

USES OF SURVEYS FOR ESTIMATING CRIME INCIDENCE

Albert D. Biderman, Bureau of Social Science Research, Inc.

The use of surveys of random population samples for studying crime has been touted by many commentators on the work of the President's Commission on Crime and Administration of Justice as the most important recent innovation in the study of crime. I am inclined to agree with this comment, although, as I will try to make clear, I have many painful experiences with limitations, difficulties and costs of the method. That using cross-sectional population surveys should be a major innovation, however, is a commentary on the stultifying influences that have reigned in the field of criminological statistics during the past 20 years--years which have seen revolutionary developments in our capacities to develop useful and significant social information. Given what is now the over-use of sample interview surveys for thousands of trivial purposes, private and governmental, it is striking that this garden-variety means of studying almost anything in the human field was not used for the study of crime in any consequential way until 1966.

The primary effort in these studies was directed to forming estimates of the frequency with which citizens were victims of criminal offenses. The basic rationale for undertaking this work was set forth in September 1965 in a proposal made to the President's Commission on Crime in the District of Columbia:

Criminological studies have largely developed their data from law enforcement, correctional, and judicial agencies, and from persons arrested or jailed. The only consequential exception to this are studies using high school and college students as subjects or respondents. As a consequence, there is a vast terra incognita in our knowledge of crime. Consider, for example, the accepted proposition that "offenses known to the police" are the "best" measure of crime because these are the data "closest to the commission of the crime." Insofar as offenses of victimization are concerned, it would seem that data developed directly from questioning the public would be "closer" to the crime and, for at least many classes of offenses, would suffer less from errors of underenumeration than data derived from reports to the police and crimes known directly to the police.

Some theorists go so far as to assert that "crime" should be defined to refer to relationships between those committing certain acts and agencies of justice if the concept is to accord realistically with the data used in its study....

One method of reconnoitering some of the base of the iceberg has yet to be

employed in the U.S. This would involve questioning a large statistical sample of the population about direct experience with crime during a given time period. While this method would be subject to various types of inadequacies and errors of reporting--notably, insofar as crimes of self- and mutual-victimization and those in which the victim is an impersonal entity are concerned--it would nonetheless represent an enormous supplementation of existing knowledge of the extent of criminal behavior. However consequential the omissions and distortions of the images of the relevant phenomena that might be involved in the application of this method, they would in any event be different ones than those of the traditionally applied methods. As in many other problems of scientific observation, the use of approaches and apparatuses with different error properties has been a means of approaching truer approximations of phenomena that are difficult to measure.

Quite apart from the many published technical criticisms of currently used crime statistics, it was felt to be particularly essential, in view of the innovational law enforcement programs being contemplated, to develop some information regarding the incidence of crime that was independent of reports of citizens to the police. This is the case because some of the improvements in law enforcement may have the incidental consequence of increasing the number of crimes known to the police and hence estimates of the crime rate for an area, while actually these measures may reduce the occurrence of crime. A possible effect of this type can readily be discerned in the area of police-community relations. Where many of the citizens are hostile toward or fearful of the police, presumably they are reluctant to deal with them except when necessary. Under such circumstances, many crimes would go unreported. As police come to enjoy greater confidence and respect, a citizen is more likely to see some possible benefit, and certainly no harm, in reporting to the police when he is victimized.

More direct effects of improved police practices on crime statistics have been noted in a great many cities including New York and Chicago. In these cities, instituting a more professional attitude toward crime statistics resulted in extreme elevations of reported crime rates.

Heightened salience of the crime problem attendant to well publicized reform measures can also produce spurious elevations of the crime rate. For example the individual citizen's greater concern with the possibility of being victimized may lead to more widespread purchases of theft and burglary insurance. The need to make a report to the police in order to establish a claim for loss provides the covered citizen with a

reason for reporting an incident to the police where he otherwise might regard doing so as completely pointless.

The interviewing studies undertaken through grants and contracts of the Office of Law Enforcement Assistance, Department of Justice, to support the work of the President's Crime Commission, included developmental and pre-testing work using Washington, D.C. population samples, a survey of a national household sample by the National Opinion Research Center, and coordinated intensive studies in selected police districts in three major cities by the Bureau of Social Science Research and the Survey Research Center of the University of Michigan.

The objectives of the surveys went considerably beyond exploring the incidence of criminal victimization. For each crime incident mentioned by respondents, they were questioned on when, where, how and why the offense had taken place, on characteristics of the offenders; on the extent and nature of losses and recovery or indemnification for these; and on investigatory and adjudicatory processes that ensued. All of this information regarding victimization could be related to detailed information that was also collected in the surveys on social background characteristics of the victims, their attitudes toward many issues relating to crime, law enforcement and justice; and some other relevant aspects of their experience and behavior.

Contrasts of Survey and Agency Statistics

I cannot discuss adequately here the methods or results of these several surveys. Reports prepared for the Crime Commission are available (Biderman, et.al., 1967; Ennis, 1967; Reiss, 1967) and Reiss and I (Biderman and Reiss, 1967, Biderman, 1967) have recently published some critical examination of theoretical and methodological problems inherent in these studies. I will rather use this occasion to consider the implications of some instructive contrasts between the interviewing survey approach and the agency statistics on which our knowledge of crime incidence hitherto has been exclusively based. The survey method differs from agency statistics in the following ways:

1. Attention to events that elude agency attention and action. The primary purpose of these studies was to try to measure unreported crime--crimes that the police never learned about. The country is as interested in that part of a social problem that altogether eludes the apparatus set up to deal with it. Indeed, in some ways, there may be even more concern with what is not being dealt with at all by our agencies for controlling problems.

2. Special adaptation to information purposes. The entire system for collecting and processing information was organized and structured for meeting informational requirements and

was independent of administrative or operational concerns including personnel, concepts, instruments, controls and incentives. Procedures were selected for the purposes of understanding and explaining events, rather than action, administration or case judgment. Operational definitions can be readily and truly uniform, with measurable reliability. (Actually for the work done for the Crime Commission, some definitional hobbles were placed on the procedures to make it easier to compare results with official statistics.)

3. Sampling. Probability samples rather than attempts at universal enumeration were employed. (Presumably, there is now widespread understanding of why it is that we are usually able to approach more exhaustive representation of phenomena by the sampling method rather than by attempts at total enumeration, so I need not elaborate on this point.)

4. Motivations of information sources. Where agency data collection exploits the interests of parties in the outcome of events to secure data from them, survey methods usually seek to exploit the advantages that stem from the fact that no material advantages ensue from testimony. This includes the guarantee of anonymity to respondents, the absence of sanctions or rewards to control the testimony given, and the release of aggregated information only.

5. Freedom from jurisdictional constraints. Attention can be given to whatever events and whatever aspects of them that one wishes to select, either because of their social importance or their potential usefulness for causal explanation. This is in contrast to the constraints on agency statistics arising from the limited mandates of the agencies. For example, the geographic boundaries of attention, distinctions among persons (e.g., between adults and juveniles), and the weights of significance attached to data can be adjusted in any direction independently of varying legal or administrative definitions which restrict agency attention. The very definition of "crime" can be made as stringently dependent on or as independent of any criterion desired. (Thus, for example, if our interest is in economic costs, we may well wish to ignore for a given analysis whether damage was caused by an adult or a juvenile; if it is behavioral, we may not wish to limit ourselves by ruling out dangerous drugs that are not legally defined as narcotics or new drugs that may not yet have come under any form of legal control.)

6. Visibility of data costs. Special purpose data collection, despite economies of rationalized design and sampling, is likely to appear considerably more costly than using agency by-products as the original data source. In part; at least, these differences are illusory. Since statistical activities in the *ad hoc* endeavor are organized independently, all or most of the effort going into the system is separately budgeted and paid for, rather than much of it being absorbed by

administrative and operational agencies. (The time of basic informants in both agency and special-purpose statistical systems usually is not compensated by the statistical system.)

Low Operational Utility of Survey Data

The foregoing characteristics of the surveys as modes of developing knowledge of crime give them great value for some uses and users, but detract from their usefulness for others. Thus, for example, the survey method would be of very limited usefulness as a source of operationally useful information for a police department. It is an extremely costly and inefficient device for developing information on crimes--even on those crimes that victimize the individual citizen. In the highest crime-rate area in which we conducted interviews, if one asked respondents to give information on all criminal incidents of which they had been a victim in the preceding twelve months, the number of crimes for which the survey would yield information would be slightly fewer than the number of respondents in the sample. This is the case even though the victimization rate (0.83) determined by the citizen survey in this area proved to be vastly higher than that estimated from police offense data. An expensive survey of 1,000 cases covering a one-year period, therefore, yields fewer crime reports in a city like Washington, D.C. than the police register in a single week. It would be prohibitively expensive to use the survey method to develop information with the detail by time and place needed to afford concrete operational guidance for any police department.

To produce data sufficient for any analysis whatsoever, survey interviews must ask people about a considerable time-span. The further the respondent must stretch his memory, the greater the effects of forgetting and distortions of recall. The magnitudes of these effects are familiar in all surveys for objective data and they become particularly serious when the survey deals with ephemeral events, such as crimes, which yield incidence statistics, rather than with durable states of the subject suitable for prevalence statistics.

It was also found that most offenses that victimize citizens are not among the most significant of life events, and hence are not readily recalled in an interview. Relative to, say, births and deaths in one's family, major surgery, getting a job or losing one, or buying a new car, the bulk of crimes involve trivial and brief consequences for the victim. As a consequence, methodological analyses of the data from the crime interviewing survey showed pronounced signs of recency and telescoping effects, and other interview error.

Crimes that do have major consequences for the victim's person or property--and consequently those which deserve priority in police action--are so infrequent as to require huge samples to

produce N's of analyzable magnitude. To illustrate the order of magnitude involved, if we use the Uniform Crime Report Crime Index as a measure of incidence, the expected number of mentions of crimes involving serious violence or threat of violence in a random sample covering 10,000 citizens would only be about 25. Even though surveys can yield some multiple of the crime rate that figures in annual police reports, the absolute magnitudes of the data from surveys with a feasible sample size are therefore much too small to permit of the kinds of analysis that would be useful as operational intelligence for law enforcement.

The guidance of police operations, however, is not the sole nor necessarily the major use of crime statistics. At the moment, their impact on public understanding and attitudes toward problems of crime and their significance for the development of intelligent social policies relevant to public order and safety seem of greater significance. These public knowledge and policy functions of statistics--which it has lately become fashionable to designate as "social indicator" uses--need to be distinguished clearly from the very specific forms of statistics useful at the operational level of criminal justice agencies as well as from the mid-range kinds of statistical data that are useful at the level of agency administration.

At the present time, the three kinds of uses are confounded mentally and organizationally with much mischief to our crime statistics. The same confusion, however, pervades much of the rest of our national statistical apparatus. Each of the three kinds of functions of information, I believe, is best met by a different form of organization and a different organizational position vis a vis other governmental activities. Such organizational separation can help serve the following ends:

1. To avoid confounding the purposes of knowledge with those of immediate action to the detriment of all types of use.
2. To separate those forms of information collection, aggregation and use which present grave hazards to freedom and privacy from those in which such hazards are minimal.
3. To extend the scope of available information to the entire range of pertinent phenomena, not merely those which are in a given agency's operational purview.
4. To place each type of informational activity in responsive relationship to its major users.

Organizational Location of Informational Activity

The field of criminological statistics has been handicapped because it has been centered organizationally at the middle one of three levels

of use I have mentioned--that of agency administration. However, the great demand for statistical information on crime at both higher and lower levels of specificity has distracted the work at the administrative level, so that it has not met the purpose of any of these levels very well.

The lowest level, the most specific, of information needs is that for operational intelligence. This is the kind of information usable at the actual line operational units of an activity--by the police precinct, the individual patrolman, the parole officer or the judge. Such information tends to be useful in direct proportion to its fit to the organization and operating procedures of that particular unit, and to the very specific kinds of cases with which that unit has to deal. A national uniform crime reporting system inevitably imposes a set of categories that accords poorly with the very specific needs of any given jurisdiction. Although our statistical system places great burdens for recording and processing information for statistics on these lowest operating levels--on the cop, on the beat or the parole officer--I believe this level gets next to nothing in return. They give, but do not receive; I suspect as a consequence, they do not give very well.

To be of use at higher levels of organization--administration or management--information from the operational level has to be reordered, stripped of its idiosyncratic features, generalized. Our criminal justice statistics currently are products of the administrative agencies in the field. To the extent that there is a coherent rationale for the concepts, units of measurement, modes of aggregation, semantics of table labelling and the rest of the apparatus of these series, the rationale of the agency administrative perspective toward these problems largely obtains. Nonetheless, I do not believe that most of the current statistics are of any great usefulness as working tools of administration in the crime field. This is because of powerful factors that lead to their being prepared much more with an eye toward their external consumption rather than internal consumption by administrators and managers. With regard to the Uniform Crime Reports, for example, I can see readily how these series might affect the relations of a chief of police with his mayor and the public and, hence, his policy decisions. But I have difficulty in seeing much other intelligent impact they might have on his decisions on how to administer his department.

The final level of use is that which is required for general public understanding of the problems and for informing legislatures and other general policy-makers. Professor Wilkins has discussed the kind of rates that would be particularly instructive for the public and general social policy.

I believe there is an important role that can be played by initiating a statistical series in the crime field based on periodic surveys of the public and of special population groups, such

as businessmen and institutional officials. Such a series can have primarily social-indicator uses, rather than administrative or operational ones. The potential uses of such surveys will be ideally served if they are sponsored or undertaken by an agency that does not have law enforcement as a primary responsibility.

Surveys of Operational Agencies

The foregoing arguments are not intended to gainsay the potentialities of agency statistics and the importance of improving them. This is particularly important for the administrative and operational uses of data, but data from agency sources can also contribute far more to social indicator knowledge. For example, many of the limitations of police statistics for which use of the survey method has been recommended as a corrective are not inherent in the law enforcement informational systems. Police agencies collect far more information than they process statistically and vastly more than they publish; for example, information on victims, characteristics of persons arrested, details regarding the nature and circumstances surrounding reported offenses, etc.

Such information is not readily assimilable into any broad statistical reporting system, however, because of the highly fractionated organization of law enforcement in our highly federal system. The limitations of resources, the absence of uniform definitions and practices, and the disincentives against full and accurate reporting by local jurisdictions and individuals can never be satisfactorily overcome by a voluntary and unrecompensed reporting system. To tap these resources will require data-collection systems similar to some which are used to collect information from samples of the public and of business enterprises. Such systems would make use of specially drawn samples of jurisdictions, as well as samples of personnel in each for certain specific data. In addition to voluntarily submitted questionnaires, trained statistical personnel are required to interview, observe, or code records as close to the original significant event as possible. Just as in the case of data developed from the public, the identification of individuals and individual jurisdictions may be kept confidential where these data are collected for social indicator uses. This is consistent with having this information serve the legitimate national purposes--knowledge and understanding--while safeguarding against illegitimate centralized interference in local affairs.

To give an illustration from the examination of unreported crime, it was assumed that the problem involved primarily the failure of citizens to report crimes to the police. Our results from a citizen survey in one city cast doubt on this. More offenses involving the victimization of private citizens apparently are not reflected in police statistics because the police do not count many citizens' complaints than because of citizen

failure to report offenses to the police. I am sure that we would greatly reduce the "dark figure" of crime statistically if we were able to analyze time samplings of all incoming telephone calls for a national sample of police jurisdictions. (I hope statisticians will always bear in mind that an operator frequently has something he rightly feels is more important to do with his time than to fill out a form--even a "required" form--however.) An error of the past, however, has been to impose on the operational system an informational system that is heavily influenced by academic and political needs for data.

By the same token, much of the potential of surveys of the general public for measuring crime was not realized in the first trials of the method that were sponsored by the Crime Commission. This came about because in the collection and analysis, a dominant consideration was for the surveys to yield data that would be as comparable as possible to the offense statistics of the Uniform Crime Report and of local jurisdictions. As we have pointed out elsewhere (Biderman, 1967; Biderman and Reiss, 1967), the categories, units, rate-calculations, and, indeed, some of the underlying perspectives that are appropriate in looking at crime from a law enforcement perspective, are different from those which would be ideal for citizen surveys. Collection procedures must be adapted to the manner in which citizens experience crime. The major usefulness of the data thus collected also depends on using those analytic means which will reveal the crime experience of the citizenry.

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