

THE MEASUREMENT OF CRIME THROUGH VICTIMIZATION SURVEYS: THE CENSUS BUREAU EXPERIENCE
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Definition and control of criminal behavior historically have been functions of the State. Accordingly, governments have long compiled information on various aspects of crime, including law enforcement, court actions, and corrections. Such information is used to determine the extent of crime and the effectiveness of control procedures.

In the United States, information on trends in the amount of crime is derived from administrative records of law enforcement agencies, which are largely units of local governments. On the basis of reports from these police departments, the Federal Bureau of Investigation compiles national summaries entitled the Uniform Crime Reports (UCR).

The UCR utilize seven crime classifications to establish an index to measure the trend and distribution of crime. The crimes selected—murder, forcible rape, robbery, aggravated assault, burglary, larceny over \$50 and auto theft—represent the most serious crime problem. However, one major limitation of these data is that many crimes are not reported to the police. Another difficulty with the current data is that administrative records necessarily provide a limited amount of information about the event, the victim, and the offender. These records do not uniformly provide the kinds of information necessary to an understanding of crime extending beyond its incidence and type to such aspects as the characteristics of the victim and offender and a detailed description of the event.

In 1965, the U.S. President's Commission on Law Enforcement and Administration of Justice was established to inquire into the causes of crime and delinquency and to make recommendations for its prevention, as well as the improvement of law enforcement and the administration of criminal justice. As part of the Commission's work, the first nationwide survey of crime victimization was initiated. The National Opinion Research Center of the University of Chicago surveyed 10,000 households to determine if any household member had been victimized, if the crime had been reported to the police and, if not, why not. This study concentrated on the same crimes as reported in the UCR. More detailed surveys about the UCR crimes were undertaken in a number of precincts in Washington, Chicago, and Boston by the Bureau of Social Science Research and the Survey Research Center of the University of Michigan. These studies all indicated that the amount of actual crime was much greater than that reported in the UCR and further, that a great deal of crime is unreported to the police.

In 1970, the Law Enforcement Assistance Administration (LEAA) asked the Bureau of the Census to begin developmental work toward a national sample to provide victimization data through household surveys. The first studies employed

a reverse record check technique in which victim respondents were identified from police records. The primary objectives of these studies were to determine the reference period about which to question the respondent to gain the most complete and reliable information; to measure the degree of telescoping; i.e., the tendency of the respondent to advance an incident occurring outside the reference period into that period when questioned; to explore the possibility of identifying incidents by a few broad general questions as opposed to a series of more specific probing questions; and to test and improve the survey instrument. The respondent was asked a series of questions on a screening questionnaire to determine whether he had been victimized. This was followed by a detailed incident report designed to classify the crime and obtain additional information about the incident.

A certain amount of telescoping (placing the incident within the time frame, when actually it occurred before) did appear. Generally, when this occurred, the incidents were reported to have taken place 1 or 2 months prior to the reference period. This telescoping tendency can be controlled by using a bounded interview technique. With bounding, information obtained in a previous interview is used to prevent duplicate reports.

The first nationwide household survey effort was conducted as a supplement to one of the Census Bureau's household surveys, the Quarterly Household Survey (QHS). At the time this work was undertaken, the sample was spread over 235 primary sampling units (PSU's) throughout the United States, and housing units in the sample were interviewed for six quarters, with one-sixth of the sample retired and a new sixth introduced each quarter. Interviews on crime victimization were conducted in approximately 15,000 occupied housing units. These supplements, conducted at 6-month intervals from January 1971 through July 1972, were used to test and improve the questionnaires and accompanying field procedures and to revise and improve the clerical and computer tabulation procedures. They were also used to address certain methodological issues such as the use of a mail screening procedure, the control of telescoping through the bounding technique, the use of the telephone to obtain details of reported incidents and the advisability of lowering the minimum age of coverage from 16 to 12.

In addition, the Bureau also conducted victimization studies in two cities (San Jose, California, and Dayton, Ohio) that had participated in LEAA's Pilot Cities Program, which provides funding assistance to law enforcement agencies. These studies were also used for methodological research. One of the most important methodological issues addressed in the Pilot Cities Studies was the use of self-respondent versus a household respondent. In all

of our previous work (including the QHS supplements) one household respondent answered all the screening questions and detailed incident reports for all eligible household members. In the Pilot Cities Surveys, the household respondent technique was used in one-half of the households in each city, while the self-responder approach was used in the other half; i.e., all eligible household members responded to the screen questions and the incident reports for themselves. A series of attitudinal questions concerning such topics as attitudes toward neighborhood, local police, and fear of crime also was included.

This developmental work led to a series of conclusions which directly affected the major effort that followed. These conclusions are as follows:

- the optimum recall period was either 3 or 6 months.
- telescoping appears to be effectively controlled by the bounding technique.
- the self-responder technique elicited more reports of victimizations than did the household respondent technique.
- a series of detailed screening questions were more effective than several general screening questions.
- a single incident report, covering both personal and property crimes was developed.

Using much of the information obtained in the aforementioned studies (which were related to household surveys only), a continuing survey, the National Crime Panel, was established in July 1972 covering a general probability sample of households and commercial establishments. The commercial victimization survey, which parallels the household survey in many respects, is not described in this paper.

The National Crime Panel has two major components, a national sample and a sample of large cities. The national household sample consists of approximately 72,000 designated housing units in 376 primary sampling units. The sample is divided into six parts, each of which is interviewed in a specified month and again at 6-month intervals; i.e., July and January, August and February, etc. Households included in the national sample are interviewed seven times. Approximately 12,000 new households are introduced over each 6-month period, replacing approximately the same number which rotate out of or leave the sample during the 6-month period. There are several reasons for rotating the sample, one of which is to avoid the loss of cooperation which may result from interviewing the same households indefinitely. Another is to reduce the effect of possible biases in responses when the same persons are interviewed for an indefinite period.

The second component, the cities sample, consists of approximately 12,000 housing units in each of 30-35 central cities in the largest Standard Metropolitan Statistical Areas (SMSA's). These include the five largest cities in the United States (Chicago, Detroit, Los Angeles, New York, and Philadelphia), as well as others selected for varying reasons (participation in special LEAA programs, cities with particular crime problems, etc.)

Interviewing in the five largest cities was conducted at the beginning of 1973 and will be repeated early in 1975. Other cities will be interviewed at 3-year intervals. Because households in the cities sample will be interviewed only two to five times during the decade, no rotation of sample households is planned.

Data collected in the initial interview for a household in the national sample are not used in preparing final estimates, but rather serve a bounding function; that is, to ensure that earlier incidents are not telescoped into the successive visit. The effect of telescoping on the level of reported crime will be studied during the first few years of the survey by comparing first-time unbounded interviews with data from subsequent bounded interviews.

The sample will not be completely bounded until incidents that occurred in July through September 1973 are recorded. Preliminary information indicates that this bounding technique will affect these data. Personal crimes were reported at a .730 ratio of bounded to unbounded households, while the ratio for property crimes was .765.

The bounding technique is not used in the cities sample because of the gaps in the time coverage of the survey. In the five largest cities, for example, the sample was first interviewed in 1973, essentially covering victimizations in 1972. Interviewing in 1975 will cover 1974 victimizations. Without data for 1973, it is impossible to bound the 1974 data. However, we do plan to develop bounded estimates for the largest cities from the national sample and compare them with the unbounded city results to provide some measure of the possible effect of bounding.

As was noted earlier, one of the important problems in the National Crime Panel is victim recall. Results of the earlier studies indicate that the shorter the recall period, the better the respondent is able to remember any victimizations that occurred during that period and to remember when they occurred. For the national sample, the reference period was set at 6 months, ending the last day of the month prior to the interview month; i.e., households interviewed in July 1972 (the initial interview) were asked about victimizations that occurred during the period from January 1, 1972 to June 30, 1972. The reference period used in the cities sample is a variable 12-month period, ending the last day of the month prior to the

interview month. One reason for doing this was to provide both the respondent and interviewer with some fixed point in time so that all data collected during a particular month would refer to the same period.

In the national sample, incidence of crime can be measured over a period of time, but in the cities sample, this incidence can be measured only for a specific period of time or at a specific point in time. The cities data may be used to establish baseline estimates to be compared to estimates produced at a later point in time. Many of the cities will be using these data in exactly this way. The baseline data will provide an estimate prior to the implementation of programs designed to reduce certain aspects of crime and the later estimate can be used to measure the effect of these programs.

Another issue raised during the developmental phase was whom to interview; that is, should one household member provide information regarding all the victimizations of all eligible household members or should each eligible person be interviewed for himself, regarding only his own victimizations? The Pilot Cities studies indicated that there was a significant difference in the victimizations reported by the household respondent compared to the self-respondent. As might be expected, many more victimizations were reported by persons reporting for themselves than by the household respondent method. On the basis of this evidence, the self-respondent technique for all persons 14 years and older was adopted. Information for persons 12 and 13 years old is obtained by interviewing another adult household member (usually a parent).

The household portion of the National Crime Panel focuses on measuring the extent of victimization ascribable to the major index crimes of assault, burglary, larceny, auto theft, and robbery. A series of screen questions are asked to determine if any attempted or actual victimization occurred during the reference period. After all the screen questions have been completed for an individual, questions designed to obtain information on the circumstances and characteristics of the incident are completed for each reported incident. These include items such as time and place of occurrence, injuries suffered, medical expenses incurred, number, age, race, and sex of offenders, relationship of offender to victim (stranger, casual acquaintance, known by sight, relative), and other detailed data relevant to a complete description of the incident. In addition, data are being collected about the victim on such subjects as education, migration, labor force status, and if employed, occupation and industry in which employed.

Legal and technical terms, such as assault and larceny are not used in the interview. Rather, through a structured questionnaire, a complete description of the incident and the elements of the behavior (both victim's and offender's) is obtained. On the basis of the description, the

incidents are classified at a later time into the index crime categories or are excluded from the survey as out-of-scope.

Interviews in the national survey are conducted by the Bureau's staff of permanent interviewers. Interviewers are given an extensive initial training program, which covers material relevant to the general current surveys conducted by the Bureau, as well as that which is concerned solely with the National Crime Panel. Monthly memoranda, explaining new procedures or clarifying existing procedures, are sent to the interviewers. Periodically, the interviewers are required to attend refresher group training programs.

An interviewer observation and reinterview program, to ensure the quality of data collection, is an integral part of the field operation. Supervisory personnel observe each interviewer on a regular and continuing basis throughout the year. In addition, each month a sample of the interviewers' work is reinterviewed by supervisory personnel. Based upon the observation and reinterview results, interviewers identified as needing help may be retrained in particular aspects of the survey procedures.

The cities surveys are conducted by an independent staff of interviewers recruited especially for that particular survey. These interviewers also undergo an extensive training program, which is essentially the same as that for the national sample, but with more time devoted to interviewing techniques. Interviewing is conducted over a 3-month period. A quality control program, consisting of supervisory observation and reinterview, is conducted similar to the national survey.

In general, the National Crime Panel has been well received by the respondents. The average response rate for the first 12 months of the national sample is about 96 percent. The response rate for the 13 cities interviewed thus far ranges from 92 percent to 98 percent.

The length of the interview varies, depending upon the number of household members interviewed as well as the number of victimizations in the household. Generally, the average time needed to complete the screen questionnaires for a household is approximately 20 minutes. Each incident report requires approximately 10 minutes for completion.

Periodically, supplemental inquiries may be added to the National Crime Panel. One such inquiry is a series of questions designed to collect data on a general attitude toward crime, the fear of crime, the effect of this fear on activity patterns such as choice of shopping area and places of entertainment, and the public's view of the police. There are two groups of questions—one group is asked only once in a household and refer to attitudes toward such things as respondent's neighborhood and shopping patterns. The second group of questions

are asked of each household member 16 years or older. These ask about individual attitudes toward such things as local police and fear of crime.

Data from the National Crime Panel will be compiled and published on a quarterly basis. Information will be produced on incidents that occurred during a particular quarter, rather than by victimizations that were collected during a particular quarter. Data for the July-September 1972 quarter will be tabulated from interviews conducted in August 1972 through March 1973.

These reports will provide crime rates by type of crime, victim characteristics, and geographic distribution. The types of crimes are not strictly defined according to definitions used in the Uniform Crime Report (UCR) issued by the Federal Bureau of Investigation, but in terms of the most serious aspect of the incident; i.e., the categories are descriptive of the incident itself. For example, in the survey, the two main subcategories of personal crimes are "Assaultive violence," which includes incidents with and without theft, and "Personal theft without assault." Robberies involving forcible attacks are classified as "Assaultive violence with theft," because the assault is the most serious aspect of the crime. Robberies involving only threats of harm, on the other hand, are classified under "Personal theft without assault." Using the strict UCR definitions, both of these incidents would be classified as "Robberies." However, classifications comparable to the UCR classifications can be obtained by combinations of several survey categories. For example, "serious assault, without theft" plus "attempted assault, with weapon" are comparable to the UCR definition of "aggravated assault."

Although the NCS is now operational and data are being produced on a regular basis, several methodological questions require further investigation to ensure collection of accurate and meaningful data on a continuing basis. The reinterview sample will be used to provide measures of the net difference rates and an index of inconsistency for various items. These are measures that reflect the reliability and validity of the original responses. Reinterview results are not available at this time.

An area of concern, described earlier, relates to self-response versus a household respondent, particularly for 12-and 13-year olds. Currently, data for persons 14 years old and over are obtained from each individual and for persons 12 and 13 years old from the household respondent, usually a parent. The primary reason for following this procedure concerns the sensitivity of the questions as they relate to the young children and their parents. Would parents allow their children to be interviewed? If they did allow it, would the children admit to all of their victimizations, particularly if the parents were present during the interview? How would the children themselves react to the

questions and the interview situation itself? In January 1974, a test of self-response for this age group (the 12-and 13-year olds) will be conducted in San Francisco. Half the sample, about 5,000 households, will be interviewed using the self-response procedure for all persons 12 years old and over. In the other half, interviewers will use the current procedure of self-response for persons 14 years old and over, with a household respondent reporting for 12-and 13-year olds.

Methods of interview in the National Crime Panel should be tested further. Currently, the initial contact with the household is by personal visit, with telephone interview permitted for all sample persons 14 years old and over not present or available for interview at that time. Data collected from personal interviews will be compared to that collected by telephone to determine if there are any significant differences. In addition, a test should be designed to evaluate an initial telephone contact with a household to determine the effect on response rates, accuracy of reporting, and cost implications.

As part of the developmental work for this program, a test was designed to determine the feasibility of self-enumeration by mail. Screening questionnaires were mailed to approximately 5,200 households; approximately 2,800 (54 percent) households responded to the screening questionnaire. Of these, 555 households (19.8 percent) were identified as definitely having been victimized, while 491 households (17.5 percent) did not supply enough information to determine if an incident had occurred. These 1,046 households were all visited by an interviewer, either to complete the incident report or to determine if an incident did occur, as well as a sample of the mail nonresponses. At this point, the response results, as well as the comparison of data from the mail versus personal interviews need to be evaluated further. It appears, however, that the mail, self-enumeration method of screening is not satisfactory.

In addition to the operational oriented research activities just described, further record check studies should be undertaken to compare information provided by the respondent to the interviewer with that reported to the police. Work in this area should include further testing of the recall period and experimentation with methods to improve recall by probing questions.

There are other areas which suggest research activities. One that may be of interest involves the level of underreporting by respondents. Does this affect only particular subgroups of the population? More important, however, is the measurement of underreporting. How can you estimate this level and then adjust the data accordingly?

Another point of interest is the response variability to individual questions. This is affected by the respondent reaction to the wording of the questions; i.e., what does

"neighborhood" mean? What does "threat" mean? Some work should be done in this area also.

A continuing survey such as the National Crime Panel presents the opportunity for refinement and improvement of survey methodology relating to the specific subject area surveyed. Necessarily, the effort in establishing the continuing program has been great and has precluded testing all of the techniques that would have been desirable. However, as new insights are developed and new problems are discovered, plans will be made for further study as resources can be made available.

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