to admit a stranger into their home to conduct an interview, even if they have credentials. This may decrease the advantage of a personal visit. However, equally in some societies the volume of market research and other telephone contact can make people reluctant to participate in telephone interviews.

Telephone interviews

431. Telephone interviews have become a popular survey mode for countries and regions in which telephone coverage is widespread. They may be conducted from the interviewers' homes, or from centralized telephone call centres designed for this purpose. Telephone interviews may sometimes be considered as an alternative to face-to-face interviews because of their lower cost.

432. Interviewers can make several attempts to contact difficult to reach respondents without incurring repeated travel costs associated with repeated trips to the respondent's home. Telephone interviewing may facilitate more flexibility in arranging interview times than face-to-face interviews and allow for questionnaires to be completed across more than one interview.

433. Telephone interviews can provide respondents with more anonymity than face-to-face interviews, and may, in some circumstances, be better suited to collecting sensitive information. Telephone interviews also afford interviewers a greater degree of safety since they do not have to travel to possibly dangerous areas or at night to conduct the interviews. Telephone interviews may also provide more safety for some respondents by enabling interviews when they know no other people are around, although this requires additional management and cost. This can however be a useful feature for surveys addressing such subjects as violence against women, for which respondent safety is of special concern.

434. If conducted from a centralized telephone centre, telephone interviewing enables closer supervision of interviewers and monitoring of interviews than does personal visit interviewing. Supervision can be further facilitated if interviewing is done using computer assisted telephone interviewing (CATI). Most CATI software packages incorporate monitoring functions that allow supervisors to observe live cases being interviewed. This affords immediate feedback to interviewers to correct any errors or flaws in their interviewing skills.

435. A telephone sampling frame, such as random-digit-dialing (RDD) eliminates the requirement to cluster sample cases to reduce costs; a procedure that increases the variances around survey estimates.

436. There are disadvantages associated with telephone interviewing. Unlike personal visit interviews, it is more difficult for an interviewer to determine the actual identity of the person to whom he/she is speaking. Respondents who do not want to participate can tell the interviewer that they are not at home or not available.

437. Surveys conducted by telephone can be conducted using random-digit-dialing or by utilizing sampling frames of lists of telephone numbers. In nations or regions in which a substantial proportion of the population does not have a telephone, the telephone sampling frame will not be representative of the population. In such cases, the resulting sample will have a bias.

438. Telephone surveys generally cannot be as long or as complex as personal visit interviews because both respondents and interviewers tire more quickly. CATI has alleviated some of this fatigue difference to some degree, but telephone interviews do not allow the use of visual aids possible in personal visit interviews to help explain complex concepts or reduce the burden on the respondent (see paragraph 430).

439. The increasing use of mobile phones is beginning to impact telephone interviewing in some nations. Mobile phones present problems both in developing a telephone sampling frame and for conducting telephone interviews. As the number of mobile phones increases, telephone sampling frames may not be capable to distinguish land line from mobile phones. This increases the number of calls required to obtain interviews and also complicates the weighting algorithms used to make the data representative of the population. Some nations do not allow interviewing to be conducted using mobile phones because they are not secure and because they can incur costs to respondents for their use during the interview.

440. In recent years, many countries have experienced a growth in the use of devices and services that enable people to restrict telephone access to their households. Services such as caller ID and call blocking along with call screening devices can make it difficult for interviewers to contact prospective respondents and obtain interviews. This is of particular concern for telephone-based sampling frames such as RDD.

BOX 29: THE SCOTTISH VICTIMIZATION SURVEY EXPERIENCE

Prior to 2004, the Scottish Victimization Survey was conducted every three years as in- person interviews at 5,000 households. The 2004 iteration of the survey involved moving to a larger, telephone based sample in order to produce more robust victimization estimates and conduct the survey more frequently without drastically increasing the survey's budget. In order to evaluate the transition to a telephone survey, the 2004 survey included a parallel sample of 3,000 households that were drawn from an address-based sampling frame and were interviewed by personal visit. The target sample for the telephone sample was 27,000 households. The response rates for the telephone survey proved to be much lower than that of the face-to-face survey (49% and 67% respectively). The main reason for the lower response rate in the telephone survey is a higher refusal rate – 40% of eligible respondents refuse making the telephone refusal rate 140% higher than the face-to-face survey. Because of the differences in response, and especially the low response rate for the telephone sample, a non-response bias analysis was conducted. This analysis found that the telephone survey appeared to differ from all comparator sources of data to an extent that could not be explained by sampling error. The report concluded that the telephone survey appears to be systematically biased and this bias appeared to be against people who have not experienced any form of victimization. There was therefore a risk that the telephone survey would overstate victimization estimates. The final report concluded that there was not sufficient evidence to conclude that the telephone survey accurately measured victimization. As a result of this analysis, Scotland felt unable to use the results from the telephone survey because they did not have sufficient confidence that they produced credible estimates of victimization. Instead, the telephone methodology was rejected as insufficiently reliable and Scotland has now re-run the victims survey using a face-to-face method similar to that used in the Scottish Crime Surveys previously.

BOX 30: THE ISTAT CATI VICTIMIZATION SURVEYS

Istat's experience of household social surveys began in 1987 with a first cycle of multipurpose studies. Subsequently, in 1993, the institute's researchers planned a system of social surveys: the Multipurpose System. This included an annual Multipurpose Survey, the aim of which is to investigate several aspects of household social life, and 5-year periodical thematic surveys alternating yearly in order to study particular aspects in greater depth: health conditions, leisure time and culture, use of time, family member conditions, etc. All these surveys were – and still are – carried out by means of a face-to-face interviewing technique. The experience of PAPI surveys was well established in the institute until the 1990s, when the need to study victimization required a re-thinking of the mode of interviewing, because of the presence of sensitive questions, specifically those dealing with sexual harassment and rape, threats and assaults, but also, for instance, the security systems adopted by households.

Considering that Istat face-to-face interviews are carried out by a municipality employee and that in Italy many municipalities are quite 'small' with a high chance that people knows each other, researchers decided to move to telephone surveys. The main reason was to avoid the risk that face-to-face interviews could be affected by shame or feelings of embarrassment, with the consequence of less disclosure and incident underestimation. The telephone mode is very useful when carrying on a difficult interview because it enables the victim to interrupt the call and to make an appointment at any time, if the interviewee doesn't feel safe or he/she is too emotionally involved. The use of the telephone mode as guarantee of anonymity is also stressed by other experiences, as those of shelters and helplines, where the telephone mode is used to make first contact with the victim.

Thereby, in 1996, Istat had its first telephone interview experience with the victimization pilot survey. The CATI mode was characterised by a high-quality data approach; indeed Istat developed and improved many tools to monitor quality at each stage of the survey and, due to the fact that the data collection phase is centralized, greater attention was paid to interviewer training and to the daily monitoring process. Moreover, comparing the victimization estimates with those resulting from other interviewing modes (face-to-face and self-completion questionnaire) carried out by Istat showed that significant differences did not emerge.

This first encouraging CATI experience led to the final Victimization survey that has been in 1997/98 for the first time, and then repeated successfully in the editions of 2002 and 2008.

Self administered interviews

441. Self administered questionnaires are completed by the respondents themselves rather than by an interviewer. The most common form of self administered questionnaire is the mail out/mail back questionnaire. Such surveys are typically less expensive than face-to-face and telephone interviews, but have some serious drawbacks, which are discussed below. In general, this form of survey method is not recommended for victimization surveys.

442. In addition to mail questionnaires, some other forms of self administered surveys have been developed in recent years that take advantage of advances in computer and telephone technology, in the form of several types of computer-assisted self interview (CASI). One type is audio self-completed personal interview (ACASI), in which a respondent is given the opportunity to complete the computerized questionnaire themselves during a personal interview. Another is the telephone equivalent to ACASI, in which an automated telephone recording prompts respondents to enter responses by using the telephone keypad or by saying answers aloud. Internet based surveys are another form of self completion survey, and can vary from an internet version of a simple mail back questionnaire to a heavily structured and controlled self-completion form as might be use in a face-to-face CASI survey.

443. Questionnaires that respondents complete themselves have the advantage that they afford privacy and anonymity to a degree not possible with face-to-face or telephone interviews. Respondents do not have to actually relate sensitive information to another person but can enter it on the form themselves. For victimization surveys, this can therefore provide a better vehicle for measuring such crimes as domestic violence or sexual assault. The British Crime Survey incorporates a CASI component within its face-to-face methodology to provide estimates of violence against women. In the BCS experience, the estimates of domestic violence from the self administered section of the questionnaire have been up to five times higher than the estimates of this offence using CAPI.

444. Self administered questionnaires must be designed to be easily understood by respondents who may not be familiar with the concepts the survey is attempting to convey or with questionnaire structures. For this reason, they cannot be as complex as surveys that utilize trained interviewers. For ACASI surveys the interviewer is present during the interview to help the respondent if necessary, but with mail surveys, respondents have no resource to help them complete the questionnaire. Therefore, mail surveys generally have higher item non-response and more inappropriate responses than do interviewer conducted surveys.

445. Mail survey questionnaires also have the disadvantage of allowing respondents greater opportunity to opt out of participation. Typically response rates to mail surveys are extremely low, and therefore require large numbers of questionnaires to be sent out in order to obtain enough responses to enable analyses. For victimization surveys, which attempt to measure relatively rare events, this can be a formidable problem. Additionally, the low response rates are highly likely to create biased samples if some sub-populations are less responsive than others.

446. Another disadvantage of mail surveys can be the length of time they take to conduct. Most often, multiple mailings must be made to prospective respondents to persuade them to participate, with a few weeks in between mailings. This can be alleviated in some circumstances by allowing respondents to fax the questionnaires rather than mailing them back. Another new approach is that recipients of mail surveys are given the option, instead of mailing back the questionnaire, to complete it online (the respondents can be provided with individual access codes for logging on to the web survey in the mailing).

Internet based questionnaires

447. With the growth of the web, some surveys (but currently none of the national victimization surveys included in the UNODC-UNECE inventory) are conducted using questionnaires that respondents can access by visiting a website. At present, internet access is not widespread enough in any nation to enable the internet to be used to design a sampling frame. Therefore, internet based questionnaires are viable as part of a mixed mode framework, but not as the sole means of conducting a survey that will produce representative, unbiased estimates. This will not be possible until the ownership of personal computers is as widespread as that of telephones.

448. It is worth recognizing that internet based questionnaires may be particularly useful when surveying specific target groups, such as businesses (see Box 31).

BOX 31: THE ITALIAN BUSINESS VICTIMISATION SURVEY

The first Italian business victimization survey was conducted in 2008 with a sample of 83,136 business premises using an internet-based questionnaire. The preference for this method and its usefulness can be specified with reference to the following aspects:

- it allowed for a larger sample: the use of the internet based questionnaire, due mainly to the reduced costs, made it possible to design a larger sample to be representative at provincial level for the southern regions of Italy and at regional level for the rest of the country;

- it provided higher response quality: since businesses could respond to the questionnaire at any time, either at the workplace or at home, even with several interruptions, they could also respond to the more specific questions (i.e. insurance costs, crime prevention costs etc.) for which detailed data were requested;

- it emphasized respect of the respondent's privacy: the fact that there was no direct interaction between interviewer and interviewed was particularly important with reference to the questions aimed at collecting data on phenomena linked to organized crime such as extortion, racketeering, usury, corruption. Respondents may in fact feel more free to provide sensitive data when there is no possibility of judgment on the part of the interviewer.

Mixed mode interviewing

449. Some nations have begun combining different modes to conduct victimization surveys to take advantage of the benefits they offer as well as to reduce the disadvantages of traditional interview modes. As described above, to offset the reluctance of respondents to provide information about sexual

assault and domestic violence the British Crime Survey combines a face-to-face CAPI interview covering a broad range of crimes (including domestic violence) followed by a self completion section (CASI) which covers sensitive topics including domestic violence, sexual assaults and illicit drug use. Currently the self completion section is limited to people age 16-69. The British Crime Survey finds levels of domestic violence five times higher in the self completion section than in the face to face section.

450. If both the sampled person's address and telephone number are available when the sampling frame is designed, a survey could, for example, require telephone interviews for households with telephones and face-to-face interviews for households without telephone access. The increasing use of the internet may provide opportunities to develop a mixed-mode approach using a combination of face-to-face and internet completion, for example.

451. Using multiple modes may result in improved response rates. Respondents who cannot be contacted by one method may be reachable by another; thereby increasing their likelihood of participation in the survey. However, as in the case of the Scottish Victimization survey discussed in the box above, the interview mode can have an effect on the results.

Summary of survey mode advantages and disadvantages

452. Face-to-face interviews:
Advantages:

- Positive identification of respondents
- Possible higher response rates
- Possible better rapport between interviewer and respondent
- Enables use of interviewing aids such as information cards
- Interviewer can obtain information about housing unit and neighborhood by observation
- Enables use of longer, more complex questionnaires
- May enable more privacy than other modes

Disadvantages:

- Is more expensive than other modes of data collection
- May increase variances around estimates if sample is clustered to reduce costs
- Repeated attempts to contact respondents can be expensive
- May afford less supervision of interviewers than telephone interviewing
- Fears for interviewer safety in potentially dangerous survey areas
- Concerns for privacy may result in lower response rates in some areas

453. Telephone interviews:
Advantages:

- Less expensive than face-to-face interviewing
- Enables repeated attempts to contact respondents at lower cost
- Affords greater safety for interviewers
- If conducted from centralized facilities, enables greater supervision of interviewers
- Affords greater anonymity which may encourage reporting on sensitive subjects
- Eliminates need to cluster sample to reduce enumeration costs
- May enable more flexibility in arranging interview times

Disadvantages:

- More difficult to determine identity of respondent
- Requires high telephone saturation nationwide or in region to avoid creating a biased sampling frame
- Cannot be as long or complex as face-to-face interviews
- Cannot use visual aids in conducting interview

- Increased use of mobile phones may create problems for creating sampling frames and conducting interviews
- Increased use of technology such as caller ID and call blocking may inhibit ability to contact respondents

454. Self administered surveys

Advantages:

- Mail out/mail back surveys are typically less expensive than other survey modes
- Affords more privacy and anonymity than other modes
- May facilitate asking more sensitive questions

Disadvantages:

- Must be simpler in construction and content
- Mail out/mail back surveys typically have very low participation rates which significantly affect the representativeness of the achieved sample
- Mail out/mail back surveys require extensive enumeration period

455. Internet based questionnaires

Advantages:

- Could reduce costs of processing data
- Afford more privacy and anonymity
- May facilitate asking more sensitive questions
- Can allow for more detailed questions than shorter telephone surveys

Disadvantages:

- Requires high internet saturation nationwide or in region to avoid creating a biased sampling frame
- Not yet a viable option unless incorporated in a mixed mode configuration

456. Mixed mode interviewing

Advantages:

- May reduce interviewing costs
- Can use modes that afford privacy or anonymity to facilitate asking sensitive questions
- Can improve response rates

Disadvantages:

- Use may be constrained by available resources or other considerations

Methods of data capture

457. There are a variety of options for actually recording the information provided by respondents and transferring that information from the questionnaire to computer files. Paper and pencil and mail in/mail back questionnaires require some procedure for doing this transfer; for computer assisted interviews, this transfer can be done utilizing software incorporated into the questionnaire design.

Paper and pencil

458. Paper and pencil instruments are the traditional means used for conducting surveys. Interviewers (or respondents for self-administered questionnaires) read questions and enter responses on printed forms. The information must then be keyed or otherwise entered into computers to be analysed.

459. Paper and pencil instruments, while still widely used, have been replaced by computer assisted instruments in many nations. Where paper questionnaires are still used, it is because of the costs associated with developing automated instruments and providing computers, usually laptop computers, to the possibly large numbers of interviewers. It may be less expensive to create a paper instrument and

the associated data entry and computer processing protocols than it would be to procure and maintain the equipment and develop the automated questionnaires required for computer assisted interviewing. Sometimes the use of pen and paper questionnaires may be based on security concerns with interviewers being unwilling to carry expensive equipment in areas they feel are unsafe.

460. Paper questionnaires have few, if any advantages over computer instruments if the cost of implementing the computer instrumentation is not an issue. They do have a number of disadvantages. They cannot be as complex as computer instruments. Skip instructions, which guide the interviewer from question to the next appropriate question, must be simple enough for interviewers (or respondents for self-administered questionnaires) to follow without error. Such errors result in asking inappropriate questions, and often, failing to obtain important information about the victimization being discussed.

461. Subsequent to the interview, the questionnaires generally go through a number of processes, such as clerical and computer edits to eliminate inconsistencies and errors on the questionnaires. However, each step can also introduce the possibility of error and lost data. Editors can mistakenly make a correct response incorrect. Paper questionnaires can be misplaced or lost in transmission between interviewer and data processing centre. The information from the paper instrument must then be somehow entered into computers. This can be accomplished in a variety of ways; most commonly by data keying the entries, with the possibility of incorrectly entering data. An alternative means of transferring the data from the paper forms to computer files is by scanning the data from questionnaires specially designed for this purpose.

462. Processing the data from paper questionnaires takes longer and is more costly than processing data from computer instruments because of all the additional steps required after the interview.

Computer assisted interviewing (CAI)

463. Computer assisted personal (CAPI) or telephone (CATI) interviewing is rapidly replacing paper and pencil interviewing because of its many advantages. First, it removes the necessity to move the data from paper forms to computer files, a step that can add errors to the data. Additionally, computer administered questionnaires can be designed to incorporate more complex question sequences than is possible in paper questionnaires and the survey can better utilize information obtained during the interview to direct subsequent questions. In a panel design survey, the computer can be used to recall information provided in an earlier interview.

464. Computer administered surveys can also be designed to reduce interviewer error. In a paper questionnaire, interviewers (or respondents in self-administered surveys) must follow the instructions embedded in the forms to ask the appropriate questions based on responses provided. If the interviewer follows the wrong path, questions that should be asked may be omitted, while inappropriate questions may be asked. Computer administered questionnaires automate this process, forcing the interviewer to the next appropriate question.

465. Computer assisted self administered surveys are also growing in use, and provide similar advantages over paper to CAPI and CATI. The complexity of the instrument is transparent to the respondent and the next appropriate question appears on the screen based on the previous entry.

Selecting the appropriate mode and method of data capture

466. To determine the appropriate choice of survey mode and data capture, the survey developer must evaluate a number of factors, such as cost, availability of resources and trained interviewers, goals of the survey and the possible sources of survey error. There is no one perfect survey mode, although some methods are clearly preferable to others in certain circumstances. In general, mail out/mail back surveys are not suitable for measuring victimization due to the problems with low response and the poor representativeness of the achieved sample.

467. Victimization surveys have some special characteristics that influence the selection process for

survey mode and data capture method. Many of the concepts associated with victimization are complex and may be difficult for respondents to understand. Interviewers trained to explain the purposes of the survey may help respondents to better understand the concepts and survey protocols. Victimization surveys generally measure events that occurred during a specified time window. Interviewers can also assist in insuring that the events being measured actually occurred during the survey's reference period. On the other hand, interviewers may have a negative effect, and filter information provided by respondents or otherwise deter respondents from providing information about sensitive subjects. Likewise, computerized questionnaires can greatly simplify and facilitate the interview, but may in some circumstances, constrain responses and diminish the accuracy of the data.

468. Factors such as the telephone coverage in the nation or area being surveyed, the availability of trained interviewing staffs, and the financial resources available for the survey will also play a large role in the selection process. In addition, the scope of the survey and intended sample size will also be factors in the selection process. For a survey measuring a broad range of offences a telephone or personal visit interview (or, if funds are available, a computer assisted personal visit interview) might be the mode of choice.

469. Similarly, for a survey with a large sample size, telephone interviews might be the affordable option. If utilizing a smaller sample, it might be feasible to conduct the interviews by personal visit. Finally, mixed mode interviewing is becoming more common, and enables the survey designer to take advantage of the strengths of more than one mode and method of data collection.

K. Reference period

470. All retrospective surveys of victimization must define a timeframe for the reporting of crimes experienced by the survey population. This is known as the 'reference period for victimization.' The reference period for victimization can vary from lifetime experience to the last month. The US NCVS methodological notes state that:

> Generally, respondents are able to recall more accurately an event which occurred within three months of the interview rather than one which occurred within six months; they can recall events over a six- month period more accurately than over a 12-month period. However, a shorter reference period would require more field interviews per year, increasing the data collection costs significantly. These increased costs would have to be balanced by cost reductions elsewhere (sample size is often considered). Reducing sample size, however, reduces the precision of estimates of relatively rare crimes.[64]

471. In light of these trade-offs of cost and precision, a reference period of six months is used for the US NCVS. The British Crime Survey uses 12 months, and in Italy the recall period is three years and 12 months. The majority of surveys use a one-year reference period although there are different approaches to achieving this.

472. Regardless, the intended use of the data must be considered before selecting the reference period. Lifetime experience may be important for some forms of victimization (e.g., rare but serious crimes such as sexual abuse) but, in general, a shorter more recent time period will be of more use to give a more up-to-date picture of crime and (when the survey is repeated) to show how crime levels are changing over time. Different types of crime may benefit from different recall periods, although that needs to be balanced with confusion caused for the respondents, and what is considered 'rare' or 'serious' may vary according to the country, culture or over time.

473. Multiple time frames can also be used, which can help balance the need for accurate prevalence levels over a longer time period while providing more details on recent events, including estimates of numbers of incidents. Multiple time frames also allow a more long-term picture of experience (e.g., experience over a lifetime) compared with the greater detail for recent events. Examples of multiple

64 See National Archive of Criminal Justice Data, National Crime Victimization Survey Resource Guide at http://www.icpsr.umich.edu/NACJD/NCVS/.

time frames include the ICVS which uses five years and one year for all crime types and the BCS which uses lifetime (since age 16) and last 12 months for domestic and sexual violence. The Canadian victimization survey also uses mixed reference periods – a rolling 12 months for most crimes, and the last five years for some more sensitive modules. The US NCVS uses a six-month reference period but re-interviews the same people up to seven times and so builds up the reference period by adding across interviews.

474. The use of lifetime experience or 'since age 16' questions have some advantages but can also give rise to issues in interpreting the results. In surveys of violence against women, for example, lifetime experience can be useful as an explanatory variable for levels of fear or concern about crime. However, the results are also equivocal as sometimes lower levels of victimization for older victims could be due to lower levels of violence in the past, a reluctance to disclose events or recall problems due to the greater period of elapsed time.

Definition of reference period

475. In addition to the length of reference period, the definition also needs to be considered. This is a particular issue for a reference period of one year. Some victimization surveys use the 'last calendar year' but others use the 12 months prior to the interview ('last 12 months'). The advantage of the calendar year is that it is clearly defined in the respondent's mind but this can have implications for the timing of the interviews.

476. The reference period should be as close as possible to the date of interview to reduce memory errors. Where the reference period is a calendar year then interviews should take place in the early part of the following year, ideally in the January but this is not always possible so the aim should be to complete interviews by March. A reference period covering the latest 12 months prior to interview allows greater flexibility. Fieldwork can take place at any time of year and can be extended over any time period. Where the time period is extended so that fieldwork takes place over the course of a year or is continuous, the 12 months referenced would then change over the interview period. This introduces some complications in reporting the data.

477. Where the reference period is the 12 months prior to interview, this time period needs further definition. Is it from the day before the interview or the previous 12 calendar months (i.e., does the reference period from an interview on 12 June include incidents in June?). Taking the 12 calendar months makes defining the start of the reference period clearer ('back to June of last year' rather than 'back to 12 June last year') and can also be useful in analysis if a specific time period is required.

478. In 2001 changes were made to the design of the British Crime Survey, including a move from using fixed calendar year reference period to continuous fieldwork with a reference period of the 12 months prior to interview. As part of these design changes a 'spliced design' or 'split-sample design' was carried out during the first six months of 2001 in order to assess the impact of moving to a different reference period on victimization rates.[65] Testing of differences between the two reference periods showed little differences in estimates as a result of this change and where there were differences these were identified as improvements.

Interview techniques to improve recall

479. Methodological considerations include accuracy of recall, 'telescoping' and timing of the interviews. Accuracy of recall is dependent on the salience of an event, the frequency and the time that has elapsed since the event occurred. If crime is an infrequent event it may be more likely to be remembered whereas those who experience crime frequently may have more problems recalling each individual incident (for example, this can be a particular problem with reporting domestic violence). In addition, minor crimes may be easily forgotten irrespective of their frequency. Clearly the time that has elapsed since the crime will affect the likelihood of the respondent remembering it, so the length and

65 See 2001 British Crime Survey (England and Wales) Technical Report available from http://www.data-archive.ac.uk/doc/4786/mrdoc/pdf/4786userguide.pdf.

definition of the reference period is important, as is the timing of interview in relation to the period which it is intended to reference.

480. There are a variety of different strategies which can be used to cope with the problem of locating incidents precisely in time. The use of memory aids can help both to prompt people's memories and to set the crime in the correct time period. For example, an events calendar where birthdays, other anniversaries and important events are identified throughout the reference period can help people think back and anchor their victimization events around more easily remembered life events. Events calendars also help to reduce the problem of 'telescoping' whereby respondents incorrectly identify crimes to have taken part in the reference period – partly through faulty recall and also through trying to 'help' the interview process.

481. Clearly defining the dates of the reference period can help to reduce 'telescoping' (the inclusion of events outside of the reference period). It is also useful to repeat the dates of the reference period at regular intervals during the questions about victimization (e.g. 'during 2007'). Where the reference period is the 12 months prior to interview, the start date must be mentioned in the initial question (in the last 12 months, *that's back to* …) and again this must be repeated at regular intervals. Dates can also be used in more detail. For example, work conducted in Italy suggested that clearly defining dates of individual incidents of crime reduced the telescoping effect.

482. A further technique to reduce the effects of telescoping is to use bounding. This is a technique where some information gathered is used to ensure no duplication of victimizations is counted. One example of bounding includes using two reference periods. The two reference periods can include the interviewer probing if a type of victimization 'ever' happened, followed by questions pertaining to 'the last 12 months.' This strategy means that people are less likely to include in the main reference period incidents that happened prior to the last 12 months. Italy introduced a 3 year period followed by the last 12 months and experimental evidence suggested this reduced the prevalence of crime rates. Additionally, it is possible to begin by asking about the most recent occurrence of a crime, in addition to crimes within a specific reference period, in order that the respondent does not feel that they cannot 'report' crimes which may still be on their mind. For example, where the calendar year is being used, incidents that took place in January of the following year can be mentioned by respondents interviewed in February (but must then be removed from the analysis).

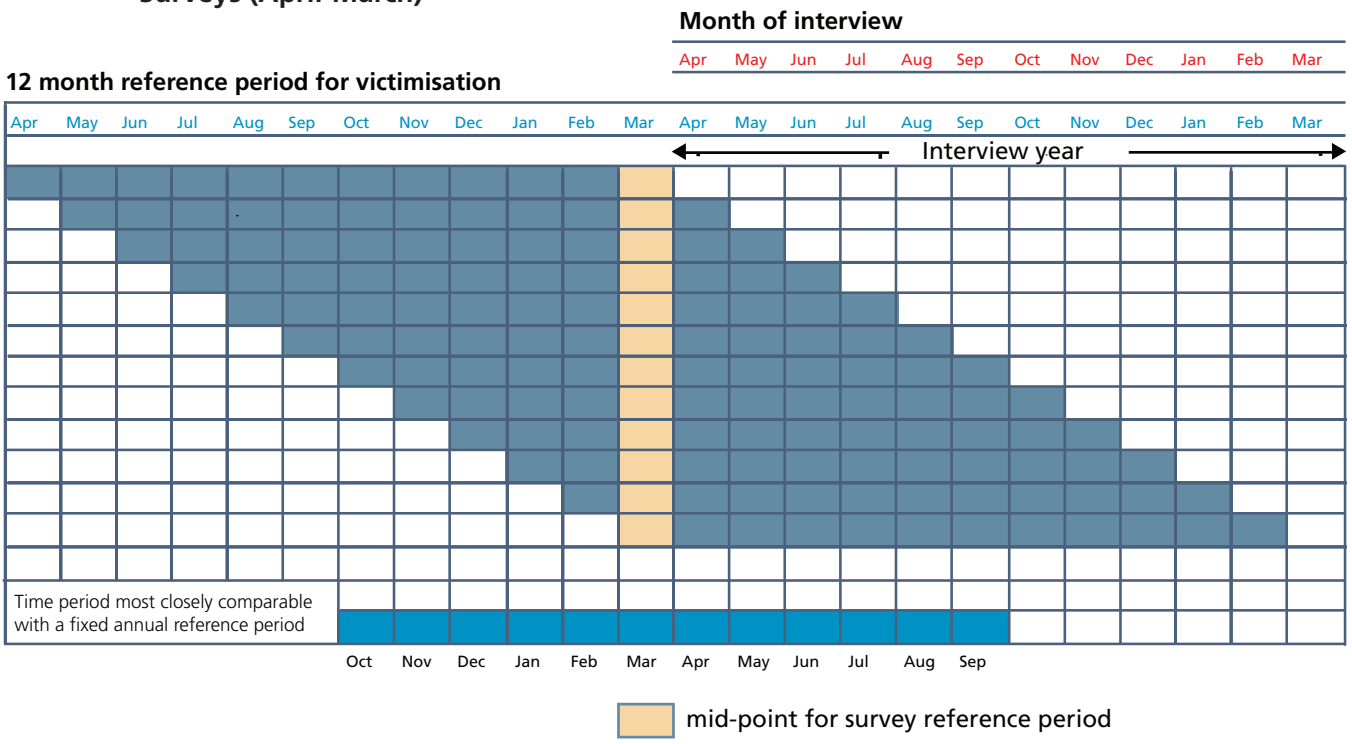
483. It is possible to expand these techniques, for example, in a panel survey situation where the whole of the first interview could be used as a bounding interview and the results excluded from analyses. The US NCVS has until recently used this technique but, of course, this significantly adds to the cost of the survey.

Moving reference periods

484. It is important to note that the reporting of results is more complicated with a moving reference period than with a fixed one. For example a victimization survey with a fixed reference period reports on crime for that period. A survey with a moving reference period (of the 12 months prior to interview) reports on crime which happened to respondents over an elapsed period beginning with 12 months before the *start* of the fieldwork period and ending with twelve months before the *end* of the interview period. In the case of a year of fieldwork this means the reporting period for crime spans 2 years (see Figure 6).

485. This has implications for how the data can be used, for example, it is difficult to identify the effect of any new policy and there is a longer time delay between the crime happening and the results being available. It also has other implications, for example, with regard to how to present the period covered by the survey. It can be difficult to describe results derived from a moving reference period and results are often reported according to the period of interviews rather than by trying to estimate precisely which crimes occur in a particular year. It is important that commissioners of the survey appreciate this element of the design and the implications for reporting.

Figure 6: **Distribution of reference periods in one financial year of British Crime Surveys (April-March)**



BOX 32: SUMMARY - REFERENCE PERIODS

The choice of reference period will largely depend on the frequency and timing of the survey. In all cases, the reference period should be as close as possible to the date of interview. Shorter reference periods tend to produce more accurate estimates, but can add to the cost of the survey since sample sizes need to be larger to provide useful estimates of crimes. Longer reference periods can be useful to estimate lifetime prevalence or particularly rare crimes, although results can sometimes be more complicated to explain.

It is possible to use multiple reference periods in a single survey. For instance, one may ask a series of questions about victimization experiences in the last six months. And in a subsequent section of the survey, questions may be asked regarding victimization experiences during the respondent's lifetime.

Another issue to consider when determining references periods is whether to use a fixed reference period (e.g. calendar year). Practical issues may determine whether to use fixed reference period or a moving period (e.g. during the last 12 months).

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CHAPTER V. QUESTIONNAIRE DESIGN

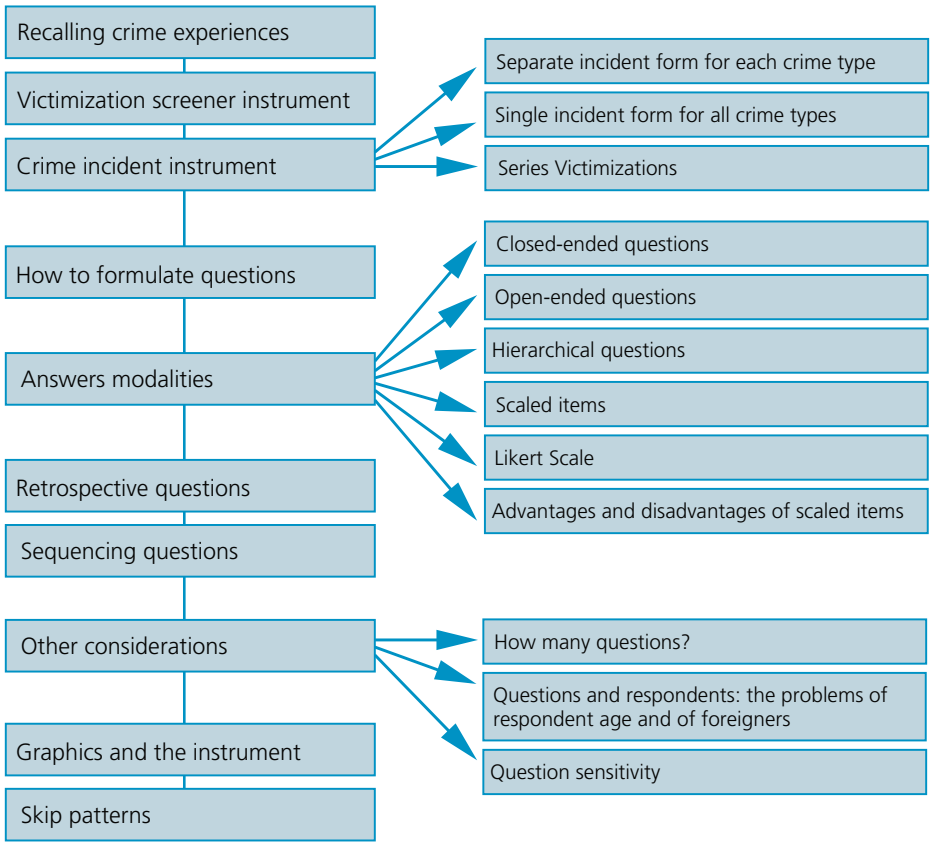
486. Chapter V of the Manual describes typical question patterns that may be included in crime victimization surveys. It looks at the use of screener questions, incident questions, answer modalities and question response patterns. Chapter V also considers pre-testing of survey questionnaires and the conduct of pilot surveys.

487. Victimization surveys gather a broad array of information such as the respondents' fear of crime, their perception of safety, neighbourhood conditions, actions taken to prevent crime, experiences with crime and personal characteristics. Translating these topics (and more) into a questionnaire is not an easy task: optimizing the collected information, their volume, the manner and ordering to ask the various aspects is a complex activity, more difficult as the subject is so multifaceted and sensitive. Many things must be considered as there are general difficulties common to any survey, plus, there are specific critical aspects related to the subject of victimization.

488. The focus is on how to design a questionnaire suitable to recall crime experiences, to face sensitive topics, as well as perceptions and opinions, avoiding the risk of underestimation, social desirability and other kind of biases. In the first part of the section, the issues address the recall crime experiences strategies and the way of posing questions (screenings, suitable wording, funnelling effects and the problem of retrospective questions, number of incident report, sequencing …), the second part considers the answer modalities and the possibilities for using scales as well as hierarchical items, the Likert scale or open-ended questions. Finally, some other problems are addressed, for instance the sensitivity questions and the length of the questionnaire, topics that involve both the sensibility and the burden of respondents in various ways. At the end of the section, the graphic aspects of the questionnaire and the skip patterns are considered in order to help respondents and interviewers progress through the survey.

489. Figure 7 represents the development of this section, the different steps and possible choices to be considered while designing a questionnaire.

Figure 7: Flowchart on questionnaire design



A. The design

490. Designing the questionnaire is a critical step in a research project. The coherence of the questionnaire affects the quality and quantity of collected information and related interpretation. When designing the questionnaire, it is important to plan not only the overall structure of the instrument, but also the number, the order and the sequence of questions. The instrument must also be suitable for the chosen interviewing technique to ensure optimal communication between the researcher and respondents.

How many questions?

491. Determining how many questions should be included in a questionnaire is an important issue. Clearly it is important that the final version of the questionnaire fully covers all relevant issues needed to properly investigate the topic of interest, including an adequate number of background variables to ensure that results can be examined by sub-groups. Further, the questionnaire should not include irrelevant or redundant information. The number of questions on a questionnaire also depends on the interview technique used. If a face-to-face interview is being conducted, more questions may be included than when a self-administered survey is being fielded. And self-administered questionnaires generally contain more questions than telephone interviews.

492. A careful assessment of costs and benefits should be made with respect to the length of the questionnaire, the time needed for the interview, the burden on respondents and the available financial resources. Additionally, the actual opportunity for using and analysing the resulting data should have an impact on decisions regarding the number of questions in the questionnaire. Before designing the questionnaire, it may be helpful to have an idea about the desired headings of tables to be published, in order to concentrate the attention on them.

493. In some cases, a longer questionnaire may guide respondents through series of screeners and questions aimed at eliminating misunderstandings, thus producing 'cleaner' responses than those which could have been obtained with one direct question. In this case, even if the questionnaire is longer the number of persons who will be asked all follow up questions will be relatively small. As an alternative, it is possible to reduce the number of questions by including categories of response aimed at capturing multiple aspects of the respondents' answers. This may require careful training of the interviewers, who should be instructed on appropriately prompting respondents and marking the relevant boxes.

494. As described above, an option is to design surveys so that fewer questions will be asked to the entire sample, while some of the more specific questions will be asked only to particular category of respondents. For example, in some victimization surveys only victims of selected crimes are asked more detailed questions about the victimization, or only adults are asked questions on issues relevant to the household, such as insurance and the number of children.

495. In general, it is not easy to identify the optimal number of questions for a questionnaire. It should be emphasized that the length of the interview is not only related to the number of questions, but also to the level of difficulty of questions, the number of open-ended questions, the respondent's involvement in the topic and, above all, the fluidity of the questionnaire. Furthermore, it should be noted that victimization may be a rare event, thus the possibility to obtain reliable estimates on questions addressed to victims only may depend on the size of the sample.

Questions and respondents: the problems of respondent age and of foreigners

496. Some questions are not suitable for all persons. For example, questions about delicate issue such as sexual habits, faith and religion, political preferences, health, or racial origins may not be appropriate for some in a sample. In addition, questions dealing with issues not suitable for minors such as insurance and income should not be asked of minors. To avoid asking questions of those who should not be asked, such questions should be placed within specific thematic areas in the questionnaire so that only a part of the target population will be asked.

BOX 33: EXAMPLES OF QUESTIONS ON INJURY SUFFERED AFTER ASSAULT/THREAT

The two examples below, taken from the Australian Crime and Safety Survey and the British Crime Survey show two ways to address the issue of injury suffered after assault/threat through one or more questions.

Australia: Crime and Safety Survey (2005)
– One question:

Were you physically injured in the most recent incident?
1- Yes, admitted to hospital
2- Yes, seen (treated) by a doctor or other medical practitioner
3- Yes, injured but not seen by a doctor or other medical practitioner
4- No, not injured

UK: British Crime Survey
– several questions (selected)

[You mentioned earlier that force or violence was used]. Were YOU bruised, scratched, cut or injured in any way?
1. Yes
2. No

What happened to you?
1. Minor bruising or black eye
2. Severe bruising
3. Scratches
4. Cuts
5. Broken bones
6. Broken nose
7. Broken/lost teeth
8. Chipped teeth
9. Concussion or loss of consciousness
10. Other

Can I just check, as a result of what happened did YOU have medical attention from any of the people on this card?
1. A trained first aider/St John's Ambulance
2. A paramedic
3. A nurse
4. A doctor
5. No medical attention

As a result of what happened did YOU visit an Accident and Emergency department within 24 hours of the incident?
1. Yes
2. No

Did you need to stay one night or more in hospital at all?
1. Yes
2. No

BOX 34: AVERAGE SURVEY LENGTH: ANALYSIS FROM THE UNODC – UNECE CRIME SURVEY INVENTORY

The time it takes to conduct an interview using a victimization survey varies greatly. One interview may last one minute, while others may take 60 minutes. The time a survey takes depends on many factors such as the number of individuals interviewed in a households and the number of questions asked to the respondents. Aside from these factors, other characteristics such as the number of victimizations experienced will dictate the time it takes to survey.

Average time to complete survey	**Number of surveys**	**%**
Less than 15 minutes	14	29
15 to 30 minutes	14	29
30 to 45 minutes	11	22
Greater than 45 minutes	10	20
Total	49	100

Results shown in the table reveal that most surveys lasted less than 15 minutes or 15 to 30 minutes. A slightly lower percentage of surveys took 30 to 45 minutes (11 surveys) and 10 surveys took over 45 minutes to administer the questionnaire.

Another important issue related to the length of an interview is the technique used to collect data. Some interviews take more time due to the particular methodology. For example face-to-face and self-administered questionnaires take more time than a telephone interview. By definition, telephone interviews tend to be short to avoid the negative influence that fatigue, boredom and respondent burden can have on data quality. Finally combining different strategies leads to longer interviews with the exception of mixed mode involving CATI. Surveys on special groups such as minorities may take longer than a comparable survey on the general population due to language problems, for example.

497. If some important ethnic minority groups are part of the reference or target population, or in countries with more than one official language, the researcher must provide a translation of the questionnaire, taking particular care that no bias is introduced into the meaning of questions when changing the language. From a methodological point of view, much care must be paid to ensuring that stimulus for the minority group of respondents is the same as the majority one, to ensure the reliability of the tool that is the questionnaire. Consequently, the accurate and focused training of interviewers in foreign languages is recommended, and the interviewers will be asked to fully understand the

basic aims of the questionnaire. A wide variability of dialects within the country is another reason to encourage the researcher to take extra care with the meaning of the terms used in the wording of sentences and questions.

498. Showcards can be a useful tool, particularly in some face-to-face surveys where the target is an ethnic and social minority, for example migrants or persons with disabilities. This tool is very useful for people with concentration and attention deficit disorders, as well as language comprehension, because these respondents can quietly and attentively read and choose their answer from among a number of already defined categories.

499. However, in some contexts the showcards are not useful, becoming counterproductive as they create a distraction and some misunderstanding. The use of showcards must be evaluated with attention to the social and demographic characteristics of the target population.

Question sensitivity

500. When designing a questionnaire, special care is required regarding the questions that deal with sensitive issues such as a violent victimization. It is recommended that the questionnaire be structured to gradually introduce the potentially upsetting theme with a brief introduction suggesting that such troubling experiences can happen to people at any time. Providing an introduction of this sort helps the respondent feel more free to answer the question. Aside from increasing the probability of response and disclosure by the respondent, this strategy will minimize possible psychological harm or embarrassment on the part of a respondent asked to discuss a traumatic experience.

501. Some examples of sensitive issues are drug use (topic that is covered in the British Crime Survey); violence suffered; ethnicity, race and religion; minority groups; sexual orientation; some health questions; political beliefs, etc.

502. Concern regarding their sensitivity depends on the culture and the habits of each country, what is sensitive to one culture may not be to another. This aspect also means that the tools for tackling these problems do not have to be generic but appropriate to different contexts.

Graphics and the instrument

503. Graphics are useful in questionnaires. In general, the use of graphics such as symbols, coloured text, and bold text accomplishes three basic goals. First, graphics support the fluency of the questionnaire. Second, graphics assists in the accurate recording of responses, whether that task be conducted by the interviewer or the respondent. And finally, in the case of electronically administered surveys, graphics allow the automatic recording of data which is less prone to error and less costly.

504. There are several recommendations for using graphic tools in a survey instrument. One important recommendation is that the layout of the questionnaire should be uniform. A common way to introduce uniformity in an instrument is to adopt one style for questions and another for the answers layout. For instance, questions should be placed on the left and answers on the right.

505. An important recommendation is that each question and all the associated answers must be placed on the same page. If this is not done, respondents are likely to miss the answer options on the second page and instead use only response categories on the first page. Clearly this will lead to errors and biases in the data.

506. Third, if a question has many answer options, there is the risk that either the interviewer or the respondent will concentrate on only the first alternatives. A graphic solution to this potential problem is to group the items within sub areas using graphic tools such as bold text. This is demonstrated in the example at Box 35.

507. A particularly useful way in which graphics are used in instruments is via 'signposts' or symbols. For example, filtering questions should have a signpost such as an arrow that is particularly clear and easily to see and follow. Questions connected by signposts or symbols should be placed in the same page to avoid problems in following the path.

BOX 35: GRAPHIC EXAMPLE 1

REP_NP29 Is there anything else the police should have done to help you?

<<MARK ALL THAT APPLY>>

Informed her
1 Informed her about what was going on
2 Provided information about legal procedures or services

Answered more quickly
3 Responded more quickly

Acted against the offender
4 Charged him / arrested him
5 Given him a warning
6 Taken him away / out of the house / should have given restraining order

Provided the woman immediate help:
7 Taken complaint more seriously / listened to me / been more supportive / helped me more
8 Provided her with some protection / helped her leave the house
9 Taken her to hospital / medical care
10 Referred her to a service or shelter
11 Other (specify)

---

12 No, nothing
98 Don't know/Can't remember
99 Refused/No answer

508. An important layout recommendation is not to place questions too close together. When trying to keep a survey as short as possible, crowding questions may be tempting. However, this is a bad strategy because when questions are crowded together they are easily skipped and difficult to read. When this occurs, there are more coding errors and missing data. It is important to place adequate space around each question.

509. If there are different sections in the instrument, it is recommended that only one font type be used. Easy to read fonts include Time New Roman and Courier. Related to font issues it is advisable that questions, sentences, and instructions each have a specific and different look, using upper and lower case, italics or colour. This should be consistent throughout the instrument.

510. In the instrument, each question should be numbered clearly and these numbers should correspond to any related documents. Question numbering is as important for the interviewers as it is for the respondent. Clear numbering helps the interviewer understand which part of the questionnaire is being dealt with. Question numbering does not need to be restricted to actual numbers. For instance, in the 'Italian Women Safety Survey', a section on reporting non-partner violence was indicated by a prefix REP_NP before the progressive question number. Similarly, the section of the survey dealing with reporting of partner violence was denoted using the prefix REP_PR. To characterize screening sections, the prefix used for non-partner was SCR_NP and for partner was SCR_PR.

511. It is recommended that different colours be used as background for questions, particularly when groups of questions are to be administered to different sub-samples of the population. Obviously, the same colour should not be used for different functions. That is true, particularly with paper questionnaires, while for electronic ones it is easier that particular colours be used to distinguish sentences having different functions. For example, green may identify the 'online help' while blue may indicate 'please read all the items'.

512. The use of pictures is particularly useful for self-administered questionnaires. In such cases, a picture may be better than any text explanation. This is particularly the case if the explanation utilizes very technical and difficult to understand terminology. When pictures are not feasible, underlining some specific words in very long sentences can help the interviewer to read the question with the right tone, and to stress the most important part of it. This is particularly the case in face-to-face interviews as illustrated in Graphic example 2 (Box 36).

BOX 36: GRAPHIC EXAMPLE 2

Underlining some words in long sentences can help the interviewer read the question with the right tone.

Has your partner ever FORCED YOU TO ENGAGE IN SEXUAL INTERCOURSE by threatening you, holding you down, or hurting you in some way?

<<If yes :>>

'Please at this point exclude ATTEMPTS to force you'.

513. A final recommendation is specific to computer assisted surveys. In these types of surveys, the segmentation effect must be minimized. The scrolling of the computer screen must be made fluid and pleasant, and the waiting times for messages and notifications on the screen must be minimized. Otherwise, the interview will be disrupted by continuous interruptions increasing the chances of early interview termination.

514. The graphic aspect of the questionnaire is very important for the success of the interview. Graphics used in questionnaires offer one easy way to increase the chances of a successful interview. They are especially useful when filter and complex skip patterns are utilized. Using different graphic characters, some colour variation, and layout recommendations, a survey can be created that is easier to navigate and more likely to be completed.

Skip patterns

515. In victimization surveys not every person is asked every question on the survey instruments. Thus, depending on the answers to some questions, other questions will be skipped and other additional relevant questions will be asked. Skip patterns like these make the interview flow smoothly while gathering all information needed.

516. Whether the survey is conducted using paper and pencil or using a computer, it is imperative that the skip pattern sequence be correct. Failure to check this may mean the loss of very valuable data as questions that should not be skipped are. Or a poorly sequenced skip pattern may mean that questions that should not be asked are asked making the respondent angry or bored and possibly lead to early termination of the interview. Problems in skip patterns can be detected by piloting the survey and the analysis of the pilot results.

Sequencing questions

517. Aside from careful wording of questions, statements and response categories, the order of the items also requires attention. The first section of the interview should include a suitable introduction in which the survey goals are outlined. This step opens communication between the interviewer and the respondent and increases the respondent's willingness to participate in the complete interview.

518. Following the introduction, questions in the instrument should be grouped based on themes. In an effort not to confuse the respondent, questions should be ordered so that sudden changes in themes are avoided. And when themes do change, a few sentences alerting the respondent to a change in theme – transition statements - are advisable. This enables the respondent to prepare for and think about the new topic.

519. As far as specific questions within each thematic area, it is advised that a funnelling technique be utilized for question ordering. That is, each thematic section should begin by first asking general questions, next increasingly detailed and sensitive questions should be asked, and finally, the questions should move to simple or mundane topics. This technique takes into account the level of interest and attention of respondents. Research suggests that respondent attention and interests starts high and increases until it reaches a maximum point. It remains at this maximum for some time before it drops rapidly due to respondent fatigue (Pitrone, 1986). Thus, easier questions should be placed at the beginning of the interview, more difficult and sensitive ones in the middle, and demographic and social characteristics of the respondent (sex, age, employment, etc…) asked at the conclusion.

BOX 37: EXAMPLES OF SKIP PATTERN FROM THE U.S. NATIONAL CRIME VICTIMIZATION SURVEY (NCVS)

The first example, taken from the US NCVS Crime Incident Report, begins a series of questions designed to obtain information about the nature of a physical attack or threat to the victim. Respondents who answer 'Yes' to any of these questions are directed to a question about the nature of the attack, attempted attack or threat, as appropriate. Respondents answering 'No' to all three questions are directed to questions that ask about other aspects of the crime victimization, including thefts that may have occurred.

EXAMPLE 1

24. Did the offender hit you, knock you down or actually attack you in any way?
1 Yes – ***SKIP*** *to 29, page 5*
2 No – *Ask 25*

25. Did the offender TRY to attack you?
1 Yes – ***SKIP*** *to 28a*
2 No – *Ask 26*

26. Did the offender THREATEN you with harm in any way?
1 Yes – ***SKIP*** *to 28b*
2 No – *Ask 27*

The second example, taken from the US NCVS Crime Incident Report, directs the question to the appropriate series of questions about the characteristics of the offender(s) in the crime incident. The questions asked are different if there was one offender or more than one offender. If the respondent answers that he/she doesn't know the number of offenders, the next question asks **'Do you know anything about one of the offenders?'**

EXAMPLE 2

ASK OR VERIFY –

60. Was the crime committed by only one or by more than one offender?
1 Only one – ***SKIP*** *to 62*
2 More than one – ***SKIP*** *to 73*
3 Don't know – *Ask 61*

520. Where a question is placed in the questionnaire can influence the response. Placing questions is particularly relevant for questions about respondent opinion on subjective arguments, such as perception (e.g. fear of crime and insecurity) and satisfaction. Experience offers some lessons about this. In the 'Italian Women's safety' survey, the complexity of the structure of the questionnaire necessitated a test to evaluate the best placement for the screening sections and for detailed victimization sections regarding violence by a partner and a non-partner. The results obtained from a pre-test of about 200 interviewers showed that placing questions regarding all non partner violence before the corresponding ones regarding actual or past partner violence worked better. It appeared that asking women about violence suffered by her partner at the beginning of the questionnaire upset the women, shut down communication, and in many cases ended the interview. In contrast, asking first about non-intimate partner violence followed by partner violence resulted in better communication and completion of the interviews. Placement of questions will vary across different countries. It is important that questions are fully tested prior to deciding on placement as these can influence a person's response to the survey.

521. In addition, the sections are arranged so that the population groups for whom some questions are not relevant can run through the questionnaire quickly and interrupt the interview as soon as they have answered all the questions that concern them. This is particularly true of the Paper and Pencil Interviews (PAPI).

B. Specific issues of victimization surveys

Recalling crime experiences

522. Crime questions serve to prompt the respondent's memory of criminal events. The wording of screening questions can be brief or very detailed. They can take the form of a list describing different situations or of examples of victimization stories. In general, questions describing the situation are preferred. An example of this is utilizing a specific screener question related to intimate partner or family violence. Experience shows that such a screening question elicits incidents far better than a generalized screener since many victims do not view intimate or family violence as a victimization in general.

523. Care should be taken when surveys are administered in areas characterized by large differences in languages and ethnicity. In these instances, some wordings could inhibit recall in some people while stressing it in others.

BOX 38: EXAMPLE OF QUESTIONS RECALLING CRIME EXPERIENCE

In the first part of this box, some examples of questions regarding the screener section used are reported. This exercise is useful to look at the similarity and differences of wording questions on different crimes. In the second part of this box is an example from the United States National Crime Victimization Survey (US NCVS) showing a different construction of screening itself. In fact, the US NCVS uses a screening technique, instead of the description of a crime for each question, a complex set of questions regarding individual and household crimes as well as violent and property crime, trying to describe the victimization experience, where each collected crime is reconstructed ex-post.

THEFT OF PERSONAL BELONGINGS

The Italian Citizens' Safety Survey (ISTAT)

In the last three years, has anyone attempted to steal or stolen money or items you didn't carry with you, for example money or jewellery in a locker room, bags or cases on a train, books at school or at work, money, cash card or cheque book at work (don't consider things stolen from your car, house or outside the house)?

The Canada General Social Survey (GSS)

(Other than the incidents already mentioned,) was anything of yours stolen during the past 12 months from your place of work, from school or from a public place, such as a restaurant?

The British Crime Survey (BCS)

And [apart from anything you have already mentioned], in that time has anything (else) of yours been stolen, from a cloakroom, an office, a car or anywhere else you left it?

The International Crime Victim Survey (ICVS)

Apart from theft involving force there are many other types of theft of personal property, such as pickpocketing or theft of a purse, wallet, clothing, jewellery, sports equipment. This can happen at one's work, at school, in a pub, on public transport, on the beach or in the street. Over the past five years have you personally been the victim of any of these thefts?

DAMAGE

The Italian Citizens' Safety Survey

In the last three years, has your house or parts of your house ever been damaged or destroyed deliberately (soiling, broken windows, scratched doors)?

In the last three years, have your belongings or your family's belongings ever been damaged or destroyed deliberately?

The Canada General Social Survey (GSS)

During the past 12 months did anyone deliberately damage or destroy any property belonging to you or anyone in your household, such as a window or a fence?'

The British Crime Survey

And again, [apart from anything you have already mentioned], in that time did anyone deliberately deface or do damage to your house/flat or to anything outside it that belonged to someone in your household?

BURGLARY OR THEFT AT HOME

The Italian Citizens' Safety Survey

In the last three years, has anyone ever stolen or attempted to steal something in the house where you live or in a house at your disposal or that you used for example during your holidays? Do not consider the theft of items outside the house, such as the mat, the garden hose, or items from the apartment landing.

The Canada General Social Survey (GSS)

Was anything of yours stolen during the past 12 months from the things usually kept outside your home, such as yard furniture?

The British Crime Survey

Has anyone got into this house/flat without permission and stolen or tried to steal anything?

The International Crime Victim Survey (ICVS)

Over the past five years, did anyone actually get into your home without permission, and steal or try to steal something? I am not including here thefts from garages, sheds or lock-ups.

THEFT

The USA National Crime Victimization Survey (NCVS)

I'm going to read some examples that will give you an idea of the kinds of crimes this study covers.

As I go through them, tell me if any of these happened to you in the last 6 months, that is since _____ _____, 20 ____.

Was something belonging to you stolen, such as –
(a) things that you carry, like luggage, a wallet, purse, briefcase, book –
(b) clothing, jewellery, or mobile phone –
(c) bicycle or sports equipment –
(d) things in your home – like a TV, stereo, or tools
(e) things outside your home such as a garden hose or lawn furniture –
(f) things belonging to children in the household –
(g) things from a vehicle, such as a package, groceries, camera, or CDs –
(h) did anyone attempt to steal anything belonging to you?

37a. (other than any incidents already mentioned,) has anyone –
(a) broken in or attempted to break into your home by forcing a door or window, pushing past someone, jimmying a lock, cutting a screen, or entering through an open door or window?
(b) has anyone illegally gotten in or tried to get into a garage, shed, or storage room?
(c) illegally gotten in or tried to get into a hotel or motel room or vacation home where you were staying?

Victimization screener instrument

524. The main objective of most victimization surveys is to offer a precise estimate of criminal victimization. To do this, it is necessary to use a technique called screening which consists of a series of questions aimed at determining whether the respondent experienced a crime (or crimes). Simply, screener questions determine if, and how many, criminal victimizations the respondent sustained in the given reference period.

525. The same principles mentioned in paragraph 522 also apply to the development of screening questions, which also serve to prompt the respondent's memory of criminal events. The wording of screening questions can be brief or very detailed. They can come in the form of a list describing different situations, or as examples of victimization stories. In general, questions describing the situation are preferred. An example of this is utilizing a specific screener question related to intimate partner or family violence. Experience shows that such a screening question elicits incidents far better than a generalized screener since many victims do not view intimate or family violence as a victimization in general.

526. Care should be taken when surveys are administered in areas characterised by large differences in languages and ethnicity. In these instances, some wordings could inhibit recall in some people while stressing it in others.

527. Sometimes crimes are collected using a single screening question, while other times multiple screeners based on the type of crime are administered. For instance, the US NCVS uses multiple

screener questions. In general, each screener is designed to elicit victimizations for a specific type of crime. Some screeners identify personal crimes against the individual (e.g. purse snatching), others screen for violent crimes (e.g. robbery, aggravated assault), while others screen for crimes against the household (e.g. motor vehicle theft, burglary).

528. Screeners can also be used to identify non-physical violence. Psychological violence by a male intimate partner, for instance, can be identified through a series of screener questions.

BOX 39: EXAMPLE OF PSYCHOLOGICAL INTIMATE PARTNER VIOLENCE SCREENER QUESTIONS

Your husband/ live-in partner/ your fiancé:

- Does he get angry if you speak with another man?
- Does he humble or insult you when faced with other people, e.g. treating you badly, ridiculing your ideas, telling others your intimate details?
- Does he criticize the way you looks, your attire or hairstyle, e.g. telling you are less charming, and/or inadequate?
- Does he criticize you for your managing of the home, your cooking or for how you educate the children, e.g. telling you are not able and you are good for nothing?
- Does he neglect you, not speaking and not listening to you, e.g. not considering what you say or not answering to your questions?
- Does he insult you or badmouth you?

529. A useful approach used in various surveys is to screen for victimizations based on the victim and offender relationship. Without such screeners, there is the real possibility of underestimating violence that was committed by an intimate partner. This is a useful screener question to include because some respondents do not view violence by an intimate or a family member as a personal or violent victimization. In this case a set of questions is used to define one unique concept. Sensitivities about what is acceptable to ask in an interview may differ across cultures, and this should be taken into account when considering whether to apply a question used in one country as such, or if it is necessary to reformulate the question.

BOX 40: QUESTIONS USED FOR INTIMATE PARTNER VIOLENCE AGAINST WOMEN OR SPOUSAL VIOLENCE SURVEY SCREENING

The following items represent examples of the types of questions used in surveys that are designed to measure violence against women or spousal violence. It is suggested that the questions be preceded by an introductory paragraph such as the following:

It is important to hear from people themselves if we are to understand the serious problem of violence in the home. I'm going to ask you some questions and I'd like you to tell me whether your spouse/partner has done any of the following to you. Your responses are important whether or not you have had any of these experiences. Remember that all information provided is strictly confidential

PHYSICAL AND SEXUAL VIOLENCE

- Has your partner ever THREATENED to hurt you physically in a way that frightened you? Please keep in mind that we are focusing here only on threats to hurt you.
- Has your partner ever THROWN SOMETHING AT YOU OR HIT you with something that hurt or frightened you?
- Has your partner ever PUSHED OR GRABBED YOU OR TWISTED YOUR ARM OR PULLED YOUR HAIR in a way that hurt or frightened you?
- Has your partner ever SLAPPED, KICKED, BIT OR HIT YOU WITH A FIST?
- Has your partner ever tried to STRANGLE OR SUFFOCATE YOU, BURN OR SCALD you on purpose?
- Has your partner ever used or threatened to use a KNIFE OR GUN on you?
- Has your partner ever forced you into unwanted sexual activity, by threatening you, holding you down or hurting you in some way?
- Has your partner ever been violent towards you in a way that I have not already mentioned?

Crime incident instrument

530. When screening questions reveal the respondent was victimized, additional questions must be asked to gather details of these victimizations. These incident-based questions are generally located on a second survey instrument dedicated to incident characteristics. This part of the questionnaire needs to be carefully designed depending on the purpose of the survey, the size of the sample and the method of interviewing. Typical series of follow-up questions will ask information about the context/location of the incident (time, place), who was/were the offender(s), whether any weapons were used, if the victim suffered any injury, whether he/she reported to the police and/or received any help after the incident.

531. Follow-up questions for victims should be appropriate to the type of crime suffered (see section IV.F). For example, Box 41 shows questions addressed to victims of assault-threat in the ICVS. In order to capture detailed information on all surveyed aspects regarding the context of victimization, the questionnaire should contain accurate instructions for the interviewers indicating the next question to be asked.

532. If during the screening process, the respondent identifies more than one type of crime suffered, the following strategies can be chosen: using a separate incident detail form for different types of crime, or using a single incident form that is flexible enough to be used for all crime types.

Separate incident form for each crime type

533. The incident questionnaire can have as many in-depth incident question sections as the number of crimes revealed in the screener. Alternatively, it might sometimes be enough to concentrate on the consequences of only some crimes. In each incident question section the same kind of questions regarding 'when', 'what', 'how' the crime occurred should exist. However, using this method, there should be items related to specifics of each type of victimization investigated. For example:

If the crime is pick-pocketing, what was stolen?

Pocket money _____ 1
Identity documents _____ 2
Money _____ 3
Credit cards, bank card, cheque book _____ 4
Watch, jewellery _____ 5
Keys _____ 6
Other personal items, mobile _____ 7
Other (i.e. miscellaneous documents) _____ 8

If the crime is theft of personal objects, what was stolen?

Pocket money _____ 1
Credit cards, bank card, cheque book _____ 2
Money _____ 3
Documents _____ 4
Bags, suitcases _____ 5
Watch, jewellery _____ 6
Camera, Videocamera _____ 7
Mobile _____ 8
Computer _____ 9
Walkman, radio, cassette tape _____ 10
Keys _____ 11
Books and stationery (pens etc.) _____ 12
Personal clothing _____ 13
Tools, work wear, sportswear _____ 14
Personal items (make-up, spectacles, umbrella, etc.) _____ 15
Other (specify) _____ 16

BOX 41: EXAMPLE OF QUESTIONS ADDRESSED TO VICTIMS OF ASSAULTS AND THREATS – INTERNATIONAL CRIME VICTIM SURVEY (ICVS)

Q250. The attack or threat that you mentioned, when did this happen? Was it ...
1) this year, i.e. since [ref. period]
2) last calendar year, in [year]
3) before then
9) << don't know/can't remember >>

If answer is equal to code 2 then continue with question 251
Else continue with question 252

Q251. How often did it happen in [year]?
1) once
2) twice
3) three times
4) four times
5) five times or more
9) don't know

Continue with question 252

Q252. (The last time) did this incident happen at your own home/residence, near your own home/residence, elsewhere in your city or local area, at work, elsewhere in [COUNTRY], or did it happen abroad?
<< INT. IF VICTIM MORE THAN ONCE OVER THE PAST FIVE YEARS, ASK ABOUT THE LAST TIME THIS HAPPENED >>
1) at your own home/residence
2) near your own home/residence
3) elsewhere in city or local area
4) at work
5) elsewhere in [COUNTRY]
6) abroad
9) don't know

Continue with question 253

Q253. How many people were involved in committing the offence?
1) one
2) two
3) three or more people
9) don't know

Continue with question 254

Q254. (About the last incident) did you know the offender(s) by name or by sight at the time of the offence?
<<INT. IF MORE THAN ONE OFFENDER, COUNT IF KNOWN IF AT LEAST ONE KNOWN >>
<<IF KNOWN BY SIGHT AND KNOWN BY NAME: RECORD KNOWN BY NAME>>
1) did not know offender
2) (at least one) known by sight
3) (at least one) known by name
4) did not see offender

If answer is equal to code 3 then continue with question 255
Else continue with question 256

Q255. Were any of them your spouse, ex-spouse, partner, ex-partner, boyfriend, ex-boyfriend, a relative or a close friend, or someone you work with?
<< INT. MEANS RELATIONSHIP AT TIME OF THE OFFENCES>>
<< IF UNCLEAR, PROBE WHETHER EX-SPOUSE, EX-PARTNER, EX-BOYFRIEND AT TIME OF THE OFFENCE>>
<< INT. MULTIPLE ANSWERS ALLOWED >>
1) spouse, partner, (at the time)
2) ex-spouse, ex-partner, (at the time)
3) boyfriend (at the time)
4) ex-boyfriend (at the time)
5) relative
6) close friend

7) someone he/she works/worked with
8) none of these
9) refuses to say

Continue with question 256

Q256. Can you tell me what happened, were you just threatened, or was force actually used?
1) just threatened
2) force used
9) don't know

If answer is equal to code 1 or code 2 then continue with question 257
Else continue with question 262

Q257. Did (any of) the offender(s) have a knife, a gun, another weapon or something used as a weapon?
1) yes
2) no
9) don't know

If answer is equal to code 1 then continue with question 258
Else continue with question 260

Q258. What was it?
1) knife
2) gun
3) other weapon/stick
4) something used as a weapon
9) don't know

Continue with question 259

Q259. Was the weapon actually used?
<< INT. COUNT WEAPON AS USED:
- KNIFE/OTHER WEAPON/STICK: THREATENED WITH IT, OR VICTIM IN PHYSICAL CONTACT WITH THE WEAPON
- GUN: THREATENED WITH IT OR BULLET FIRED >>

1) yes
2) no

Continue with question 260

Q260. Did you suffer an injury as a result?
1) yes
2) no

If answer is equal to code 2 then continue with question 262
Else continue with question 261

Q261. Did you see a doctor or any other medical person as a result?
1) yes
2) no

Continue with question 262

Q262. Did you or anyone else report that last incident to the police?
1) yes
2) no
9) don't know

If answer is equal to code 1 then continue with question 264
Else continue with question 268.

Q264. On the whole, were you satisfied with the way the police dealt with the matter?
1) yes (satisfied)
2) no (dissatisfied)
9) don't know

If answer is equal to code 1 or to code 9, then continue with question 268

If answer equal to code 2 continue with question 265

Q265. For what reasons were you dissatisfied? You can give more than one reason.

<<INT. MULTIPLE ANSWERS ALLOWED >>

1) didn't do enough
2) were not interested
3) didn't find or apprehend the offender
4) didn't recover my property (goods)
5) didn't keep me properly informed
6) didn't treat me correctly/were impolite
7) were slow to arrive
8) other reasons
9) don't know

Continue with question 268

Q268. Taking every thing into account, how serious was the incident for you.
Was it very serious, fairly serious, or not very serious?

1) Very serious
2) Fairly serious
3) Not very serious

Continue with question 269

Q269. Do you regard the incident as a crime?

1) yes
2) no
9) don't know

If answer is equal to code 1 at question 262 continue with question 270
Else continue with question 280

Q270. In some countries, agencies have been set up to help victims of crime by giving information, or practical or emotional support. Did you or anyone else in your household have any contact with such a specialized agency after this incident?

1) Yes
2) No

If answer is equal to code 2, continue with question 271
Else continue with 280

Q271. Do you feel the services of a SPECIALIZED agency to help victims of crime would have been useful for you after this incident?

1) no, not useful
2) yes useful
9) don't know

Continue with question 280

Single incident form for all crime types

534. This structure suggests that the questionnaire should have as many in-depth sections on the incident as the number of investigated victimizations. Further, this approach suggests that the list of questions should be the same for each type of crime reviewed. Using this format, the survey designed must provide an exhaustive list of responses for each type of crime examined. For example:

For pick-pocketing and theft of personal objects, what was stolen?

Pocket money_____ 1
Identity documents_____ 2
Money_____ 3
Credit cards, bank card, cheque book_____ 4
Watch, jewellery_____ 5
Keys_____ 6
Other personal items, mobile_____ 7
Bags, suitcases_____ 8
Camera, Video camera _____ 9

Mobile_____10
Computer_____11
Walkman, radio, cassette tape_____12
Books and stationery (pens etc.)_____13
Personal clothing_____14
Tools, work wear, sport wear_____15
Personal dresses (make-up, spectacles, umbrella, etc.)_____16
Other (i.e. miscellaneous documents)_____17

535. In some instances, the victim suffers multiple victimizations of the same type. When this is the case, researchers must make decisions whether to gather incident-level information about one or all of these similar events. This decision will greatly influence the incident instrument design. Options about which events to gather incident-level data on include:

- Gather incident details on the victimization the victim views as most serious
- Gather incident details on only the most recent event
- Gather incident details on all victimizations
- Gather incident details on a subset of the victimizations (e.g. the last three)

536. Each of these options affects the quality of the data, the cost of the data and the questionnaire length. For example, the choice to gather data on the most serious crime will bias the data toward more serious crimes and threaten a representative description of victimization. The option to gather information on the most recent victimization (or the most recent three) will offer a more precise picture of the qualitative aspects of victimization but it will provide only a partial accounting of the quantity of victimization. A clear disadvantage of opting to collect only the most recent victimization is that it may not accurately represent the other victimizations experienced. For instance, in some intimate partner violence scenarios, violence escalates over time. One strategy to avoid that problem is the possibility of collecting information regarding a longer series of violent incidents (the last three victimizations). That is, gathering information on injuries, long term consequences, costs, presence of children, when the violence occurred, etc. which better represents the series of violence.

Repeat Victimization

537. There are some victimizations that are ongoing in nature and difficult to view as a single event. These victimizations, called repeat or series victimization, include bullying, harassment, mobbing/harassment in the workplace, and intimate partner violence. Repeat victimizations are ongoing in nature and tend to be similar in character. Further, such victimizations are characterized by the respondents' inability to offer detailed incident characteristics about each event or the exact number of incidents.

538. Survey design must take into account repeat victimization. Several decisions must be made – all of which are reflected in the survey design. First, the survey designer must clearly define what constitutes repeat victimization. What, for example, should be the minimum number of incidents to be considered repeat victimization and treated differently in the survey than other incidents? Must there be three events similar in character for which the victim cannot give detailed incident information? Or must there be six or more events before one is considered as suffering from series victimization? Or some other number?

539. A second decision is how to handle these multiple incidents. Recall that counting victimizations requires knowing the details of each incident to ascertain if an in-scope crime occurred and if so, what type of crime occurred. A common way to deal with this is to note the number of times the respondent feels they were victimized and to gather incident level characteristics on the most recent victimization.

540. The third major decision is then how to count or include series victimizations in estimates. One method is to exclude all series victimizations from estimates. This option will obviously underestimate victimization. A second method is to use the details of the most recent event and include it as many

times as the respondent states they were victimized. That is, if someone stated they were victimized ten times in the reference period and offered that the most recent event took the form of a robbery, the estimates would include ten robberies. This may offer greater precision in the quantity of violence, but it offers less precision in the qualitative aspects of the violence if the victimizations were not very similar or changed in character over time. A third option utilized is to include the series victimization in estimates as one incident. Obviously this underestimates the true scope of victimization. However, it does not introduce additional error into the qualitative aspect of victimization by assuming all victimizations in the series were identical in nature.

How to formulate questions

541. When writing survey questions, two fundamental components must be considered. First, one must take into account the population of interest. When interviewing the general population, education levels, age and cultural experiences may vary. Second, the topic of the question must be considered. When writing survey questions, each question must be clear to the reader. Ensuring clarity means taking into account the target population. The goal is to provide such clear questions that no respondent is forced to interpret any question. Interpretation by respondents means they will use their own personal reference system jeopardizing the data gathered. Also in national survey different languages may need to be used (where there is more than one national language, or where emphasis is put on including linguistic minorities). Following the initial translation, the wording of questions may need to be reconsidered, also in the original language, in an effort to find formulations that would carry the same meaning in different languages.

542. In an effort to avoid common pitfalls, several approaches are recommended. These include:

- Using simple terms;
- Avoiding technical terms;
- Using precise terms, avoiding ambiguous words or those with multiple meanings;
- Avoiding depreciative words;
- Avoiding colloquialisms;
- Avoiding long questions that may confuse the reader;
- Avoiding double-barrelled questions (e.g. Do you fear you will be victimized and that the police will be unresponsive?);
- Avoiding constructing questions containing too many specifications, since the question could appear rather burdensome and difficult to understand;
- Avoiding using negative language (i.e. Don't you disagree that…);
- Using examples to clarify the correct interpretation for complex questions.

543. Victim surveys should avoid using legal language as most are unfamiliar with the precise meaning of legal terms. In addition the use of common terms associated with crime and victimization are frequently confused by respondents. For instance, many respondents will state that their home was robbed when robbery is a term generally applied to a person. Thus, even common terms such as burglary and robbery are frequently confused by the general population. Further, in violence against women surveys, for example, some respondents may not feel that what they have experienced was a crime, and they might not report an incident if the emphasis is on breaking the law. Rather than using such words, it is preferred to describe an event in terms of its elements: the use of force, the threat, weapon presence, physical contact, physical injury, loss of property, etc. Box 42 provides an example of a poorly worded question followed by preferable question wording.

544. Questions on victimization surveys are often very similar. Often, only small portions of the questions (e.g. the reference period) change from question to question. Because of this, the structure of a victimization survey may be somewhat repetitive. And, even though theory suggests the avoidance of long sentences, victimization survey questions often need to be long to be precise. This is in part due to the inclusion of examples designed to enhance respondent recall. To cope with these important aspects, special graphic styles (bold and colour font …) can be used to place a greater emphasis on interviewers reading and in order to retain the interviewee's interest.

BOX 42: USE OF CLEAR WORDING: AN EXAMPLE

Poor question wording:
In the last … years, has somebody purse-snatched you, or has anyone attempted to purse-snatch you?

Preferred question wording:
In the last … years, has somebody taken or attempted to take from you your bag, purse or an object of value (for example a watch, a bracelet, a necklace, a fur...), using force, but without verbal threat or the use of a weapon?

545. How to word a particular question is in part related to where the question resides on the instrument. For example adjacent placement of questions regarding violence against women may require some examples to distinguish the two questions. If one is to place a question about sexual violence before another question about sexual harassment, it is advisable to add some examples in the second question emphasizing the differences in the two events just asked. In Box 43 an example from the Italian experience illustrates this.

BOX 43: THE ITALIAN VIOLENCE AGAINST WOMEN SURVEY

During the pilot study of domestic violence, it was learned that placing a question about rape by non-partner before a question about sexual harassment without utilizing examples confused respondents. Respondents mistakenly perceived that the question about rape and harassment referred to equally serious crimes.

Consequently, an alternative questionnaire formulation was used which underlined specific aspects of each crime, providing concrete examples to better assist the respondents.

When estimates from the two approaches were compared, results showed that failure to use examples of the victimization of interest led to an under-estimation of about six percentage points.

The questions used are as follows:

(Besides anything you have already mentioned,) (since the age of 16,) Has any man ever TOUCHED YOU SEXUALLY when you did not want him to in a way that was DISTRESSING to you?

(Besides the events we have already talked about) since your 16th birthday until today, were you touched by a man IN A SEXUAL WAY AGAINST YOUR WILL in a way you did not like?

Please consider that we are also referring to less serious events that can happen to a woman for example: at school, in a disco, at work, at home, at the cinema, on the bus.

You can take all the time you need to think of it.

BOX 44: HOW TO SURVEY VIOLENCE: DO NOT MENTION VIOLENCE

Research suggests that asking about situations versus using a term such as 'violence' 'rape' 'assault' increases disclosure of victimization events. In other words, questions should not ask about any physical or sexual violence directly. Instead, they should describe episodes, examples, or incidents that the respondent can recognize as real in their life. The details used in these scenarios or prompts should include a variety of situations, locations and offender relationships. Such variations assist victims in remembering events and decrease the possible underestimation of the phenomena of interest.

Answer modalities

546. When planning a questionnaire, it is important to define the type of questions to be included. A questionnaire can contain closed-ended or open-ended questions. These modalities are discussed in greater detail below.

Closed-ended questions

547. A closed-ended question is a question in which the interviewee must choose between a fixed set of response categories. Closed-ended questions are useful when it is possible to define beforehand mutually exclusive and exhaustive list of response categories. Mutually exclusive refers to the fact that the response categories listed should have no overlap in meaning. Exhaustive response categories imply that all options for response are offered. Should there be any question, as to whether the response

categories are exhaustive, it is recommended that the wording 'Other, please specify' be included. The use of including an 'Other, please specify' option avoids two problems:

- The selection of incorrect response categories (an interviewee who does not find a right answer could decide to choose any one among those provided)
- An increase in the number of non-responses (interviewees may otherwise become frustrated if they feel that they cannot answer the question or that the categories do not take into account what they have experienced).

548. Of course, to include the item 'Other, please specify' among the answer alternatives entails that the researcher must do more work during the data entry and correction phase. During this phase, the researcher would have to carefully read the respondent's answers and, where necessary, assign these to pre-existing answer modalities. The option of 'Other, please specify' also enables the researcher to expand some of the answer modalities previously defined to include some that were found through the use of 'Other, please specify' category. It allows the researcher to create new categories when a substantial number of 'Other, please specify' indicate the need to. The responses in the 'Other, please specify' also allow the researcher to see if the respondent has failed to understand the meaning of the question asked.

BOX 45: A NEW RESPONSE CATEGORY IN THE ITALIAN VICTIMIZATION SURVEY

In the 'Citizen Safety' 2002 survey, the analysis of the answers provided in '*Other, please specify*' relative to the type of objects a thief had stolen led to the inclusion of a previously unused response category: mobile phone. Between 2002 and 1997 when the survey was first conducted, the theft of mobile phones had increased enough to warrant its inclusion as a response category.

549. Closed-ended questions have great advantages. They provide uniform responses and save time and intellectual energy on the part of both the respondent and interviewer. Because closed-ended questions are designed to help respondents concentrate on the aspects important to the researcher, the cognitive effort necessary for providing an answer is minimal. They only need identify one category among those submitted. In addition, the easy coding, especially in the case of self-compiled structured questionnaires, greatly helps reduce transcription errors and saves time. The most frequently used modalities for coded answers are those regarding the presence/absence of a phenomenon, generally coded as 'Yes', 'No', 'Doesn't know' and 'Doesn't answer'. Usually the last two items are not solicited, but they can be considered as refuge responses. In other cases, a more complex structure of answers can be preferred, for instance graduating the answer or proposing several alternatives.

550. On the other hand, closed-ended questions have some disadvantages. Their main flaw is 'over-determination of the reference scheme' (Morton-William and Sykes, 1984). The respondent can only choose one category among those provided and cannot clarify nor express further their position. Hence, it encourages the passiveness of the respondents, providing them with a way to hide ignorance or disinterestedness on the topic. Consequently, subjects who answer a closed-ended question invariably appear to have a higher than average level of information than subjects who answer an open-ended question on the same topic.

551. Another disadvantage that occurs with closed-ended questions at times is the use of too many alternatives, particularly in surveys where the alternatives are read out to the respondent. Research suggests that an average person can evaluate a maximum of seven alternatives at a same time. This suggests that when a long list of alternatives is provided, the order in which the answers are presented can influence the respondent's responses and possibly distort frequencies. One way of resolving this problem is to structure the question as an open-ended question. The interviewer then can mark the appropriate closed-ended category. This technique clearly places an important burden on the interviewer as he or she must decide how to register the answers. Clearly, this methodological option requires highly trained interviewers. In personal interviews, showcards are sometimes used to present the alternatives to the respondents, making it easier for them to evaluate the options.

BOX 46: HOW TO USE INFORMATION FROM 'OTHER, PLEASE SPECIFY' IN CRIME CLASSIFICATION

In the pickpocket section of the survey, respondents sometimes answered the question 'How did the crime take place' with 'I left it on the table'. Because pickpocketing refers to something being removed from the respondent's person, these responses clearly indicated the respondent misunderstood the type of crime the researchers were asking about. In these cases, the interviewer had to survey the misunderstanding of the respondent, ticking the answer with the code relative to this type of error (Example 1).

EXAMPLE 1:

How did the crime take place? (pickpocketing)

You were approached with an excuse while walking	1
Somebody deceitfully approached you, for example you got involved in a false brawl or somebody hugged you	2
You were knocked or pushed in a crowded place	3
Your attention was attracted by a noise or an event, the purpose of which was to distract you	4
You do not know, you did not notice anything right then	5
They took advantage while you were distracted	6
Other (please, specify)	7
OBJECT LEFT UNATTENDED	96
THE OBJECT WAS IN THE CAR	97
THE OBJECT WAS TAKEN BY FORCE	98
THE OBJECT WAS LOST	99

Questions relative to what had been stolen also help in understanding if there has been a misunderstanding in crime classification. For example, respondents sometimes answered the question regarding thefts of personal items, declaring to have been deprived of some car parts and considering that the screening question was: *«In the past three years, has somebody stolen or attempted to steal from you money or objects that you did not directly wear, such as money or jewellery from a locker room, purse or luggage on a train, books at school or at work ... (do not consider the objects stolen from your car, house or external parts of your house)?»*, it is clear that the respondent misunderstood the question addressed to him or her.

Here too, the interviewer was given the possibility of putting right the error using code 99 present among the answer alternatives (Example 2), unburdening the researcher work in the data correction phase.

EXAMPLE 2

What was stolen?

(Ask the question again, more than one answer possible)

Wallet, purse	1
Credit cards, cheque book, luncheon vouchers	2
Money	3
Documents	4
Purse, luggage	5
Jewellery, watches	6
Camera, telecamera	7
Mobile phone	8
Computer	9
Walkman, radio, music cassette	10
Keys	11
Books and writing material (calculator, pen, etc.)	12
Clothes	13
Work and sports equipment and gear	14
Personal items (make-up, spectacles umbrella, etc)	15
Other (please, specify)	16
CAR ITEMS AND PARTS	99

BOX 47: DIFFERENT WAY TO PLAN ANSWER MODALITIES: EXAMPLE FROM THE ITALIAN CITIZENS' SAFETY SURVEY

4.1 In the last three years, has anybody snatched away by force or attempted to snatch your bag or valuables (for example a watch, a bracelet, a necklace, a fur ...), without threatening nor by weapons or words?

No _____ 1 ➔ go to q. 4.4
Yes _____ 2

3.1 How safe do you feel walking down the street when it is dark and you are alone, in the area in which you live in? (read the answers)

Very safe _____ 1
Quite safe _____ 2
Not very safe _____ 3
Not safe at all _____ 4
Never goes out _____ 5

3.2 Try to recall the last time you went out in your area for any reason when it was already dark. Did you try to keep away from certain streets or from certain places or did you try to avoid certain people for safety reasons?

No _____ 1
Yes _____ 2
I don't know, I don't remember _____ 3
Never goes out _____ 4

3.13 People have several opinions about the kind of sentence that should be inflicted to the offender. Image of a 21 years old boy, guilty for the second time of burgling a house. The last time he stole a television. Which of the following sentences do you think is right in this case?

Penalty _____ 1
Prison _____ 2
Services to the community, house arrest _____ 3
Probation _____ 4
Other sentence _____ 5

BOX 48: MANAGING A LONG LIST OF RESPONSE CATEGORIES

Pre-tests of the Italian Violence Against Women Survey (Safety women survey 2006) highlighted some of the difficulties posed by a long list of response categories. In this survey, the field representatives code the respondent's answer. When more than seven categories were present, the interviewers had difficulty in doing so precisely.

This was especially the case when the questions included multi-response answers, where more than one answer could be given. It appeared that the interviewers may have been involuntarily modifying what the respondent stated. Pre-test data analysis revealed a concentration of frequencies on particular alternatives, as well as an excessive use of 'Other, please specify'.

To address this problem, it was decided to correct the formal and substantive structure of some of these questions. In other words, it was decided to alter the editing of these questions and, after reading the responses provided in 'Other, please specify', to offer new response categories. Specifically, the researchers made several important changes:

- Grouped previously separate response categories into a single category. This change enabled interviewers to more easily mark the correct response category.
- Expanded some response categories based on the responses transcribed in 'Other, please specify'. This reduced the overuse of 'Other, please specify'.

552. Clearly it is very important to closely monitor when and how to adjust semi-closed or closed-ended answer questions.

Open-ended questions

553. The alternative to closed-ended questions is open-ended questions. These questions allow respondents to express their answers in their own words. Though open-ended questions are more commonly found in smaller surveys, they are used in large surveys as well. For example, open-ended questions were utilized in the Italian Victimization Survey, under the 'abuse and violence' section regarding the sexual blackmail women suffer at their workplace. Rather than offering a battery of occupations from which the female respondent would choose, the respondent was able to state what her occupation

was at the time of the blackmail. The primary purpose of using open-ended questions in this instance was to avoid errors in classifying jobs on a pre-designated list of occupations. Clearly, this approach required additional work during the data cleaning and coding phase. Each response had to be formalized, and the responses given had to be categorized into the categories offered in the 'Labour Force' and 'Economic activity' surveys (NACE classification).

554. The primary disadvantages to open-ended questions are the cognitive effort required from the respondent and the greater potential for distortion by the interviewer when recording the response. In addition, open-ended responses require a considerable amount of time in coding, as well as higher costs and time during each phase following the interview. This has been documented in several international survey experiences where it was learned that sometimes open-ended questions, despite being useful for obtaining a certain quality, do not help the 'economy' of the research. The efforts put forth during subsequent data analysis and cleaning phases require great time and cost. Finally, open-ended questions may be more difficult to persons who are not accustomed to expressing their thoughts, attitudes and behaviours in detail.

555. In contrast, the main advantage of open-ended questions is that they guarantee spontaneous answers. There is no risk of conditioning the answer or of 'under-determining the stimulus'. And, based on the respondent's answer, the interviewer can better evaluate whether the respondent really understood the question. Open-ended questions are advisable when closed-ended questions require too many options, responses are anticipated to be complex or the response categories are not fully known. Hence, non-structured answer questions are often used in pre-test phases to help ascertain which response categories should be included in closed-ended questions later appearing on the final survey instrument.

Hierarchical or ranking questions

556. Hierarchical or ranking questions are those that ask the respondent to classify in order of importance a certain number of responses relative to the phenomenon. In this case, the researcher knows and proposes the alternatives. Interviewees must place the list presented to him or her in the order of importance. Like all questions, it is important that the respondent clearly understands all items. Because these questions require considerable effort, the number of items to be hierarchically ordered should not be too large unless it is absolutely necessary.

BOX 49: HYPOTHETICAL EXAMPLE OF A HIERARCHICAL QUESTION

I'd like to ask you your opinion about how serious YOU think certain crimes are. Please place these crime situations in order starting with the one you think is the least serious and continuing to the one you think is the most serious.

1. A person robs a victim. The victim is injured but not hospitalized.
2. An employee embezzles $1,000 from his employer.
3. A person sells heroin to others for resale.
4. A man forcibly rapes a woman. No other physical injury occurs.
5. A person intentionally injures a victim. The victim is treated by a doctor and hospitalized.

557. One aid that can be used in face-to-face surveys is a set of small cards. Each card has written upon it one response category. The respondent can use these cards to order the categories. Another option is to request that the respondent place a subset of the categories in order of importance. Such a strategy is referred to as a partially-measured hierarchical question. These are particularly useful during telephone interviews.

558. Because hierarchical questions allow structuring of the respondents' preferences, the information gathered is superior to the one drawn from non-hierarchical multi-response questions. Nonetheless, they should be used with caution due to the increased burden placed upon both the interviewer and the respondent.

Retrospective questions

559. Victimization surveys generally involve asking the respondent to consider events from the past. Hence, the questions used are referred to as retrospective questions. A problem with retrospective surveys is ensuring that the respondent both correctly recall that an event occurred, and correctly recall when the victimization took place. Errors in memory increase as the reference period becomes longer.

560. One possibility to minimize error associated with retrospective questions is to repeat the survey after shorter periods of time (for example after six months instead of one year). If the budget or other constraints prevent this approach, the use of particular wording can help the respondent recall an event. In particular, a funnelling question technique could be used. This technique suggests that the respondent be asked about any event (e.g. victimization) during their lifetime. Then, if an event was revealed, the interviewer can ask about a smaller period of time (e.g. last three years). And again, if the event occurred during that shorter time period, the respondent can be asked about a short time period such as the last 12 months or last calendar year.

561. At times a respondent can recall an event, but be unclear as to exactly when it occurred. An approach that is useful for this situation is the 'care data' technique. Using this approach, the interviewer would ask the respondent about how he or she was dressed when the event occurred. This may aid in recognizing the season or if it occurred during a particular celebration (national celebration, Christmas, Easter, holidays, family or friend birthdays).

BOX 50: THE REFERENCE PERIOD USED IN VICTIMIZATION AND VIOLENCE SURVEYS: ANALYSIS FROM THE UNODC–UNECE CRIME SURVEY INVENTORY

Most frequently used reference period to report crimes is 'one year' or '12 month before interview'. The following are also indicated by higher frequency: 'five years', 'lifetime', 'last six months' and 'three years before the interview'. In many cases, both five years and one year before the interview are considered, as it will be stressed when dealing with strategies to reduce the telescoping effect (14 surveys out of 19 using five-year reference period also ask for events occurring one year before the interview). In those cases, estimates are published referring to the 12-month reference period. Italy considers the three-year reference period instead of five, but it is presented here with surveys using the five-year reference period for brevity.

It is important to notice that when the reference period is one year, many surveys indicate the calendar year as a fixed reference period, while some surveys, using a moving reference period, consider the first month of the last 12-month period before the interview, as a reference to collect events. That first month becomes an anchor to delimitate the reference period, which will shift according to the survey length.

Other surveys, specifically panel surveys, link the reference period to the previous interview which may occur every 9 to 15 months, with a moving reference period of about 11 months on average (Switzerland) or about every six months for the US NCVS.

When considering lifetime periods, we also consider reference periods defined as 'from 16 or 18 years old' which are clearly used when collecting physical and/or sexual violence events

Type of reference period used.

Reference period	N	%
Six Months	6	8
One year /12 months	46	58
Three years	1	1
Five years	18	23
Life time (or > 16/18years)	7	9
Other	2	3

Surveys collecting data about victimization can be dedicated surveys or multipurpose surveys with a module about victimization and/or crimes included. From the UNODC-UNECE inventory, 55 per cent are victimization surveys; 41 per cent are multipurpose surveys with the inclusion of a module on victimization; 3 per cent are other types. Victimization surveys most frequently consider five years, six months and/or one year as the reference periods.

Multipurpose surveys most frequently adopt one year and six months as the reference periods for collecting crime events.
Other surveys usually refer to lifetime or a long period beginning when the respondent was 16 or 18 years old.
Victimization surveys use lifetime periods only to collect sexual violence events, with the only exception, being the International Crime in Business Survey – Lithuania.

Scaled items

562. Scaled questions offer response categories using a verbal or numerical scale. The scaling technique is mainly used to measure attitudes, opinions, motivations, judgments, and values. Directly interviewing the individual using questions with scaled answers is the easiest and most reliable way to obtain such information.

563. Scaled questions can be administered in several ways. The first is to present answers as independent in semantic terms, i.e. their own intrinsic meaning does not need to be related to the other available alternatives in the scale to be understood (nominal scale). The second method is to provide response categories that are partially independent. For example, response categories can be: 'much', 'enough', 'few', 'not at all' (ordinal scale). Third, one can offer response categories that are self-anchoring. For example, the respondent may be asked to express their opinion of a particular crime-fighting law using a scale from '1' (least favourable' to '10' (most favourable). That is, only the two extreme categories are meaningful, while between them is a continuum where the respondent identifies his or her position.

564. When using scaled items, one may include a neutral and impartial option such as 'Do not know' or 'No opinion'. A disadvantage of including a neutral option is that respondent may opt to go for this cognitively easy option. Some research suggests it is best to avoid using neutral categories, thereby 'forcing' respondents into a position.

565. Another response category sometimes offered when using scaled items is a central or neutral option. That is, the numerical scale offered may range from 1 (most desirable) to 5 (least desirable) with the central option 3 representing 'no preference'. Survey specialists have mixed views on whether to use a central or neutral option. Some argue that the respondent will be inclined to indiscriminately select the central value, so omitting this option provides a clearer distinction between alternative views. This may be particularly the case in self-administered questionnaires. However, others believe that a neutral response, indicating no particular opinion, is a valid response to some questions, and that it is inappropriate to try to force respondents to take one position or another. Additionally, many surveys will use a scale for responses ranging from 1 to 4, or 1 to 5 if including a neutral response. However, in analyses and the presentation of results it is normal to merge the responses 1 and 2, and to merge 3 and 4, because differences in response will mainly reflect the different character of respondents (e.g. whether they normally tend to respond passionately or dispassionately to certain questions) rather than genuine differences in strength of feeling.

566. The number of items in the scale is contingent on the type of interviewing. In phone interviews it is suggested to offer respondents the opportunity to choose from fewer items such as 'often', 'sometimes', 'occasionally', 'never'. It should be left up to the interviewer to record 'Doesn't know' or 'Refusal' should the respondent state that is the case.

Likert Scale

567. A Likert measurement scale is a technique according which respondents are given a list of items, each of which expresses positive and negative attitudes towards a specific object. Each item provides for five different possible answers: 'Strongly agree', 'Agree', 'Uncertain', 'Disagree', 'Strongly disagree'. By adding the ratings expressed, it becomes possible to delineate, in a reasonably precise way, how the subject feels about the problem or object of survey.

568. The specific qualities of this measurement scale can be synthesised as follows:

a) Each item is expressed as a statement and subjects are request to rate it by means of a rating scale. Such answer scale has a partial semantic autonomy
➔ the meaning of each category is only partially autonomous;
b) Because each item must represent an indicator of the theoretical construct that the scale intends surveying and measuring, the theoretical construct is called latent variable: latent because it is not directly observable and variable because some of its properties, such as strength and width, may vary according to persons or conditions;
c) The scores of each item must be added;

d) The fact that the items do not have a 'correct' answer makes it different from the multiple-response tests; rating scales cannot be used to test knowledge and ability.

569. Among its main qualities, this scale is able to graduate the respondents' behaviours and opinions regarding a specific survey topic and reveal the beliefs closest to their experiences.

570. One of its main advantages is that it can be easily administered to respondents. The answer recording is formally very simple: the answer categories are clear and follow a preset scheme. To express their viewpoints, interviewees can choose from several answer alternatives, unlike scales that simply provide for a dichotomy reaction (yes/no or I agree/I disagree). In addition, the answers can easily be ordered on a continuum.

571. Since the typical battery-structure of the items requires interviewees to carefully read and reflect on them, Likert behaviour scales can legitimately be used in self-administered interviews where respondents can calmly reflect and evaluate the answer that most reflects their opinions.

572. Multi-dimensional analyses of the answers obtained through the Likert scales can help identify and understand what type of relation, if any, there is between structural aspects and socio-psychological features of the respondents. The picture that emerges is certainly complete and exhaustive thanks to the fact that objective data are placed in relation with subjective elements. In the victimization survey for example, the Likert scales could be included in the section that deals with feelings of fear of crime and feelings of socio-environmental decay (Example 1). The data processing phase could then involve carrying out multi-dimensional analyses that relate the personal profile of the respondent defined based on their subjective opinions expressed through the scales, with the results that emerged in the sections relative to crimes suffered and thus, to objective experiences of victimization.

EXAMPLE 1

How much do you agree or disagree with the following statements? (one answer per row)	Strongly agree	Agree	Un-certain	Disagree	Strongly disagree
Neighbourhoods where immigrants live are more degraded	1	2	3	4	5
Good lighting and cleaner streets allow for a better quality of life	1	2	3	4	5
Whoever commits acts of vandalism against public properties must be punished with community services	1	2	3	4	5
'Quality of life' is a problem that affects only who lives in the city	1	2	3	4	5
Were the police to patrol the streets more often, many acts of vandalism would not occur.	1	2	3	4	5
Homeless people and gypsies should not be allowed to beg for money on the streets	1	2	3	4	5

573. Nonetheless, the Likert scales do have some disadvantages, some of which are linked with the scale's typical closed-answer structure. Because interviewees must choose from just a few alternatives, they are not encouraged to reflect. What is more, if they have nothing to say about the argument, they could be induced to give a non-reasoned answer or even a casual answer, maybe to hide their own ignorance or disinformation on a given argument. On the other hand, particularly informed and interested persons could be prevented from 'giving an original contribution to the research, thereby sometimes generating frustration and irritation in those who have an opinion that cannot be expressed in any of the preset categories' (Pitrone 1984, 62). In this case, the interviewee could decide not to answer so that their opinion is not conditioned by the scarce and closed alternatives provided for by the survey instrument.

574. Of course, whatever way the Likert behaviour scales are used, it is important to follow some general rules, especially to pay much attention when formulating the items. The terms used must indeed reflect the current language and should not be ambiguous, etc. The items chosen must be

semantically simple, and double-barrelled items in particular must be avoided, i.e. statements that refer to two different situations of the same object. Moreover, '(…) most people have only an approximate cognition on everything that is distant from their own vital world, but make sophisticated distinctions on everything that relates to work and free-time activities. Hence, it is important that interviewees understand the item text in order to express their own opinions on the argument and that the items given to them be drawn up with much cognisance of the case in order not to make them seem vague and/or inaccurate. The items must be structurally simple and involve only one statement referred to one object only' (Marradi – Gasperoni, 2002). These recommendations reveal once more the double-edged nature of such technique: simple in structure and understanding, complex in preparation and conceptualisation.

Advantages and disadvantages of scaled items

575. Scales offer many advantages. The greatest advantage is their simplicity. Scales are easily administered to respondents, respondents understand them and responses are easily recorded and coded. Scales allow respondents to express their viewpoints from several alternatives in contrast to dichotomous responses (i.e. yes/no, agree/disagree). And scales allow answers to be easily ordered on a meaningful continuum.

576. Scales are prone to some disadvantages however. First, because respondents must choose from relatively few alternatives, they are not encouraged to reflect deeply on the topic of interest. Further, if the respondent has nothing to say about the topic, they may be induced to a non-reasoned or even a casual answer. On the other hand, particularly informed and interested persons may decide to not answer in order that their opinion is not conditioned by the alternatives provided for in the survey instrument.

577. A problem to be avoided in scaled items is response set bias. This can occur when a survey instrument offer a series of questions in which the response categories are the same. For instance, a series of questions may be answered by marking either 'yes' or 'no'. This can be a problem in a Likert scale, where 'the items of a Likert scale are presented to the respondents not separately, [...] but always as a sequential battery using the same answer scheme' (Cacciola – Marradi 1988, 69). Consequently, respondents may be inclined to give the same answer regardless of the question asked. When the respondent identifies a pattern in response categories, they may stop reading the questions and simply mark the entire column of responses as 'yes' or 'no' or 'Agree' or 'Disagree'. Obviously this behavior jeopardizes the value of the data collected and should be avoided. One way to do this is to break the blocks of questions into smaller blocks and to reverse the 'yes'/'no' sense of the questions asked.

578. And finally, scales can produce acquiescent response set. This refers to the tendency that individuals have to be agreeable. Therefore, in a survey situation, respondents are more likely to agree with items than they are to disagree with items. Clearly, acquiescence bias will distort the data. Therefore, the polarity of some statements should at times be inverted in order to make the presence of this bias measureable.

BOX 51: INSTRUCTIONS TO THE RESPONDENT

After having selected the type of question to be used (e.g. single response, multi-response, hierarchical, scale, etc.), it is necessary to provide clear instructions to the respondent for answering the question. These directions should tell the respondent exactly what they are expected to do. Depending on the type of question, this portion of the instructions may include:
- select only one response
- provide a maximum of three answers
- check all that apply
- please rank the following items from most preferred to least preferred
- please select the three most preferred options, and then rank order those three from most to least favourable

Aside from the specific instructions, more general instructions for the respondent are important to include. This includes instructions such as:
- carefully read all items
- please take your time to reflect upon the best response

C. Language and cultural considerations

Languages: Will the questionnaire be administered in more than one language?

579. As borders become increasingly open, countries around the world are becoming more diverse. In designing a victim survey questionnaire, one has to take into account the diversity of the population if the results are to be representative of the population. One factor that is important to consider is the linguistic profile of those who will be included in the sample. When trying to ensure that the questions are relevant, clear and easy to understand for all individuals in the population, translating involves a number of challenges because not all languages have words to describe the same concepts.

580. The first challenge is deciding in which languages the interview will be administered to be representative of the population. This can be determined by consulting censuses of the population or other research which details which languages are most often spoken at home by the survey population. Efforts should be made to include the languages most frequently spoken at home. There may also be legal requirements, e.g. in the case where more than one official language is spoken in the country, or in the case of legally recognised national minorities.

581. The second challenge is translating the interview as to maintain the same meaning and to ensure the entire sample is being asked the same questions. The degree of difficulty of this challenge varies depending on the language. Some languages do not have words or phrases equivalent to other languages. Consistency in the wording of questions is critical to ensure comparability across populations. To facilitate this task, expert groups should be formed to assist in wording questions and to identify other issues that may arise given the ethnic diversity of the population. Translation of the questionnaire should not be viewed as a one-way process, as it may also involve making adjustments to the original language version in order to find the terms with best equivalence in the different languages.

582. Following content development qualitative studies involving focus groups and face-to-face interviews with feedback should be conducted. If feasible, these studies should be carried out multiple times in various languages. Each series of studies will help better understand the way people answer the questions, identify certain problems and improve the questionnaire. During a large pilot test additional problems that may not have been noticed before can be caught. This test will also confirm whether the non-response rate due to language barriers has been addressed.

583. Another challenge is that not only must the survey be translated properly, but individuals who speak the various languages in which the survey will be administered must be found to conduct the survey. This can pose problems since interviewers may not be able to use the other language effectively to convey the concepts. A final challenge is finding the resources to translate the survey responses back into the official language of the country when opened answers are allowed, in order that these results can be analyzed and included in the study.

Cultural issues/differences

584. In addition to problems that can arise due to language differences, there are a range of further cultural issues that may have an impact on the success of a survey and quality of the data collected. A range of these other cultural considerations may be relevant depending on the purpose of the survey, populations being surveyed and the environment in which the survey vehicle will be administered. These situations are most likely to arise when the population of an area to be surveyed (be it a city, state, region, canton, province or nation), is comprised of persons from multiple ethnic or cultural backgrounds. A survey's aim may be to specifically understand crime victimization of a particular cultural or ethnic group. Alternatively, the aim may be to gather a representative sample of an area, and the challenge may be obtaining the support of a minority cultural group in order to achieve these goals. As previously mentioned, these challenges can be exacerbated by language differences. As a general rule, the statistical organization, in these instances, will represent a dominant cultural group, and will need to consider the requirements, mores and attitudes of other ethnic and cultural groups. Understanding, being able to define the relevant cultural groups, and to identify persons from these groups where necessary, may be essential to fulfilling the survey goals.

585. It is vital that any respondent understand the importance of the data they are providing, and how these data will be used. If a specific cultural group is to be included in the survey, it is important to determine how they may specifically use or access the information that is collected. This is important throughout the survey process, from identifying information needs and who in communities may use the output data, through to ensuring that outputs can be accessed and understood. Depending on the situation this may simply mean promotion or translation into other languages, through customized outputs and information delivery. The latter may be necessary when interviewing persons living in remote communities who may not have access to the technology required to view outputs disseminated electronically or where literacy levels may restrict the utilization of more sophisticated statistical output. The data released from the survey need to be meaningful and visible to the communities who have contributed towards their collection. Communicating the purposes of the survey can facilitate both a current survey under development and be a wise investment for agencies looking to gain the trust and cooperation of cultural groups and communities in future surveys.

586. Consultation with the communities to be surveyed is essential in gaining support for the survey endeavour – particularly if endorsement can be gained from community leaders. Persons with an in-depth understanding of the cultural group of interest will be able to provide expertise in relation to the content of the survey. In some cultures, it may not be permissible to discuss certain topics entirely (particularly if sensitive, such as domestic violence or sexual crimes), or perhaps there are restrictions upon who may answer certain questions. In some instances, for example, a head of a household may wish to represent the views of the whole household, or there may be reluctance to let some members of the family speak independently. It may be necessary to design some of these factors into the survey instrument and instructions to interviewers, or seek to otherwise make respondents comfortable in participating in the survey.

587. Other potential methodological issues can also be pre-empted through community consultation and liaison. Access to cultural groups or communities living in non-mainstream arrangements or environments can be a challenge to representatives of statistical agencies conducting data collection. The establishment of community liaison points of contact can provide invaluable information about the best ways to approach persons from different cultural groups, and to assist in access. This can be a particular challenge when conducting interviews or seeking to have questionnaires filled in by respondents in remote geographical locations, or where language and literacy levels may be variable. The employment of persons from different cultural groups on survey staff can be a way to gain the support and trust of different communities – particularly if face-to-face interviews are part of the survey methodology. However, there may also be disadvantages to this if both the respondent and the interviewer are from the same, relatively small, group. This may lead the respondents to fear for the loss of anonymity or pressure them to give answers (e.g. regarding their activities) that are more socially desirable in their culture. Different cultures can have different rules about seating, etiquette, touching, eye contact and communication between men and women. Facilitators or persons from the cultural background of interest may be able to assist representatives of the statistical agency in overcoming these potential cultural barriers.

588. Trust can sometimes be lacking between different cultural groups, and persons from some ethnic backgrounds may have an inherent distrust of governments or bureaucracies based upon previous personal or historical experiences. Depending on the groups involved, this may include histories of war, dispossession, stolen children, police harassment, incarceration, etc. Distrust may also be found in a country without such history, as respondents' attitudes towards officials may be based on their earlier experiences from other countries. It is vital that an agency that may be identified with such historical activities or part of a broader 'government' be aware of these possibilities and seek to gain the trust of the groups involved. As with the issues raised above, this is best done through discussion with community leaders and a careful and considered approach of communication and exposure.

589. Provider load can arise as an issue for a statistical agency conducting surveys that are particularly focused on one smaller cultural or ethnic group (particularly a survey program that extends beyond crime victimization surveys). There are two primary elements to provider load: where a small com-

munity is repeatedly sampled for different purposes, and where a survey takes a long period of time for a respondent to complete.

590. In order to gain reliable statistical estimates at lower levels of disaggregation or geography, it may be necessary to sample a high proportion of a population sub-group. Should this be the case, consideration needs to be given to the balance between the needs and benefits of the information and placing an undue burden upon respondents. Undue respondent burden can be one way of eroding cooperation between a statistical agency and a particular group – particularly if there are many cultural differences, and the agency is in the process of building trust and a strong liaison network.

591. Normally, as the length of an interview increases, respondents tire, and in some cases may begin to give responses that are less accurate or which they feel may end the interview more quickly. If data are collected through interviewers, long survey interviews can also result in 'short-cuts' being taken, especially if they notice the respondent is becoming fatigued. Additionally, there may be a temptation to conduct long surveys with persons from groups which are difficult to sample or reach, but this can lead to a loss of cooperation, and persons responding in certain ways purely to end the interview more quickly.

592. Disparate cultural groups may respond differently to contrasting methodologies, and some research will need to be conducted to determine whether or not this may be an issue in a particular survey situation. For example, a scripted interview may not be effective with all cultural groups – in some instances, other techniques may be more appropriate to elicit data. In some more remote or traditional cultural areas, written questionnaires may not be as successful, and there may be different levels of support for phone or face-to-face interviews.

593. In instances where there are wide differences between cultural groups to be included in the survey, the content and questionnaires may also need to be tailored to allow for different understandings of concepts or ways of thinking about the world. For instance, there may be different concepts of time employed and asking about events that have occurred in the past six months may not have relevance. However, if there is a known significant event within a particular community that occurs around the reference period date, this may be a more effective substitute. For example, 'Since Easter, has the following occurred…?'

Table 13: Challenges and possible approaches

Challenges that can arise	Possible approaches
communication barriers cultural sensitivities mistrust of government agencies respondents are reluctant to participate conceptual difficulties high costs	cultural awareness consultation with relevant communities/organizations involvement of people from the cultural group(s) of interest modifying survey questions managing respondent burden extensive testing and refining of survey strategies

D. Pre-testing and the pilot survey

594. This section addresses qualitative methodologies used in the analysis of survey feasibility and pre-testing. The questionnaire is both a measuring and a communicating tool and for that reason it should be pre-tested. The suitability of the instrument needs to be evaluated, both with a focus on the ease in understanding the questionnaire by respondents and in managing it by the interviewers.

595. When assessing a questionnaire, several qualitative methodological tools may be used. These include focus groups, preferential witness meetings, the questionnaire pre-test, not participating observation, pilot survey. Findings from these tasks will be used to elaborate and refine the instrument until a final questionnaire is created.

Focus groups

596. Qualitative methods such as focus groups can be used in explorative analysis to clarify the goals of the study, refine the primary theme and to acquire more knowledge about the topic of interest. Methods such as focus groups are also useful when a preliminary questionnaire is available and one wants to engage in a pre-test of the instrument.

597. Generally, focus groups are conducted with a homogeneous group. For instance, when studying violence against women the focus group participants could be shelter operators and victims. These types of situations allow the researcher to focus on a particular element of the research topic. For instance, one may be able to gain insight into the psychological aspects of victimization. Also in the case of a general population survey, focus groups on young or elderly respondents or minority respondents may help in determining any differences in how different respondent groups approach the survey topic.

598. Based on feedback from the focus group discussions, survey instruments and questions can be refined to better gather the desired information and reduce respondent confusion.

Expert revision

599. Expert revision is a very important tool available for all survey design. This technique suggests that the instrument draft be given to experts in the field for review and comment. Along with the instrument, the experts should be given a document outlining the study aims, the available resources and the interviewing technique which will be used. The document should also indicate any part of the instrument that has proven especially difficult. Each expert is asked to write a review containing all suggestions and critiques of the questionnaire. From these reviews, the questionnaire should be modified. This is an inexpensive method to improve any questionnaire. Further, it is one that can be repeated during the design phase to ensure the best instrument possible.

The alternatives test

600. The alternatives test is an option that consists of verifying two versions of the questionnaire by two balanced samples. The two versions of the questionnaire differ in one way such as the wording of one question, the interviewing technique, question sequence or reference time periods. If well conducted, test outcomes can be analyzed to assist researchers in selecting the best approach to the phenomenon (e.g. question wording, reference period) of interest.

Cognitive testing

601. Cognitive testing is essential to developing questionnaires. Cognitive testing has several goals. First, a cognitive test can evaluate whether respondents understand the question as the questionnaire designers meant it to be. Second, the cognitive test can ascertain whether particular questions are too difficult or if they are clear to the respondent. Third, cognitive testing helps to reveal if certain topics are too sensitive or uncomfortable, resulting in respondent refusals. And finally, cognitive testing can illustrate the degree to which respondents are interested in the topic, as well as if it is too long.

602. Cognitive testing methods include several approaches. First, one may simply observe respondents completing the questionnaire. Second, an interviewer encourages the respondent to 'think aloud' while answering the questions. Respondents are encouraged to comment on each question and explain how the final response was selected. Third, interviewers may verbally probe the respondent. That takes place after the respondent answers the question when the interviewer may ask for other specific information relevant to the question or the answer. And finally, cognitive testing may involve the use of focus groups. This is the informal discussion of a selected topic by participants who are chosen from the population of interest.

603. Specially trained cognitive interviewers typically conduct cognitive interviews to a small sample of volunteer subjects. The 'generic' cognitive interviewing procedure is conducted in a face-to-face mode, within a cognitive laboratory environment. In-person interviews are preferable because they

allow observation of non-verbal cues and provide a more natural type of interchange between the subject and the interviewer than is possible over the phone.

604. It is also possible to conduct cognitive testing interviews over the phone. Telephone-based interviews can be useful for several specific purposes. For instance, if the respondents are elderly or disable and are unable to travel to an interviewing location, a telephone test is appropriate. A telephone cognitive test is also appropriate when the questionnaire is intended for future telephone administration.

605. Cognitive tests can be useful for testing specific aspects of the questionnaire or even the survey methodology. For example, one may need to ascertain whether to allow proxy interviews. Or one may be testing the value of screening questions or the reference period.

Pre-testing

606. It is fundamental that a questionnaire be pre-tested. Pre-tests test the value of wording, the context of questions, the clearness of instructions and the ease of administering the instrument. At this stage the goal is not to draw a representative sample of the target population, but to assure that the instrument is tested in various difficult conditions to stress its reliability.

607. In countries characterised by wide geographical, social and cultural differences, sample units should be drawn across these areas and across social and cultural divisions. Interviewers for the pre-test should be particularly able to help in identifying problematic areas of the questionnaire or of the interview. Questions the interviewers should focus on in respect to the instrument include:

- The completeness of the questionnaire regarding the information to be collected;
- If the questionnaire (either paper or electronic) is an easy tool to be administered by the interviewer (in terms of time length, instructions, patterns and filters, sequence);
- How the questionnaire is perceived by respondents (if they are annoyed or tired, particularly if it happens in specific part of the questionnaire);
- The context and its effect – are respondent's answers being influenced by something? Are they more willing to agree than disagree?
- Specific attention to sensitive issues;
- Difficulty in recalling incidents, as well as telescoping;
- Clarity of the questionnaire;
- Whether the questions are pertinent, correct and exhaustive;
- If response coding is correct;
- How filtering questions and skip pattern perform;
- The efficacy of the graphic form of the questionnaire;
- Whether the interview technique is suitable to the topic of interest.

608. It is recommended to provide interviewers with a detailed list of the aspects of the questionnaire to be tested and the feedback of the interviewers should be recorded (e.g. by using a separate questionnaire which the interviewers fill out after the interview) and analysed. In addition, it is advised that the researchers responsible for the survey also conduct some interviews. This is an excellent means to test the suitability of the instrument.

609. Based on the outcome of the pre-test, the survey manager can make the required changes to the instrument or methodology. If many changes are necessary, some testing steps may have to be repeated until the final version of the questionnaire is generated.

The pilot survey

610. The pilot survey is a useful tool for preparing and verifying the selected survey methodology. A pilot survey is a survey that reproduces all survey phases on a small number of survey units or respondents. It is not important that sample units or respondents, are representative of the overall population of interest. Rather, it is important that they represent the various ways respondents will be contacted

so they can reveal any difficulties that may emerge during the actual survey. For example, the pilot study should include segments of the population that are anticipated to be problematic in contacting or interviewing (such as minority groups).

611. A pilot survey is far more complex than a pre-test. A pre-test focuses more on the questionnaire alone. In contrast, the pilot study deals with the *entire* study from the beginning to the end. Respondents are selected and interviews are administered. From this, aspects of the study are checked. The aspects checked include:

- What were the response rates?
- Was item non-response high?
- Did the interview take as long as anticipated?
- Did the skip patterns work as they should?
- Was the structure of the questionnaire appropriate?
- How many contacts to the respondent were required to actually complete the interview?

612. Aspects related to interviewers are also verified during a pilot study. Interviewer's items to be verified include:

- Did the interviewers and respondents develop the appropriate relationship?
- How many days were required for theoretical and practical training of interviewers?
- What did the training involve?
- What materials were required to train the interviewers?
- What did an evaluation of the training reveal?

613. Information flow is also investigated during the pilot study.

- How was address selection accomplished?
- What was involved in address substitution?
- How did the households respond to introduction letters and phone contact?

614. And finally, the pilot study addresses the data itself.

- What problems were encountered when recording the data?
- Were there issues when producing and reading data files?
- Were interviewers able to download data electronically?

615. In order to address these and other important questions raised during the pilot study, it is important that the opinions of all members of the survey team are considered. For example, those conducting the interviews have great insight into the working of the questionnaire and respondents' views of the survey. Clearly, maintaining a good relationship with open communication with interviewers is vital. One method of gathering information from interviewers is via a meeting. These face-to-face meetings are useful for brain-storming and debriefing purposes. During these meetings items such as the following can be discussed.

- Did respondents have difficulties in understanding some questions? Did they request clarifications?
- Did respondents demonstrate reluctance in answering some questions? Why? What did you say to the respondents to encourage an answer? What were the results of your prompts?
- Did you find redundant questions that appeared to be useless or irrelevant?

616. When interviewers are located across geographical regions or when it is not possible to schedule a meeting that gathers all interviewers, it is recommended that they have another way to communicate as quickly and effectively as possible (mailings, chat/forum, telephone). Another option is to select some interviewers to participate in a focus group to further delve into particular areas of interest.

617. Supervisors have an important role as well. They offer a broader view of what is happening during the questionnaire and interview administration. In telephone surveys, where interviewers are gathered in a centralized facility, supervisors can listen to interviewers during the interview (according to laws defining the job characteristics) to get a better idea of what is happening during the process.

618. Regardless of the source, all thoughts and comments about the study should be forwarded to the study manager for review. An evaluation of these comments will determine whether additional changes in specific points of the survey process are warranted. In general, small changes made do not require another wave of the pilot survey. However, if changes are significant, it is advisable to conduct a second pilot study. All problems corrected during the pilot study phase minimize future problems during the actual survey.

E. Summary

619. This section has emphasized the choices to be taken when designing a victimization survey questionnaire. Sometimes these are clear and evident, other times, instead, multiple choices are possible, each of them presenting advantages and disadvantages.

620. Choices depend on the main goals of the survey; this means, for instance, that it is very important, from the outset, to decide which data the researcher wants to disseminate. If the main data will be only on criminality or only on fear, then the priorities will be on one of these aspects; if they want to study both of them, the balance between the two topics have to be decided (how many information, the sequencing ...).

621. Choices also depend on the types of indicators to be delivered and how to structure them. These important aspects have to be considered while planning a questionnaire: which variables are needed and the right way to collect them in order to process meaningful indicators. For instance, the crime incidence rate can be easily calculated considering the number of times the incidents occur in the reference period, but this is not the most suitable value for every crime. In fact, for violent crimes such as assault or repeated domestic violence, some authors (Rand and Renisson 2005) have shown that the number of times is affected by the victims' remembering ability, consequently being more an estimate than a precise number.

622. The above considerations are just examples of the complexity arising when faced with the questionnaire design. Any choice has a different effect on the results and only an in-depth evaluation at each step can guarantee the quality of the survey.

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CHAPTER VI. INTERVIEWING

623. Chapter VI of the Manual addresses issues associated with the conduct of interviews, including non-response, the use of proxy respondents, training of interviewers and quality control throughout the interviewing process.

A. Non-response and survey error associated with respondents

Non-response

624. Minimizing non-response, a type of non-sampling error, is an important goal for any survey. In minimizing non-response, data quality is maximized. It is imperative that the interviewed sample be as close as possible to the theoretical sample to assure that it is as representative as possible of the whole population. Fortunately, there are specific strategies that may be applied to minimize non-response.

625. There are two primary forms of non-response: total non-response and partial non-response. Total non-response occurs when the interview of the sampled unit (whether individual or household) is not conducted. This can occur for a variety of reasons including the sampled unit cannot participate, the unit refuses to participate, or the unit cannot be contacted.

626. Partial non-response results when the survey instrument or questionnaire is only partially completed. This can occur when some questions or even entire sections are omitted or ignored. In general, partial non-response occurs more often in face-to-face surveys. In computer assisted interview surveys, item non-responses are less common as the system does not allow the respondent to continue the instrument until the field is filled in, and in case items need to be skipped it is not up to the respondent to find the next question as the system can be programmed to do this automatically. Reasons for item non-responses vary and may result from items the respondent feels are personal or too sensitive (e.g. income), fatigue to the questionnaire being too long, a confusing skip pattern or a simple lack of attention on the part of the interviewer or respondent.

BOX 52: REASONS FOR REFUSAL

The primary form of non-response in survey research results from refusals and non-contacts. Refusal may come about due to disinterest in the survey topic, lack of time, distrust in the survey's purpose, doubts regarding anonymity or confidentiality, family reasons and language barriers. Aside from respondent refusals, reasons for complete non-response (or non-contact) are empty house, respondents are never contacted, and/or the sample unit is not eligible.

627. To minimize total or partial non-response, several strategies are recommended. The primary strategies used in minimizing non response include the use of introductory letters, timing of first contact and the provision of a freephone number. These topics are discussed in greater detail below.

Minimazing non-reponse

The use of introductory letters

628. An introductory letter to the sampled household or person is an effective way to reduce non-response. In the case of a telephone survey (the Italian Citizens' Safety Survey 1997-98 and 2002), when introductory letters were not received by the respondent, refusals ranged from 30% to 35%. In contrast, when an introductory letter was received, refusals dropped to between 5% and 10%.

629. An introductory letter should contain several elements. First, the letter should be professional in appearance, include the survey company's logo and be signed by the President, Director or some other high-ranking official. In some societies, there may be advantages in sending the letter from the Director of the national statistical agency, rather than from a politician or government official, in order to emphasize the independence of the survey. When the survey is being managed or conducted by multiple organizations (e.g. the national statistical institute and other territorial public administrative

offices), the introductory letter might be signed by one official from each organization if possible. In addition, involving agencies at local level tends to elicit greater cooperation from respondents.

630. The introductory letter should also include a description of the general purpose of the survey as well as the institute carrying it out or the agency promoting the research. The letter should inform the respondents of the motivations and aims of the project, provide an explanation of how the respondents were selected, and reasons why the respondents' cooperation is vitally important. As regards the content of the interview, it may be better to avoid sensitive topics or topics that may generate anxiety or worry in the household's members, for instance, questions on assault and sexual violence. This approach is essential in Violence Against Women Surveys, in order not to alarm a possible perpetrator of domestic violence and not to frighten a potential victim of violence. It is advisable to generically mention that the topic of the survey is, for example, the safety and security of citizens and to mention examples of questions about less sensitive crimes, e.g. pickpocketing or car theft.

631. The letter should also reassure respondents about the seriousness of the project, privacy of their responses and how their data and information will be treated. This includes who will process their data, the possibility of accessing and modifying their own personal data and assurance about the security used to protect their data. The letter should also indicate how the respondent is expected to participate. Regardless of the mode, the respondent should learn in the letter the days and time at which the interview can be conducted and its expected duration.

BOX 53: CONTENT OF INTRODUCTORY LETTER

Though an introductory letter should not exceed one page, it should contain all the essential information. Here is a summary of the contents of an introductory letter:

- Sponsoring agency or institute's logo
- Identification of the organization conducting the survey
- Primary purposes of the survey
- Mode of interview and dates and times of the interview
- Information about obligations to answer and the protection of private and personal data
- Freephone number with hours when the respondent may use it to obtain more information
- The phone number of agencies and institutions involved in the survey
- Thanks for participating
- Institute President's signature

632. It is important that the selected respondents read and remember the introductory letter, meaning care must be taken to facilitate the reading and retention of it. This can be done by making the letter interesting by using graphics, emphasizing important points (e.g. underlining or using different fonts) and using colour for the logo.

633. In some cases, the introductory letter is addressed to the household in general, yet it is important that each member of household read it. To encourage this, it is recommended that directions to put the letter in a place in the home where all can see it easily be underlined in the letter. Generally, however, letters addressed to a person are more likely to be read than letters which are sent to an address without a named recipient (e.g. 'to whom it may concern').

634. In some cases, it may be unclear what language is spoken in the household. If this is a possibility, send multiple letters (one in each language) to the household. This will assure that the letter is understood, and it will increase the likelihood that the respondents will participate in the survey.

(i) Mailings

635. Once the introductory letter is completed, it must be mailed to the selected household. An important consideration in this step is ensuring that the time between the receipt of an introductory letter and initial contact from the interviewer is not too long. The more time that passes, the more

likely the respondent will have forgotten the content of the letter. It is suggested that the interviewer's contact take place no more than one week to ten days after the letter has been received. To facilitate this, the mailing of the introductory letters should be staggered. The number of letters sent in each batch of mailings is based on several considerations referred to as the 'work time' of the households:

- length of the interview
- number of interviewers available
- days and hours the interviews are conducted

636. An initial estimate of the number of addresses that are 'closed' each day (i.e. interviews completed) is essential to the timing of introductory mailings. To verify the time it takes between sending the letter and the receiving of the letter by the respondents, test mailings are encouraged. One can mail letters to members of the survey staff or others not in the sample to ascertain the amount of time it takes a letter to arrive. With this simple test, it is possible to verify the lag time between mailings, receipt of letters and contact for interviews.

637. To further encourage the respondent to participate in the interview process, one may elect to mail the introductory letter twice: the first about ten days before the interview and the second a few days before. However, research does not clearly demonstrate that response rates increase with double introductory letter mailings. Therefore, it may not be worth the additional cost to do so. In some surveys, families have been called in advance to remind them of the impending interview, but this tactic has been associated with higher refusal rates..

(ii) Freephone number

638. The joint strategy of an introductory letter and a freephone number offers a substantial increase in the response rate. Making a freephone number available allows individuals to contact - before, during or after the interview - the institution conducting the survey if they need more information and/or reassurance about participating. The freephone number should be functional when the introductory mailings are mailed. It is fundamental that the staff manning the freephone number be highly qualified and trained about the aims, content and motivation of the survey. In addition, the staff must have effective communicative and listening skills. Furthermore, as previously discussed when dealing with the content of the introductory letter, the same rule applies for the freephone number: it is important when speaking with the callers not to explicitly talk about sensitive questions, unless the call is made with specific reference to them, in case a person calls after being interviewed or if the interview was temporarily interrupted.

639. The staff manning the freephone number must record the quantity and quality of the calls. How many calls are dealt with? What are the questions asked by the respondents calling? What are the doubts, concerns or complaints expressed by the callers? The information gleaned from the freephone number is vitally important and can be recorded in a structured format on a sheet of paper. On this sheet, the staff record the caller motivations, caller profile (e.g. gender, age, educational level, region) as well as their view of how the call was ended and the callers willingness to be interviewed.

640. Potential respondents call the freephone number for a variety of reasons. These include:

- Determining the seriousness of the survey;
- Gathering general information about the purpose of the survey;
- Ascertaining their obligation to participate;
- Determining the consequences of refusing to participate;
- Communicate a change of address or a period of absence;
- Offering times when the respondent is available;
- Providing an updated phone number;
- Requesting a survey date;
- Conveying the death of the person to whom the introductory letter is addressed.

641. Daily monitoring information gathered on the freephone number allows situations that could later jeopardize the quality of the survey to be caught early. For example, a current event related to

criminality reported in the media may influence public opinion and change the desire of respondents to participate in the survey. Such instances may be signalled by the citizens' calls to the freephone number.

642. Aside from a freephone number, it is recommended that a second telephone number (not freephone) be included in the introductory letter. At times, suspicious respondents believe that the freephone number can be a tool to mask a fraudulent organization attempting to gain personal data. A second number easily connected to the agency or organization conducting the survey will reassure such individuals that the survey is legitimate and important.

Contact at the sample unit

643. Introductory letters and the activation of a freephone number are steps toward minimizing non-response. It is hoped that these steps enable the successful completion of an interview when the first personal contact with the respondent is made.

644. Field experience shows that a large proportion of interviews are obtained and finished during the first contact. In addition, a large percentage of interviews are concluded following the second contact. The completion of an interview following a second contact is largely due to survey technique differences. For instance, in a face-to-face interview, the household may first be contacted by phone to make an appointment. It is then during the second contact that the survey is secured. After two contacts, the percentage of interviews completed decreases greatly. After a specific number of contacts it is more efficient for the overall economy of the survey to abandon that household.

645. To evaluate the maximum number of contacts for each respondent, a cost-benefits evaluation should be made. One the one hand, the maintenance of the sample as selected is important to consider. But on the other hand, the cost and time lost with repeated contacts to a non-responding unit must be taken into account. To establish effective and useful rules for when to abandon a sampled unit, it is important to analyse the reasons why an interview is not completed in a single contact.

646. One reason for a need for multiple contacts may be the sample design. Can the interviewer interview anyone at the sampled household (or phone number)? Or must the interviewer identify and locate a particular individual? Being able to interview anyone at the sampled unit will bias the sample since those most easily found at home are not representative of the population in general. However, this strategy means completed interviews are easier to obtain. When the survey is conducted over the phone, is the phone ringing but no one is answering? Or does the interviewer make contact, but not with the desired respondent? Clearly understanding the reasons behind failure to complete an interview will guide the rules established for abandoning a particular unit.

647. Usually rules are structured based on the type of non-contact. For example, how to proceed if no one answers a phone? If the call is not answered, it is assumed that no one is at home so it is recommended that an additional call is made at another time. If during a call, the line is busy, it is assumed that the person is at home on the phone, so it is recommended that an additional call be made five to ten minutes later. Obviously, it is not possible to define a priori a constant number of phone calls to be made since it depends on the type of non-contact.

648. If contact is established with someone, the approach may differ. The person contacted may state that family is unknown to them, that the desired family member is seriously ill or dead. Or the person contacted may be the desired target, yet he or she refuses, or he could start the interview but stops it after few moments. The contacted individual may ask for an appointment. Again, it is difficult to define a priori a constant number of contacts since the reasons for failing to conduct the interview may vary.

649. Difficult as a priori rules are to establish, generally seven or ten consecutive calls over a period of two to three days to a respondent is considered enough to abandon the respondent. When there is no answer when phoning or the call is picked up by an answering machine or a fax, the number is to be re-called at some interval. In the Italian victimization survey two time ranges were established for recalling: From 18:30 to 20:00 and from 21:01 to 21:30. In case of a busy signal, the number is to be re-

called every five to ten minutes for seven consecutive times. After a series of seven busy signals, the number is to be called again the next day at the same hour when the first busy signal was detected.

Managing refusals

650. Depending on the sample, various types of refusal can be foreseen. In the case of one-stage sample design, refusal can only come from the person who answers the phone, who refuses and prevents the whole household from being interviewed. In the case of two-stage design, instead, it is necessary to identify and contact a respondent after having extracted and contacted the household. The refusal at the first stage will cause the exclusion of the entire household, the second stage refusal only concerns the selected respondent. In past two-stage telephone interviews, a much larger impact has been found in the first stage than in the second, which means that once the readiness of the respondent who answers the phone has been obtained, the probability of refusal from the selected respondent decreases significantly.

651. Strategies for managing refusals depend on understanding the reasons for refusals. Interviewers should be trained before the fieldwork on approaches how to deal with various arguments, including issues which are particular to a victimization survey (e.g. the respondent saying 'I have not been the victim of anything, ask someone else').

652. There is no one single approach to handling all refusals since each situation is different. However, some guidelines may be established to help to limit the refusal rate. Some refusals arise from the circumstances and not from the individual respondent. In these cases, it is necessary to make an appointment to contact the person at a more appropriate time. Refusals due to lack of trust, hostility or fear regarding the use of the information given require a different strategy. In these instances, the respondent should be reassured about the survey, the security of their data and given (again) the freephone number. Refusals based on a respondent's notion that the interview is a waste of time or pointless should be handled differently. In these cases, the value of the survey must be stressed, and the respondent should be reassured about the importance of their participation in what is a socially important survey.

653. In interviewing minorities, respondents may choose to refuse because they feel that their language skills are not good enough. In such cases arrangements should be made for interviews in different languages (e.g. appointment with another interviewer). There may also be cultural reasons for not letting interviewers enter and conduct interviews at homes (e.g. male interviewers entering households where only women are present). Persons who have had bad experiences with the authorities (at home or abroad) may also be wary of dealing with people who they perceive as officials. The religious holidays of some minority groups may make it difficult to conduct interviews at these times.

654. Interviews conducted via the telephone have additional considerations since the first contact is vital for establishing a positive relationship with the respondent. The initial presentation read by the interviewer must be carefully constructed. Appropriate use of language in the questionnaire and the interviewing process are vital in minimizing non-response and managing refusals. Arrangements for same sex interviewers may mitigate against some of these issues. The language needs to be tailored to a particular country/culture and this should be tested prior to the conduct of a survey. Experience shows the importance of the research institute being well presented and the news on the data gathering in progress be highlighted. It is essential to refer immediately to the introductory letter and to inform the respondents of the freephone number.

655. To select the ideal time of the day to call, one should refer to the refusal rates and non-response rates by time of call for previous surveys. It is also important to pay attention to the time of the year. Further, it is recommended that the segment of the population that must be interviewed be considered. The young and the elderly are found at home at different times. Usually, interviews carried out from Monday to Friday in the evenings (from 18.30 to 21.30) and on Saturdays (from 15.00 to 19.00) are most productive.

656. Many of the activities to prevent non response are concentrated in the fieldwork phase. The

purpose of this is to control the activities daily via a set of preset indicators that allow checks to be made on the observance of the methodological choices and to highlight the onset of any abnormal event. In telephone surveys, the construction of an accurate system of indicators takes on a vital importance. This system keeps the refusals of sample units under control during the data gathering phase. In particular, the reasons that have caused the non-response (non-availability, refusal, interruption, etc.), the type of population that has been involved (male, female, elderly or young, single-person households or multi-person households) and the effects of the survey mechanisms used (appointments, call rules, times of data gathering, etc.) must be analysed.

Re-contacting respondents

657. Other strategies can also be used to reduce refusals. Some countries call back households even if there was a refusal at the fist attempt, in order to try a second chance. This strategy is called 'recycling refusals'. The recycling of refusals is proved to be useful, but it should be used carefully.

658. It is relatively easier to manage refusals in telephone surveys. Indeed calling again at a different time, or contacting a different person in the household can positively change the final outcome. Nevertheless, it is not advisable to place too heavy a burden on the household and it is important to define a final limit not to be exceeded, even if the survey is mandatory. In face-to-face surveys, return visits are sometimes made by specialist and ad hoc trained interviewers.

The use of incentives

659. The use of incentives, although controversial, may be another way to reduce non-responses. Sometimes this strategy may be helpful to induce households to respond to the survey. Positive effects of incentives, both monetary or in the form of gifts, are observed in mail surveys, as well as in telephone, face-to-face and, above all, panel surveys.

660. The literature shows a good relationship between incentives and data quality. Incentives seem to have a positive effect on data quality, by reducing item non-response, increasing interest in the subject and consequently obtaining more concentration on answers and increased availability to participate in future surveys.

661. If a monetary incentive is used, its amount is the object of debate, whether symbolic or substantial. Some argue it is better to provide respondents with a gift, for example a pen, a book, a beauty product or other, while others maintain that delivering the results of the survey to the interviewees should be seen as a form of recognition of their contribution.

662. Another issue is the circumstances in which the incentives will be delivered. In fact, there are some of them that are promised before the actual interview and delivered or usable only once the interview is completed. For example, a gift voucher (that can be spent in several shops) is promised in the introductory letter or by the interviewer and given on completion of the interview. Or a prepaid telephone card is provided to the respondent and activated only upon completion of the interview.

663. Several experiments about the use of different types of rewards show that this type of incentive had a significant positive effect on response rates, although an unconditional cash reward may be preferred by respondents.

664. Some studies highlighted interactions between the type of incentive and the gender and ethnicity of the respondent. These interactions indicate that different sub-populations react differently to the promised incentive: different types of incentives might affect the interviewees' group differently, creating a bias in the answering quality and willingness of the respondents to take part in the survey.

665. While a number of researchers found that offering an incentive can reduce total survey costs and reduce interviewer efforts, other researchers emphasize negative effects other than the budgetary considerations. These studies highlight that people may be more involved if they are moved by a sense of civic duty when approaching the survey. For this reason, respondents who feel motivated without incentives would provide better quality.

Addressing survey error associated with respondents

666. The approach to, and resultant behaviour of, individual survey respondents has the potential to introduce error in victimization surveys. This is particularly true where characteristics of respondents vary significantly. In such situations, survey error may arise from survey non-response (which, as discussed above, may itself be due to a range of different factors), the introduction of possible bias by particular questionnaire structure and content, or inadequate methods of survey administration.

667. In respect of survey content, as discussed earlier, questions should be worded so as to generate the same stimulus for the whole range of respondents. Questionnaire wording that is ambiguous or overly technical is likely to cause respondents to provide their own interpretation of the meaning of the question. Where respondent characteristics vary, the risk of bias caused by respondent (mis)interpretation can become significant. Account should be taken, for example, of the ability of the elderly or persons with lower levels of education to understand the language and wording of survey questions. Similarly, when choosing the survey mode, the ability of respondents to follow, for example, the items and/or pattern required by a self-administered questionnaire must be taken into consideration. Ensuring that such choices are appropriate to respondent characteristics is an important step in reducing response-associated error.

668. In addition to survey mode and question wording, research also shows that the length of the questionnaire has a significant effect on answers given by respondents. As discussed earlier, a questionnaire that is too long may result in rushed interviews or may eventually generate resistance on the part of the interviewee.

669. Such non sampling errors can also be exacerbated by particular respondent characteristics. Where respondents show different educational levels, different levels of interest in the topic (with a low level of interest potentially leading to non-response by refusal), or different levels of trust in government or other institutions carrying out the survey, the potential is increased for survey error through non-response bias and variations in understanding of survey questions. Careful training of interviews is required in order to develop social skills, to present a positive, self-confident image and to maintain effective communication throughout the interview across all respondent groups equally.

670. Trust in the government institution or public institute responsible for carrying out the survey can depend on the political climate as well as the circumstances of the individual respondent. It is important that respondents are reassured that participation in the survey does not represent any form of threat, and that the information provided will remain confidential and be used for statistical purposes only. The value of the survey should be communicated effectively to respondents, including a description of how information gathered will be used.

671. Particular care to reduce survey error is required when the survey questionnaire includes questions on sensitive topics. In violence against women surveys, for example, questions that evoke strong personal feelings may increase partial survey non-response. In general crime victimization surveys, questions about household safety and security measures adopted or the use of alcohol or drugs may easily result in defensive answers, refusals or even false answers. Methodologies such as CASI can be valuable in face-to-face interviewing as it provides for a higher degree of confidentiality than normal CAPI measures.

672. Defining an 'acceptable' level of non-response is extremely difficult. Non-response itself is a broad term that includes non-contact (due for example to impediments to enter the building or inability to contact the particular household member eligible to participate in the survey), complete refusals (in person prior to interview or by broken appointment), partial refusal (refusal to answer particular questions) and other types of non-response (sometimes referred to as 'not-able') such as illness, mental or physical impairment, or even death of the respondent.

673. It should be noted that response rates in themselves are less important than ensuring minimal non-response bias. Whilst a smaller final sample may decrease *precision* due to larger confidence intervals, a certain level of non-response does not automatically result in *inaccurate* outcomes. Where the

reason for non-response is not related to the survey outcome ('missing completely at random' (MCAR)), a non-respondent should not introduce error into the survey. Men, for example, are less likely to agree to participate in surveys, but this should not introduce error in a simple survey of, for instance, eye colour.

674. The situation is more complex when respondents are essentially missing at random but there is nonetheless some correlation between the response behaviour and survey outcomes (for example, more younger persons than elderly persons are interviewed). This can be corrected, in some cases, where information is known about the underlying characteristic. More problematically, a characteristic of which little is known may be behind, or even determinative of, both response behaviour and survey outcomes. Such respondents are 'not missing at random' (NMAR) and will almost certainly introduce a degree of non-response bias. Persons who have been recent victims of burglary, for example, may be less willing to answer the door to an unknown person, resulting in greater non-response from such persons and underestimation of previous year's burglary prevalence rates.

675. The most important step in analysing and addressing non-response bias is to ensure that the survey design records non-response, together with the exact outcome of attempts to contact eligible participants, as accurately as it records full-response. In many cases, non-response may simply be ignored, let alone computed, analysed and made publicly available. Only when non-response is accurately recorded can attempts be made to address possible non-response bias.

676. Identification of possible bias introduced by non-response may frequently be carried out through the use of 'auxiliary variables'. Auxiliary variables are defined as variables measured by the survey but for which their distribution in the population is known. If the distribution of such variables in the final sample differs significantly from the population distribution, it can mean that particular groups may be over- or under-represented. Where characteristics associated with the particular over- or under-represented group are suspected to underlie, or even be determinative of, survey outcomes, the chance of survey bias – and therefore error – is high.

677. Whilst non-respondents have, by definition, failed to provide information to the survey, it is important that as much information as possible is nonetheless collected from, or about, the cohort of non-respondents. Selected non-respondents may, for example, be re-visited by interviewers with a view to persuading them to co-operate with the survey. This approach has the disadvantage of being costly and time-consuming. An inexpensive alternative approach (Kersten and Bethlehem 1984) involves returning to non-respondents with a small number of selected questions from the original survey. Answers obtained from the reduced survey may then be used to provide insight concerning the possible bias introduced by the overall level of non-response (F. Cobben and B. Schouten – 2007). In particular, where surveys make use of a mixed mode design, non-respondents may be approached through a mode other than that used in the original survey. For example, if CATI is used for the primary survey, non-respondents may later be approached through a combination of self-administered web and paper questionnaires.

678. If some sections of the questionnaire show higher levels of non-response than other sections, a detailed analysis of the reasons for such behaviour should be undertaken. For example in the Italian Citizen Safety Survey 1997, a higher level of non response to specific questions in sections on violence against women (1.6%) and harassment (0.5%), required a detailed analysis of the reasons of such a behaviour. A multilevel model was applied to analyse which characteristics of respondents (including educational level, income, marital status, municipality of residence) most affected the risk of refusal. Outcomes showed that single women and women showing higher family incomes and educational levels were more likely to provide a response to the questions. Moreover, partial non-response to the survey correlated with general difficulties in administering the interview reported by interviewers, indicating the need for careful training of interviewers and sensitive administration of such questions.

679. When errors are suspected due to incorrect reporting of circumstances surrounding criminal acts, a re-interview survey in a sub-sample of households originally surveyed can provide a guide to the

original accuracy of reporting (Dorcas Graham – 1977). Results of the two interviews are compared and response error measures computed. Similar research carried out after the original survey both on partial non-response and on entire sections of the questionnaire, allows evaluation and measurement of final survey data quality. In some circumstances, such information may also be used to develop weighting for correction of population estimates or for the imputation of missing data.

Use of proxy respondents

680. When a respondent is unable to provide requested information, a proxy respondent can be used to provide information. Because of issues of accuracy and confidentiality, proxy respondents are generally considered a last resort for obtaining information about the designated survey respondent.

681. Generally, surveys that allow proxy respondents do so to reduce costs of obtaining interviews or to avoid a non-interview when the person designated to be the sample respondent is unable to participate. Survey designers must determine if and when a proxy respondent may be utilized in any survey. Some surveys designate that proxy respondents will not be used at all. Others will specify that proxy respondents will be allowed only under specific conditions, such as if the designated respondent is physically unable to participate and a household member is willing and knowledgeable enough to provide information for the designated respondent. The 2005 inventory of victimization surveys conducted by UNODC-UNECE found that 31% of the 58 victimization surveys allowed the use of proxy respondents.

Advantages of using proxy respondents

682. There are two reasons surveys allow the use of proxies if the person designated for interview is not readily available: reducing cost and reducing non-response. Allowing another person who is available to provide information for the survey may reduce the cost of obtaining the interview by eliminating the need to follow up and make further attempts to obtain the interview. Additionally, allowing a proxy interview can also avoid a noninterview situation if the designated person will not be available during the enumeration period, or if the designated person is unable to respond for him/herself.

Disadvantages of using proxy respondents

683. Proxy respondents are asked to provide information about the experiences of someone other than themselves. Their responses, therefore, may not be as accurate as those of the person actually designated to be the survey respondent. Importantly, for a victimization survey, a proxy respondent may not know about crimes the sample respondent has experienced, or may not know the details of such victimizations, or their impact on the victim. Proxy respondents may also forget events that happened to the designated respondent. In addition, for victimization surveys, the proxy respondent may, for a variety of reasons, withhold information about incidents of crime experienced by the sample respondent. Such reasons include embarrassment, a desire to protect the sample respondent or because the proxy respondent was the offender in crimes committed against the designated respondent.

684. The use of proxy respondents also raises issues of confidentiality. Generally, responses to surveys are known only by the respondent and the interviewer. Using a proxy respondent can violate the designated respondent's right to confidentiality as well as his/her right to choose whether to participate in the survey.

Establishing rules for proxy respondents

685. It is necessary for the survey designer to determine whether or not to allow proxy respondents, under what circumstances to allow their use, and to create criteria for identifying acceptable proxy respondents. To determine whether or not to allow the use of proxy respondents, the survey designer must determine whether the benefits outweigh the potential disadvantages. Will the use of proxies reduce survey costs sufficiently? Will the information obtained accurately reflect the information that the designated respondent would have provided? Will the designated respondent's rights to privacy and confidentiality be sufficiently protected?

686. Circumstances in which a proxy respondent might be acceptable include:

- The respondent is too young to respond for him/herself;
- The respondent is physically incapacitated or too ill to participate;
- The respondent has a mental illness or emotional disorder that prevents participation;
- The respondent will be away for the entire survey enumeration period.

687. Of the surveys in the 2005 UNODC-UNECE victimization survey inventory, the most common reasons given for using proxies were for persons unable to respond for themselves because of illness or disability or for young children.

Establishing criteria for identifying acceptable proxy respondents

688. If proxy respondents are to be allowed, the survey designer must establish rules for choosing acceptable proxy respondents. For a victimization survey, the proxy respondent must be a person with a close relationship to the designated respondent, except in the case of surveys that specifically deal with family and domestic violence. Such a person is more likely to know whether the sample respondent was a victim of a measured crime and to know enough information about these offences to provide the information the survey is collecting. Generally this will be a relative or member of the designated respondent's household. Children or people below a specified age are likely not good candidates to be proxy respondents. They may not be able to understand survey instructions and concepts and may not know necessary information about the survey respondent. Moreover, there may be cultural norms or rules against using children as proxy respondents.

Conducting interviews with proxy respondents

689. In conducting an interview with a proxy respondent, it may be necessary to reword questions to assure that the information collected is for the designated respondent and not the proxy. For example, a question such as 'Was something stolen from you?' should be reworded 'Was something stolen from Mr/Ms X?'

690. Some questions, such as those asking for opinions or attitudes, should not be asked of proxy respondents because they may not reflect the opinions or attitudes of the designated respondent.

Identifying proxy respondents in survey data

691. To identify interviews conducted by proxy, the questionnaire should have an item that identifies when a proxy was used and also identifies the name and relationship of the proxy to the designated respondent. This information is important for evaluating the quality of the data and for excluding inappropriate items from the analysis. The protocols for proxy response should be included in the survey methodology sections of any survey report.

Summary

692. Under ideal circumstances, surveys would never require proxy respondents. Surveys however are never conducted under ideal circumstances making the use of proxy respondents an issue. The following summarizes proxy respondent use in victimization surveys.

- Proxy respondents are not appropriate for questions pertaining to attitudes or for information only the actual respondent would be likely to know, such as why a crime was not reported to police or satisfaction with the response of authorities to the respondent's situation;
- Use of proxies is also inadvisable for surveys addressing intimate partner violence, or for violence committed by caretakers, because of the possibility that the proxy respondent may, in fact, be an offender against the respondent. In this case, using a proxy may result in underestimating victimization;
- For surveys where the sample design designates that non-respondents be replaced, proxy respondents are not an issue; persons unable to respond for themselves are replaced by other respondents;
- If proxy respondents are allowed, ensure that the proxy is knowledgeable of the survey respondent's experiences;
- Identify the use of proxy in the survey data, as well as the reason for taking the proxy interview.

B. Selection and training of Interviewers

693. Interviewers are a vitally important aspect of data collection. They can offer improved quality and/or introduce bias into the data. Depending on their behaviour and level of professionalism, they can prevent respondents from providing erroneous information. For these and others reasons, it is very important to identify the best skills and training for interviewers.

Selecting interviewers and identifying skills/attributes required for interviewers

694. Essential features required for a successful survey are qualified, skilled and motivated interviewers. Regardless of whether the institute responsible for the survey selects interviewers or whether this task is outsourced, the sponsoring institute can define basic requirements of interviewers.

695. The first characteristic to consider is gender. Victimization surveys commonly collect sensitive information regarding sexual violence and generally female interviewers improve the disclosure of these events, regardless of the gender of the respondent. On the other hand, in countries where sexual discrimination is more prominent, a female interviewer may have additional difficulty in obtaining an interview. In these cases, it is wise to provide a male and a female interviewer acting in tandem, this can improve household contacts and decrease the number of refusals.

696. While a specific age limit is not advised, it has been verified in telephone surveys that the tone of voice, overall warmth and reassurance emanating from adult female interviewers is better received by respondents in comparison with younger interviewers. Interviewers who are too young may be distrusted to a greater extent, causing increased unwillingness of respondents to answer questions. There is also some benefit in using multilingual interviewers when dealing with respondents who have language difficulties.

697. Due to the complex nature of most victimization questionnaires, it is recommended that interviewers have greater than a primary level education (as suggested from World Health Organization - WHO). In addition, it is preferred that the interviewer be familiar with personal computers and have the technical skills required for computer-assisted personal or telephone surveys using personal computers.

698. The activities and experience of the potential interviewer are also important. Individuals with strong relational, helpful, communicative, and expressive abilities and skills are recommended as interviewers. This includes, but is not limited to teachers, organizers, helpdesk personnel, marketing, theatre actors/actresses and those involved in assisting children, older persons, and handicapped people.

699. Interviewer candidates should have some basic knowledge of the interview technique to be used. They should have demonstrated ability in securing interviews, in effectively relating to respondents, and, in the case of violence against women surveys, working well with women who have experienced sexual violence.

700. A possible summary of elements to be evaluated in potential interviewers is:

- Personal motivation in choosing work as an interviewer;
- Language inflection, tone and cadence of the prospective interviewer's voice;
- Capacity to comprehend the survey theme;
- Awareness of one's emotions related to problematic situations and difficulties that may arise when interviewing about violence and the related strategies the potential interviewer uses to control these emotions;
- Availability to participate in, or experience in participating in active training including role-playing, simulations, discussions and group cooperation;
- The presence of any stereotypes or prejudices related to victims.

Initial training

Aims and planning

701. Interviewers are an important part in a successful non-self-report survey endeavour. They represent the connection between the institute conducting the survey and the respondents. It is only through

interviewers that institutions can ascertain respondents' experiences, opinions, and/or attitudes. Therefore it is imperative through well planned training, that the interviewer further develops the attributes and skills that identified them as a an interviewer during selection. Training ensures interviewers are well qualified, focused on the respondent, appropriate for the survey and thorough in their interviewing technique. In addition, good training produces skilled and motivated interviewers maximizing the probability of the collection of reliable data.

702. The planning of the training should include various phases such as:

- Preliminary theoretical knowledge: collecting references on the subject – national and international publications, particularly scientific review articles, books, reports of surveys about the theme realized by research institutes or justice ministry;
- Planning: object and target of training, timing and phases of training;
- Planning training days: instructional modules and their aims;
- Preparing materials: questionnaire guide, interviewers' manual, design of role plays, materials to be distributed and illustrated during training days, collecting newspapers, books and films if some part of them will be used during training;
- Developing tools to verify the learning (questionnaires, tests) to be done at the end of the training.

703. Following training, interviewers should:

- Understand the survey;
- Understand how to properly conduct the interview;
- Be able to manage the relationship with the respondent;
- Be motivated and understand the importance of their role as an interviewer.

Understanding the survey and properly conducting the interview

704. In part, the interview's quality is dependent on the interviewers' degree of preparedness, which involves understanding the overall purpose or goal of the survey and includes understanding the concepts being investigated and why they are important. With this knowledge, the interviewer can provide the respondent with valuable information and further motivate their participation in the survey process.

705. The interviewer must have in-depth knowledge of the overall purposes of the survey to successfully complete an interview. In addition, he/she must understand the specifics relating to the questionnaire as well as have mastered the survey technique to be used.

706. Understanding the specifics of the survey includes being well versed in the questionnaire, both in terms of its overall structure and specific parts (i.e. screening sections and detailed characteristics sections, filtering questions, etc). The interviewer must also understand how to properly 'navigate' through the questionnaire, enabling smooth movement through various sections. This is especially important when skip patterns are used. For example, the interviewers should have an understanding of what telescoping is and how it can affect survey results. In some cases, the interviewer classifies the crime and therefore must have an in-depth understanding of penal law definitions. During training, the more complex aspects of data collection that jeopardize data quality must be addressed.

707. The interviewer must also have full knowledge of the methodological rules utilized for the survey. For example, interviewers should understand why one individual should be interviewed versus another, and how to appropriately and effectively convince a respondent to participate in the survey. This also includes an understanding of how to properly read the survey questions as well as how to properly record respondent answers.

Managing the relationship with the respondent and interviewer motivation

708. Managing the relationship with a respondent is an essential aspect of interviewing and can be accomplished by matching the language of the respondent, listening to the respondent's needs, responding to respondents' doubts and calming respondent fears. The interviewer should view the interview as a natural conversation with the purpose of reaching a specific goal – successful completion

of the interview. The interviewer must be aware that emotions are always present and recognize that while they cannot be neglected, they must be controlled. It is imperative that the interviewer remain professional by having respect for the respondent without becoming overly involved by displaying other types of emotion.

709. The boundaries of the interviewer's role must be clarified during training. The interviewer should be welcoming, reassuring, responsive, open, patient and tolerant. However, they should not play the role of a psychologist or social worker by offering to solve the respondents' problems.

710. The interviewer needs to be an active subject of the survey – not merely a reader of questions and recorder of responses. Therefore, the interviewer must appear assertive, empathic and interested. Interviewers must also be capable of decoding non-verbal signals from the respondent. This includes pauses, silences, changes in tone, etc. Through a careful analysis of non-verbal signals, interviewers can ascertain if the interviewee is tired, annoyed, unable to speak at that time or not answering the questions as a whole.

711. Motivation is fundamentally important for the entire research process. It is particularly important during the data capturing phases since it increases the chances of finding and solving problems. To ensure the finest in trained interviewers, training should be ongoing and be conducted during the entire period the survey is being run. This includes not only initial training, but also debriefings, group discussions and room assistance for interviewers.

712. Debriefing entails gathering the interviewer's general impression of the survey process, including the overall survey contents, as well as technical and methodological aspects of the survey. It improves survey effectiveness and the information gained can be used to improve the training of all interviewers. Debriefing is especially important during the early phases of data collection and can become less frequent (e.g. once a month) the longer the survey is in the field. During debriefings, researchers solicit interviewers' views on the problems and difficulties they have encountered when interviewing. This includes difficulties related to technical aspects of the survey, contents of the survey, and their rapport with respondents. With an understanding of these issues, researchers are better able to offer corrective interventions to solve these problems.

713. Interviewer group discussions can be informally carried out during the life of the survey with about one meeting per week. These discussions serve as psychological and content support for interviewers. It is suggested that they be organized as a group in which all interviewers contribute thoughts, strategies or opinions.

714. Room assistance applies to surveys that are conducted in a centralized location. These situations allow for researchers, training course instructors and other survey institute personnel to be present while data is collected. The presence of non-interviewing personnel demonstrates the importance of data collection and their presence offers support to interviewers doing their work. Members of the survey team are able to observe and collect the impressions, ideas, criticisms, and feelings of both interviewers and interviewees and can work with interviewers to correct methodological errors.

715. Supervisors must be sensitized and trained to display a supporting role to interviewers in order to ensure their presence is not viewed as controlling. Instead, supervisors should be viewed as interested and caring members of the research team. This tact means interviewers are more likely to ask questions or vent feelings without the fear of any reprisal

Training structure and contents

716. According to the above considerations, the primary goals of training should be to make interviewers:

- Aware of the importance and sensitive nature of the survey;
- Aware of the victimization survey contents and the implementation of the questionnaire;
- Able to follow the correct interview methodology;
- Able to create a climate promoting disclosure by the respondent;
- Able to manage potential critical situations.

BOX 54: EXAMPLE OF TRAINING MODULES

Module 1 - introduction, presentation of the survey and the sponsoring institute

- Presentation and role of the sponsoring institute;
- Introduction of the team and interviewer's group and redefinition of the training aims;
- The interviewer's role and its importance;
- Importance of quality;
- The meaning of sample surveys, the respect of sampling rules; main reasons for refusals and characteristics of non-respondents;
- Techniques for administering the questionnaire. This includes questionnaire language, the importance of reading the complete question, assisting the respondent with responding without influencing their answers, coding of responses and interpretation of silences;
- Exercises for dealing with emotions during the interview.

Module 2 - Organization and methodology of the survey

- Organization: interviews to be completed, timing, timetable of the survey and interviews;
- Methodology: sample structure, the notion of household, technique to select persons to be interviewed within the household, technique to substitute the selected person (if any), the importance of respecting rules and of minimizing refusals of households and/or individuals selected.

Module 3 – Contents of the survey: in-scope crimes

- Legal classification of the crimes of interest;
- The wording of questions about crimes;
- Exercises about crime typology;
- Techniques used to collect data on crimes. This includes problems and strategies, screening techniques, language issues, memory issues, telescoping and the prevention of crime classification errors;
- Analyses of items in the questionnaire.

Module 4 – Listening and effective communication

- Effective communication as a critical feature of success in interviewing. This includes the importance of assertiveness and active listening;
- Managing emotions in critical situations of interviewing, handling refusals, and dealing with interviews on sexual violence and harassment.

Module 5 – Technical training for computer assisted interviewing

- Exercises directly at the computer terminal;
- Simulation of several possible patterns during the flow of the questionnaire;
- Examples of filtering;
- Review of question explanation for respondents, repeating requests and coding of answers.

Training of interviewers for Violence Against Women Surveys

Surveying violence against women presents additional difficulties. In these situations, WHO suggests that additional goals of interviewer training include:

- Increasing the sensitivity of participants to gender issues at a personal as well as a community level;
- Developing a basic understanding of gender-based violence, its characteristics, causes and impact on women and children;
- Learning interviewing skills which take into account the safety of women and ethical guidelines.

As expressed in International Violence Against Women Survey (IVAWS) methodology materials, during the training the interviewers should gain a clear understanding of:

- How violence against women is defined;
- The effects of violence on female victims;
- Societal myths concerning violence and victims;
- The importance of these myths to respondents and themselves;
- How to ensure the safety of respondents and themselves;
- How to respond to emotional trauma that might be raised by responding to this survey, for both respondents and interviewers;
- How to maximize honest disclosure of violence.

The theme of violence against women should be presented through definitions, theories, statistical data and legal references. Particular attention should be given to the *violence spiral* and its characteristic phases. It can be useful to present different typologies of violence provided and solicited by interviewers' own personal examples.

Presenting life stories, news papers articles, interviews or films focused on cases of violence can provide a useful way to introduce the theme of violence. Using visual tools as *slides* and video-recorded materials is also recommended to illustrate the emotional impact of violence. Through group discussion and *brainstorming* it is possible to share ideas, stereotypes and prejudices about violence against women. This is especially important to consider since stereotypes and prejudices regarding violence against women may be particularly prominent in some countries and cultures. These prejudices and ideas must be prevented from becoming part of the interviewing experience.

The use of *role-playings* and of simulated interviews is very important as interviewers are given the opportunity to analyse their own reactions when faced with various possible scenarios. Such techniques allow interviewers to observe and analyse roles played. The use of *scripts* in simulations and in *role-playing*, besides possible stories of violence, can offer examples of interview models which are 'right' and 'wrong'.

717. The training location should be be hospitable, comfortable and functional. Each training group should be comprised of between 10 and 15 interviewers; however, groups of 20 persons can be managed. The training sessions should be five to six hours in length. This allows the material to be covered and allows the participants to reflect and elaborate what they learned during the training. Attention levels decrease after a certain number of hours so attempting day-long training sessions is not a useful strategy.

718. Rooms for the theoretical training should have boards as well as overhead projectors for displaying the documents being discussed. Documents should be available on paper as well as projected. In the case of CATI training, each participant should have a computer terminal linked to a server. Each participant should be provided with a chair and a desk to allow them to take notes.

BOX 55: MINORITY GROUP INTERVIEWING

The use of 'matched interviewers': in the case of surveys on immigrants or ethnic minorities there is divided opinion about whether interviewers from the groups being interviewed should be used, and what the effects are of using them. For example, Muslim interviewees may be unwilling to reveal cases of victimization that they feel have 'shamed' them or their family (under the meaning of 'izzat'). However, they may be more willing to reveal this information to a non-Muslim interviewer. Where minority interviewers are identified from within a community, there is the potential problem that they may know an interviewee, which has implications concerning anonymity. On the other hand, minority interviewers have the advantage of perhaps speaking the minority respondent's language. Depending on the population groups that are targeted, the time frame needs to take into account religious and other holidays which may be specific to a certain population group.

Continuous training

719. Ongoing training of interviewers is important both for maintaining interviewer motivation and ensuring consistent and continued levels of interview quality throughout the entire data capturing phase. Continuous training also allows for reflection on lessons learned from interviews and on the contents and methodology of the survey.

720. Continuous training can make use of a range of techniques and methods in order to alternate between theoretical and practical training. In particular, once interviewers are familiar with the survey and its methodology, practical exercises might include the use of films and/or trailers, group discussions or role-play.

BOX 56: THE ROLE-PLAYING TECHNIQUE IN TRAINING

The purpose of role-playing for interviewers is to provide them with examples of situations they will likely face in the field. It allows them to test the following skills:

- Taking the role of an interviewer;
- Handling interactions with a variety of respondents (e.g. fearful, talkative, dependent, shy, victim, etc.);
- Effective collection of non-verbal communication from a respondent;
- Controlling the interview in an assertive yet non-threatening way;
- Being effective when stressed;
- Recognizing and retreating from threatening situations.

There are many guidelines that are useful when preparing to role-play. First, the trainer in charge of role-playing prepares the scene of the mock-interview, chooses the topic of the interview, and selects the participants. One 'actor' (trainee) is informed how she/he will play the role of co-trainer. Another actor is selected as the interviewer. This individual should not know the details of scene or characteristics of the person they will be interviewing.

The role playing scenario should last about five minutes, after which, the trainer should stop the role-play and ask the participants about their thoughts, opinions and comments about the interviewer's behaviour. After this discussion, the trainer should explain ways in which the interviewer's behaviour was correct as well as how the behaviour could be improved. Some examples of role-playing scenes are as follows:

- A threatening husband
- An intimidated respondent
- An undisclosed rape (emotional respondent).

Role-playing and simulations can be video-recorded and reviewed later. During reviews, comments and suggestions for improvement can be discussed as a group. This exercise is a useful instructional tool.

The introduction of drama techniques that focus on communicative, expressive and emotional aspects such as those used by actors, can improve an interviewer's ability to convey the content of the survey. Using drama techniques is a useful method for interviewers to develop the necessary skills required to convey the content of the survey questionnaire in a natural, authentic and expressive manner.

Developing interviewer materials

721. Training is aided by specific training documents. Interviewers will use these materials during training, when studying the addressed topics and during the data collection phase as an aid for their work.

Questionnaire guide

722. The questionnaire guide is the main tool helping the interviewer become familiar with the questionnaire both in term of contents as well as the procedural aspects. It must include a complete, simple and operational description of the data collection instrument. With regard to the contents of the survey, the questionnaire guide should include one or more dedicated sections:

a) The first major section to be covered is one that describes the survey aims or goals. Understanding clearly and being able to convey the survey's goals is an important aspect of interviewer knowledge;

b) The guide should also include the definitions of types of crime, as well as the terminology used to identify specific crimes. It is important to precisely describe each crime to ensure the accuracy and reliability of the collected information. In addition, some crimes must be clearly defined and understood in a way that does not include the specific name of the crime;

c) A third section of the questionnaire guide should cover a description of the survey methodology used to collect data. This section should cover the screening technique used to correctly collect the victimizations sustained during the reference period. In addition, this section should educate the interviewers about ways to prevent telescoping. Interviewers must be well trained to help respondents identify the time period within which the crime took place. Methods used include proposing to the respondent a variety of time periods. For example, they may first ask if an incident occurred in their life time, then during the last three years, then during the last twelve months, etc. This strategy helps respondents better remember the time in which a victimization occurred;

d) A fourth training section should cover the structure of the questionnaire by section and the relative main questions;

723. In regards to the procedural aspects of the survey, the training guide should include information about several aspects including:

- Period and timing of the interviews;
- The survey technique (PAPI, CATI or CAPI);
- The reference sample;
- The survey units (individuals, households or both);
- The procedure to identify the reference person, if any;
- The method of questionnaire administration.

Interviewer's manual

724. This Manual is intended as an aid to training, where relational aspects of the interview pertaining to communication between the interviewer and respondent are addressed. It should provide suggestions to aid in problematic situations that can occur during any phase of the interview. This Manual should provide a clear definition of the role and specificity of the interviewer's work through the use of examples. At the same time it should offer tools and strategies useful for different situations and possible difficulties that may occur at any phase of the interview. For instance, the Manual should cover how to efficiently introduce the interviewer, the survey and the Institute responsible for conducting the survey. The Manual should discuss how to encourage the respondent to participate including methods to persuade a wavering respondent. The training manual should include a list of frequently asked questions, allowing the interviewer to be prepared for what they may be asked by a respondent. Finally, it should discuss how the interviewer needs to respond in difficult situations.

725. If the survey covers sexual violence, it is recommended that a section be devoted specifically to this (see Appendix C).

C. Interview quality

The influence of interviewers on data quality

726. Interviewers play an important role in all data collection methods and can directly influence the validity, reliability and overall quality of the data. The influence of interviewers can be better controlled with certain data collection methods. For example a feature of CATI is the ability to implement some data quality controls during the data collection phase. With these controls, it is possible for the interviewer to instantly verify collected information while still on the telephone with the respondent. This offers clear advantages as well as some latent dangers. When the data correction phase is divided into more steps, it can cause problems of non-homogeneous correction criteria and a higher level of interviewers' responsibility than in other survey techniques.

727. When the survey is using CAPI interviewers, immediate corrections are still possible by the use of an observer. However, identifying and recording interviewer error is difficult and corrections involving an observer result in increased survey costs. Furthermore it is not easy to control edited values in input and after the correction. Such a technique is usually applied only in pilot surveys or when testing the procedure.

728. Continuous monitoring (via analysis) of interviewers is necessary, because during phone surveys the way the questions are read, the tone of voice, the speed at which the interview is conducted can all affect the quality of the interviews. Similarly, during face-to-face interviews, the way the interviewer approaches and addresses the respondent, how answers are recorded, coded and edited, how filters are managed in a paper questionnaire can affect the survey results.

729. The interviewer must be knowledgeable of the content and aims of the survey in which they are actively involved. This prevents interviewers modifying the meaning of the questions and causing possible respondent misunderstandings. One example of such a situation can be found in the Italian Victimization Survey 'Citizens' Safety' (2002). After the collection phase was started an anomalous trend was detected with respect to the 1997/98 survey's outcomes, regarding the frequency of households intending to change their residence due to their victimization experience. An in-depth analysis involving de-briefings with interviewers showed that the anomaly was due to an incorrect interpretation of the meaning of the question by the interviewers. Some of the interviewers counted both households who moved because of a sustained crime or a risk of victimization, as well as households that would have liked to have moved but did not (see Box 57: Example). This error was detected among a few interviewers who did not understand the real investigative aim of the question. This underlines the importance of thorough training and the need to improve a question's wording to ensure that it is easily understood by both interviewer and respondent.

730. The interviewer's role is fundamental at all phases of the survey process: at the beginning, when contacting the household for the first time, and during the course of the survey, with respect to the content and the managing of sensitive questions.

731. The first contact is important in gaining the cooperation of the family, to detect the family member to interview and the questionnaire skip patterns to follow. For example, in violence against women surveys, very important information is collected at the beginning of the survey that determines which questions the respondent will be asked. This includes the respondent's actual or past relationship (if she has a partner or ex-partners, such as husbands or fiancés or cohabitant).

732. When questions regard personal attitudes, behaviours or values people may react by building a wall between them and the interviewer. Indeed the 'interviewer effect' may influence the possibility of obtaining accurate responses. As a consequence, it is very important that the interviewer establishes a collaborative relationship with the respondent. The sensitiveness of the themes being discussed can cause resistance in the respondent, so the interviewer needs to display a calm and balanced attitude. If their tone is too familiar or too confidential, there is a risk that the respondent's confidence will be reduced as they may feel their personal boundaries have been overstepped and their anonymity is uncertain. On the contrary, if the style is too formal, this may cause a timorous respondent to close down even more.

BOX 57: EXAMPLE OF QUESTION THAT WAS MISINTERPRETED BY SOME INTERVIEWERS

1. HAVE YOU EVER MOVED YOUR RESIDENCE BECAUSE OF A CRIME OR BECAUSE YOU FELT YOU WERE IN A RISKY SITUATION?
No 1
Yes 2

Old question phrasing

(If NO)

1. *BIS* DO YOU INTEND TO DO SO FOR THIS REASON?
No 1
Yes 2

New question phrasing

(If NO)

1. *NEW.BIS* DO YOU INTEND TO MOVE YOUR RESIDENCE FOR THIS REASON, THAT IS BECAUSE YOU THINK YOU ARE IN AN UNSAFE SITUATION?
No 1
Yes 2

733. Other factors related to interviewer behaviour can negatively influence the pattern of respondent answers. For example, questions regarding physical or sexual violence suffered by women may produce fear and anxiety in the respondent, making them less likely to answer further questions. The same consequence can be caused by interviewers revealing personal stereotypes.

734. Another important aspect is time. The interviewer must read questions without rushing, while still helping the respondent understand the various concepts of crimes. They must allow adequate time for the respondent to answer the question. With appropriate timing, misunderstanding errors or disclosure problems can be reduced.

735. Another potential problem is the influence of the perceived 'social expectations' of the interviewer regarding a respondent's answers. The interviewer must be certain not to generate a situation in which the respondent feels there is a 'good/right' or 'bad/wrong' response. For example, this may occur when the interviewer asks the respondent about whether a victimization was reported to the police. It is imperative that the respondent not answer in a way that they perceive will be pleasing to the interviewer.

Quality control in the process phase

736. While the collection phase goes on, researchers must monitor the data gathered with particular attention to the quality of data and the presence of partial or total non-response.

737. Performing quality controls means that several aspects must be monitored while conducting the interviews. These include respondent and interviewer characteristics, how the respondent and interviewer feel about each other and what happens during the interview. In the following paragraphs, we focus on interviewers and how to monitor their work.

738. The important role of interviewer in the success of an interview is a widely accepted research finding and this is especially true in the case of telephone interviewing, since non-verbal and partially pre-verbal communication (i.e. the tone and timbre of voice, accent, intonation, exclamations, interjections, neutral vocalisations, sound ….) are absent. One possible way to study interviewer effect is to use a multilevel cross classified statistical model on data recorded in previous waves of the survey or from similar surveys in terms of methodology and content. The aim is to separate the interviewer effect from other variables when analysing the partial non-response rate in particular sections. The results of the application of such models show that the preliminary work of interviewers to create the relationship with the interviewees is key to predicting response to sensitive questions.

739. To better define such work, it can be useful to divide the interview into two segments. First, is the initial contact when the interviewer tries to convince the respondent to participate. And the second segment is the actual interview. Research suggests that it is easier to predict success during the first

segment – the initial contact – than it is during the interview itself. On the last part, a qualitative control could be used to record interviews and to listen to a sample of them. Or a sub-sample of households in the sample could be re-contacted and asked to provide their opinion about the interview. For privacy reasons, it is generally not permitted to record the phone calls. However, it is possible to plan a daily re-contact scheme to ask interviewed households just few questions. Another qualitative control is the evaluation of the interviewer's behaviour during the interview; this can be conducted by monitoring in the call centre as well as via the freephone number.

740. Quality control data must be collected daily since the survey progresses rapidly. Furthermore, data obtained from the initial days of the survey (the answers to the questionnaire) should be analysed, comparing them with external sources or previous editions of the survey so that any distortions in the frequencies observed can be noticed immediately. This is much easier if there is a CAI system of data collection.

741. For the entire data gathering period, the interviewers' activity should be constantly controlled by analysing specific daily reports with indicators calculated for each interviewer individually. This tight control not only supervises the performances of the interviewers, but also provides them with support if they face particularly complex or difficult situations.

742. It is important to collect some information about refusals. A specific module on refusal/interruptions should be included in order to obtain information about the reason for the refusal, the age and gender of the person who refused, the number of components in the household and provenance - if possible.

743. Tools that can be used to monitor the survey quality during the collection data phase include:

- Indicators that can be automated, updated daily and made available online (if computer assisted systems are used);
- Control charts which are elaborated daily;
- Daily assistance in the call centre, the aim of which is to monitor and record the weak and strong points along with other observations about interviewers, on an appropriate datasheet;
- Return calls to a sample of randomly chosen interviewees to verify some of the data collected and to obtain some notes about the interviewer who conducted the interview;
- The freephone number as a guarantee for citizens about the survey, but also as an instrument for collecting their observations and notes, doubts and complaints.

Quantitative indicators on quality levels

744. The monitoring system is easier for telephone surveys because of the centralization of the collection phase. In general, it is easier for CAI surveys and more complex for PAPI and Postal mode. Indicators that can be processed are related to each interview phase:[66] family contact, selection of the person to be interviewed and the actual interview. These indicators are useful in the monitoring phase, but also for evaluating the overall quality of the survey and enabling the comparison of results with other sources of data. For this reason, their standardization is very important. These indicators are expressly developed to evaluate the suitability of the adopted methodology and to discover problematic situations that need to be quickly addressed during the process phase itself. Daily analysis of the quantitative indicators allows continuous monitoring to ensure compliance with the fixed qualitative standards and the evaluation of the interviewers' performance, as well as of feedback from people in the different geographical areas, aimed at controlling the cultural and social specificities in the country.

745. Rates ensure an in-depth analysis in all phases of the interview, indicators regards the mailing of the introductory letters, the efficiency of the scheduled family contacts plans, the contact with the family and the relative outcome (complete interview, interruption, appointment, no answer, refusal, not eligible …). Among these indicators the most important for monitoring the interviewers' work are the refusal and interruption rates, as well as the management of appointments with households and

66 AAPOR - American Association for Public Opinion Research – suggests a standardized system of indicators for CATI Survey monitoring that is as wide as interesting.

individuals. Many indicators can be created for each issue; for refusals, the more suitable and commonly used is the rate created as a ratio between the refusals and the total amount of completed interviews, interrupted interviews and refusals as the denominator. Regarding the problems of the population coverage and of the accuracy of population lists, as well as the efficiency of established procedures to reach the households, other indicators may be produced to study these aspects, for instance the out-of-target and the non-contact rate.

746. A further qualifying aspect is the length of the completed interviews. Knowing how long a completed interview should last in general allows problems to be identifed when an interview lasts too long or is completed in a rushed manner. Each of these indicates situations that may jeopardize data quality.

747. PAPI, CAPI, CASI and Postal survey are characterized by a more complex organization because the data collection phase is scattered across several geographical areas, in which the numerous interviewers are subdivided into groups coordinated by intermediate offices. These local offices are linked to the central office, sometimes via computer networks. Controls can be made during and after the data collection phase. Monitoring of interviews in progress is conducted by observation of methods, procedures and times. The tool used for interviewer field control can be a datasheet prepared to collect data on household outcomes, such as refusal, interruption, ineligibility, unreachable, that interviewers send to the local offices.

748. Recently, some innovations have enhanced the monitoring phase for PAPI and CAPI surveys, enabling the collection of accurate, real-time data on the process. This is Interactive Voice Response where, for each contact with a household, the interviewer is required to fill out a monitoring sheet transcribing the contact outcome codes (contact made both by phone and in person) that is transmitted to a central freephone number and stored on a secure extranet site, designed for the purpose, to facilitate control of the data quality.

Control charts

749. The use of control charts to monitor the overall survey process is now a well-established tool and is considered recommended practice for surveys administered using the CATI or CAPI techniques. These charts, widely used in industry for the statistical quality control of production processes, allow verification of the stability of the field process and compliance with the desired quality standards. They can also be used to evaluate the outcome of the corrective actions eventually applied to bring the process under control, e.g. direct interviewer correction, debriefing, new training sections.

750. The control charts are based on daily measures of the main quality indicators elaborated (refusal rate, interruption rate, non-contact rate, average length ….) and according to various time variables: for each data collection day, one week, two weeks, a month, etc. Therefore, trends in survey data quality can be analysed. These analyses can be carried out by geographical area and by individual interviewer.

751. When analysing trends, it is important to evaluate the performance of CATI operators, not only concerning their ability to conquer an household, but also in properly managing the interview and its contents. For instance, another indicator to be checked is the ability of interviewers to encourage disclosure by the interviewees.

Daily assistance and the call centre datasheet

752. A well-structured datasheet can be used to analyse the interview as well as the interviewer's behaviour. This sheet serves several goals. First, it should record significant situations that occurred during interviewing that may influence data quality. In other words, the data quality sheet should be structured to collect any problems in the actual interview. Second, it should evaluate the level of professionalism and overall ability of the interviewer during an interview. Analysing the interviewer's abilities is important as it allows immediate knowledge about whether they administered the complete questionnaire, the relationship established with the respondent, whether the interviewer became too emotionally involved in the interview, as well as whether they handled rejection or other difficult situations professionally.

753. Fully understanding the relationship between the interviewer and respondent is critical since multilevel statistical model analysis show a significant dependence on partial non-response and the interviewer's behaviour, especially when dealing with sensitive themes. A final goal of this datasheet is to document systematic and/or random errors that may occur during an interview. That includes the recording of the atmosphere of the centre from which the interviews are conducted.

754. It is recommended that the assessment of the interview be made during three phases: the opening portion of the interview, the development of the interview, and the closing of the interview. For each phase of the interview, the room monitor should assess and record answers to closed-ended questions as well as open-ended questions expressing their doubts, thoughts or other notes. It is recommended that the data quality sheet be completed daily by appointed monitoring staff at the location where the data are collected. Given these recommendations, problems can be quickly identified and remedied.

BOX 58: FROM THE INTERVIEWEES AND INTERVIEWERS MONITORING SHEET

This is an abstract of the Italian Citizens' Safety Survey (year 2008) monitoring sheet. The sheet is organized in different parts and is completed by Istat staff during the supervision work. Each sheet presents observations on only one interviewer.

1. Contents

The interviewer:	Yes	No	Not pertinent
1. Describes the institutional role of ISTAT, its functions and activities	☐	☐	☐
2. Informs interviewee about laws on statistical secrecy and privacy	☐	☐	☐
3. Is able to correctly and appropriately motivate when facing possible refusals	☐	☐	☐
4. Is familiar with the survey's contents and able to answer respondents' questions	☐	☐	☐
5. Uses the appointment strategy to avoid losing the contact when there are problems	☐	☐	☐
6. Closes the telephone call professionally and kindly	☐	☐	☐

2. Relationship

The interviewer:	Yes	No	Not pertinent
1. Is able to to retain the respondent's interest	☐	☐	☐
2. Positively interacts with respondent	☐	☐	☐
3. Controls her own feelings and emotions	☐	☐	☐
4. Is able to listen	☐	☐	☐

3. Administering the questionnaire

The interviewer (give a score from 1 to 10):		
1. Repeats questions entirely	☐	☐
2. Has not difficulties in coding answers	☐	☐
3. Helps discreetely in event of difficulties	☐	☐
4. Maintains the right equilibrium between involvement and remaining neutral	☐	☐

4. The means of communication

The interviewer:	Much	Enough	Few	Not at all
1. Owns the Italian language	1	2	3	4
2. Uses interjections or exclamations	1	2	3	4
3. Changes her tone in accordance with the situation	1	2	3	4

5. The style of conducting the interview and of the interviewer:

(one answer by row)

Calm	1	2	3	4	5	Aggressive
Sure	1	2	3	4	5	Agitated
Warm/confidential	1	2	3	4	5	Frozen

(If the phone call ended badly) the interviewer is:

Angry	☐
Anxious	☐
Worried about it, but she continues to works correctly	☐

Households recalls and the re-contact sheet

755. A second qualitative approach to data quality control is the household re-contact and its registration on an appropriate sheet. Households are randomly selected daily to be re-contacted and it is suitable to report the information gained in a re-contact sheet. This sheet, firstly, collects the respondent's feedback about the survey and the interview. Second, it collects the respondent's view of the professionalism of the interviewer. Third, the re-contact sheet collects the respondent judgment regarding specific question and answer modalities. Fourth, it gathers general household information from the respondent. And finally, the respondent reveals if the interview was actually conducted, whether it was fully administered and whether it was conducted in the proper manner. If problems arise when contacting the households, the interviewers responsible will be monitored intensively.

The freephone number sheet

756. As discussed in Part VI.A. (Minimizing non-response), the freephone number is a useful tool in survey research. The number represents a valuable opportunity to gain additional information about the quality of the interview process. It is recommended that a sheet be filled out by the freephone number operators to monitor and record important information that can be used for quality control purposes. The sheet should be constructed so that it allows reciprocal questions and answers between the respondent and the operator. Further, the form should gather information on several phases of the interview process. The information collected should include territorial data, address and landline phone number, characteristics of the respondent, time of the call and the reason for the call.

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CHAPTER VII. DATA PROCESSING, ESTIMATION AND ANALYSIS

757. Chapter VII of the Manual examines data processing, including the transfer of data from the questionnaire, coding processes, checking and editing. It looks at ways in which victimization survey data may be analysed and presented, including how data should be interpreted with a view to communicating key findings and results.

A. Data processing and estimation

758. Data processing includes the transfer of data included in the questionnaire to data files ready for analysis, coding processes, data checking and data editing. The nature of data processing will depend on the way in which the data have been collected. Paper questionnaires will require considerably more data processing after the interview while computer assisted interviews include much of the checking process during the interview. This section reviews some of the key components of data processing including transferring data to files, security concerns, data checking and data editing.

Transfer to data files and security issues

759. Once an interview has been completed, secure arrangements are needed for the return of the interviews to the central office. Names and addresses of respondents should be returned separately to ensure confidentiality. There will also need to be a comprehensive checking-in system to ensure all the issued sample is accounted for.

760. Paper interviews require data be keyed or scanned into a suitable data entry programme or directly into one of the main survey analysis programmes. Commonly used survey analysis programmes used for this purpose include the SPSS, STATA and SAS (there are also freeware alternatives such as EpiData). Data entry should be checked either through double entry processes or using facilities within the programmes. Some provision will need to be made for sampled cases which did not produce an interview so that response figures can be calculated.

761. Initial processes for CAPI and CATI (computer assisted telephone interviews) differ. Data collected from a telephone interview will already be held centrally (although they may require an internal transfer to a main data file). In contrast, data from a computer assisted personal interview will need to be transferred from the interviewer's laptop to a centrally held data file. Completed interviews using CAPI can be returned electronically by modem directly to the central office through an intranet arrangement or on some other media such as a computer disk. Security measures are essential for any type of electronic transfer. Unauthorized access to personal data is prevented through user name and password protection systems. In addition, all laptops and central computers should run anti-virus software.

762. All personal details of the respondent (e.g. name, address, telephone number) should be collected and stored in files that are encrypted and transmitted separately from the main data to provide additional security.

763. For both paper and computer assisted interviews a back-up copy should be created during each stage of the process and maintained separately from the main data file. This includes files on the interviewers' laptops. Archived data files should be created and stored separately from the main CAPI servers or the original paper interviews.

764. All office-based staff dealing with the survey should be required to abide by information security policies and standards. In addition, there should be contingency plans for major disasters.

Data checking

765. After the data are received, the next major step is data checking. Data checking includes range, logic and consistency checks. For paper interviews these can be done by hand or they can be conducted once the data have been entered into suitable software. The use of CAI (computer assisted interviewing) removes much of the requirement for post-fieldwork edit checks. As far as possible this type of

checking can be built into the CAI program. This approach is methodologically preferable to post-fieldwork editing, since the interviewer can resolve any inconsistencies during the interview. However, because some checks require reference to external data sources, and issues of timing and interview flow means that there is a limit to the number of in-program checks, some in-office edit checks conducted in the central office are desirable.

BOX 59: EXAMPLES OF CHECKS THAT CAN BE CONDUCTED AT VARIOUS STAGES OF THE PROCESS

- Check every question in the analysis data file against frequency counts that are produced directly from the CAI or initial data entry database. This is to ensure that the numbers on the analysis file match the numbers in the actual database and that no corruption or error has occurred during the creation of the analysis file.
- Check every question in the analysis data file to ensure that the base number is consistent with what you expect based on the filter for that question. Questions should also be checked to ensure that the 'don't know' and the 'refused' codes are correct and that the labelling is correct.
- Where there is more than one file per case (for example where there are separate files for each victimization experienced by the respondent) check the consistency between the files to ensure they contain records from the same cases.
- If the survey is repeated, compare the distributions of key variables to previous iterations. If any large changes in distributions are noted, a more detailed check to ascertain why these differences exist is necessary.
- In addition to standard consistency checks, additional checks relating to offence coding are advised. For example, if during a victimization, data reveals an arson but no fire recorded further checks are required. Similarly, if during a single incident, the data show a car theft but the data also show that nothing was stolen, additional checking is needed. Or if during a single victimization, a crime was noted as occurring at the respondent's workplace, yet the respondent also is categorized as 'not working', this requires additional attention. Clearly this type of consistency checking is limited by resources. Even with extensive checking and vast resources, it is likely the case that the data set will never be fully consistent
- If the data have been weighted then checks will be required to ensure the weights have been computed correctly.

766. The edit checks discussed above also form a key part of ensuring there has been no loss of data gathered at interview.

767. At each stage of checking the data can be edited to ensure consistency but the amount of editing that can be done is limited by resources. Data editing is concerned with the identification and, if possible, the correction of erroneous or highly suspect survey data.

BOX 60: EXAMPLES OF ERRORS THAT CAN ARISE IN THE DATA

Coverage errors (arising from the omission or duplication of responses)
- duplicate records
- loss of records
- incomplete canvassing

Content errors (arising from incorrect reporting or recording)
- errors in questionnaire design such as poorly worded questions
- misunderstanding of questions by respondents
- mis-keying during data entry
- out-of-range or invalid responses (i.e. age given as 130 years)
- incorrect units (i.e. response given in days rather than weeks)
- incorrect scale (numerical items expressed as thousands instead of millions)
- inconsistent data items (i.e. age of child provided when number of children given as zero)
- failing to follow correct skip patterns
- incorrect balances (i.e. sum of parts on numerical item does not equal total)

768. The effective and appropriate use of data editing procedures is designed to minimize these errors and so enhance the quality and accuracy of the survey data. Furthermore, consistent errors in the survey data might be identified and these could suggest problems with questionnaire design or interviewer technique, for example. Identifying the reasons behind these errors will improve future survey waves.

769. The process of data editing occurs during and after the data collection phase, but usually prior to any data imputation or analysis. The activities associated with the data editing process include the following:

- Micro-editing concerning the validity and consistency of individual data fields, fields within a record, and the relationships between individual records (i.e. are data items within acceptable bounds, ratio checks, comparison of data to previous survey waves).
- Macro-editing concerning aggregated data (either whole survey or a sub-set of respondents) and assesses the importance of a suspected error.

770. Data editing procedures range from the simple, such as checking for out-of-range responses, to the more complex, such as identifying inconsistencies in responses for particular groups of respondents. Although there are many generic elements to the data editing procedures that can be followed, there are also specific rules that need to be developed and implemented that relate specifically to the victimization survey.

Imputation

771. Imputation is a correction technique used for some types of item non-response. Imputation involves the substitution of some valid data for invalid or missing data for individual survey variables. Imputation is generally used in surveys to ensure that key variables, such as age, gender or race have valid entries. Such variables are often used for weighting or in analyses that require valid entries for all sample cases. Imputation is generally done in a systematic manner. In hot deck imputation, a commonly used technique, when the computer finds a missing value, it enters in its place the same value as a designated previous valid case. This technique is used because it sustains the overall distribution of the valid cases in the dataset. For example, if the respondent's gender was not entered on the survey form for a case, the computer program can be instructed to look at the previous case that was processes. If the gender of the previous respondent was a male, than 'male' would be inserted in the case being imputed.

772. There are other techniques that can be used to impute for missing survey values. Two examples are regression imputation and multiple imputation. Regression imputation uses non-missing data to predict the values of the missing data. Multiple imputation generates a number of plausible values for each missing element in the dataset and then analyses the sets of imputed values using standard analytical techniques.

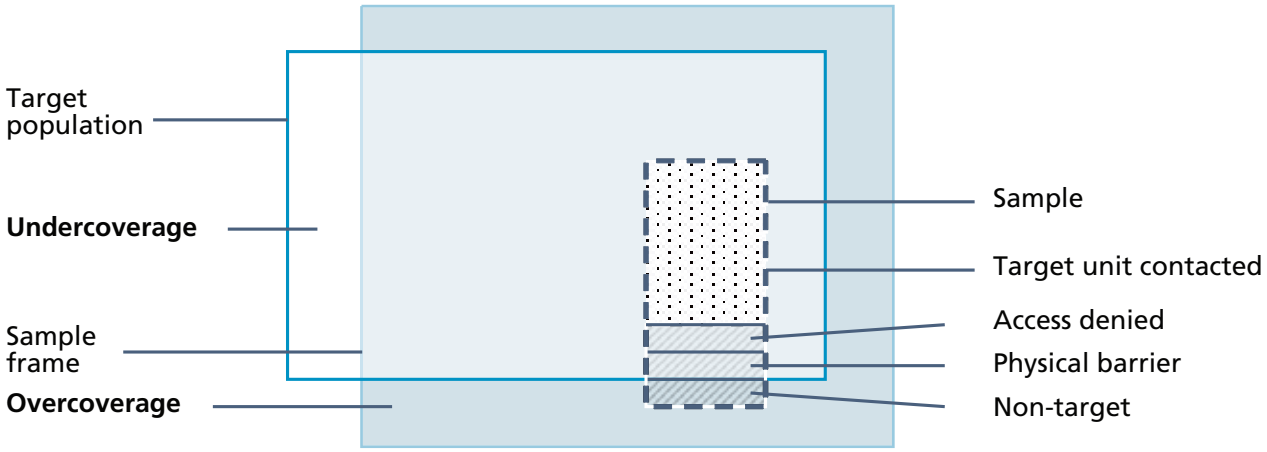
Estimation and data weighting

773. Figure 8 shows that estimates based on target sampled units apply to the sampled population with no additional assumptions, but they can apply to the portion of target population within the sample frame only if it is possible to assume that the access denied, target not-sampled, etc., units occurred randomly and independently of units characteristics, especially those of interest. Furthermore, besides the above assumptions, estimates for the target population require also that portions of the target population that are not included in the sample frame have the same characteristics of the sampled population.

774. Estimates from victimization surveys are both totals (no. of victims), rates and proportions and enumeration of events (no. of experienced crimes). Considering a complex sample design as it is common for victimization surveys (stratified sample for example), estimates are based on calibration estimators, which take into account the weight of each unit, also considering the stratification, in order to reproduce some significant total for the target population.

775. Sample data are hampered by different kinds of bias. In order to correct for such bias, weighting is applied. The objective of the weighting is to produce estimates that correspond to the real parameters in the target population as closely as possible. Weights are calculated to correct for sampling bias due to samples not fully representative of the target population and for non-response.

Figure 8: Target population - Frame - Sample – Estimates



776. Weights are initially defined as the inverse of the inclusion probability of each unit. They are subsequently corrected by a factor calculated ex post facto to take into account non-response and list problems, and the main demographic and social characteristics of the target population as age and gender, level of education, marital status, type and size of households, according to rates from the past census updated using vital statistics or other reliable population survey data. Weighting may often be a highly sophisticated exercise, depending on the complexity of the applied sampling frame. What it cannot achieve is to correct for systematic error such as non-response when it is related to the victimization risk and other relevant characteristics of the target population.

777. The correction factor to be multiplied by the initial weight is then obtained by solving a problem of constrained minimum. The function to minimize is the distance between the initial and the final weights. Constraints are defined by equating the totals of the above population characteristics such as the population distribution by age, gender, level of education, marital status to the corresponding totals estimated weighting sample data by the initial weights (the initial weights are the inverse of the inclusion probability of each unit).

778. Telephone samples bias due to under or over coverage of the lists is then partially corrected by weighting as indicated. In fact if, for example, non responses cause the loss of women interviews, post stratification weights inflates the initial weights in order to take into account such an under-coverage, based on the assumption that the lost women behave more or less as the observed ones.

779. Considering a total ${}_dY$ referred to the territorial area d, the final estimate will be:

$$ {}_d\hat{Y} = \sum_{h=1}^{H_d} \hat{Y}_h = \sum_{h=1}^{H_d} \sum_{j=1}^{m_h} Y_{hj.} \cdot W_{hj.} $$

where $Y_{hj.}$ and $W_{hj.}$ are respectively the value of Y and the weight for the individual sampled in household j of stratum h.

780. The better option would be to rely on census data to correct weights, considering the corresponding totals to make constraints for the final weights. However, reliable estimates from other sample surveys, such as other face to face surveys, can be useful.

BOX 61: US NCVS ESTIMATION PROCEDURE

Yearly estimates of the levels and rates of victimization are derived by accumulating four quarterly estimates. The weights of all crimes reported during interviews in the reference year are totalled, regardless of when the crime occurred. The base for collecting the annual rate for personal crime is the sum of all person weights. Likewise, the base for the property crime rates is the sum of all household weights.

The estimation procedure begins with the application of a base weight to the data from each individual interviewed. The base weight is the reciprocal of the probability of each unit's selection for the sample, and provides a rough measure of the population represented by each person in the sample. Next, an adjustment is made to account for households and individuals who were selected for the survey but unavailable for an interview.

In addition to adjusting for unequal probabilities of selection and observation, the final weight also includes a ratio adjustment to known population totals based on the adjusted counts from the 1990 census. Specifically, the final person weight is the product of the values of the following six component weights; the final household weight is the product of all components except the within-household non-interview adjustment component detailed below:

Probabilities of selection

- Base weight: the inverse of the sample unit's probability of selection.
- Weighting control factor: adjusts for any subsampling due to unexpected events in the field, such as unusually high growth in new construction, area segments larger than anticipated and other deviations from the overall stratum sampling rate.

Probabilities of observation (non-response)

- Household non-interview adjustment: adjusts for non-response at the household level by inflating the weight assigned to interviewed households so that they represent themselves and non-interviewed households.
- Within-household non-interview adjustment: adjusts for non-response at the person level by inflating the weight assigned to the interviewed persons so that they represent themselves and the missed interviews.

Post-stratification ratio adjustment to known population totals

The distribution of the sample population may differ somewhat from that of the total population in terms of age, race, sex, residence, and other characteristics. Because of this, two stages of ratio estimation are employed to bring the two distributions into closer agreement, thereby reducing the variability of the sample estimates.

- First-stage factor: the first stage of ratio estimation is applied only to on-self-representing PSUs. Its purpose is to reduce sampling error caused by selecting one PSU to represent an entire stratum. It adjusts for race and zone of residence differences between the sample non-self-representing PSUs and the population non-self- representing PSUs (for self-representing PSUs this factor is set to 1).
- Second-stage factor: the second stage of ratio estimation is applied on an individual basis to bring the distribution of individuals in the sample into closer agreement with independent current estimates of the population according to age, sex, and race characteristics. This factor is defined for each person to adjust for the difference between weighted counts of persons (using the above five weight components) and independent estimates of the number of persons, within the defined cells. These independent estimates are projections based on the 2000 census population controls adjusted for the undercount.

For household crimes, the characteristics of the wife in a husband-wife household and the characteristics of the head of household in other types of households are used to determine the ratio adjustment factors. This procedure is considered more precise than simply using the characteristics of the head of household since sample coverage is generally better for females than males.

For estimates involving *incidents* rather than *victimizations*, further adjustments are made to those cases where an incident involved more than one person. These incidents have more than one chance of being included in the sample so each multiple-victimization is reduced by the number of victims. Thus, if two people are victimized during the same incident, the weight assigned to that incident is the person weight reduced by one-half so that the incident cannot be counted twice. However, the details of the event's outcome as they related to the victim are reflected in the survey results. No adjustment is necessary in estimating data on household crimes because each separate crime is defined as involving only one household.

B. Analysis and presentation

781. Data analysis is the process of transforming raw data into useable information that is often presented in the form of a published analytical article. The basic steps in the analytic process consist of identifying an issue, asking meaningful relevant questions, answering questions through examination and interpretation of data and communicating the key findings and results to the end-user.

Principles

782. An organization undertaking the development of a victim survey should be aware of the relevance and usefulness of the information contained in the data. Analysis is the principal tool for obtaining information from the data. Analysis results may be categorized into two general types: (a) descriptive results, which are results relating to the survey population at the time that the data were collected - for example, the rate of the population reporting physical assaults for the year that the population was surveyed; and (b) analytical results relating to a survey population that often goes beyond the actual population surveyed – for example, the risk of someone being the victim of a sexual assault.

783. To be effective, the analyst needs to know the audience and the issues of concern (both current and those likely to emerge in the future) when identifying victim topics and suitable ways to present results. The study of background information allows the analyst to choose appropriate data sources and statistical methods to influence the analysis. Any conclusions presented in an analytical study, including those that can impact on public policy, must be supported by the data being analysed.

784. Data analysis has an important role as part of the survey development and revision process. It can have a crucial impact on data quality by helping to identify data quality issues and by influencing future improvements to the survey process, including question wording, questionnaire flow, approach and methodology. Analysis is essential for understanding results from previous surveys and pilot studies, for planning new statistical activities, for providing information on data gaps, for designing surveys, and for formulating quality objectives.

785. The main purpose of statistical analysis however, is to increase the conciseness, clarity and objectivity with which results are presented and interpreted. Statistics are used every day to help us gain insight into questions that affect our lives. Data analysis is the process of transforming raw data into useable information that is often presented in the form of a published analytical article.

786. Analysis that is conducted by a national statistical organization must be relevant and credible. Analysts must achieve balance between the need to be informative and to support policy makers in making decisions and the need to avoid political bias. In addition, contents of analytical reports must remain neutral and objective by avoiding speculation and by discussing only the results that can be supported by statistical facts.

787. The process of analysis involves a number of steps, including: identifying an issue; asking meaningful and relevant questions; attempting to answer these questions through the understanding, examination and interpretation of the data; and communicating the key findings and results to the data user.

Identifying an issue/Asking meaningful and relevant questions

788. The analytical process begins with the identification of specific issues to be addressed and the relevant questions to be answered. The main questions are often identified at the survey design stage and defined through the survey objectives. An organization undertaking the development of a victim survey should be aware of the relevance and usefulness of the information and have an understanding of the analytical outputs that will be obtained from the data once it has been collected.

789. As described in Section III, the analyst should have strong knowledge of the audience and the key issues of concern in the areas of victimization (both current and those likely to emerge in the future) when identifying topics and appropriate ways to present results. Undertaking research and consulting with experts both on the subject matter and on the statistical methods allows the analyst to

choose relevant and appropriate data and methods to describe the analysis. Any conclusions presented in an analytical report, including those that can impact on policy-making or program development, must be supported by the data being analysed.

790. Before beginning analysis, it is important to consider some preliminary questions such as: 'What issue am I addressing? What data am I using? What are the limitations of my data? What analytical methods are appropriate? What results do I want to highlight? What are my key findings?' These questions can be explored through the creation of a report outline.

Understanding, examining and interpreting of data

791. It is also important for an analyst to have a strong understanding of the survey's concepts, methodology and data quality. An awareness of the strengths and limitations of the data, and how they can be effectively used and analysed will be particularly important when making comparisons with data from other surveys or sources of information and in drawing conclusions regarding change over time, differences between geographic areas or differences between sub-groups of the target population.

792. The survey sample design is of particular importance to the analyst because it affects the estimation and variance calculation procedures that should be used. For example, if a stratified design is used and there are significant differences in sampling between geographical areas, some areas will be over-represented in the sample (relative to their populations) while some other areas will be relatively under-represented; this means that the sample is not representative of the target population. The analyst must use survey weights when producing estimates or performing analyses in order to account as much as possible for the over- and under-representation of various groups.

793. In order to begin examining the data, the survey responses must be entered into a data file of an analysis programme like Excel, Access, SPSS, or SAS, which can perform statistical analyses and create tables and graphs. These data can often be imported from electronic surveys directly into the analysis software.

794. Once the data are accessible via an analysis programme, and before the creation of tables and graphs, it may be important to examine open-ended survey responses to identify general themes and exceptions to trends. With short-answer questions, it is possible to obtain basic information about response frequencies by categorizing responses, assigning a numerical code to each category, and entering the codes into a statistical analysis program.

795. It may be necessary to recode some answers to questions that have an open-ended 'other' response option. For example, one person may answer the question, 'Do you believe that this incident committed against you could be considered a hate crime?' with 'Yes' and then when asked if it was due to hatred of their gender, race/ethnicity, religion, sexual orientation, age, disability, language or other, the respondent may select 'other' and indicate 'I am Chinese'. To maintain consistency, code the answer as 'race/ethnicity' rather than 'other.' During re-coding, categories can be collapsed and new variables can be created for analysis.

796. It is important to select an analytical method that is appropriate for the question that is being investigated. Statistical results can be categorized into two general types: descriptive results and analytical results. Descriptive results relate to the survey population at the time that the data were collected - for example, the rate of the population experiencing a criminal victimization incident during the time period that the population was surveyed. Analytical results can range from simple to complex and often go beyond the actual population surveyed. They can include for example, examining the risk of someone being the victim of a particular type of crime; exploring relationships or differences among populations; or examining independent effects of certain variables on particular outcomes.

797. An example of obtaining descriptive results involves the calculation of response frequencies and percentages from a particular survey question. Table 14 presents the proportion of those who experienced a criminal victimization in the survey reference period.

Table 14: The proportion of the population experiencing one or more criminal victimizations in the past 12 month

Victimized one time	17%
Victimized twice	5%
Victimized three times	5%
Not victimized	73%

798. An example of obtaining simple analytical results involves the computation of cross-tabulations to examine relationships between responses for two survey questions. For example, you may cross-tabulate the Aboriginal status of the respondent with the proportion of the population who experienced a victimization in the survey reference period (Table 15).

Table 15: Proportion of the population that experienced a criminal victimization in the past 12 month by Aboriginal status

	Aboriginal	Non-Aboriginal
Victimized one or more times	40%	28%
Not victimized	60%	72%

799. Cross-tabulations can highlight contrasts between groups of participants or findings that are consistent across groups. Research questions will help the analyst select which cross-tabulations to compute.

800. There are some limitations to simple descriptive analyses. For example, they cannot account for the possibility that there are other factors that could be related to the differences among the groups. More advanced statistical analytical techniques and approaches can explore in-depth issues such as correlations and independent effects.

801. An example of a more advanced statistical technique would be the use of multivariate analysis carried out through a logistic regression. This analysis explores the independent effect of a number of variables while holding constant or controlling for other effects. For example, by examining the variables of gender, age, marital status, and main activity together in a statistical model, we determine that when the effects of all factors are controlled, being young is by far the strongest predictor of violent victimization. We may also determine that while certain variables may have appeared to be related to the risk of victimization in a bivariate analysis, they are no longer significant in a multivariate model.

802. Regardless of the analytical approach, data must be organized, summarized, and presented appropriately in order to address specific issues, provide appropriate answers, and help inform policies and make recommendations. The results must be presented with enough detail to draw attention to their significance without providing unnecessary information.

Communicating the key findings and results

803. After the analysis is undertaken, the results must be interpreted and communicated in a way that will provide answers to the original question(s). This interpretation should be relevant, accurate and coherent. In addition, it is important to ensure that the intentions stated in the introduction are addressed by the rest of the report and that the conclusions are consistent with the evidence.

804. It is important that the author be satisfied that the assumptions behind any statistical analysis are sufficiently met. In cases where assumptions are made, procedures are used, or unusual types of data are involved, the reader should be provided with sufficient information to determine whether any departures from assumptions are substantial enough to affect the conclusions.

BOX 62: COMMUNICATING KEY FINDINGS AND RESULTS

Statistics Canada's *Quality Guidelines* report sets out some recommendations that can assist in communicating key findings and results. These include:

- Focus the article on the important variables and topics. Attempting to address too many issues will often interfere with a strong story line.
- Arrange ideas in a logical order and in order of relevance or importance.
- Use headings and sub-headings to improve the organization of the article.
- Keep the language as simple as the subject permits. Depending on the targeted audience for the article, some loss of precision may sometimes be an acceptable trade off for more readable text.
- Use graphs in addition to text and tables to communicate the message. Carefully composed graphs often permit the reader to understand findings in a simple and clear way.
- Use headings that capture the meaning (e.g. 'Marital status linked to violent victimization') in preference to traditional chart titles (e.g. 'Rates of violent victimization by marital status') helps readers understand the information in the tables and charts by discussing it in the text.
- When tables are used, take care that the overall format contributes to the clarity of the data in the tables and prevents misinterpretation. This includes spacing; the wording, placement and appearance of titles; row and column headings and other labelling.
- Explain rounding practices or procedures. In the presentation of rounded data, do not use more significant digits than are consistent with the accuracy of the data.
- When presenting details about rates, be careful to distinguish between percentage change and change in percentage points. Define the base used for rates.
- Ensure that all references are accurate and are referred to in the text.
- Beware of focusing on short-term trends without inspecting them in light of medium-and long-term trends. Frequently, short-term trends are merely minor fluctuations around a more important medium- and/or long-term trend.
- Avoid drawing conclusions based on causality.
- Check for errors in the article.

805. Rigorous statistical methods should be used to ensure that the data released are of the highest possible quality. This often means that the reader of an analytical report must be provided with information on the significance of results (e.g. standard errors, confidence intervals or significance tests). It also means that appropriate statistical techniques should be used to answer a research question. Finally, it means that use of standard names and definitions for populations, statistical units, concepts, variables and classifications in statistical programs should be similar across all of the agency's publications.

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CHAPTER VIII. ETHICAL CONSIDERATIONS

806. Chapter VIII of the Manual deals with the important area of ethical considerations. It addresses both the protection of respondents through ensuring informed consent and protection of privacy and confidentiality, and data dissemination standards. These ethical issues should form part of interviewer training.

807. Survey researchers must act responsibly at all times, understanding that they must protect the interests and identities of the people they are asking to participate in their surveys. This section reviews these ethical considerations that should guide the behaviour of those conducting any survey, especially victimization surveys, which may involve sensitive issues that potentially could embarrass or harm respondents if appropriate precautions are not taken.

808. Because survey researchers are asking respondents to provide information about themselves, their experiences, and possibly their attitudes, it is imperative that the researcher act responsibly regarding this information. This entails two primary tasks: protecting the rights of respondents and ensuring the validity of the survey results. This section reviews some of the ethical considerations related to protecting the rights of respondents and ensuring the validity of the survey results.

A. Protecting respondents

809. Protecting respondents (and potential respondents) requires attention to many details. First, the researcher must develop survey protocols that inform respondents of the survey's purposes and procedures. Second, the research must be conducted in a fashion that respects the respondents' rights to privacy. Third, the research must be sensitive to existing cultural norms for social interaction. Fourth, the research must avoid embarrassing or harming the respondent in any way including physical, psychological or emotional harm. And finally, in the case of voluntary surveys, the respondents must be free to chose to participate or not without fear of repercussion.

Informed consent

810. Informed consent means that respondents are made aware several factors. First, the respondents must be informed about the purposes of the research. Second, the procedures used in collecting the data must be revealed. Third, any risks or benefits to the respondents must be conveyed. And finally, the respondents should have full information regarding the survey sponsor. Groves et al. (2004) expands on this idea by identifying eight essential elements of informed consent:

- A description of an explanation and the purpose of the research. This includes how long the respondent will be needed to participate, a description of the procedures including any that are experimental;
- A description of anticipated risks or discomfort;
- A description of any anticipated benefits;
- Disclosure of any alternative procedures (if applicable);
- Disclosure of how the anonymity or confidentiality of the data will be maintained;
- A description of compensation or treatment available if injury occurs (if applicable);
- Disclosure of whom to contact with any questions;
- Disclosure that participation is voluntary and the respondent may discontinue participation at any time.

811. Only after considering this information can the respondent decide whether or not to participate in the survey. Informed consent can be obtained verbally or in writing. Written consent forms generally provide the information about the survey and the essential elements outlined above and include a place for the respondent to sign to acknowledge that he or she understands the survey purposes and protocols.

812. For a victimization survey, a written consent form may be in order if the survey contains sensitive questions such as those that ask about any criminal acts the respondent may have committed. In this case, potential harm could come to the respondent should the information provided become public. In general, a written consent form allows potential respondents to evaluate the possible harms that might be associated with participating and make an informed decision about whether to participate. The form also provides the survey researcher with tangible evidence that that respondent participated willingly and was knowledgeable of the risks when they agreed to participate.

813. Generally, verbal consent is acceptable when there is minimal risk of harm to the respondent. Nonetheless, surveys that obtain consent verbally should ensure that the respondent understands the potential risks, if any, for participating and also be provided information about the purposes of the survey and for whom it is being conducted. Telephone surveys generally use some form of verbal consent procedure.

814. Informed consent implies that the respondent is legally, mentally and emotionally capable of providing such consent. The survey researcher must, therefore, create special procedures for obtaining such consent for participants who are underage or are unable to make their own decisions. In these cases, consent must be obtained from a parent or guardian (or the parent or guardian is used as a proxy respondent).

815. There are additional ethical concerns that must be addressed for interviews involving persons residing in institutions to ensure their safety and allow for informed consent. For example, a victimization survey of persons in a home for the elderly might focus on abuse by aides or employees of the home. The researcher must develop protocols to ensure that respondents are protected from potential retribution should they participate, as well as ensuring that pressure from others will not influence the respondents' responses.

Protecting respondent privacy

816. Because surveys seek to obtain information from respondents, the survey researcher has a moral (and possibly legal) obligation to protect the information. One aspect of informed consent is notifying the respondent about how the information will be used and who will have access to it. Information provided to respondents about any legal guarantees of confidentiality of the data they provide should be accurate.

817. For face-to-face surveys, protecting the respondent's privacy entails ensuring that the interview is conducted away from other household members. This can be especially important for victimization surveys that measure violence between intimate partners,[67] violence among family members, or violence by caregivers. Respondents must be assured that the information they provide will not be shared with anyone, including other members of the respondent's household. To insure respondent privacy and safety, surveys related to violence against women or family violence or similar subjects should include instructions for interviewers to reschedule the interview if a household member is present and arrange for a time and place that will guarantee the respondent is alone when responding to questions about offences committed by intimate partners or family members. It is important to remember that such additional protection for respondent privacy is likely to have also budgetary consequences and should therefore be taken into account at an early stage of project planning.

818. Interviewer and staff training is a key component for ensuring the privacy of the information provided by survey respondents. Interviewers and others with access to survey data must be trained about their legal and ethical responsibilities to prevent disclosure to anyone who should not have access to the information.

Respecting cultural norms

819. Sound survey practice, as well as common sense, dictates that the researcher avoids any behaviour

67 For a more detailed guidelines for research on intimate partner violence against women, see *Putting Women First: Ethical and Safety Recommendations for Research on Domestic Violence Against Women* (WHO, 2001; http://www.who.int/gender/violence/en/womenfirtseng.pdf)

that will violate the respondents' beliefs or cultural norms. One example of such behaviour that might be offensive and therefore avoided is interviewing on a day of worship or a religious holiday. Another example is using inflammatory, derogatory or foul language. And in some cultures, using interviewers of the opposite gender would be offensive.

Avoiding harm to respondents

820. In medical research, the potential for harm to participants can be obvious. Even though surveys such as victimization surveys do not involve physical contact or medical procedures, the potential for harm still exists. This potential for harm can come both during and subsequent to the survey interview.

821. During the interview, potential harm is associated with the possibility that the questions or survey procedures might cause physical, emotional or psychological damage to the respondent. Victimization surveys often contain questions related to sensitive subjects, including rape, sexual assault and intimate partner and family violence. Some victims of sexual assault (or other crimes) may suffer traumatic reactions when reminded of the incidents during the survey. While it is not possible to avoid all such situations, it is imperative that interviewers be trained to address these situations if they arise. One approach can be to provide victims of crime with information about local victim support services at the end of the interview.

822. Survey developers should identify potentially sensitive questions and explore the creation of special procedures for asking such questions. Sensitive questions are questions that respondents are uncomfortable answering. These questions can be perceived as intrusive or embarrassing to the respondent. Often, a respondent will refuse to answer these questions or even provide false answers.

823. There are methods for avoiding refusals while asking sensitive questions. One technique for face-to-face interviews is to use self-administered questions for the topics deemed potentially emotionally taxing. During an in-person interview, the interviewer excuses themselves and allows the respondent to self-administer the questions. The British Crime Survey uses such a technique for their violence against women survey. Not having the interviewer present increases the likelihood of responses to sensitive questions.

BOX 63: WHO ETHICAL AND SAFETY RECOMMENDATIONS

Particular guidance for interviews that aim to obtain information about sexual violence may be obtained from the WHO *Ethical and safety recommendations for researching, documenting and monitoring sexual violence in emergencies*. The recommendations are designed to complement and add to existing professional standards, guidelines and other practice tools and guides. While the WHO recommendations are stated to apply specifically to the collection of information on sexual violence in emergencies, they also apply to the ethical and safety issues that are typically associated with crime victim surveys covering sensitive subjects, including rape, sexual assault and intimate partner and family violence.

The WHO recommendations are:

- The **benefits** to respondents or communities of documenting sexual violence must be **greater than the risks** to respondents and communities.
- Information gathering and documentation must be done in a manner that presents the **least risk to respondents**, is methodologically sound, and builds on current experience and good practice.
- **Basic care and support for survivors/victims** must be available locally before commencing any activity that may involve individuals disclosing information about their experiences of sexual violence.
- The **safety and security** of all those involved in information gathering about sexual violence is of paramount concern and in emergency settings, in particular, should be continuously monitored.
- The **confidentiality** of individuals who provide information about sexual violence must be protected at all times.
- Anyone providing information about sexual violence must give **informed consent** before participating in the data-gathering activity.
- All members of the data collection team must be carefully selected and receive relevant and sufficient **specialist training** and ongoing support.
- **Additional safeguards** must be put into place if **children** (i.e. those under 18 years) are to be the subject of information gathering.

824. The randomized response technique is another method for achieving responses to sensitive questions. With this technique, respondents answer either the sensitive question or a different, innocuous question. Which of the two questions asked is randomly selected. The notion is that respondents are more comfortable answering a sensitive question when the interviewer does not know what question they are answering. The probabilities of the question being the sensitive question or the innocuous question are used to estimate the sensitive question characteristics.

825. The potential for harm to the respondent following the interview generally involves a situation in which someone else learns that the respondent participated in the survey. For example, a victim of violence by an intimate partner could face retribution from the offender if the perpetrator learns of the respondent's participation (such retribution may be triggered by advance letters sent to the household or any material left in the household after the interview). Harm to the respondent can also result from breaches of information if survey respondents are identified in the data. Breaches in confidentiality can occur in many ways, so researchers must have protocols for protecting the information provided by respondents and for removing identifiers from survey responses, securely storing information, encrypting files and reporting data.

826. Tables and data tapes must be examined to determine whether there is any possibility that they may enable individual respondents to be identified. When only a few responses are represented in a survey table, there is a risk that the identity of the respondent could be determined when the survey results are reported. To account for that, the research may suppress the data by blanking out some cells that contain only a few cases. To ensure that the data cannot be estimated through subtraction from other data in the table, additional data are often suppressed, too. This method does not change the data totals. Any blocking or blanking of the cell data must be noted.

827. Other methods for addressing the confidentiality in tables that report only a few responses include using broadened response ranges and collapsing data over several categories. Although the data are not affected by these methods, information is still lost.

828. For data tapes, protecting the respondent's identity involves removing any information that could be used to identify individuals, scrambling identification codes, and examining outliers for key variables. For survey research, the risk of harm to respondents resides primarily in the possibility of their identity being revealed. Research organizations must strive to ensure confidentiality to protect respondents.

Respecting peoples' rights to not participate in voluntary surveys

829. There is clearly a tension between statistical theory and the concept of voluntary participation in surveys. For survey results to be valid, non-response must be low. Yet 'voluntary' means that persons selected for the survey can choose whether or not to participate without any adverse impact on them. While survey procedures can be designed to persuade reluctant respondents, interviewers must be trained to respect respondents' right to decline to participate.

B. Other ethical considerations

830. Conducting a survey ethically is not solely a matter of protecting respondents and the information they provide. Rather, matters such as national legal principles and international guidelines on data dissemination must be taken into account (see also the section on data disclosure controls).

Balancing confidentiality and laws on reporting crimes

831. Many nations have laws protecting the confidentiality of information collected for statistical purposes. Many nations also have laws mandating reporting to the police of some serious crimes such as child abuse. Clearly, there can be a conflict between these laws. An interviewer is forbidden by law to reveal anything about a person who participated in a survey, but is also required by law to report an offence learned about during the survey. This creates both an ethical and legal conflict. In many nations, this conflict has not been resolved. For example, in Canada, the a Statistics Act protects the confidentiality of information collected for statistical purposes, which means interviewers are not permitted to report an offence to the police.

Ensuring sound professional and scientific process

832. Conducting a survey also entails adhering to sound professional and scientific methods and established codes of conduct for survey research. Organizations of academic and professional survey researchers as the World Association for Public Opinion Research (WAPOR), the European Society for Opinion and Marketing Research (ESOMAR) and the American Association for Public Opinion Research (AAPOR), have created guidelines for their members to use in conducting survey research. The AAPOR Code of Professional Ethics and Practices,[68] for example, covers several topics, including the principles of professional practice in conducting survey research, the principles for working with people, including respondents and the public, and the standards for minimal disclosure of essential research information. The ESOMAR/WAPOR Guide to Opinion Polls provides similar information.[69]

833. Sound professional and scientific processes involves using established statistical sampling methods for drawing samples, working to develop unbiased questions and testing them prior to implementation, providing adequate training for interviewers and other staff, and providing users of the data with enough information about the survey and its methodology to enable understanding the limitations of the data as well as the strengths.

834. When publishing survey results, the researcher should present information about the sample design, sources of potential bias in the sample (i.e. under-coverage of a particular sub-population), sources of non-response error, response rates, and measurement errors associated with survey variables.

BOX 64: THE FUNDAMENTAL PRINCIPLES OF OFFICIAL STATISTICS

Victimization surveys are an integral part of the system of official statistics in each country. They are therefore expected to encompass the Fundamental principles of official statistics (see: http://www.unece.org/stats/archive/docs.fp.e.htm).

These principles were adopted for the ECE region by the Economic Commission for Europe in 1992, and by the United Nations Statistical Commission at its Special Session of 11-15 April 1994. The principles are:

Impartiality: official statistics provide an indispensable element in the information system of a democratic society, serving the government, the economy and the public with data about the economic, demographic, social and environmental situation. To this end, official statistics that meet the test of practical utility are to be compiled and made available on an impartial basis by official statistical agencies to honour citizens' entitlement to public information.

Professionalism: to retain trust in official statistics, the statistical agencies need to decide according to strictly professional considerations, including scientific principles and professional ethics, on the methods and procedures for the collection, processing, storage and presentation of statistical data.

Metadata: to facilitate a correct interpretation of the data, the statistical agencies are to present information according to scientific standards on the sources, methods and procedures of the statistics.

Comment on erroneous interpretation: the statistical agencies are entitled to comment on erroneous interpretation and misuse of statistics.

Diverse sources: data for statistical purposes may be drawn from all types of sources, be they statistical surveys or administrative records. Statistical agencies are to choose the source with regard to quality, timeliness, costs and the burden on respondents.

Confidentiality: individual data collected by statistical agencies for statistical compilation, whether they refer to natural or legal persons, are to be strictly confidential and used exclusively for statistical purposes.

Transparency: the laws, regulations and measures under which the statistical systems operate are to be made public.

National coordination: coordination among statistical agencies within countries is essential to achieve consistency and efficiency in the statistical system.

International standards: the use by statistical agencies in each country of international concepts, classifications and methods promotes the consistency and efficiency of statistical systems at all official levels.

International cooperation: bilateral and multilateral cooperation in statistics contributes to the improvement of systems of official statistics in all countries.

68 Available at http://www.aapor.org/aaporcodeofethics.

69 Available at http://www.esomar.org/uploads/pdf/ESOMAR_Codes&Guidelines_OpinionPolling_V5.pdf.

835. The findings should be accurate reflections of the data and should not be manipulated to create desirable results. It is often desirable to separate the agency or office that conducted the survey and analysed the data from agencies related to government policy in order to ensure that the survey results are free from political influence. This separation can also serve to increase public acceptance of survey findings.

836. In the long run, conducting surveys ethically by protecting respondents, protecting survey data, and presenting results completely and fairly, serves to promote trust in survey results. Respondents will be more willing to participate in future surveys if they are not treated with respect by survey researchers. The public as well as policy makers will trust survey data if releases are honest and present sufficient information to interpret the results. Taking shortcuts or otherwise failing to adhere to sound professional and scientific practices may seem beneficial or appear to avoid difficult situations, but ultimately, such practices serve to cast doubt on the entire field of survey research.

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CHAPTER IX. DATA DISSEMINATION AND DOCUMENTATION

837. Chapter IX of the Manual addresses principles and guidelines for data dissemination and documentation, including dissemination formats and standards for metadata and references. It considers the issue of media relations and data disclosure controls, including the importance of preserving confidentiality of respondents.

A. Scope and purpose

838. Publication and dissemination occurs when information obtained through a statistical activity is released to users. The form of the actual publication and dissemination can vary depending on resources and demand. Users may access the information via websites, internet-only publications, paper publications, microfiche, micro-data file, telephone, facsimile, public speech and/or a presentation, as well as a radio and/or television interview. Often, multiple dissemination formats supporting one another are used for one publication. Publication should aim to cater for the variety of user needs, whether these are non-statisticians who may only require a high-level summary or professional analysts or academics who wish to carry out their own analyses of the results or re-interpret the raw data. Regardless of the format selected, the goal is to make the publication easily accessible to the user.

839. Despite the fact that dissemination occurs when information is released to users, the end statistical product must be taken into consideration at the beginning of survey development by considering the range of user needs and outlining clear objectives.

840. Objectives are the purposes for which information is required, stated within the context of the programme, research problem or hypothesis that gave rise to the need for information. Users narrow down and specify more precisely the information needs, for example, by describing what decisions may be made based on the information collected and how such information will support these decisions. A statement of objectives provides users who have different objectives with the means to assess the extent to which a product from a statistical activity may meet their own needs. It is also an important means of communicating to (potential) users what they can expect from the products of a statistical activity and the degree to which they will want to be careful when their use of the data extends beyond that which the activity was designed to support.

841. A victimization survey's purpose should be communicated to stakeholders who participate in consultations to develop or change survey content, as well as to survey respondents. In Canada, the purpose of the victimization survey is that it is the only national survey to collect data on criminal victimization. The police only have information on crimes that are reported to them. Not all crimes are reported for a variety of reasons. The victimization survey collects information on all crime, regardless of whether or not it was reported to the police. At the same time, we can learn why some people chose not to report a crime to the police. This survey also collects much more detail about the crime incident and the impact of the crime on the victim than do police data.

842. It also becomes important to explain how the data will be used. In the case of victimization surveys, their data are used to develop and evaluate programmes and services to prevent and respond to crime and to support victims. Police departments, all levels of government, victim and social service agencies, community groups and researchers use this information: to study perceptions of the level of crime around them and their attitudes toward the criminal justice system; to profile victims of crimes; and to study characteristics of criminal incidents.

843. To plan the survey in advance by sharing the objectives of the survey and the uses of the data often serves to legitimize the survey and ensure its impartiality and objectivity. Broadly speaking, a survey should be able to develop, produce and disseminate reliable and objective information that satisfies and anticipates critical needs and sheds light on major public policy issues.

844. Accessibility of information refers to the ease with which users can learn of its existence, locate it and import it into their own working environment. The dissemination objective should be to maximize

ability to collect and process data in the first place.

845. In determining what information products and services to offer, survey planners must liaise with clients, research and take careful account of client demands and monitor client feedback on the content and medium of their products.

846. Data accessibility can also be limited by language, since the availability of information is restricted to the country of origin's official language(s).

847. Major information releases should have release dates announced well in advance. This not only helps users plan, but it also provides internal discipline and, importantly, undermines any potential effort by interested parties to influence or delay any particular release for their benefit. The achievement of planned release dates should be monitored as a timeliness performance measure. Changes in planned release dates should also be monitored over longer periods.

848. These approaches are in line with the United Nations Fundamental principle of relevance, impartiality and equal access that states '…impartiality in compilation and release is achieved through the process being free from political interference in both the methodology adopted and what is released and when. In many countries this independence is enshrined in statistics legislation. Statisticians need to act professionally by the sound application of statistical methods, by openness about concepts, sources and methods used, and by avoiding partisan commentary…. to make information widely known and available on an impartial basis requires dissemination and marketing activities (including dealing with the media) to provide information in the form required by users, and release policies which provide equal opportunity of access. Sound statistical principles needs to be followed with the presentation of statistics so that they are easy to understand and impartially reported'.

Principles

849. There are several principles that should be kept in mind during publication and dissemination. An overarching principle is that this process must consider the users' needs. Needs are met by following particular guidelines to ensure that the information delivered to users is accurate, complete, accessible, appropriately priced, clear, user-friendly, timely and meets confidentiality requirements. Second, the method of dissemination should exploit technological advances allowing users access to the statistical information in a cost-effective and efficient way. Third, dissemination should consider market expectations. These expectations are based on feedback from previous clients, product testing or marketing activities.

Guidelines

850. Adhering to guidelines will help ensure that these principles outlined above are achieved. First, it is important that the information disseminated is accurate. Obviously, preparation of data to be released from a statistical activity's source file involves many steps. Released data must be verified to ensure that they are consistent with the source data. In the case of regrouped data or derived variables, this means that one should be able to reproduce the same results from the source data. Second, the published and disseminated product should be relevant, timely, interpretable and coherent. And third, all rules concerning confidentiality of the data should be followed. This includes suppressing data that may identify individual respondents. Failure to do so is unethical and can cause harm to any respondent inadvertently identified.

851. Before the formal dissemination, it is important to test the release of an electronic product for accessibility, functionality and usability. For example, testing the accessibility of the product would involve ensuring that the web content is accessible to all users, including persons who use adaptive technologies and examining how a product is viewed and functions with screen reader software. Functionality testing determines that the product is complete, works properly and performs all expected functions. Usability testing ensures that the product is easy to use, that the language is appropriate and that the choices presented to the user are logical. Undertaking this testing will reveal any problems in the release system which can be remedied prior to the actual release of data.

852. Provide measures of accuracy and data quality or, where possible, tools for their calculation (e.g. coefficient of variation, look-up tables, sampling variance programs) along with the disseminated product. Measures will include both the sample design, sample size and response rates achieved as well as indications of the confidence intervals around survey estimates and whether particular differences or comparisons are statistically significant. This information should also include, when possible, providing a telephone number and/or an e-mail address of a contact person who is knowledgeable about the survey for each release of information. This helps to ensure the proper use of the data when users have questions concerning concepts, definitions, approaches and methodologies.

853. All disseminated publications should provide documentation and metadata (information about the data source). This information should contain (as appropriate) descriptions of the data quality and the methodology used, including both sampling strategy, survey design and the questionnaire used, or details on how these can be obtained. Providing this information will help build trust in the findings and minimize the risk that users will reach inaccurate or inappropriate conclusions.

854. Finally, it is advisable that the disseminating agency disseminate items that are consistent in style and formatting to previously released data from the survey. Doing so maximizes the use and utility of research products.

Dissemination policies

855. Most statistical agencies have some type of formalized dissemination strategy which regulates the general types of outputs that are produced from a survey. There are four general types of products or outputs produced. The first is the general interest publication. This publication is prepared in anticipation of general user demand and contains statistics or information relating to statistics from the survey. The second type of output is the special interest product. These publications are produced to satisfy the anticipated demand and requirements of a limited range of specialist users on a strictly commercial basis. The third sort of output is customized products and services that are made to order for specific customers. And the final type of output is termed other services which involves a multitude of things including the provision of statistical advice.

856. Statistical information may be delivered to users in many ways including through direct access to datasets, through remote-access terminals, or as information provided on CD-ROM or other removable media. Some services may incur a fee for users.

857. Regardless of the form of output, the statistical agency should be clear about the manner in which the outputs will be disseminated. For example, four options may be applicable to the release of a crime victimization survey. First is the general release. Publications released in this way are simply released to the general public at a nominated time on release day, and provide the main findings of statistical collections and compilations, and more detailed statistical and related information. A second option is to release under embargo. In this scenario, access to statistical and related information cleared for publication prior to general release may be granted to pre-approved parties.

858. The purposes of such a release may be in order to prepare special briefings for government ministers responsible for the topic covered by the survey or other significant stakeholders. The third option is to release for peer review. This method provides statistical information, prior to its clearance for publication, to approved parties for review, provided that such release will ultimately add value to the statistics or analyses to be released. This may be particularly important if the survey manager and staff do not have backgrounds in criminal justice or victimization statistics and there is a need to seek external expertise. The fourth option is to release for purposes of joint publishing. In this case, the statistical agency may give joint publishing partners access to statistical and/or related information not otherwise released, including information from confidential unit record files. Depending on the arrangement between partner agencies, this exchange of data may be quite limited, and result in an endorsement and joint publication of the final product, through to a detailed collaboration on analysis and composition of the final output.

859. The way in which an agency approaches data dissemination and documentation critically influ-

ences the ability of users to access, use and understand the data produced from the victimization survey. In order to publish the findings from the survey in a statistical product several steps are involved:

- developing the product concept and output requirements;
- preparing the product;
- printing paper-based publications and duplicating electronic output (if necessary);
- release and distribution of the product.

860. These steps outline a dissemination plan, which aims to ensure that the statistics generated by the crime victimization survey are accessible and used. Outputs need to be provided in ways that take into account the variety of information needs expressed by users, and also the capability of users to deal with different forms of statistical information. Statistical output may be presented in tabular fashion as a general rule, but users may require simplified outputs with more visually stimulating presentations via graphs and charts. Conversely, a more sophisticated statistical audience may look for a greater degree of technical information and specialized reports to bring nuances in the data to the surface.

Standards for data dissemination

861. Standards for data dissemination are a key consideration in determining the dissemination of statistical output. Standards are a primary means of ensuring that data quality principles are followed and can be relied upon by users. It also allows the statistical agency to quality assure the statistical outputs using existing methods. While standards generally apply to all the methods and procedures for the collection, processing, storage, and presentation of statistical data, this becomes vitally important for users when trying to establish appropriate use of output. If a statistical agency has well established standards that are applied in the presentation of statistical output, these formats become understood and expected by users. The inclusion of relevant information on the sources, methods, and procedures of the statistics is also important, as are full explanations of standards applied to the data – for example, the structure of offence classifications utilized and other statistical tools.

862. Confidentiality policies are a core element of standards application in the dissemination process. This can be vitally important in protecting the identity of respondents. The privacy of respondents is always a paramount concern to a statistical agency which hopes to obtain the future trust and cooperation of citizens in its processes. Confidentiality becomes even more vital when the crime victimization surveys tackle more sensitive subject matter, such as sexual assault, domestic violence, help-seeking behaviours and the effects of criminal victimization. Steps should be taken uniformly across statistical output to ensure that cells with small counts of persons are not revealed, and that personal information is not included. Where unit record files are to be released as a statistical output, this process can be lengthy and complex. If there are small numbers of persons with combinations of responses that are highly distinctive, it is often necessary to swap values between records, or group data in ways that protect the anonymity of the survey respondents. The strategies required for ensuring the data remain confidential varies as a product of the formats in which the data are to be released, and the amount of control these formats give the statistical agency to control the further manipulation of data.

Dissemination formats

863. Dissemination formats are crucial in determining whether or not the statistical output can be easily accessed and utilized. Published reports are a traditional vehicle for statistical outputs, but increasingly other options have been made available as a result of emerging technologies and communication channels. Users may also specify their own formats that are required for certain analysis to be possible. Ultimately, decisions about the appropriate medium for the survey output should be geared towards convenience. Formats can be made available through a number of channels: direct contact with clients, through library programmes to disseminate statistical findings, contributions of articles and similar materials to other agencies for publication and release, or through the internet.[70]

70 A discussion of different statistical dissemination formats and strategies is presented in 'Communicating with the Media – A Guide for Statistical Organizations', United Nations Economic Commission for Europe, 2001 (http://www.unece.org/stats/documents/media/guide/Contents.htm)

864. Some formats and services are very resource-intensive to produce, and this expense is often passed on to users by the statistical agency in the form of access fees or charges. When considering the output formats available, survey managers should consider the costs involved in producing an output via a particular format, and how well the resulting output can be utilized with the necessary charges applied. For instance, if unit record data are required for users to complete comprehensive analysis of survey results, but the cost of producing such data is high, the cost applied to the final output may prohibit any of the targeted users from accessing the data. In such instances, the resource expended is not recovered and the data cannot be used.

865. Users of data have become more sophisticated and are demanding fine level data for research. The form that the data are released will affect confidentiality requirements. The most common form of presenting data is via multidimensional tables or data cubes.

866. Another form of dissemination is through micro-data access. Micro-datasets containing individual records provide a rich source of data; however the risk of disclosure of personal information can be high. Micro-data can be confidentialized by removing identifying information, recoding values or changing variables. This process can be complex and involves a subjective process therefore the confidentiality should be performed by someone who understands the data and the risks. The rapid expansion of databases in the private sector containing information about identifiable persons can increase the risk of identification through data matching even though names and addresses are not included on the micro-data file.

Metadata and documentation

867. Explanatory material is provided as a principal means of achieving informed use of statistics. It provides guidance and interpretation to help users understand the statistics presented, and determines appropriate applications of the data. The final output from a crime victimization survey should contain, or be clearly associated with, sufficient explanatory materials to enable users to:

- be aware of the nature and limitations of statistical information;
- assess the usefulness of the statistical data for specific purposes; and
- use the findings about crime victimization for decision making.

868. Explanatory material should inform users about the quality of the statistics and any process or events that might affect interpretation. This can include measures of accuracy, such as providing technical notes that detail the effects of relative standard error, for example. The variation that can arise as a result of a particular survey methodology needs to be communicated to users – particularly in statistical environments where there are multiple sources of crime victimization data that may utilize different methods, as users will require this information to determine which data is best for their purpose, and which data cannot be compared. Draft explanatory notes from the point of view of a user who is not an expert in the field. Avoid using statistical jargon and technical terms. Do not simply translate jargon into 'ordinary language', but explain it, and recast texts where it is used. Simply translating technical language into 'ordinary' language without also dealing with the logic in which it is framed can result in texts that are even more confusing to readers than the original technical prose.

869. Sampling issues, such as coverage difficulties, sample loss, potential bias and any significant events that occurred immediately prior or during enumeration need to be included in the explanatory material for the survey findings. Information about significant events may be obtained through media, or news about major events, or may be communicated by stakeholders who are aware of local issues that may have a significant impact upon the data.

870. In some instances, the survey output to be disseminated may be linked to an ongoing survey collection, but be the result of a significantly different questionnaire, definition used, sample, method or other survey process that is considered to have an effect on the data such that they are no longer comparable with previous iterations of the survey findings. In such instances, this is termed a break in series. Similar issues arise when presenting revisions to data that have been previously released to the

public. These events can cause confusion among users, and lead to misinterpretations of data, or potentially even perceptions of invalidity of the data if not handled correctly.

Publications and access to the public

871. Part of the initial specifications for the survey should detail the requirements for outputs and data availability to the public. It is vital that the survey manager clearly determines strategies for dissemination to the public ahead of time. This allows the survey manager to plan activities and schedule resources from an internal perspective, with a focus on the deliverables and their due dates. The aim should generally be to release statistics as soon as possible after their compilation.

872. The release of survey outputs should be announced in advance of the expected release date, to enable stakeholders and other users to prepare for the arrival of the results. In many instances, researchers and policy makers keenly anticipate the release of new crime victimization data and if scheduled dates of release are known ahead, it is possible for them to be prepared with appropriate resources in order to access and begin to work with the survey findings at the earliest opportunity. In this way, the results of the victimization survey will be as timely and relevant for users as possible, and the policies and programme development that results from the availability of new data will occur more quickly for users.

Comparisons between survey results and police reports

873. Police data and victimization survey data are quite different and highlight different aspects of crime. The purposes of the two types of data differ, and are variably suited to different applications depending on the research or policy questions to be addressed. The two data sources can be viewed as complementary. When an incident of crime victimization occurs, there are a number of ways in which this can be measured and a number of stages where a measurement can be taken. This includes from the time that the person perceives they have been a victim through to reporting to police and the formal charging of the offender. Police statistics reflect a measure of crime reported to and recorded by police, while victimization surveys represent direct reports from members of the public about their perceptions and experiences of crime as collected in household surveys. Neither of these sources provides a definitive measure of crime victimization, but together they provide a more comprehensive picture of victimization than either measure alone. Both sources have their limitations and need to be clearly understood.

874. In a number of jurisdictions, data based upon police administrative records and data gathered from crime victimization surveys are presented together in the same publications. There are advantages and disadvantages associated with this approach. The advantage is that one publication contains a broader view of crime. In contrast, a disadvantage is that it can lead to attempts at comparisons between the two data sources that should not be made. Additionally, if users do not fully understand the differences between the two datasets, it can lead to users choosing the number that looks 'best' or most helpful to support a particular hypothesis or argument. This is always a risk when disseminating statistical information, but one that should be carefully managed when dealing with crime statistics. If there are differences in the ways that offences are defined or categorized, this needs to be very clearly stated. Otherwise, the presentation should be altered in such a way that comparisons between related, but distinct concepts, are difficult to achieve.

875. The statistical agency needs to be very clear about the way that the survey can be complementary to police statistics or other sources and instances where there are differences that may impact upon statistical inferences that can be made. These differences should be explained in any published statistical outputs, regardless of whether police and survey data are released in the same published outputs.

876. One of the most informative pieces of data that can come from a crime victimization survey is a measure of crimes that have not been reported to the police, and therefore a reporting rate that shows the propensity of people to report incidents to authorities of the criminal justice system. Depending on the research or policy questions, this can be a more helpful piece of data than police records in some instances. However, it should also be noted that the scope of offences or topics covered by the crime

victimization survey may not be easily reconcilable with the legal definitions of offences used by police. These legal definitions are bound by criminal law, operational policies and procedures, and thus are also prone to change over time. For example, changes to a law, computer system or recording rule can all have effects on the number of criminal incidents recorded in police statistics. Crime surveys generally use broader descriptions of behaviour and harms.

Media relations

877. An important consideration in presenting data to the public is preparation for dealing with the media. Crime victimization is often a topic which gains significant attention in the press and generally the media tend to focus on the negative rather than positive aspects of the results. The disseminating agency needs to plan in advance for this attention. It is highly recommended that media training is provided to people designated as media contacts, especially given the highly politically sensitive topic of crime. Developing a set of questions and answers that cover a range of sensitive issues that might be raised by the media or general public prior to the release of the results would also be a useful resource for those dealing with the media.

878. Statistical agencies generally have a policy of equity of access to statistical information to all, whereby the initial statistical outputs from a survey are released to the general public and media at the same time. Generally notifications of expected releases of statistical outputs are published on the organization's website.

879. Some statistical agencies have media relations units which comment on the wording of the media release. These comments generally are aimed at making the language used in the media release media-friendly, thus increasing the chances of the findings being reported in the media. These same media units will fax or e-mail copies of the media release (which is also released at the same time and date of the statistical outputs) to media agencies.

880. It is important to present an appropriately short and succinct media story in a press release form. For jurisdictions where the survey data are likely to be compared with other data such as from previous surveys or other police or justice data, it is helpful if the agency can be prepared about what is and is not comparable and be ready to explain this in simple, non-statistical terms.

881. One of the responsibilities for an agency releasing statistical relating to crime victimization (or any topic for that matter) is to promote the accurate media coverage of statistics wherever possible. Any release of statistics should include, as previously outlined, sufficient explanatory material to enable users to understand the origin and complexity of the data, in addition to any additional information that may relate to that specific survey. For example, this may include information about any significant events that may have occurred during the reference period or enumeration. While this information may assist more savvy users in understanding the data in depth, it is also important to have an agency contact listed for media inquiries, statistical clarification and to coordinate general requests for additional information. Such a contact not only provides a face for the agency in relation to this topic, but also can assist media in finding the data that are most relevant to them from the survey and advocate for appropriate representations of the findings. The general public or other users of the statistics can also use such a contact to obtain further guidance about the appropriate interpretation of the statistics and information about other data that may not be made available in the initial products disseminated.

882. Obtaining the support of key figures in the field of crime and justice - or specifically the topic of the survey - can be invaluable in providing independent support for the findings. Such figures can become additional ‘survey champions’ or spokespeople, who can speak on the topic and be briefed on the detail of the survey methodology and results in order to provide a public face for the findings. Depending on the limitations placed on the agency in terms of providing analytical comment on the results, these contacts may often be in a better position to provide more analytical and/or speculative comment on possible drivers for an increase/decrease in crime victimization.

BOX 65: GUIDE TO MEDIA RELEASES

A media release is not intended to summarize all the details of the final publication. Instead, the media release is better described as a short, attention-grabbing and topical presentation of the most significant features of the results from the crime victimization survey. These features are likely to be of most interest to media editors and the public at large.

The main objectives of a media release are:

- To achieve wide reporting of the findings from the particular survey to help increase the awareness of the data among decision makers and the general community;
- To invite favourable publicity for a particular survey or publication;
- To encourage a positive media approach to the purpose or content of the publication;
- To advance the public perception that the statistical organization is effectively fulfilling its important and objective role in society.

Experience shows that these objectives are most readily achieved by a media release that:

– **Is journalistic in style.** That is, the release is short, written in plain language with an eye-catching heading and opening paragraph and a straightforward, logical presentation of interesting facts;
– **Honestly sets out to satisfy journalistic (and therefore public) curiosity** about the subject matter. The release should not try to obscure unpalatable findings by omission or through misleading language;
– **Is self-contained.** That is, the release should not present questions which are unanswered in the text.

While setting out to meet these requirements, it is important that the release does not resort to sensationalism or distort the facts through misleading headings or content. **The media release should not undermine other statistical organizational objectives** (e.g. objectivity and impartiality) nor lead to a story that trivializes a dataset, or leads it off on a tangent and hence undermines community discussion.

Start writing the media release text well before the publication's release date, and even before final clearance of the publication. Unless you are working from first-hand knowledge of the publication contents, you probably will be drawing on the 'Main Features' or 'Summary of Findings' text which is, of course, written for a different purpose.

There is a good argument for drafting the media release before the Main Features document is finalized. This helps to clarify issues of public interest or concern which might be overlooked in preparing the introduction to the publication.

The main principles of news writing (and therefore media release writing) are straightforward:

- Keep it **short** and **simple**. It is recommended that releases are kept to an absolute limit of 400 words and to one page. This provides maximum economy for distribution purposes;
- Keep your primary readers/audiences in mind: media and general public;
- Emphasis on active voice (subject-verb-object);
- Short sentences, generally one idea to a sentence;
- Who, what, when, where and (where feasible) why.

News is about people. It is important to remind ourselves that putting the people into a media release makes it much more interesting to the intended audience.

Sometimes there will be a clear idea for an opening paragraph such as a large increase in a particular crime type. But if the main point of the survey results is not obvious, you will have to give some thought to choosing a topic for the 'lead' or 'intro' as journalists call it. In this situation you need to mentally step out of your professional frame of mind and ask yourself these questions:

What do these findings say about people's lives? Do they indicate changes or new insights into the way people live, work, relax, plan, worry or relate to each other?

Consider the 'biggest, newest, latest, most' in your release. The media uses this approach a great deal.

Would newspaper readers or radio listeners be surprised by any of these findings?

Would any of this information cause some people to change their attitudes or their plans for the future?

Change, or in some cases the lack of it, makes news. If your publication's main features summary does not make comparisons with previous time frames or previously published figures, you should check these yourself to see if you can use them to make your media release more effective. You may also wish to include information from another publication relating to subject of the media release. Such inclusions are permissible provided the title and catalogue number of the source publication is given.

As a rule, any material in the media release should be available in the Main Features, and the material in the Main Features should be sourced from the publication.

You might come up with three or four possible candidates for 'most interesting point'. You can use them all in the text. Make a choice for number one and then write your opening paragraph as a simple statement (you can decide on a heading later).

Journalists are taught to think of an inverted pyramid while writing their stories. The most important fact or facts come at the broad top (the inverted base), with supporting information immediately following, then additional interesting facts in descending order of importance, with the least important/interesting/significant material in the narrow apex at the bottom. The advantage of this image is obvious – shortening the text is a relatively easy matter of cutting from the bottom. When space is at an absolute premium, the 'base' (the first paragraph) will stand on its own.

While recognizing that most news organizations will use the media release only as a starting point for their own version of the story, one should aim to present the text in good style so that it could be published without further editing. This means that the journalist is working from a text that is valid in its own right and needs no basic correction or explanation – it is ready for 'customizing' to their own requirements with creative editorial treatment.

Try to keep the heading comfortably to one line. A short, eye-catching heading will draw an editor to the lead paragraph, so look first to your lead for a heading. Try to vary or simplify the language to avoid repetition, although some repeats are to be expected.

A heading should make basic sense but should be seen as a form of shorthand: it need not have a verb and generally will not have room for qualifying phrases.

THE STYLE OF THE MEDIA RELEASE

- Spell out numbers one through nine and all numbers that occur at the start of a sentence. Percentages are an exception because of the use of the symbol (5%).
- Be sparing with bullet points, they can be useful in small numbers.
- Spell out acronyms when first used, followed by the acronym in brackets: Consumer Price Index (CPI). Afterwards just CPI is fine.
- Publication titles in italics.
- Use capitals sparingly. Media releases follow standard (media) style.
- One well-spaced page is the optimum length for any media release.
- Allowing for letterhead and 'master' items such as contact details, the actual content must be less than three-quarters of an A4 page in length. In some special cases extra material can be distributed to key media contacts, but this is costly and labour-intensive.
- Authors should keep in mind that the 'Main Features' document will be available online to media, who will also have access to the publication itself. This is not a reason to leave key points out of the media release, but an incentive to avoid trying to cram too much into the available space.
- Journalistic writing and scripting is not a language in its own right, it is simply a version of the way people speak to each other in normal situations. It could be called 'conversational style'.
- The best approach to writing a media release is to write as if you were speaking to a busy, intelligent stranger not of your own profession. Such a listener would quickly grow impatient with language that was not simple, concise, to the point and free of jargon.
- Choose words that are used in everyday life: *chose* or *preferred* instead of *expressed a preference for*, *travelled* for *were conveyed, most* in place of *the highest proportion of.* Of course this list could go on for pages.
- Avoid bureaucratic language. In general, journalists and their audiences think in terms of people, not persons – they regard that word as a bureaucratic term which rarely appears in normal conversation. Such terminology can irritate sub-editors and other journalists using the text, while it might be acceptable in a specialist document.
- **Do ensure the figures in the media release text are absolutely correct**. Ask one or more colleagues to check them for you and then re-check them yourself. The issue here is not rounding of figures, which often makes them more digestible to the public, but transposition of percentages or simple typing errors which cause embarrassment if not discovered before the text is released.
- **Do keep an open mind** on what might interest the media and the public. If a survey has raised questions or issues considered peripheral to the main purpose of the exercise, but these are particularly interesting in themselves, there is no point trying to hide them. At the same time if material is of such interest as to be in a media release, it should also be in the Main Features.
- **Do keep in mind the ultimate use of the statistics** being highlighted. If possible include a reference to use of the statistics in the text.

BOX 66: AN EXAMPLE OF A MEDIA RELEASE

MEDIA RELEASE

June 27, 2008 Embargoed 1130 am (AEDT)

Nearly $1 billion dollars lost by Australians to personal fraud : ABS

Nearly one billion dollars ($980 million) was lost as a result of personal fraud according to the first National Personal Fraud Survey by the Australian Bureau of Statistics (ABS) released today.

The survey, conducted in 2007, asked people aged 15 and over about their experiences relating to personal fraud incidents in the preceding 12 months. The survey found that 453,100 Australians lost on average $2,160 as a result of personal fraud.

Other results from the survey include:

- A total of 806,000 Australians reported they were victims of at least one incident of personal fraud in the previous 12 months. This represented 5% of the population aged 15 years and over.
- Half a million Australians experienced a form of identity fraud. The majority 383,300 (77%) were victims of credit or bank card fraud; identity theft accounted for the balance.
- Nearly 6 million Australians (36%) were exposed to a range of selected scams; that is they received, viewed and/or read an unsolicited invitation, request or notification designed to obtain personal information or money or obtain a financial benefit by deceptive means.
- 329,000 people fell victim to at least one type of scam by responding to or engaging with the unsolicited offer. The three main categories of selected scams were: lotteries (84,100 victims), pyramid schemes (70,900) and phishing and related scams (57,800).

Media Note: Personal fraud included credit or bank card fraud, identity theft (includes the unauthorised use of a person's personal details), and the following selected scams: lotteries, pyramid schemes, phishing and related scams, financial advice, chain letters and advance fee fraud.

Further information is available in *Personal Fraud, Australia 2007* (cat. no. 4528.0), available free of charge from the ABS website <www.abs.gov.au>.

Less formal dissemination

883. It should also be acknowledged that dissemination does not solely include physical statistical outputs. This can also include more informal information sharing through liaison and promotional activities. If a community engagement strategy has been utilized in order to address the needs of a specific cultural group or other sub-population, dissemination can be a crucial phase of the survey process in providing meaningful feedback to respondents and their community. This may require the presentation of data in a different manner in order to make the results more relevant, and perhaps consideration of dissemination in a number of languages. Other forums, conferences and meetings can be utilized in order to return the findings of the survey to their source. If a longer-term strategy to engage communities is in train, these are methods of maintaining the trust and support of groups.

Summary of points: publication and dissemination

884. Preparation of data to be released from a statistical activity's source file usually involves many steps. Verify and ensure that released data, after all the processing steps, is consistent with the source data obtained. In the case of regrouped data or derived variables, this means that one should be able to reproduce the same results from the source data.

885. Verify the quality of the publications by ensuring that the information presented is relevant, the analysis is accurate, the release is timely considering the data collection period, the data are interpretable and coherent.

886. Ensure that all rules concerning confidentiality of the data are followed by suppressing data that may identify an individual respondent.

887. Test an electronic product before release to ensure that it performs as planned.

888. Provide data quality measures or, where possible, tools for their calculation (e.g. CV look-up tables, sampling variance programmes) along with the disseminated product.

889. Provide documentation and metadata along with the disseminated material that contains, as appropriate, descriptions of its quality and the methodology used to ensure that users do not draw conclusions from the data that are inaccurate or inappropriate.

890. Develop a dissemination product consistent in style and formatting to other previously released data from the survey to assist in its use and utility.

891. Where possible, provide a contact person who is knowledgeable about the survey, a telephone number and/or an e-mail address for each release of information. This will help ensure the proper use of the data when users have questions concerning concepts, definitions, approaches and methodologies.

Data disclosure controls[71]

892. Cooperation from respondents in completing survey returns is dependent on the trust they have with the agency requesting them to provide personal information. Confidentiality is a key element of that trust and agencies need to protect the information supplied by respondents and ensure that information about individual people, businesses or other entities is not disclosed. Some national statistical agencies have a legal obligation to protect information supplied by individuals and businesses. The sixth United Nations Fundamental Principle of Official Statistics states:

> 'Individual data collected by statistical agencies for statistical compilation, whether they refer to natural or legal persons, are to be strictly confidential and used exclusively for statistical purposes.'

893. Without trust, national statistical agencies would not get the high level of response and accuracy to deliver good information to the community. If respondents believe or perceive that an agency will not protect the confidentiality of their data, they are less likely to cooperate or provide accurate data. Any assurances provided to respondents about privacy or how the data will be used should also be upheld. A lack of trust or misuse of data could result in negative publicity for that organization or in some cases legal action.

894. Personal information may also be subject to privacy rules. Information must be stored securely and only used for its intended purpose. The agency collecting the information should ensure that no one outside the organization has access to information that could identify an individual. This could include the questionnaire, database records or the outputs produced from the survey. Data must be protected at all stages of the of the collection process.

895. Technological developments provide considerable challenges in ensuring that an individual's personal information is protected, therefore it is critical that a survey agency develops a set of rules or policies, methods and techniques to sustain the trust of its providers. Strict procedures in collecting, processing, storing and releasing information should be in place.

896. Some offence types in crime victimization surveys, such as sexual assault, may have low prevalence, resulting in some cells in tables having few contributors. Cells with few contributors in the unweighted data will need to be altered by collapsing rows or columns or both, suppressing cell values or perturbing cell values prior to data being released. Care should be taken to ensure that cells that are suppressed cannot be calculated from the totals or other values. Cells that are suppressed because they fall below a set number of contributors are called primary suppression cells. It may be necessary to suppress other cells within a table to ensure that the value in the primary suppression cell cannot be revealed; this is referred to as secondary or consequential suppression.

71 See also section VIII.B – Other ethical considerations.

897. If the confidentializing action severely restricts the amount of information available from a table (i.e. too many cells are suppressed), then the table design should be reviewed; collapsing some rows and/or column categories may improve the table. Table 16 below is an illustration of data that has been suppressed; the total person counts are still publishable, but the male and female counts cannot be supplied. There are various methods of confidentializing data and this will depend on policy or the situation. Some software packages are also available to protect micro-data against disclosure.

Table 16: Victims of robbery: type of weapon used in most recent incident

	Males		Females		Persons	
	'000	%	'000	%	'000	%
Total number of incidents of robbery	67.6	..	23.8	..	91.4	..
Knife	np	np	np	np	11.1	18.8
Other weapon	np	np	np	np	8.5	14.5

np = not published '..' = not applicable

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CHAPTER X. CLOSING THE CIRCLE – EVALUATING COMPLETED SURVEYS

898. Chapter X of this Manual demonstrates the importance of the evaluation process in the life cycle of crime victimization surveys.

899. A survey system can be viewed as a cyclical process. It begins in the design stage, with developing and testing the survey. Stages two and three are the implementation of the survey and the production of survey results. Stage four is the review and evaluation of the process as it has been carried out. Finally, in the last stage, the cycle is begun again, as the next iteration of the survey is developed and implemented.

900. Previous sections have discussed various procedures that should be incorporated into the first three stages of the survey cycle to ensure that the survey's goals are clear and its protocols and processes are well developed, and that the quality of the work is high and accomplished in a cost-effective manner. For example, systems should be created to monitor data collection costs and the quality of interviewers' work and their progress in completing their assignments. During data processing, the data must be examined closely to determine whether the questionnaire is measuring what it was designed to measure; and the extent to which non-sampling errors, that is errors associated with respondent recall, coverage, etc. are present in the data.

901. This section covers the fourth stage of the survey process cycle; the post-enumeration evaluation of the survey system. Once the data are collected and the results produced, the various processes, protocols and procedures employed in the survey should be thoroughly reviewed to assess the reliability, accuracy and utility of the data and to improve and enhance the survey's ability to collect timely, accurate data in as cost-efficient manner possible in future enumerations.

902. Most, if not all, of the discussion that follows can apply to any survey regardless of subject matter. Evaluations are of particular importance to victimization surveys because such surveys are generally expensive undertakings measuring relatively rare, often difficult to measure and sensitive events. Problems that arise can have substantial impact on the survey's results and therefore must be identified and corrected.

A. The importance of the evaluation process

903. This evaluation is a vital component of the survey process. It is not solely about the quality of the survey estimates and whether the procedures and methodologies have been carried out well, but whether the procedures, questionnaires, and methodologies meet the survey's goals, whether the survey data have the intended utility, whether the costs for fielding the survey are appropriate and within reasonable constraints and whether any of these factors require refinement or revision. It is a systematic review of the entire survey process, both a qualitative and quantitative review of the programme.

904. Evaluation of the survey takes many forms. It involves reviewing the data to assess the presence and extent of sampling and non-sampling errors, determination of whether the survey's questionnaire is obtaining the information intended, whether the survey's other protocols are operating as designed, and whether the survey's overall goals are being achieved.

905. The nature of review and evaluation necessarily depends on the nature of the survey being evaluated. The evaluation of a one time survey focuses on the past to determine the quality of the data that have been collected. Ongoing or periodic surveys must also be reviewed regarding the incorporation of improvements and additions into the methodology of future iterations. If problems have been identified in the current enumeration, these must be analysed and methods developed and tested to correct the problems. It is also possible that the survey results may identify additional questions or issues that could be addressed in future enumerations. Again, these must be researched and protocols developed for incorporation into the survey. The following sections describe some of the areas that should be reviewed in the post-enumeration evaluation. Among the topics are data quality, survey goals and objectives, the utility and benefits of the data collection, and the protocols and questionnaires used. Additionally, a robust programme will also incorporate a programme of methodological research.

BOX 67: THE USA EXPERIENCE

The US National Crime Victimization Survey was introduced in 1972 (as the National Crime Survey). At the time it was implemented, the idea of measuring crime using a household survey was not widely accepted by the public or by policy makers. Many questions remained about the utility and reliability of the survey. The initial results of the new survey raised a number of new questions about the viability of a national victimization survey. The sponsor of the survey contracted for two evaluations of the survey's methodology, utility and benefits (see McMullan, et al., 1978 and Penick and Owens, 1976). The recommendations of these studies guided a decade-long process of research and study that culminated in a redesign of the survey in 1992. The research carried out during this period was intended to examine virtually every aspect of the victimization survey, including sample selection, survey mode, survey error properties, subject matter coverage, respondent recall issues, questionnaire design and analytic capabilities. It was carried out by a consortium of research organizations that possessed a broad range of expertise and skills selected through a competitive process.

The survey redesign incorporated a number of changes to the survey including the introduction of computer-assisted telephone interviewing, a new crime screening protocol that enhanced respondents' ability to recall hard to enumerate crimes such as violence by non-strangers and rape, the addition of sexual assault as a measured offence, inclusion of lifestyle questions to enhance analysis of risk of criminal victimization and a revision of the survey's protocol to measure repeat victimization.

Over the history of the US NCS/NCVS, other research projects have been undertaken to evaluate and improve the survey's methodology. One such study examined the survey's reference period, and compared 3-month, 6-month and 12-month reference periods in terms of accuracy of respondent recall and cost of data collection.

In 2008, in response to rapidly rising costs of enumeration in a time of fiscal austerity, the survey's sponsor instituted a new programme of methodological research, similar to that conducted twenty years earlier, but with a focus on decreasing the costs of producing reliable data on crime victimization. This effort examined the feasibility of using less expensive modes of collection, changes in the survey's reference periods, identifying more efficient sampling frames and evaluating the survey's goals and objectives.

B. Data quality

906. Earlier sections of this Manual have discussed data quality and how to identify and measure and address sampling and non-sampling errors. Some of this review takes place during data collection, but much of the review can only be accomplished upon completion of enumeration when all the data are available for analysis. Post-enumeration review should encompass a comprehensive examination of the errors associated with conducting a survey; including coverage errors, response errors and data processing errors. The assessment of the existence and magnitude of these errors is important regardless of whether the survey is a one time effort or an ongoing programme. It creates a level of transparency in presenting the survey results. Publishing information about the quality and limitations of the survey estimates helps to promote acceptance of the estimates and pre-empt criticism about them. Such analysis also informs efforts to eliminate problems in subsequent iterations of periodic or ongoing surveys.

C. Survey goals

907. As discussed in section II.A, it is vitally important to establish clear goals for a victimization survey. The post-enumeration evaluation should include a review of the goals, and the extent to which they have been achieved. For example, a major goal of the survey might be to measure national victimization rates at a certain level of precision. The review should include whether or not this goal has been met. If not, the cause for the failure should be identified. It may be that the sample was too small, the participation rate was too low or that the victimization rate measured by the survey fell below that anticipated during the planning stages. Identifying the cause can enable a correction to be implemented.

908. It may be necessary to modify the survey's goals to meet the constraints imposed by budgetary or resource limitations. For example, it may not be possible to increase the sample or introduce other modifications to the survey to increase precision of estimates. Such a situation may require modifying the goal to accept a lower level of precision, focus on different sets of victims or offences or create a substantially different objective for the survey.

909. Survey goals may also change in response to changes in information needs. These needs may be identified during the post-enumeration survey review, but may also come from outside. A governmental agency may impose a new role for the survey or a new problem may arise that can be addressed through a victimization survey.

D. Utility of the survey

910. Victimization survey results have a variety of potential uses. They can provide a social indicator function measuring the magnitude of the crime problem and its impact on society. The data can inform policy and legislation to address societal or crime-related issues. They can be used in research related to crime and criminal justice and they can also be used for planning, administration and evaluation of programmes and policy. The uses are dependent on the survey's goals and the questions that it asks. In addition, the utility of the survey is also a function of other factors, including the quality of the data and how they are disseminated.

911. The post-enumeration evaluation should examine the current and potential utility of the survey. The review should examine who has used the data and the ways the data have been used. Various methods can be applied to this effort, such as conducting a literature review, convening focus groups or conducting surveys of potential user communities. The review should examine how well the dissemination process facilitates or hinders the various potential uses and benefits of the data.

912. The development and nurturing of a broad user community is vital for the growth and continuance of any survey programme. The survey must be seen to be serving an important function, be it informing the public, informing public policy, providing a platform for research into societal problems or providing other important information. Evaluating the current and potential uses of the survey enables the sponsor to develop and expand upon those uses. This analysis can identify the impediments that exist towards any of the potential uses for the survey so that the means can be developed to eliminate them.

913. The evaluation should also examine how well the survey's goals coincide with the actual uses of the data. A goal of the survey may be to inform policy, but if the information collected does not promote or enable such use, than that goal cannot be met.

E. Review of survey protocols

914. While monitoring the survey's protocols during data collection should identify those that are problematic, a post-enumeration review of the survey's protocols and procedures is also important to the success of the survey. Often, only when the data are being analysed is it discovered that a series of questions or survey procedure is not as successful as had been believed. The analysis may determine, for instance, that there is a great deal of missing data, or too many responses to a particular question fall into a 'catch-all' category. A review may identify mode effects on the estimates or establish that additional attempts to reach respondents do not substantially increase the likelihood of obtaining an interview. These analyses may not correct the problems in the past enumeration, but they do inform improvements in subsequent iterations of the survey.

915. Such an evaluation can include experiments to determine the viability of alternative survey protocols. For example, when the US National Crime Survey was first implemented, a proxy respondent was used to obtain information for household members 12 and 13 years of age unless a parent explicitly stated that the youth could respond for him or herself. This procedure was implemented because of fear that parents would find the questions too sensitive or difficult for such young respondents. Because information from proxy respondents was deemed to be less reliable than that obtained from respondents themselves, a study was conducted to determine whether parents would consent to their children being interviewed for themselves. After the study found that few parents actually object to such interviews, the protocol was changed to accept personal interviews from children aged 12 and 13 unless a parent objected.

F. Methodological research

916. A programme of systematic review of survey methods and protocols is necessary to maintain and improve the quality of the survey's data. However, this aspect of survey implementation is often underfunded and may not exist at all because it is not seen as directly related to the mission of producing and publishing the survey's information. It is often viewed as an extra function to carry out if funds and resources are available. A well designed programme of methodological research, however, can create economies in data collection and improve the quality of survey data.

917. The research programme should examine the quality of the data being collected and explore ways to improve the quality and utility of the data, as well as the extent to which economies can be introduced into the programme without jeopardizing the accuracy or reliability of the results.

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APPENDIX A – GLOSSARY OF SURVEY RELATED TERMS

Term	Definition
AAPOR	The American Association for Public Opinion Research (AAPOR) is the leading professional organization of public opinion and survey research professionals in the USA, with members from academia, media, government, the non-profit sector and private industry. www.aapor.org
ACASI	ACASI stands for Audio Computer-Assisted Self-Interview. This system allows participants to privately answer sensitive questions via a laptop computer. Audio should be provided in all languages in which the survey is carried out.
Bias	An effect which deprives a statistical result of representativeness by systematically distorting it, as distinct from a random error which may distort on any one occasion but balances out on the average.
Bounding	A technique where some information gathered through the current or previous surveys is used to avoid double counting of victimization incidents. In the NCVS, this is done by providing the interviewer with a summary of the incidents reported in the preceding interview and, if a similar incident is reported, it can be determined whether or not it is a new one by discussing it with the victim. Events which occurred after the reference period can be set aside for inclusion with the data from the following interview.
CAI	Computer Assisted Interviewing refers to all techniques (CAPI, CASI, CATI, CAWI) that make use of computers in which a software application has been installed to facilitate the interview process. The software is able to customize the flow of the questionnaire based on the answers provided, as well as information already known about the participant. By using CAI it is not necessary to enter survey data as a separate process.
CAPI	In Computer Assisted Personal Interviewing (CAPI) the interview takes place in person. Instead of using paper and pencil, the interviewer is equipped with a computer for CAI.
CASI	In Computer Assisted Self Interviewing (CASI), interviews take place in person and respondents enter the answers directly into a computer. Interviewers may provide respondents with a brief explanation of how to use the computer, which may include taking them through some practice questions, before handing the computer over either for the entire questionnaire or only a part of it.
CATI	Computer Assisted Telephone Interviewing (CATI) is a telephone surveying technique that allows interviewers to enter answers directly into the computer.
CAWI	Computer Aided Web Interviewing
Client	SEE STAKEHOLDER
Dark figure	A sizable portion of criminal events are never reported to the police and are therefore not included in police or any other statistics. This unknown number is often referred to as the 'dark figure' of crime. Victimization surveys may capture a part of the 'dark figure'.
Data coding	Coding is the technical procedure for converting verbal information into numbers or other symbols which can be more easily counted and tabulated.
Data disclosure	Disclosure relates to the inappropriate attribution of information to a data subject, whether an individual or an organization. Disclosure has two components: identification and attribution.
Data processing	The operation performed on data in order to derive new information according to a given set of rules.
Enumeration	In mathematics and theoretical computer science, an enumeration of a set is either a procedure for listing all members of the set in some definite sequence, or a count of objects of a specified kind. The two kinds of enumeration often, but not always, overlap.
Eurostat	Statistical Office of the European Union, established in 1953. http://epp.eurostat.ec.europa.eu

Term	Definition
Focus group	Research technique that collects data through group interaction, as an informal discussion of a selected topic by participants who are chosen from the population of interest. Focus groups make use of a trained moderator and prepared questions or discussion guide.
Freephone	A Freephone (or toll-free, Freecall, or - in some countries - 800 number) is a telephone number which can be reached at no cost by the caller. The cost of the call is charged to the owner of the Freephone number.
Hard refusal	Respondent turns down the interview and refuses to make another appointment / does not cooperate. This is generally the end of contact with this particular respondent. See also *Soft refusal*.
HEUNI	The European Institute for Crime Prevention and Control, affiliated with the United Nations (HEUNI) is the European link in the network of institutes operating within the framework of the United Nations Crime Prevention and Criminal Justice Programme. HEUNI was established through an Agreement between the United Nations and the Government of Finland, signed on 23 December 1981. www.heuni.fi/
Household	Either a one-person household, defined as an arrangement in which one person makes provision for his or her own food or other essentials for living without combining with any other person to form part of a multi-person household or a multi-person household, defined as a group of two or more persons living together who make common provision for food or other essentials for living. The persons in the group may pool their incomes and have a related or unrelated person or a combination of persons both related and unrelated. This arrangement exemplifies the housekeeping concept. In an alternative definition used in many countries exemplifying the so-called household-dwelling concept, a household consists of all persons living together in a housing unit.
Imputation	Imputation is a procedure for entering a value for a specific data item where the response is missing or unusable.
Incidence	The number of new cases per unit of time in a given population, or the number of new cases divided by the size of the population at risk.
Incidence rate	The incidence of an event is the number of new occurrences of the event that occur during a specified period of time in a population at risk for the occurrence of the event. The incidence rate is the number of new occurrences of the event divided by the size of the population at risk for the occurrence of the event.
Likert scale	A type of composite measure developed by Rensis Likert (1932) in an attempt to improve measurement in social research through the use of standardized response categories in survey questionnaires. Likert items are those using such response categories as strongly agree, agree, disagree and strongly disagree. Such items may be used in the construction of true Likert scales as well as other types of composite measures.
Memory decay	Memory decay is a natural phenomenon, which is part of the 'forgetting' process. Although natural decay is not the only theory of forgetting (for example, it cannot explain why some information may be temporarily forgotten and perfectly retrieved at a later point), in victimization surveys, memory decay indicates that respondents may simply forget incidents that happened to them.
Micro-data files	Electronic databases comprising the individual survey records, anonymized for confidentiality.
Multiple victimization	A case of a respondent who was the victim of more than one type of crime. It differs from 'Repeat Victimization' which refers to a case of a respondent who was the victim of the same type of crime more than once.
Non-probabilistic sample	A sample of units where the selected units in the sample have an unknown probability of being selected and where some units of the target population may even have no chance at all of being in the sample. Forms of non-probability sampling are numerous, such as voluntary samples (only responses of volunteers are used), quota samples, expert samples.

Term	Definition
Non-response	In sample surveys, the failure to obtain information from a designated individual for any reason (death, absence, refusal to reply) is often called a non-response and the proportion of such individuals of the sample is called the non-response rate.
Non-sampling error	An error in sample estimates which cannot be attributed to sampling fluctuations. Such errors may arise from many different sources such as defects in the frame, faulty demarcation of sample units, defects in the selection of sample units, mistakes in the collection of data due to personal variations or misunderstanding or bias, negligence, or dishonesty on the part of the investigator or the interviewee, mistakes at the stage of processing of the data, et cetera.
Outsourced data collection	To have an external market research or other related business take over part of the work of the survey. This can be a quicker and cheaper alternative, and for agencies who do not maintain panels of interviewers or other forms of infrastructure necessary to conduct population-based surveys, this can be an important option to cost and consider.
Pilot survey	A survey, usually on a small scale, carried out prior to the main survey, primarily to gain information to improve the efficiency of the main survey. For example, it may be used to test a questionnaire, to ascertain the time taken by field procedures or to determine the most effective size of the sampling unit. The term 'exploratory survey' is also used in those special circumstances when little is known about the material or domain under inquiry.
Police-reported statistics	Typically a census of all criminal offences reported to, or detected by, the police and subsequently recorded as crimes.
Pre-test	Before starting survey fieldwork, it is important to pre-test the questionnaire to check whether its wording correctly conveys relevant concepts to the respondents. This is particularly important in case of questionnaires translated from/into different languages.
Prevalence, Prevalence rate	The percentage of respondents who have experienced victimization at least once during the reference period. It differs from the *incidence rate* which indicates the number of incidents. The prevalence of a characteristic is the number of existing cases of the characteristic in a population at a designated time. Prevalence is measured either at a point of time or during a period of time. The prevalence rate is the number of existing cases of the characteristic divided by the size of the population in which the characteristic was identified and counted.
Probability sampling	Any method of selection of a sample based on the theory of probability; at any stage of the operation of selection the probability of any set of units being selected must be known. It is the only general method known which can provide a measure of precision of the estimate. Sometimes the term random sampling is used in the sense of probability sampling.
Quality assurance	A planned and systematic pattern of all the actions necessary to provide adequate confidence that a product will conform to established requirements.
Quality control	Quality control in the data review process measures the impact of data adjustment on the data. The statistical analysis of process inspection data for the purpose of controlling the quality of a manufactured product which is produced in large numbers. It aims at tracking and eliminating systematic variations in quality, or reducing them to an acceptable level, leaving the remaining variation to chance.
Recall aids	In aided recall techniques, respondents are provided with checklists, cues, landmarks, time frames and other inputs aimed at preventing or reducing the number of errors they make in recalling what happened to them. Aided recall procedures and *bounding* procedures are both aimed at enhancing data quality.
Recency bias	More recent incidents are more easily remembered than those occurring even a few months earlier. This phenomenon (similar to *Memory decay*) may generate a bias, that is, an effect which deprives the statistical result of representativeness by systematically distorting it towards more recent incidents (see also *Internal telescoping*).
Recorded crime	Crime incident reported to the competent authorities, normally the police, that has been included in relevant records and categorized as a crime (synonymous with *registered crime*).

Term	Definition
Reference period	In one sense, this is synonymous with base period. It may also refer to the length of time, for example, week or year, for which data are collected.
Registered crime	Crime incident reported to the competent authorities, normally the police, that has been included in relevant records and categorized as a crime (synonymous with *recorded crime*).
Repeat victimization	A case of a respondent who was the victim of the same type of crime more than once. It differs from 'multiple victimization' which refers to a case of a respondent who was the victim of more than one type of crime.
Reported crime	Crime incident reported to the competent authorities, normally the police.
Respondent	Respondents are businesses, authorities, individual persons, et cetera, from whom data and associated information are collected for use in compiling statistics.
Respondent burden	The effort, in terms of time and cost, required for respondents to provide satisfactory answers to a survey.
Response rate	The number of respondents who complete a questionnaire compared to the number assigned, usually expressed as a percentage. The response rate can also apply to individual questions.
Sampling bias	That part of the difference between the expected value of the sample estimator and the true value of the characteristic which results from the sampling procedure, the estimating procedure, or a combination of both.
Sampling error	That part of the difference between a population value and an estimate thereof, derived from random sample, which is due to the fact that only a sample of values is observed, as distinct from errors due to imperfect selection, bias in response or estimation, errors of observation and recording, etc. The totality of sampling errors in all possible samples of the same size generates the sampling distribution of the statistic which is being used to estimate the parent value.
Screening design	Screening design – the statistical design for a programme of experiments which has the object of selecting a promising subset of treatments for further development. In victimization surveys, typical screening questions aim at ascertaining the respondent's experience of victimization.
Secondary victimization	Secondary victimization means the victimization that occurs not as a direct result of the criminal act but through the response of institutions and individuals to the victim. (Council of Europe, Committee of Ministries, Recommendation Rec (2006) 8 to Member States on assistance to crime victims)
Sensitivity training	Interviewers involved in victimization surveys require special training to be able to ask sensitive questions and professionally deal with the respondent's emotions.
Soft refusal	The first time a respondent declines to participate in the survey, the respondent may be coded as a case of 'soft-refusal' and further attempts at recruiting him/her for the survey can be made. 'Soft refusals' may turn into *'hard refusals'* (see above), when the respondent clearly indicates he/she does not intend to cooperate.
Stakeholder	A stakeholder is a person or group of people who have a share or a personal or financial involvement in an enterprise or undertaking. In the case of a criminal justice statistics system, stakeholders are many and may include government officials, criminal justice personnel, the media, researchers, scholars and the public.
Survey population	A survey is an investigation about the characteristics of a given population by means of collecting data from a sample of that population and estimating their characteristics through the systematic use of statistical methodology.
Target population	The target population is the set of units to be studied, for example the general population or businesses. In relation to victimization, the target population is the set of units that could be victims of the crimes under study.

Term	Definition
Telescoping (internal/external)	Telescoping is the phenomenon by which respondents tend to change their recollection of the time when incidents occurred. *External telescoping* refers to incidents of victimizations occurring outside the survey reference period, which are instead mentioned to the interviewer as if they happened within the survey reference period. *Internal telescoping* is the tendency of survey respondents to remember crime incidents occurring more recently than they really did. Incidents within the survey reference period may be moved by respondents from the more distant past to the more recent past.
Time anchoring	Time anchoring is a technique aimed at helping the respondent to correctly place his/her memory of an incident within a time frame using, for example, important personal dates (like birthdays), and other events. (See also *Bounding* and *Recall aids*).
Unfounded incidents	Unfounded incidents are those discarded as it could not be proven they were crimes or did not occur as they were reported.
Victim	'Victims' means persons who, individually or collectively, have suffered harm, including physical or mental injury, emotional suffering, economic loss or substantial impairment of their fundamental rights, through acts or omissions that are in violation of criminal laws operative within Member States, including those laws proscribing criminal abuse of power. (UN Declaration of Basic Principles of Justice for Victims of Crime and Abuse of Power, 1985).
Victimless crime	Forms of illegal behaviour that are unlikely to be known by the police because of their being consensual in nature, so the participants have no reason to complain to the police.
Victimization	A crime as it affects one individual person or household. For personal crimes, the number of victimizations is equal to the number of victims involved. The number of victimizations may be greater than the number of incidents because more than one person may be victimized during an incident. Each crime against a household is assumed to involve a single victim, the affected household.
Victimization rate	A measure of the occurrence of victimizations among a specified population group. It may be calculated as a number per 100 or 1,000 and based on households or individuals.
Weighted data	Data collected from survey respondents may be adjusted to represent the population from which the sample was drawn. Data may be weighted to compensate for underrepresentation of respondents in some groups, for example young men or elderly women. The weighting process involves computing and assigning a weight to each survey respondent, based on external information required to increase the value of a particular data element or elements so as to give that element more significance in the analysis of results.

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APPENDIX B – OTHER SURVEYS ON CRIME AND VICTIMIZATION (BUSINESS SURVEYS, SURVEYS ON CORRUPTION)

A. Business surveys

1. Victimization surveys of the private sector are relatively more recent than those targeting households. They represent a powerful tool for assessing business experiences with crime and safety as well as their perceptions and attitudes. For many aspects, these surveys are similar to household victimization surveys. This section provides information on some methodological issues which are peculiar for this type of surveys, drawing on examples from some countries in which they are carried out.

2. A crime-safe and secure environment is generally considered as a prerequisite for development. Among crime problems, corruption is perceived as one of the most dangerous for the economy in all countries in the world. It hampers development and represents a serious challenge to the growth of developing countries, while at the same time it erodes rule of law in many developed countries.

3. Businesses are exposed to crime more than individuals and households, especially as regards the risk of being victimised by organized crime, bribery/corruption, fraud, counterfeiting, requests for protection money, intimidation and extortion. Crime against business may result in consequences affecting entire communities. Small businesses with few resources may be constrained to closure because of crime, thus resulting in loss of jobs and opportunities for economic growth. Crime may represent an important element in the decision-making process of investors about if and where to establish a business, thus accurate knowledge of the impact of crime on business is crucial.

Understanding the business structure and culture

4. Before starting a business survey, it is essential to gain a good overview of the reference population, and to take account of regional differences. This may require investigating the economic situation, the structure of businesses and their culture. For instance, it can be useful to develop a profile of the target business community taking into account the structure (small, medium, large scale enterprises), the type of economic activity[1] and the cultural understanding of what constitutes 'doing business' in the surveyed location.[2] Further information could be taken from other relevant sources.[3]

5. Business surveys generally target small to medium-sized companies. Several surveys concentrate on retailers, taking into account their proximity to the public and exposure to crime.

Objectives of business surveys

6. Business surveys may have the following objectives:

- to assess the type and extent of crimes committed against businesses;
- to assess the impact of crime and corruption on businesses and relevant costs;
- to assess the preventive measures taken by businesses as well as their willingness to engage in crime prevention initiatives with the local community;
- to assess the perceptions and attitudes of the private sector on a wide range of crime and corruption related issues.

Survey mode

7. Business surveys may use the same survey methods applied in household surveys. Taking into account the likelihood of businesses having telephone and/or computer access, telephone and web-

1 For example, looking at international classifications of economic activities / industries such as the International Standard Industrial Classification (ISIC – see http://unstats.un.org/unsd/cr/registry/regct.asp) or the Statistical Classification of Economic Activities in the European Community (NACE see http://ec.europa.eu/eurostat/ramon/index.cfm?TargetUrl=DSP_PUB_WELC).

2 For example, by checking the 10 topics, made up of a variety of indicators, of the World Bank 'Doing business project' http://www.doingbusiness.org/.

3 For example, the Eurostat 'Observatory of European Small and Medium Enterprises' (http://ec.europa.eu/enterprise/enterprise_policy/analysis/observatory_en.htm) and The World Bank Group.

based surveys may be used more frequently with businesses than households. As is the case with household surveys, each mode has advantages and disadvantages. A summary of survey mode advantages and disadvantages can be found in section IV. J of this Manual.

BOX 1: THE ITALIAN BUSINESS VICTIMIZATION SURVEY

The Italian Business Victimization Survey was carried out by the Italian Ministry of Interior – Transcrime in 2008. The survey was in the form of an online questionnaire.

Questionnaire

The questionnaire used is partly based on a combination of the British Crime Survey of the UK Home Office, the UNODC Crime and Corruption Business Survey, and the Italian Institute of Statistics (Istat) victimization questionnaires, but is distinctive in other parts.

Different sections dealt with ordinary crimes, bribery / corruption, organized crime and fear of crime. The final version of the questionnaire contains about 190 questions covering the following sections:

SEC. 1 - Survey introduction;
SEC. 2 - Survey startup;
SEC. 3 - Information on the business premises and on the respondent (security manager)
SEC. 4 - Fear of crime and of urban disorder;
SEC. 5 - Street crime (theft, fraud, robbery, vandalism);
SEC. 6 - Counterfeiting;
SEC. 7 - Computer crimes;
SEC. 8 - Intimidations and threats;
SEC. 9 - Graft, extortion, usury;
SEC. 10 - Trust in the police;
SEC. 11 - Insurance;
SEC. 12 - Crime prevention measures

Sampling

The sampling design of the Italian Business Victimization Survey consists of 4 strata:

The 30 provinces of 6 regions of the south of Italy and the remaining 14 Italian regions. The south of Italy has been oversampled because of the relevance of this region for the business crime phenomenon;

Municipalities, capitals of the provinces and the rest of municipalities;

Economic activity sectors (NACE): 12 levels C) Mining and quarrying, D) Manufacturing, E) Electricity, gas and water supply, F) Construction, G) Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods, H) Hotels and restaurants, I) Transport, storage and communication, J) Financial intermediation, K) Real estate, renting and business activities, M) Education, N) Health and social work, O) Other community, social and personal service activities;

Size of the premises (number of employees): 4 categories (2 – 9 employees; 10 – 19 employees; 20 – 49 employees; 50 – 249 employees).

The total sample consisted of 83,136 business premises.

Reminders

Reminders were sent to businesses in order to solicit responses. In some cases reminders were useful to verify if the businesses had received the letter of introduction with the website address and the password to access the questionnaire.

In order to solicit businesses to answer the questionnaire, three different types of reminders (telephone, fax and email) were planned during the data collection period. This procedure proved extremely useful: out of 24,913 business premises contacted with the reminder, 58 per cent stated that they did not receive any letter of introduction and 22 per cent did not know if they had received it. 57 per cent asked for the letter to be sent again.

B. Sample design

Coverage for business surveys

8. Surveys of the private sector designed to measure victimization may have a broader or more limited scope as regards the type of businesses included. For instance, surveys may select their coverage depending on the economic sector, size of the company or geographical location of businesses. Box 2 shows examples of coverage of some national business surveys.

BOX 2: EXAMPLES OF COVERAGE OF NATIONAL BUSINESS VICTIMIZATION SURVEYS

The Commercial Victimization Survey carried out by the Home Office in England and Wales in 2002 [J. Shury, M. Speed, D. Vivian, A. Kuechel, S. Nicholas, 2005: 1] focused exclusively on retailing and manufacturing premises with less than 250 employees.

The Business Crime Monitor carried out by the WODC in the Netherlands in 2004-2005, interviewed businesses in the building, commercial trade, catering, transport and business services industries (WODC, 2006).

The Italian Business Victimization Survey, carried out by the Italian Ministry of Interior – Transcrime in 2008, included most economic sectors, but did not consider one-person businesses. Taking into account that there are no available data in the Italian database on working premises (ASIA) about businesses in some economic sectors. the following exceptions were made:

- agriculture, hunting and forestry (section A of NACE classification); fishing (section B of NACE classification);
- public administration and defence, compulsory social security (section L of NACE classification);
- activities of households (section P of NACE classification);
- extra-territorial organizations and bodies (section Q of NACE classification).

9. Several considerations may affect decisions on coverage:
   a) The objective of the survey. For example, a survey designed to identify support required for small retailers in reducing crime will necessarily target small retailers rather than larger businesses;
   b) The availability of suitable sampling frames and the accessibility of the sector(s) of interest;
   c) The burden of the survey on the businesses themselves and its likely effect on response rates;.
   d) The available resources;
   e) The complexity of the type(s) of victimization the survey intends to address.

10. Survey samples should be large enough to provide a sufficient basis for analysis according to the criteria around which they are selected. For this reason stratified samples are usually preferred for these surveys. Taking into account the large number of economic activity sectors, it is important to identify homogeneous categories in which a sufficient number of units can be reached to provide a framework for interpretation of results. The same applies to the size of businesses: it is necessary to identify an adequate frame of companies from the relevant group size.

11. It may be important to conduct some preliminary research on the likelihood that some of the selected companies are branches of larger business organizations or part of a chain. In this respect, it should be clear from the questionnaire – and in particular from the instructions to the interviewers – if responses are expected about experiences / attitudes of the company as a whole or only from the responding branch / location. In most business surveys, the 'establishment' (the actual premises at which the respondent is located) represents the main survey unit. The 'establishment' concept is preferred for the following reasons:

- It would be possible to include in the sample more than one branch of the same company, thus more than one respondent could make reference to the same incident;
- It would be difficult for the person responding to answer about incidents that occurred in the whole company (enterprise).

Respondents

12. Beyond the selection of a representative sample of businesses, it is necessary to identify a person within the business to be interviewed. It would be desirable that the respondents' profile be consistent across the surveyed businesses. The identification of respondents at a similar level will be more difficult if the sample includes businesses of very different size.

13. The desired respondent in a business victim survey is a senior manager with overall knowledge of what happens in the company. In particular he/she should be aware of the levels and types of crime to which the business has fallen victim and about all the measures adopted by the business premises in order to prevent and respond to crime In general, this person will be the managing director, or chief executive or the owner of the business. Larger companies may have a manager responsible for risk management and security. In some other cases, depending on the type and size of the business, the interview may be conducted with the trade/marketing director, the main manager of the premises, the

responsible security officer, the finance director, the production manager, the company secretary or other responsible managers. Finally, in the case of very small businesses, the respondent may be the owner or a family member.

First contact

14. The first contact is extremely important in order to provide the companies with full information about the scope, objectives and institutional arrangements of the survey, as well as the intended use of its results. It is also crucial to provide references and telephone numbers via which the survey's legitimacy can be verified.

In order to obtain response and gain the confidence of the businesses, it can be useful to provide extensive information on the business victimization survey through the media. It may also be useful to indicate where the complete questionnaire and the informative note about the treatment of personal data can be accessed/ downloaded from the internet. It may be useful to specify that it is important to be interviewed even if the business has not been victim of any crime.

BOX 3: CRIME AND CORRUPTION BUSINESS SURVEY (CCBS) INTRODUCTION FOR FIRST CONTACT

In 2006, during the development of the methodology for the Crime and Corruption Business Survey (CCBS), pilot surveys carried out in Canada and Bulgaria considered two methods of introduction by telephone: a) immediate interview, and b) contact to introduce the survey and to make an appointment. Taking into account the low response rate of business surveys, there may be advantages and disadvantages for each of these methods.

(i) Telephone call and immediate interview

In the CCBS pilot in Canada,[4] phone calls aimed at identifying the suitable respondent and interviewing him/her immediately. The calls took place at either the opening or closing hours of the businesses, in the belief that calling at these times would cause the least interference with business transactions. The following is the text read by the interviewer:

Good morning/afternoon/evening. I am an interviewer of...

We are conducting a survey about (safety) of businesses. Your company has been selected at random from the ... database of businesses to participate in the survey.

The survey is part of an international (optional: United Nations) project which is being done in many countries all over the world. The aim of the research is to get information about the experience and opinions of companies, in order to assist businesses in preventing crime and corruption.

I need to address a few questions to the manager responsible for this establishment. Can you please ask him/her whether he/she is available?

In this case, in advance of calling for the interview it may be possible to try to identify the position or the name of the desired respondent from other sources (for example public listings or by speaking with the receptionist of each business). The interviewer calls and briefly introduces the survey before asking to be connected with the desired respondent.

It is possible that the desired respondent is available immediately. In such a case, the interviewer should be ready to continue with supplying more information on the survey and the interview process before starting with the actual interview.

In the vast majority of cases, the desired respondent will not be available. Interviewers may either check if another person matching the survey respondent profile is available to be interviewed or request to make an appointment with the person who is not available at the moment. There are advantages and disadvantages to both scenarios. If another person is available, there is the obvious advantage that the interview with that particular business may be secured at the first attempt. However, this person may not have full knowledge or may not be authorized to respond on incidents occurring at the business premises. The interviewer should assess – with tact and diplomacy – if this person is suitable as a respondent. This could be done by asking if he/she considers himself/herself qualified to answer questions on safety/security on behalf of the company.

If there is no alternative respondent available, it is necessary to insist on making an appointment with the desired respondent. This may result in a refusal (the respondent may not have any openings in his/her busy schedule, et cetera.), an appointment that is made but not maintained, or an interview.

(ii) Telephone contact to introduce the survey for subsequent interview

The same process described above may be used for introducing the survey and agreeing on a time for the interview. When a contact is made with the appropriate respondent at each business, he/she is asked to indicate the most convenient time to conduct the interview. Depending on the overall survey arrangements, those who agreed to participate may be given the option of conducting the interview by telephone or in person.

4 UNODC, 2006.

15. Selecting the respondent may be done during the first contact with the selected business. A telephone call or a letter are generally used to make an appointment with the business. This first contact is aimed at encouraging a response and is likely to assess the company's policy about surveys. Boxes 3 and 4 show examples of first contacts.

BOX 4: LETTER OF INTRODUCTION: AN EXAMPLE FROM THE ITALIAN BUSINESS VICTIMIZATION SURVEY

A letter of introduction may substitute for the telephone contact. The letter has the advantage of giving the company/manager who receives it more time to decide if and when to accept the interview. The disadvantage is that there is no possibility to respond to queries the company may have about the survey and the entire process is delayed. Furthermore, while the company may favourably consider the interview, responding to the letter and making an appointment requires extra work that some may not be ready to carry out. The Italian businesses had their first contact with the Italian Business Victimization Survey through a letter of introduction written by the Ministry of Interior together with Transcrime.

The key points of the letter were:

It was addressed to the senior manager and the security manager: this was done in order to assure that the target person would be a person with overall knowledge of what happens in the company and in particular would be aware about the levels and types of crime to which the business fell victim and about all the measures adopted by the business premises in order to prevent and respond to crime.

It asked for collaboration on the survey, and briefly explained the main content of the survey in order to give the respondent enough time to get the information to answer it. It was made clear that the survey questionnaire covered different topics: the risk of urban decay and crime in the business working area; information on crimes suffered in the twelve months prior to the interview (in particular on theft, fraud, robbery, vandalism, counterfeiting, computer crimes, corruption, extortion, usury); trust in the police; insurance and crime prevention measures.

It clarified the concept of business premises and underlined the fact that each premise had to answer referring to its own activities and to its own working area.

It asked the senior manager to compile the online questionnaire and gave the website address on which to find it, as well as a confidential password in order to get access to the website.e. It explained the importance of collaboration on the survey and the method to receive more precise information about the project: in order to gain the businesses' confidence, an informative report was published on the Transcrime website (www.transcrime.it) regarding all the details of the Business Victimization Survey. It was also possible to download the complete questionnaire and the information report about the treatment of personal data from the Transcrime website. Information about the survey was also published on the website of the Italian Ministry of Interior.

16. Once the business has been identified, the first contact may be made either by telephone or by letter, or both, in view of the selection of the final respondent. Furthermore, it should be taken into account that business surveys suffer from a very low response rate.

Questionnaire

17. The content of the questionnaire should take into account the survey objectives, the characteristics of the reference population (structure and culture of businesses) and the need to collect information on particular phenomena affecting business in the location(s) in which the survey will be carried out.

18. It is important to test the questionnaire to check for appropriateness of language and clarity of the questions, as well as internal consistency. Furthermore, the test should take into account whether the questionnaire provides a complete account of the issues being surveyed, and whether the questions are differently understood by respondents from different economic sectors.

Crime experience

19. Questionnaires for business surveys may cover crime topics similar to those addressed by household surveys. The following issues are likely to be present to ascertain the experience of victimization of businesses:

- Fraud (by employees, by outsiders)
- Extortion (including threats, intimidation, requests for protection money)

BOX 5: THE BUSINESS SURVEY ON CRIME & CORRUPTION, AND AWARENESS OF EFCC IN NIGERIA

The Business Survey on Crime & Corruption, and Awareness of the Economic and Financial Crimes Commission (EFCC) was undertaken by the National Bureau of Statistics (NBS) in collaboration with the EFCC in 2007. The survey aims to assess the perception of corruption and awareness of the EFCC among the business community, with the long term objective of supporting the Government in its efforts to combat economic and financial crimes.

Coverage and Scope

The survey was carried out in all the States in the Federation including Federal Capital Territory (FCT), on the business community, including 2,775 establishments/ agencies/ parastatals at federal, state and local government levels from fourteen economic sectors in accordance with UNIDO ISIC classification. The questionnaire covered the following areas: Characteristics of the establishment/business; experience of crime/victimization, bribery and corruption, intimidation, extortion; access to justice system; crime prevention; awareness of EFCC.

Sampling

Sample selection was made using three different establishment frames available at NBS (Economic Survey and Census Division of NBS, 2006 National Quick Employment Generation survey (NQEGS) and 2006 NBS/CBN/NCC Collaborative Economic Survey). The procedure for selection of the required number of establishments was based on the following parameters:
(i) Employment size, that is strata of 10 and above
(ii) Contribution of the sector to GDP
(iii) Purposive or prior knowledge of performance of sectors in the economy

A total of 2,775 establishments were selected nationwide and distributed among fourteen economic sectors to the 36 States of the Federation and Federal Capital Territory, Abuja.

A response rate of about 80 per cent was achieved nationwide, resulting in 2,203 valid responses.

Main challenges

This type of survey presents a number of obstacles which are typical of interviewing on highly sensitive matters such as crime and corruption, such as poor response and lack of respondents' cooperation. Further problems may originate from the sampling procedure, which may include in the target sample respondents who are located in areas extremely difficult to reach. Listings of businesses may become obsolete quickly, thus their use may result in non-existing addresses ending up in the sample. Taking into account that telephone communications were also poor, there were some serious cases of waste of time for the survey team. It was also considered that the cost of transportation – especially to remote areas - had been underestimated, thus making the allotted budget inadequate for the fieldwork. The survey team noted that more publicity of the survey would have probably helped in securing more cooperation from respondents.

- Corruption (for example, bribes the company had to pay upon request of public officials to obtain licenses; bribes in the private sector)
- Workplace violence
- Theft (by employees, by outsiders); theft of vehicles
- Burglary and robbery
- Vandalism and damages against business property
- Counterfeiting
- Computer crime

20. The questionnaire may include questions addressing whether any crime among those covered by the survey occurred at the business premises over the reference period. It is important to focus on crimes that occurred at the premises in order to avoid referring to incidents that happened elsewhere and about which the respondent may have limited knowledge.

Follow-up for victims

21. The questionnaire may include the same type of follow-up questions as those foreseen for household surveys, such as those aimed at establishing when the incident occurred, how many times it happened, whether the crime was reported to the police, whether the offender was identified.

22. The cost of crime experienced by businesses adds to the cost the private sector faces to prevent victimization. These costs have an effect on the economy, not only in terms of prices paid by the public

on the final products but also on the risk of the financial loss resulting in damage to society. As the survey may address different types of crime, specific questions aimed at assessing the damage incurred as a consequence may also be included.

Attitudes/perceptions

23. Business surveys may include a wide range of attitudinal questions, aimed at capturing the perceptions of the respondents, as representatives of selected economic sectors, about issues likely to affect the private sector, including for example:

- General opinion of the crime situation;
- Fear of crime and perception of likelihood of specific crimes occurring against the company;
- Relationship with the police and the authorities;
- Insurance;
- Participation in community crime prevention initiatives.

24. Business surveys may collect crucial information on corruption. For this reason, the relevant section of the questionnaire may ask respondents a number of attitudinal questions such as their perception of integrity of the public sector, assessment of service delivery, knowledge of anti-corruption mechanisms and to which authorities corruption should be reported. Box 6 shows a possible list of issues that may be covered by the questionnaire in this area.

BOX 6: BUSINESS SURVEYS: EXAMPLE OF INDICATORS OF CORRUPTION

Indicator (corruption)	Definition
Obstacles to business	Percentage of respondents thinking that corruption is an obstacle to business.
Perceived competitive advantage of informal market	Percentage of respondents thinking that companies operating in the informal market get significant/highly significant advantages in relation to costs/risks with respect to the 'clean' companies
Perceived corruption climate	Percentage of respondents thinking that companies are obliged to make unofficial payments or retributions to public officials 'to get things done' in normal business operations
Knowledge of corruption practices	Percentage of respondents who are aware of how much a business in their sector would have to pay as unofficial payments or retributions to public officials 'to get things done'
Experience of corruption	Percentage of respondents who were asked by public officials to pay for services that should have been rendered for free (over the reference period).
Type of official involved in corruption	Percentage of respondents who were asked by public officials to pay for services, by type of public official involved
Experience of private-to-private corruption	Percentage of respondents who were offered bribes by other businesses (over the reference period)
Perceived frequency of corrupt practices	Percentage of respondents thinking that a number of corrupt scenarios are frequent/very frequent in their line of business
Likelihood of corruption	Percentage of respondents thinking that certain categories of public officials are likely/very likely to be corrupt
Investment climate	Percentage of respondents who have ever decided not to make a major investment because of a fear they will have to pay bribes
Perception of change in corruption	Percentage of respondents thinking that certain types of corruption-related behaviours have improved or worsened over a given reference period

Conveying results to policy makers

25. It is important to include in the planning of the survey an opportunity to share the results with researchers, statisticians, criminal justice administrators, policy makers and the business sector, including representatives of business associations and relevant labour unions. This may take the form of a panel presentation, round table or workshop to generate discussion of policy implications of the results.

26. PowerPoint presentations and press releases may facilitate the reading of the results by the media and all interested parties.

C. Surveys of corruption in the public sector

27. Beyond surveys in the private sector, as a response to the growing request for instruments to measure corruption, surveys of corruption in the public sector are becoming more frequent to shed light on the point of view of public employees. A simple definition of corruption reads '(mis-)use of public office for private gain'. The experiences and perceptions of public sector employees, who are frequently indicated as those responsible for committing acts of corruption, are therefore crucial to gain a better understanding of the phenomenon of corruption and the weaknesses of the system.

28. Such surveys place emphasis on working conditions and integrity and investigate possible areas/behaviours at a higher risk of corruption. As a result, the experiences, perceptions and expectations of public employees may provide crucial information on their integrity (or lack of), thus providing actual indicators of corruption. Surveys of police officers, the judiciary and other employees of various sectors of public administration (such as health, education, public transportation, et cetera) are an important means of complement information on crime and victimization obtained from household and business surveys.

29. As discussed in section IV.E of the Manual, corruption is a topic frequently covered by household surveys, especially as regards measuring the prevalence of experience of bribe paying among the surveyed population. The general population may also be surveyed in separate surveys of users of public services. For example, surveys may target samples of the population who filed reports with the police after having been victims of crime, to assess their satisfaction with their reporting experience. Similar surveys may target users of other public services, for example the courts. These surveys may focus on service delivery and aim at assessing the quality of services through the respondents' assessment of the employees' timeliness, efficiency and integrity.

Questionnaire

30. Surveys of public employees deal with the way public service operates, integrity, motivation and level of satisfaction of the workers. The questionnaire may cover the following main areas:

- Demographics and work experience;
- Position in the structure;
- Recruitment and selection;
- Training;
- Work environment and organization;
- Satisfaction with current job;
- Quality of service delivery;
- Perceptions of integrity.

31. Among the corruption-related issues that can be covered by surveys of public employees, it is important to consider the direct experience of receiving (and accepting) offers of bribes. Furthermore, an important aspect of these surveys is the possibility to measure the level of awareness of corrupt behaviour, such as the use of nepotism, favours, gifts, both as regards the respondent's personal belief and what he or she perceives that colleagues may find acceptable. Box 7 shows an example of issues/statements that can be used in surveys to assess the respondents' awareness of corrupt behaviour.

32. Surveys may assess whether employees are aware of codes of conduct and/or other ethic rules in place in their office. They may also capture the level of tolerance of bad management in the office and the respondents' knowledge of existing anti-corruption measures, ways to report corruption and mandated authorities/institutions. Finally, the survey may assess whether respondents would feel safe in reporting corrupt behaviour to such authorities.

BOX 7: EXAMPLE OF QUESTIONS REGARDING THE PERCEPTION OF INTEGRITY

The types of behaviour below are quite widespread in many countries, what is your opinion about them? Are they never acceptable, sometimes acceptable or usually acceptable?

- Circumvent formal procedures to reduce red tape and be more efficient;
- A civil servant committing minor irregularities on behalf of family, friends, or relatives;
- A civil servant taking minor gifts from clients to supplement a low salary;
- Family ties and friendship playing a role in recruiting personnel and procuring of services and goods;
- Giving a traffic officer a gift or payment of money instead of paying a fine;
- A civil servant carrying out a second activity to supplement a low salary;
- Tricking out the Tax Office (tax evasion);
- Buying stolen goods;
- Keeping money you happened to find;
- A civil servant asking for money or gifts to speed up processing of files;
- A civil servant using office hardware for private purposes;
- Private companies offering gifts to public sector employees to develop business;
- Officials and politicians tolerating irregularities in return for subsidies and other privileges.

33. It should be noted that different areas of the public sector may have different level of contact with the public and thus a different level of exposure to corruption. Employees of the most corruption-prone 'intermediary groups' (such as the police) may be much more exposed than others. It may be desirable that surveys use samples of homogenous groups of respondents, selected from sectors with similar levels of exposure.

34. The use of a cluster of separate surveys of users of public services, general public (households), private sector and public officials is generally considered a desirable approach to the study of corruption. It provides a broad basis of information, which allows for cross-analysis of the results and more in-depth interpretation of findings.

BOX 8: SURVEYS IN CAPE VERDE

Within the framework of two projects launched by UNODC and the Government of Cape Verde[5] in 2006, the Cape Verde surveys focused on households (Crime Victim Survey - CVS), the private sector (Crime and Corruption Business Survey - CCBS), police officers and other public employees. The four survey questionnaires, previously used in other African countries, were adjusted to the local context and implemented at the inception of the projects.

Objectives

The overall objectives of the surveys may be summarized as follows:

- Assessment of the extent of crime and corruption experienced by citizens;
- Assessment of the perceptions of citizens regarding police performance, access to justice, safety and security, causes of crime;
- Assessment of experiences and perceptions of police officers regarding crime and corruption, working environment and conditions;
- Assessment of experiences and perceptions of other public employees about corruption, working environment and conditions;
- Assessment of the extent of crime and corruption experienced by the private sector;
- Assessment of the perceptions of businesses regarding corruption, safety and security.

Geographical coverage/domains, target population, sample size and interviewing methods

1. Citizens of Cape Verde (aged 16 and above) from the islands of Santiago (urban area of Praia and rest of Santiago), Sal, Boavista, S. Vicente, Santo Antão and S. Nicolau – 1,845 respondents
- Face-to-face interview with one selected respondent in the household

2. Officers of Polícia Nacional, Polícia Judiciária and Polícia Marítima from the police domains of Calheta, Santa Catarina, Santa Cruz, Tarrafal, S. Domingos, S. Nicolau, Sal, S. Vicente, Praia, Boavista, Santo Antão – 300 respondents
- Face-to-face interview
- Self-administered questionnaire

3. Public employees from the islands of Santo Antão, São Vicente, São Nicolau, Sal, Maio and Santiago – 492 respondents
- Mix of face-to-face interviews and self-administered questionnaires

4. Private sector from the urban area of Praia, rest of Santiago, São Vicente, Sal and Maio – 332 respondents
- Face-to-face interview

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APPENDIX C – LESSONS FROM THE PILOT STUDY OF THE INTERNATIONAL VIOLENCE AGAINST WOMEN SURVEY (IVAWS)

1. The main goal of a pilot study is to verify the methodology of the basic survey. Of particular interest in this case was testing the questionnaire and the interviewing technique. In the International Violence Against Women Survey (IVAWS), the pilot study was exceptionally important, because it highlighted the emotional aspect to interviewing. An IVAWS questionnaire touches on private and sensitive issues, and the recall of these events can be a traumatic experience to the respondent. IVAWS interviews are sometimes a challenge for the interviewers as well since they may face communication difficulties as well as unexpected emotional reactions from the victims of violence.

BOX 1: INTERNATIONAL VIOLENCE AGAINST WOMEN SURVEY (IVAWS)

The IVAWS involved several countries in Europe and all over the world. A standardised questionnaire and methodology was used to measure women's experiences of violence in an international perspective. The survey was completed in Australia, Costa Rica, the Czech Republic, Denmark, Greece, Hong Kong, Italy, Mozambique, the Philippines, Poland and Switzerland.

The IVAWS project started at the end of the 1990s and was coordinated by HEUNI, Statistics Canada and UNICRI by the core team of Natalia Ollus, Holly Johnson, Anna Alvazzi del Frate and Sami Nevala (Johnson et al 2008).

2. Like all victimization surveys, the primary goal of a VAW survey is to ensure that women truthfully report their experiences of violence. And like all victimization surveys, the safety of the respondents and the interviewers is a chief concern.[6]

A. Letter of introduction

3. The letter of introduction enhanced cooperation by female respondents in the VAW survey. The major purpose of the initial introductory letter used in face-to-face surveys is to introduce the organisers and/or sponsors of the survey as well as to specify the main goal of the survey. In the letter, it is recommended that the survey be referred to as one on the 'safety of women' versus one on 'violence against women'. Referencing the survey in this way may minimise any unpredictable reaction from their partners (male or female) who may be committing offences against the respondents. The letter should also note that the responses received will be confidential or anonymous, whichever is applicable.

4. When telephoning respondents, it is also important to begin by introducing the organisers and/or sponsors of the survey, and by describing the purpose of the survey. As with face-to-face interviews, it is advised that the survey be referred to as one on the 'safety of women.' And like other modes, initial discussion should emphasise that the respondent's responses are confidential or anonymous, whichever is applicable. The Canadian experience with a VAW survey indicates that women are more likely to refuse to participate when a male is at home during the call. Therefore, when a male is present with the respondent, it is advised that the interviewer call back and interview the female when she is at home alone.

B. Questionnaire testing

5. In the questionnaire testing phase, the interviewers made a list of difficulties they encountered. This included a list of the questions that created discomfort in the respondent and anger by the respondent. In addition, interviewers carefully looked at the degree to which respondents understood definitions and the meaning of questions. Understanding this was important since making the questionnaire as short as possible and eliminating long questions which may be difficult to understand was a goal.

6. It is not possible to cover all situations. The questionnaire should not be too long and complicated. Good instructions and a well designed questionnaire can help in the efficiency of face-to-face surveys.

7. Questionnaires which are too long can cause both the interviewer and respondent to become tired and irritated. All countries paid attention to that problem. The Italian experience showed that using

6 Manual for IVAWS was prepared by N. Ollus, H. Johnson, A. Alvazzi del Frate and S. Nevala.

questions which were too long required they be repeated multiple times. This was particularly the case during telephone surveys. In the pilot study, many women felt uncomfortable with the length of the questionnaire and its structure which required frequent repetition.

8. In the IVAWS survey, it was decided that the screening question should include all acts of violence but detailed information was gathered on only the most recent victimization.

9. In international research, it is necessary is to take into account suggestions from all participating countries. A reasonable number of specific questions should be included from each participating country. In addition, each country should have a say in the adaptation of words or phrases to account for cultural circumstances. Further, questions should offer an exhaustive list of all possible answers. This includes options for 'I do not remember' or 'I do not know' if necessary.

C. Selection of interviewers

10. Interviewers should be selected according to their previous experience, interest in violence against women and excellent interviewing skills. Many countries suggested that the interviewers have a pleasant personality and an ability to relate to others. The following features should to be taken into account when selecting interviewers.

a) The level of knowledge and openness for discussing issues related to violence against women including sexual violence;
b) Non-judgmental and empathic attitude towards victims of domestic violence and violence against women;
c) Good interviewing skills and previous experience;
d) Willingness to take part in the training and follow instructions;
e) Willingness to report problems and discuss them in an objective manner;
f) The absence of highly biased views relating to the subject matter or characteristics of respondents (age, gender, social status, ethnicity or religion);
g) Readiness to enter into role playing regarding the difficult behaviour of respondents, their partners, family members etc.;
h) An acceptable level of literacy, the ability to understand the questionnaire and the issues surveyed;
i) A knowledge of local languages and dialects;
j) Availability for evening and weekend work;
k) Being female (because of the topic).

11. In face-to-face surveys, the Costa Rican experience suggests that interviewers should be from a similar background and familiar with the culture and language.

12. The Italian experience showed that the maturity of the interviewers was important.

D. Training of interviewers

13. The training programme included a theoretical lecture about the definition and form of violence against women, its causes and consequences, as well as practical issues concerning the proper behaviour an interviewer must adopt during an emotional situation or a display of anger. The Polish experience showed that the drama workshops involving role-playing sessions were particularly useful.

14. Training by role-playing also served to correct verbal expressions and body language in face-to-face surveys. During training, it was determined that the interviewers were relatively well prepared, but did not always demonstrate the best attitude towards the respondents.

15. An important issue dealt with in training was to underline the difference between a positive 'clinical' approach and a psychological support approach for the victim during the interview. Not all interviewers were able to differentiate between those two attitudes. Some of them wanted to offer help and advice, but all of them were instructed as to remain neutral when faced with drastic examples of violence.

16. Interviewers were given the addresses of professional local organizations offering and giving assist-

ance and support to abused women as well as phone numbers for helplines. When respondents asked about where to get help or advice, the interviewers were instructed to give them addresses to local organizations/centres or phone numbers for helplines (there were few such cases out of 2009 interviews in Poland).

17. Theoretical and practical training are not more important than debriefing sessions where interviewers shared their experiences and discussed their feelings after interviews.

18. The training programme also included interviewer feedback following the completion of a given number of interviews. The most important issue requiring a correction was 'time-discipline'. Time-discipline refers to the time limits allotted for answers. The interviewers were trained to pass smoothly through a sequence of questions.

19. The pilot study showed that there were myths about abused women and the training for interviewers included discussion and consequences of these myths.

20. Discussion about the definition of violence showed that interviewers only understood violence in the very narrow sense that it includes only very serious acts.

21. Interviewers should be good listeners and have an emphatic and non-judgmental attitude toward victims regardless of their social status or lifestyle.

E. Interviewing and reaction of respondents

22. Technical matters were a very important part of the VAW interviewing. Interviews were confidential and needed to be conducted using a neutral approach.

23. Both the respondents and the interviewers were able to suspend the interview for another day if it was interrupted by a husband, boyfriend or children. The Canadian experience found that interviewers needed to take breaks between the interviews, in particular when the interview was especially challenging. Face-to-face interviews present a particular challenge for the interviewer. She must be a good listener and able to manage the allocated time. The phone interviewers are also responsible for proper verbal interaction and good timing.

24. The attitude of the interviewer is an important element in gathering information about violence. All persons, especially victims of violence against women may sometimes become very nervous when questioned about violence by a partner. Questions about the detailed circumstances such as when it occurred and how many times it occurred may make women angry or upset especially if they prefer to forget about it or not talk about it. In some cultures talking about private family matters with outsiders can be dangerous for women. Several respondents were also unhappy about questions regarding age and income.

25. The strategy of interviewers was based on the underlying premise that all answers are anonymous and confidential (the name and personal characteristics will be never be shown to anybody). Empathy and a non-judgemental attitude helped in collecting information on violence by respondents. Training for interviewers and especially the role-playing session was a very efficient method of showing the proper responses by the interviewers. It is important to listen carefully and be empathic. The most frequent ways of how interviewers dealt with respondents were:

a) Offering supportive and motivating statements. These included 'You are not alone with this problem,' 'By revealing your experiences you can help many women suffering because of violence,' 'I appreciate the way you manage your husband's abusive behaviour,' and 'You can get help and support from specialised agencies.';
b) Engaging in a friendly conversation after completing the formal interview;
c) Demonstrating understanding and acceptance;
d) Carefully listening without interrupting and rushing the respondents.

The most important is to demonstrate understanding and to give support but not to play a role of therapist and not to influence respondent's decisions and choices.

BOX 2: EXAMPLES OF EMOTIONAL REACTION OF RESPONDENTS IN THE VAW SURVEY, BASED ON FEEDBACK FROM INTERVIEWERS DURING DEBRIEFING SESSIONS

- Tears in her eyes
- Very ashamed, fear, crying, tightening hands
- Nervousness and started to talk fast and aloud about her experience
- Surprised that I was going to ask about such private things, but she said she didn't have anything to hide
- Blushed and got nervous; it often comes back to her in nightmares and she feels afraid
- Made sure a few times that the interview is anonymous
- Very angry recalling the incident I was asking about
- Furious that she had been helpless; loud voice
- Became irritated, started to shout
- Resented that her husband's family hadn't told her about his mental illness
- Nervousness, very long gale of laughter
- Embarrassment, shame. I could see it was very unpleasant and painful for her
- Trembling voice, anxiety
- Stated with tears in the eyes that she was sorry for her children. All her dreams were completely destroyed
- She sobbed when remembering her mother had beaten her and placed her in a foster house. She was very agitated while talking that she had been beaten even by her aunt
- Irritation because she is unemployed, homeless and very ill, just about to have a serious operation
- 13 years ago she went through alcoholism therapy and the subject of alcohol is very sensitive for her
- Angry that she was asked about her income
- Crying, biting her fingernails, very nervous reaction
- Talking about humiliation and hopelessness
- Irritation, agitation and anger. She had pain on her face
- Ashamed that she had to talk about it. She felt guilty and though that her husband could have got irritated.

BOX 3: EXAMPLES OF REACTIONS BY INTERVIEWERS IN THE VAW SURVEY, BASED ON FEEDBACK FROM INTERVIEWERS DURING DEBRIEFING SESSIONS

- I know that many women have the same problem and things like that often happen. Disclosure of their circumstances might help other women to avoid them.
- I know it's not very helpful to say this, but lots of women go through worse things.
- I saw the respondent tried to avoid telling the truth about her husband's alcoholism and violence. I was very gentle, warm and understanding and because of that she told me everything.
- I calmed her down by saying that it had been a single attack and it would probably never happen again. Such an experience taught her to be cautious with strangers.
- The respondent was very nervous. I gave her time before proceeding with the next questions. After finishing the interview we had a conversation, I didn't leave her alone.
- I listened to her and tried to tell her that it is untrue that she is worthless.
- After the interview I said I believed she would meet a suitable man to rely upon and I congratulated her on being so brave.
- I apologised for asking difficult questions that brought back painful experiences.
- I congratulated her on dealing with violence related to alcohol.
- I gave her time to calm down. I saw that she needed it. I was listening, I didn't rush her but also I didn't try to be a therapist.
- I tried to be tolerant. I said that fortunately in these days women have more support from specialised agencies. They don't have to cope with this problem alone, as she did.
- I listened to her. I said that now she had support not only from her sons but also from the agency. Many women in similar situations can get help from the institution/agencies.
- I asked questions quietly, didn't rush the respondent and let her talk, even when it was irrelevant. I listened to her with understanding.
- I tried not to show how shocked I was by her story. I tried to express verbally my compassion.
- I tried to show that I was able to understand her and I was listening carefully.
- I put the questionnaire away and tried to convince her that her story was important. I emphasised the anonymity of the questionnaire.

BOX 4: A SAMPLE OF INTERVIEWERS' JUSTIFICATIONS FOR ACTIONS

- You can only show understanding and support.
- You should listen and understand. It might help to work out this situation.
- I think she needed a concrete offer of help, not only a list. She asked if I could offer her legal help. I advised her to contact the agencies.
- I could suggest her getting support from the agencies. Although violence in her family occurred a long time ago, she still reacts intensely. I didn't want to be too intrusive and thought that having been given the list the respondent would make a decision herself.
- I should have advised her against going back to her partner but of course I couldn't do that (we were told so during our training).
- The survey coordinator should contact the specialised agencies that offer assistance and help for victims of violence. Respondents can be offered the list of specialised agencies. This is one of the best ways to support victims of violence.

F. Emotional trauma of interviewers

26. Sometimes the interviewers were highly disturbed by respondents' stories.

BOX 5: EXAMPLES OF INTERVIEWERS' COMMENTS

- I know about such incidents from the media, but sexual violence is beyond my imagination and I had difficulty asking about it.
- Questions about sexual violence provoked such an intense reaction in the respondent that it was difficult to ask the next question about the frequency of the incident.
- When the respondent told me about the injuries she had sustained, I was shocked and wanted to finish and flee.
- All questions about sexual violence embarrassed both of us.

27. Training for interviewers can help them to cope with emotional trauma as a result of listening to the respondents' stories. Briefing sessions and the exchange of experiences between interviewers are very useful. The survey coordinator should be responsible for interviewers. They must assist them in coping if necessary. Discussion and films can be a very good tool for understanding violence. Films such as 'You can't Beat a Woman' by Gail Singer and 'Once Were Warriors' by Lee Tamahori are useful.

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APPENDIX D – MAIN RESULTS OF THE 2005 UNODC-UNECE INVENTORY OF VICTIM SURVEYS

1. In 2005, the UNECE-UNODC Task Force on Victim Surveys collected information on victimization surveys conducted or planned in the 56 ECE member countries (including Europe, North America and Central Asia) and in selected other countries. The information was used to create an inventory of victim surveys to be used as a tool to analyse differences and communalities in the methods and definitions adopted. The information contained in the inventory was used extensively for the preparation of the UNODC-UNECE Manual on Victimization Surveys.

A. Type of surveys included in the inventory

2. The inventory includes information on a total of 58 surveys conducted in 31 countries[7]. These include 32 victimization surveys (carried out in 23 countries) and 24 multipurpose surveys with the inclusion of a module on victimization (carried out in 16 countries). Two sample surveys of other types with a module on victimization are also included.

B. Historical development

3. The oldest survey included in the inventory is the US National Crime Victimization Survey, started on 1972 and still ongoing. Between the late 1970s and the early 1980s, surveys were launched in some Nordic countries (Sweden, Finland and Norway) and others including Israel, the Netherlands and the UK. From the late 1980s, new surveys were increasingly launched in many countries, with 21 new surveys launched in the 1990s and 24 launched between 2000 and 2006.

C. Frequency

4. With regard to frequency, half of the 32 victimization surveys are irregular (12 surveys) or one-time (four) surveys. Only one fifth are conducted frequently: continuously (three), yearly (two) or every two years (two). The remaining 30 % of the victimization surveys are conducted regularly but not frequently, every four (six), five (two) or even ten years (one).

5. Among the 24 multipurpose surveys, on the contrary, more than half are conducted frequently: continuously (one survey), yearly (ten), or every two years (two). Only 25 % are irregular (four) or one-time (two), while the remaining surveys are conducted regularly but not frequently: every three to four years (three) or every eight to ten years (two).

D. Countries with most surveys

6. The countries with most surveys reported are Australia (six surveys) and Switzerland (five surveys), while three surveys were reported in Bulgaria, Israel, New Zealand, Norway and Sweden.

E. Objectives of the surveys

7. The main objectives of the surveys are measuring victimization (for 52 surveys) and the fear of crime and insecurity (42 surveys). Other important objectives include measuring the dark figures/unreported crimes (34 surveys), attitudes towards the police and the criminal justice system (32 surveys), crime prevention measures, security systems and strategies (28 surveys).

F. Institutions responsible for the surveys

8. In almost half of the cases (27 surveys out of 58) the surveys were conducted by the relevant national statistical office. In the other cases, the surveys were conducted by research institutes (12 surveys), ministries or government departments (ten), universities (four) or other institutions.

7 Australia, Belgium, Bulgaria, Canada, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Iceland, Ireland, Israel, Italy, Japan, Lithuania, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Republic of Moldova, Romania. Slovenia, Sweden, Switzerland, Ukraine, United Kingdom, USA

G. Use of ICVS questionnaire

9. The International Crime Victimization Survey (ICVS) standardised form was used for a total of 18 surveys: for six surveys it was used in full, for three surveys parts of the ICVS were used, and for nine surveys an adapted form of the ICVS questionnaire was used. For the majority of surveys, the ICVS form was not used, but in 17 cases the questionnaire used included questions comparable to those in the ICVS form.

H. Reference population

10. The reference population differed across the surveys, in particular with regard to the age limits. In most cases, the population aged 15-16 and older was included, but in some cases the reference population included children, for instance from the age of 12 and even from the age of 7. One survey ('The hidden violence?' survey in Norway) covered only population aged between 12 and 18. The majority of surveys had no upper age limits, but in some cases limits were set, for instance at age 84, 75 or 54. The reference population always included men and women living in private households. Only in two cases were persons living in institutions also covered. In 12 surveys, the reference population changed depending on selected types of crime. For example, for sexual abuse the population covered included only women.

I. Mandatory or voluntary participation

11. The participation in surveys was voluntary in the large majority of cases (45 surveys). In 13 cases, participation in surveys was reported as mandatory.

J. Survey design

12. The majority of surveys in the inventory (44 surveys out of 58) are cross-sectional studies. Panel studies are used in five cases and a combination of cross-sectional and panel studies are used in four cases.

K. Data collection mode

13. The most popular data collection modes include face-to-face interviews at the respondent's home using a paper questionnaire (22 surveys) or an electronic questionnaire 'CAPI' (14 surveys), and telephone interviews (20 surveys). Few surveys were carried out as face–to-face interviews in locations other than at respondent's home – at the workplace, the place of study and the placement service or at a location preferred by the respondent. In five surveys, self-administered questionnaires were used, mainly postal questionnaires. Combinations of the above mentioned or other modes were used in eight cases.

L. Sampling design and procedure

14. In two thirds of the surveys (39 surveys), a sample of households was used. If a household sample was drawn, in most cases (25 surveys) only one person from the household was interviewed. This person was generally selected either randomly or using the birthday method (the last or next birthday was selected in similar number of cases). In seven surveys, all persons above a certain age limit (generally 14 years) were interviewed. In only three surveys were all persons of the selected households interviewed. A sample of individuals was drawn in 19 of the surveys.

15. The most common sampling procedure was multistage probability sampling, adopted for 42 surveys. With regard to the variables used for stratification, different approaches were adopted with up to six variables used. The variables most commonly used are geographical area (34 surveys), degree of urbanization (20), gender (12) and age (11). Simple probability sampling was used in 11 surveys, while other procedures (including weighted sampling from home register, stratified sampling with quotas by local government region and systematic stratified random sampling) were used in four surveys.

16. In case of multistage probability sampling, over sampling was applied for certain groups of persons and/or areas in 13 surveys. Substitution strategy was applied to reach the desired sample size in five surveys.

M. Territorial level

17. For 32 surveys, the sample was representative at the national level but not at a more detailed geographical level. The sample was representative at regional level for 15 surveys and at a more detailed level for four surveys.

N. Reference period

18. Concerning the reference period used for reporting crimes, one year was used in 44 surveys. However, in 20 of these surveys, the one year period was used in combination with other reference periods: five years (15 surveys), lifetime (seven surveys) or six months (five surveys). Two reference periods were used for 13 surveys and three reference periods were used for seven surveys.

O. Reduction of telescoping effect

19. For almost half of the surveys (28 surveys), some measures were taken to minimise the 'telescoping effect', a distortion by which the respondent remembers an event as if it had occurred more recently than when it in fact took place. The measures taken more frequently include the reporting of the event date (15 surveys), the reduction of the reference period (10 surveys) and the use of funnel questions (nine surveys).

P. Time for completion of the survey

20. The average time reported to complete the survey varies a great deal across surveys and countries. In some cases, particularly with regard to modules on victimizations included in larger surveys, the time taken for the module was very short (one or two minutes). On the other hand, for some dedicated victimization surveys, the average time reported for completion was 60 minutes. Considering all the surveys included in the inventory, the average time used for completing the survey (or the victimization module if it was included as a part of another survey) was 26 minutes.

Q. Proxy responses

21. In most cases (40 surveys), proxy responses were not allowed. When proxy responses were allowed, this was done for different reasons and for various population groups. Proxy responses, for instance, were allowed for children under a certain age in various countries (16 years in Bulgaria and Switzerland, 15 in Israel, 14 in the Republic of Moldova and 13 in Italy, where the exception was for children between 11-13 years regarding questions on tobacco and alcohol consumption and computer/internet use). In some cases, a proxy response was allowed only when parents did not give permission to interview a child under a specified age limit. Other cases when proxy responses were allowed include persons who were not at home at the moment of interview (six surveys) or persons not being able to reply because of illness or disabilities (eight surveys).

R. Interviewers

22. In about half of the surveys, in-house interviewers (from the institution conducting the survey) were used, while in the other half an external company carried out the interviews. Regarding the gender distribution of the interviewers, in about half of the surveys, the totality or large majority of the interviewers (80 % or more) were women. In one quarter of the surveys, there was a prevalence of women (60 % to 80 %), and in the remaining quarter there was a balance between women and men or a slight prevalence of men.

23. Significant differences were reported concerning the training of interviewers. The duration of training ranges between 1.5 hours and 10 days, but in general it is around two to three days. Training

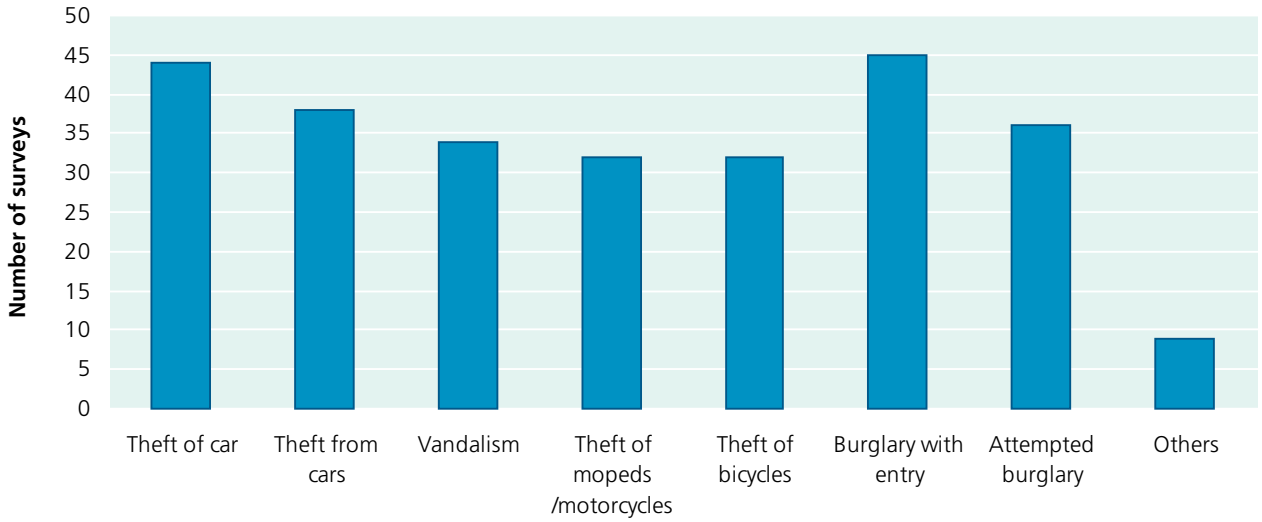
modes reported include lectures, practical exercises, role plays and self-study. Training materials include manuals and videos. In some countries, general training on sensitive questioning techniques was provided to the interviewers, or special psychological training and/or support to help them to deal with sensitive survey content. In some cases, interviewers were provided with additional types of training or support, for instance to learn how to deal appropriately with crime victims and with their potential reactions (particularly with regard to family violence, sexual assault and abuse), to assist interviewers in cases when respondents had reported a particularly traumatic experience, or to share experiences with other members of the interviewing team.

S. Items covered by the victimization surveys:

Household property crimes

24. In the category of household property crimes, the item covered in most surveys was burglary with entry (covered by 45 surveys), followed by theft of the car (44 surveys) and theft from cars (38 surveys).

Figure 1: Household property crime



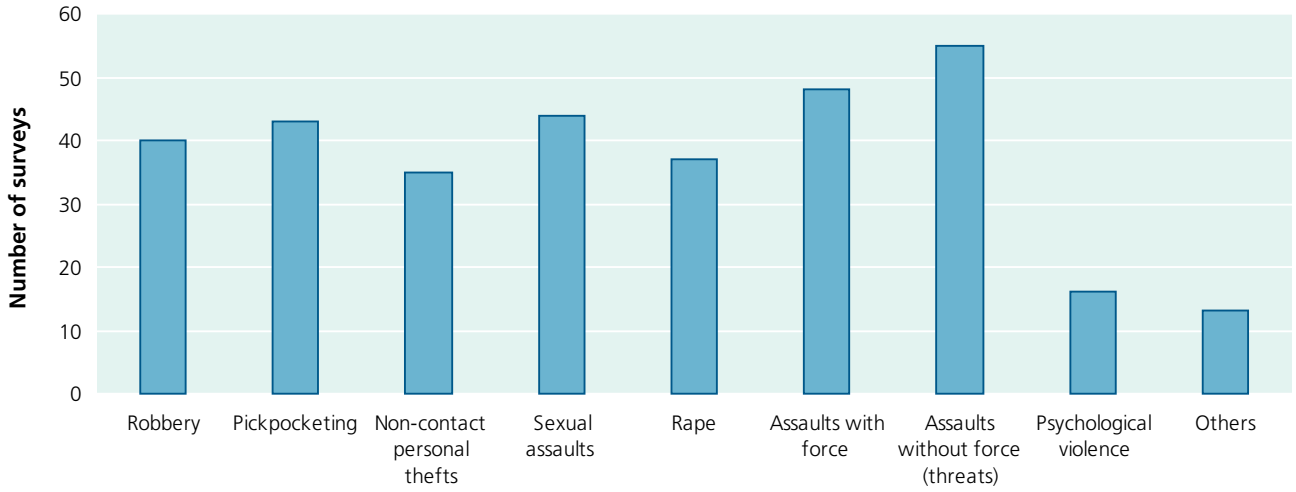
25. Items covered by surveys slightly less often were theft of mopeds/motorcycles and theft of bicycles (32 surveys for both items). The inventory also includes information on definitions used in the surveys for the different crimes. For household property crimes the most common definitions reported correspond to the ICVS definitions. Other definitions differ in the description of the object, or the level of damages caused. In some cases, attempted crimes are included as well in items about theft of car, motorcycles, mopeds and bicycles.

Personal crimes

26. The items among personal crimes most often covered include assaults with force, covered in almost all surveys (55 out of 58), and assaults without force or threats (48 surveys). Sexual assaults and pick pocketing were also covered very frequently (in 44 and 43 surveys respectively). Psychological violence was reported to be covered only by 16 surveys and other items in fewer surveys.

27. There are differences in the definitions used for the description of personal crimes; however the most common definitions correspond to the ICVS definitions with the exception of psychological violence, where in almost all surveys different specific definitions were used.

Figure 2: Personal crimes



Attitude towards police and the criminal justice system

28. Among the items considered in this category, the one most often covered is the respondent's attitude towards the police, which was covered by 38 surveys. Other items, including attitudes towards courts and correctional institutions, were covered only in ten surveys or less.

Figure 3: Attitude towards police and criminal justice system

Security systems and strategies

29. Crime prevention and protection was covered in 30 surveys, eight of them using the ICVS definition. Other definitions for this item include references to reporting victimization to the police, prevention of burglary, theft of/from car, bicycle theft, security locks, burglar alarm, security doors etc.

Exposure to illegal drugs

30. Exposure to illegal drugs was covered by nine surveys and in three of them the ICVS definition was used. Other definitions included contacts with drug-related problems in the area of the respondent's home, seeing people dealing in drugs, taking or using drugs in public spaces, finding syringes left by drug addicts, being offered illegal drugs, knowing anyone among acquaintances who has used or uses narcotics.

Fear of crime

31. Fear of crime was covered by the majority of the surveys (44 surveys). The ICVS definition was used in nine cases. Other definitions included fear of violence, fear of walking alone in darkness, feeling safe home or outdoors in daytime/night-time, worries about possibly becoming a victim.

Corruption, fraud and other crimes

32. Corruption was covered in only 12 surveys and in all cases but one the ICVS definition was used. Fraud/cheating was covered in 20 surveys and in nine of them the ICVS definition was used. Other crimes covered in selected surveys include: extortion, consumer fraud, cyber crime and electronic crime.

T. Comparison with police data

33. The results of the surveys were compared with data on crimes reported to the police in 17 cases (about 30 % of the surveys). In some cases, questions on reporting to the police are included in the survey itself.

U. Dissemination of survey results

34. The results of the surveys have been made available on the internet in 37 cases and for five additional surveys the results were available in the ICVS database. For 16 surveys, the results are not available on internet. Printed reports are still very common dissemination tools for survey results: reports have been published for 36 surveys, plus three reports that have been published as part of the ICVS analysis. No printed reports have been published from 16 surveys. Public-use microdata sets have been produced for 24 surveys, about 40 % of the total.