THE NATIONAL CRIME VICTIMIZATION SURVEY REDESIGN: NEW UNDERSTANDINGS OF VICTIMIZATION DYNAMICS AND MEASUREMENT

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Introduction

The National Crime Victimization Survey (NCVS) was inaugurated in July 1972 and was instituted to satisfy two broad goals in providing information on the incidence of crime and its effects on victims:

- To create a time series tracing changes both in the incidence of crime and in the association between criminal victimization and attributes of victims, offenders, and crime incident characteristics.
- To create a vehicle that would allow study of particular research questions related to criminal victimizations, such as the relationship of victims to offenders, the cost of crime, and the vulnerability of various types of individuals to victimization.

The NCVS was intended to complement information available from the FBI's Uniform Crime Reports series collected from police departments by providing collecting data on crimes not reported to the police and by collecting more detailed information on victims and victimization incidents.

After several years experience with the survey, the Department of Justice asked the National Academy of Sciences to perform an evaluation of the survey, and these findings were published in 1976.¹ As a response to the Academy's findings and subsequent internal reviews, the Bureau of Justice Statistics began a project to redesign the survey in 1979. This project comprised three distinct phases:

 A contractual research and development effort performed by a consortium of experts in survey design, statistics, criminology, and victimization, headed by the Bureau of Social Science Research in Washington, D.C. (1979-85)

¹Surveying Crime, Bettye K. Eidson Penick, ed. (Washington: National Academy of Sciences, 1976.)

- Further testing and evaluation by the Census Bureau to produce the operation questionnaire and field procedures. (1985-89)
- Phase-in of survey revisions. Changes judged to be non-rate affecting were instituted in 1986.
 Rate-affecting changes were phased in gradually from 1989-93.

The first annual change estimates using data from the fully redesigned survey were released in November, 1994.

Sixteen years after the inauguration of this project, it seems useful now to examine what its outcomes have been and what its impact has been on the quality and utility of NCVS data. This paper will address these questions and will be organized around four major themes:

- I. Completeness and accuracy of victimization measurement.
- II. Reduction in reporting artifacts.
- III. Improvement in the survey's ability to meet existing objectives.
- IV. New options for the study of victimization created by the redesign.

I. COMPLETENESS AND ACCURACY OF VICTIMIZATION MEASUREMENT

The NCVS Screener

The NCVS questionnaire is divided into three sections:

- a control card that records household information, interview history, and information on reported crime incidents to "bound" reports in subsequent interviews.
- a screener that flags whether a property or personal victimization has occurred during the six month period before the interview. This vehicle also records information on the interview, the household, and individual respondents. A screener is filled for each eligible respondent in the household.

 a crime incident form that records data on the characteristics of crime incidents reported by respondents in response to screener questions.
 One incident form is filled for each incident.

Perhaps the single most pronounced change to the survey was the total revision of the screener. A number of different screening strategies were tested during the research and development phase of the redesign project, with the aim of improving the respondent's ability to define, search for, recall, and report victimizations suffered during the reference period. The most effective approach was to pepper respondents with a number of short cues to evoke the context in which victimizations might occur, including types of places where an attack could take place, possible relationships to the offender, types of property that might have been stolen, and types of weapons that might have been used in an attack.

In addition to other procedural changes, most notably implementation of a CATI capability, this screener revision resulted in an increase of 48% in rates of personal crimes, 54% in violent crime, and 23% in property crime, as measured by a split ballot comparison of old and new methods in 1992. One might expect that this increase would occur at the margin - those crimes that might be judged less severe because they resulted in less injury or property loss or because they were not reported to police. To some degree, this is the case:

- Thefts of less than \$50 showed a 47% improvement in rates, compared to 18% for those incidents in which \$250 or more was lost.
- Simple assaults showed a 77% improvement, compared to 24% for aggravated assaults.
- Rates for aggravated assaults not reported to police showed a 47% improvement, compared to a nonsignificant change for aggravated assaults reported to police. Rates for simple assault not reported were 99% higher with the new method, compared to 49% higher for simple assaults that were reported.
- Overall Robbery, which is potentially the most severe nonsexual crime measured by the NCVS, showed no significant method effect. Robbery, however, is probably least sensitive to question design changes, because its context is arguably the least ambiguous of all crimes measured by the NCVS: An offender takes or attempts to take a victim's property, using violence or the threat of violence.

The good news is that method differences are not restricted to less severe crimes and still show substantial, significant improvements for more severe property and personal crimes. The screener seems most effective at helping respondents define and report incidents that may fall in gray areas. These include incidents that may not be easily recalled because of their lesser severity, but also because they may have occurred in contexts that may not routinely be associated with crime, such as at work or home, or because the offender was a nonstranger. For example new method rates for crimes of violence show a 40% improvement for stranger crimes, but a 66% increase for crimes committed by relatives and a 77% difference for those committed by acquaintances. Although it is impossible to attribute this these effects specifically to any particular design change, it is likely that at least some of this difference in increases across types of relationship to offender is attributable to a question on the new screener that asks:

"People often don't think of incidents committed by someone they know. (Other than any incidents already mentioned,) did you have something stolen from you OR were you attacked or threatened by (*Exclude telephone threats*) -

- (a) Someone at work or school -
- (b) A neighbor or friend -
- (c) A relative or family member -
- (d) Any other person you've met or known?"

Sexual assault

Of all types of crime measured by the NCVS, rape and sexual assault measurement was subjected to the most rigorous scrutiny. As initially designed, the NCVS screener did not directly ask respondents whether they had been raped. Only if a respondent answered positively to one of the initial screening questions regarding attack, attempted attack or threat of attack was an incident form administered., and then only if a respondent was reluctant to provide details on the incident did the interviewer ask whether a rape, attempted rape, or threat of rape had occurred. No definition of rape was provided to the respondent.

This question strategy was the result of judgments at the inception of the survey in 1972 that direct questioning of respondents regarding rape incidents would be invasive. This climate changed over subsequent years, and a number of other surveys included more direct

measurement of rape and special assault. As part of the redesign this approach to rape measurement was reevaluated, with the help of a panel convened by the American Statistical Association, and a number of changes were introduced to help improve NCVS data on rape and sexual assault. These revisions resulted new method rates that were 323% higher for completed rape and 96% higher for attempted rape than old method rates. Major changes included adding a response code of "any rape, attempted rape or other type of sexual attack" to the omnibus "attack and threat" screener question, including the question about crimes committed by someone known to the respondent that was cited above, and adding an additional question that allows hesitant respondents a second chance to report sexual assaults:

"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 -

OR

(c) Someone you know well?"

In addition, new response codes have been added to the incident form violent crime questions that allow reporting of non-rape sexual assault and unwanted sexual contact. A definition of rape is provided to interviewers that may be used for reference or read to respondents. The key elements are physical or psychological coercion and the presence of any form of penetration.

Treatment of series crimes

The original NCVS included a class of victimization labeled "series crimes." These were groups of three or more incidents that the respondent could not remember as discrete events. Not only was it impossible to accurately count series victimizations, but it was not clear whether these incidents comprised the same type of crime. Although the NCVS collected information on the most recent victimization that would allow classification, it was nonetheless virtually impossible to use these incidents in computing estimates, because of the lack of precision in counting and classifying them.

The redesign project reexamined this class of victimization and made criteria more stringent for classifying incidents collectively as a series crime. The

threshold was raised from three to six incidents, and the respondent must indicate that these incidents are essentially the same type of crime. When a series classification is accepted, additional information is also collected on whether these incidents occurred in the same place or were committed by the same person. In addition, the NCVS attempts to determine the relationship of the offender to series victim and whether these incidents are continuing. By collecting this additional information, the survey changes series victimization from a "residual" type of crime to one that is analytically useful. For example, one of the hypotheses proposed during the redesign was that series crimes contained a disproportionate share of those crimes committed by offenders with ongoing relationships to the victim, such as domestic violence. These new questions will allow us to test this hypothesis and provide some new information on the nature and duration of domestic violence incidents, if this hypothesis is confirmed.

Period-to-period recounting

The NCVS utilizes a reference period of six months. That is, the survey attempts to enumerate victimization incidents that occurred to victims and their households in the previous six months. At it inception, the survey recorded information for the six months before the month in which the interview occurred (e.g., January through June, if the interview was conducted in July). If the respondent had been victimized during the month in which the interview took place, he or she was instructed to wait until the subsequent interview to report this information. Although cutting off reference periods at the beginning of the month produced clean temporal breaks for calculating estimates, it had several unfortunate consequences. First, waiting six months to report an incident may result in less accurate information on dates and incident characteristics. Second, this instruction may appear nonsensical to the respondent, with a resulting negative effect on respondent rapport and cooperation.

The NCVS redesign project suggested that respondents be asked to report incidents that had occurred since the previous interview, and this change has been implemented. This revision in field procedures allows respondents to report incidents while details are fresh in their memories and also provides a salient back-end anchor for reporting. To produce estimates, the survey still prepares files containing records for the six months prior to the month in which the interview occurs. Those incidents that occurred in the current month are not included in this file and are held for processing with data from the subsequent interview. If the incident is reported again in the next reference period, interviewers have

records on previously reported incidents that allow them to unduplicate such reports.

Vandalism

The NCVS redesign project investigated a number of ways to expand the scope of crimes measured by the survey. Among these were arson and parental kidnaping. BJS evaluated these suggestions and rejected a number of them because of concerns about their expected rarity, which would make it difficult to produce reliable estimates or analytical studies, or because of concerns about the quality of data that could be collected about such crimes in a victim survey context. BJS did approve expansion of the NCVS to include measures of vandalism. The revised NCVS does not record vandalism as discrete incidents, as it does for other crimes, but collects information on the type of property damaged and the costs of vandalism during the reference period.

II. REPORTING ARTIFACTS

Since the inception of the survey, a number of reporting artifacts have been identified that relate to larceny measures. The original survey divided larceny into two broad categories -- household and personal. Personal larceny was further divided into "with contact" and "without contact" crimes. Contact crimes could be described as pocket picking and purse snatching.

Personal larcenies without contact and household larcenies were distinguished solely by the location of the property when it was taken. This somewhat arbitrary classification of larceny produced several artifacts in larceny counting and reporting:

- The location of the property determined whether it was counted as a personal or household crime, with a corresponding effect on crime counts and rates.
- The classification rules for personal and household crimes sometimes produced inconsistent rules for counting an incident, depending on its location.

For example, if a child's bicycle is taken from the front yard or driveway of a home, the theft would be classified as a household larceny with no other qualifications. However, if the bicycle had been taken from a schoolyard, it would be counted as a personal larceny, but only if the child was 12 years old and thus met the minimum age to be included as an NCVS respondent. If

the child was less than 12, the theft would not be counted at all

There were several other more subtle artifacts related to this classification rule for larceny. Consequently, the redesign project recommended that larceny classification schemes be revised to eliminate this artifactual distinction between personal and household larceny. Almost all larcenies are now classified as thefts and are counted as property crimes. The only exceptions are contact thefts, which are classified as purse snatching and pocket-picking.

III. MEETING EXISTING OBJECTIVES

The NCVS changes just described have several impacts on the quality of NCVS data:

- The revisions improve the coverage of the survey by enhancing its yield of victimization incidents. This impact is particularly pronounced for sensitive crimes, such as sexual victimization or crimes committed by someone known by the victim, and for less salient crimes that may be more difficult to remember at first.
- The precision and reliability of NCVS data are enhanced by tightening the criteria for recording series incidents and by eliminating artifactual classifications of larceny. By improving measures on sensitive crimes, the survey also improves the accuracy of estimates of the levels of these crimes.
- By increasing the number of victimization incidents reported, the NCVS revisions also improve the analytic utility of survey data. Standard errors are reduced as a result of the increased number of cases, which makes the survey annual change measures more sensitive, and also improves the sample size available for topical analyses.
- The scope of the survey is enlarged to include vandalism and non-rape sexual victimization..

Consequently, as a package, the redesigned NCVS provides a more accurate, sensitive instrument for measuring the likelihood and distribution of personal and household crime victimization.

IV. NEW OPTIONS FOR THE STUDY OF VICTIMIZATION

In addition to improving the ability of the NCVS to measure overall personal and household crime victimization, the redesign project has also expanded opportunities for analysis of the dynamics of crime victimization. These changes range from creating new predictor and outcome variables for the on-going survey to special purpose files and supplements.

New predictor and outcome variables

The redesign project has resulted in a number of new variables that will be useful for illuminating the dynamics of criminal victimization:

- Self-protection. Victims are asked what they did, if anything, to protect themselves or their property during a personal victimization. They are also asked whether they believed these actions helped or hurt their circumstances and how these actions hurt or helped. Victims are also asked whether actions were taken before or after any injuries, to help determine whether the actions were precipitants or reactions to injury. In addition, victims are asked whether actions of anyone other than the victim or offender who was present hurt or helped the situation.
- Gang membership. The victim is asked whether the offender was a member of a street gang.
- Substance abuse. The NCVS asks victims whether the offender was drinking or on drugs.
- Lifestyle variables related to risk. All
 respondents are asked how often they go
 shopping, how often they spend the evening
 away from home, and how often they have
 ridden public transportation.
- Target hardening. The designated household respondent is now asked whether the home has any special devices such as dead bolts, timers, or alarm systems to deter thieves or intruders. The NCVS also asks whether a neighborhood watch or similar group is active in the neighborhood and whether someone from the household participates.
- New questions on police response are now directed to victims, intended to measure the time taken to respond, the nature of police action taken immediately after they were contacted and the nature of any subsequent interaction.

• Because the NCVS collects its data with a nationally representative sample, there are limitations on the subnational data it can provide, both because of privacy issues and the reliability of estimates that could be derived for subnational units. The survey does include other generic variables that allow the analyst to perform analyses for places that share certain characteristics, such as size or MSA status. The redesign project utilized these variables to produce a 14-level generic area model intended to allow disaggregation of NCVS data into meaningful subnational typologies. BJS is currently evaluating this typology and hopes to release analyses utilizing it in the near future.

Supplements

The redesign project examined a number of issues related to the content of the survey. One outcome of this review was a suggestion that the fixed format, social indicator design of the survey be relaxed to accommodate several classes of analytic needs:

- The NCVS was not achieving its potential as a resource for information on crime-related topics. As the only large-scale nationally representative survey on crime, it would be a very useful vehicle to collect information on short-turnaround topical issues that were not part of its routine data collection.
- A number of questions, such as those related to employment, were not providing the quality of information that would be useful for analysis of crime dynamics. BJS concluded that it would be preferable to delete these items from the regular survey and administer them in the context of short-term groups of questions that dealt more exhaustively with the topic. This would be particularly useful for questions whose outcomes were not expected to change much from year to year.

As a result of these criticisms, BJS decided to include the development of topical supplements as part of the regular NCVS program. In addition to supplements conducted early in the life of the survey, this supplement effort has fielded two supplements related to school crime, the most recent being funded by the National Center for Education Statistics. BJS is evaluating future supplements dealing with such topics as workplace violence, campus crime, and long-term consequences of violent crime victimization.

C. Development of new files

Another consequence of evaluating the survey has been the identification of special analytic uses for NCVS data. A number of these can be made more straightforward by developing special purpose files. In addition to rectangular files for crime incidents and rape victims that had already been developed, a number of new files have been created or suggested as a result of this process:

A longitudinal file was created that provides records for all housing units scheduled to receive all seven NCVS interviews in 1986-1990. Although the NCVS utilizes a rotating panel design and is not therefore a fully longitudinal survey, this file allows analysts to examine some topics that would be very cumbersome with the regular annual files:

Long-term patterns of victimization for sampled persons and housing units.

The relationship between victimization and other life events, such as change in marital status, moving, leaving school, and employment.

An examination of gross v. net changes in victimization from year to year. I.e., to what extent do last year's victims tend to be this year's?

Other files under consideration include a file of violent crime victims, and a library of recodes used to produce published BJS analyses that have not been documented in BJS public use files.

Conclusion

As a result of the National Crime Victimization Survey redesign project, the NCVS is a substantially different survey than it was 15 years ago. It detects a substantially greater number of victimizations than did the previous survey, the data are more accurate, particularly for more difficult to report crimes, and the survey is more sensitive to temporal changes in these measures.

In addition to providing more accurate core data, the survey has enhanced its analytic utility by providing new predictor variables and expanding the scope of crimes covered. New files have also been developed to make special purpose analyses easier.

Consistency is important to maintain the longitudinal comparability of NCVS data. However, we have tried to minimize the degree to which this goal translates into inflexibility in the survey's ability to respond to new needs for criminal justice data. As a result, BJS has made the regular design and implementation of supplements an important component of the NCVS program. As currently constituted, the survey is well placed to provide useful, nationally representative crime measurements well into the next century.