

Project Narrative—Methodological Research to Support the National Crime Victimization Survey: Self-Report Data on Rape and Sexual Assault

Project abstract

Under a cooperative agreement with the Bureau of Justice Statistics, Westat, Inc. will develop and test optimum data collection procedures for self-report data on rape and sexual assault. The focus of the research is to develop, implement, and test survey methods for providing estimates of rape and sexual assault, and to determine the feasibility of using these procedures in the National Crime Victimization Survey (NCVS) program. Two different designs for collecting self-report data on rape and sexual assault will be developed and tested. One will be an optimal design identified by the BJS and a CNSTAT panel convened to assess the optimum data collection methodology for rape and sexual assault. The second design will be very similar to those used by the public health approach, which is frequently cited as an alternative to the NCVS for estimating the prevalence and incidence of rape and sexual assault. The test will assess the relative feasibility, cost, and error components of the two designs. More specifically, the test will address the relative accuracy and quality of the estimates of the prevalence and incidence of rape and sexual assault across the survey designs. An important component of the research will be an assessment of whether the improved design could be implemented within the existing NCVS program and, if not, what vehicle would be appropriate. The study has three key objectives: 1) develop and pilot test an optimal design to collect self-report data on rape and sexual assault; 2) develop and pilot test a comparison design using Random Digit Dialing (RDD) to collect self-report data on rape and sexual assault; and 3) conduct detailed analytical comparisons of the two designs against each other and the existing NCVS program.

Project-Specific Information¹

The NCVS collects data from more than 94,800 persons in 62,200 households every 6 months and provides the nation's only measures of the incidence of criminal victimization not reported to authorities. Since 2008, BJS has initiated a number of projects to assess and improve upon NCVS program methodology, including redesigning the sample plan, comparing alternative modes of interviewing, reducing non-response bias, examining various reference period lengths, testing the effectiveness of victimization screening questions, and exploring the feasibility of producing sub-national estimates of victimization. As a part of the continuing effort to improve the survey, the focus of this solicitation is to develop and evaluate improved procedures for collecting self-report data on the sensitive and difficult to measure crimes of rape and sexual assault.

¹*This information is an extract from the BJS solicitation for the project and may differ slightly from the project award.*

The NCVS is an omnibus crime survey conducted by the Census Bureau under the sponsorship of BJS. The NCVS program produces estimates of many common law crimes including rape and sexual assault through self-report interviews of persons selected in a national stratified sample of addresses drawn from each decennial census. All residents age 12 or older at each address are interviewed at 6-month intervals. The interview has two components: a screening questionnaire and an incident report. For every incident uncovered in the screening questionnaire, an incident report is filled out, obtaining a range of information about the circumstances, offender, and consequences to the victim. The primary measures produced by the NCVS are annual incidence, year-to-year change, and trend estimates.

Challenges exist in the collecting of self-report data on rape and sexual assault. For almost two decades, there have been a number of competing national estimates of the level and the change in level of rape and sexual assault. The official estimates of these crimes released by BJS and based on the NCVS have typically been lower than estimates obtained from surveys contracted for by other federal agencies and by private groups. For example, the National Violence Against Women Survey (NVAWS), sponsored by the National Institute of Justice (NIJ) and the Centers for Disease Control and Prevention (CDC) and conducted in 1995–96, estimated an incidence rate for rape (counting multiple rapes) of 8.7 per 1,000 women aged 18 or older, compared with an incidence rate for rape (including attempted rape) and sexual assault in the previous 12 months of 2.3 per 1,000 women aged 12 or older from the 1996 NCVS.²

Some of the differences in these estimates result from more and less inclusive definitions of rape and sexual assault. The NCVS, for example, emphasizes felony forcible rape, while the National Women's Study employs a much more inclusive definition. Even when the surveys use comparable definitions, however, the methodology used to elicit reports of these events can differ dramatically and produce very different estimates of the incidence of these crimes. A number of discussions have taken place regarding the desirability of various survey design features, including sample design, screening strategy, reference period, bounding, cuing strategy, types of cues, context, and respondent selection. In addition, differing interviewing modes have been discussed, including telephone interviews in NVAWS, in-person interviews as in the NCVS, and more private, Audio Computer Assisted Self-Interview (ACASI) options like those used in the BJS-sponsored National Inmate Surveys of sexual violence among correctional populations.

²See Tjaden, P. and Thoennes, N. 2000. *Full Report of the Prevalence, Incidence, and Consequences of Violence Against Women*. NCJ 183781. National Institute of Justice and Centers for Disease Control and Prevention, Washington, DC; Ringel, C. 1997. *Criminal Victimization 1996*. NCJ 165812. Bureau of Justice Statistics, Washington, DC.

The differences that arise from using different methodologies and surveying different populations have resulted in debate over the ideal method for collecting self-report data on rape and sexual assault.³ In addition, these differences have resulted in confusion among stakeholders as to which estimates are more accurate. This debate has had the negative consequence of raising doubts about the self-report methodology itself.

In an effort to address this debate and to determine an agreed upon method for measuring rape and sexual assault in self-report surveys, BJS has asked the National Research Council (NRC) to convene a Committee on National Statistics (CNSTAT) panel. The panel has been asked to review the state of self-report methodologies with respect to rape and sexual assault, make recommendations as to the definition of these crimes within the mandate of the NCVS, and identify the optimal methodology for measuring the incidence and prevalence of these crimes using self-report surveys.

The deliberations and recommendations of the panel will shape the optimal design that is ultimately developed and tested under this contract. A mechanism will be worked out so that the funding recipient can be informed of the panel's work as it progresses while respecting the National Research Council's provisions for confidentiality of its panels' deliberations. When the initial design work is completed, the panel will be asked to comment on the design and assess how consistent it is with the panel's recommendations. This solicitation seeks applicants to create and test two different designs for collecting self-report data on rape and sexual assault. One of these designs will be the optimal design identified by the CNSTAT panel or as reasonable an approximation of that design as can be achieved. The second design will be one very similar to those used by Dean Kilpatrick and his colleagues, which is frequently cited as an alternative to the NCVS for estimating the prevalence and incidence of rape and sexual assault.⁴

³See Fisher, B. 2009. *The Effects of Survey Question Wording on Rape Estimates: Evidence from a Quasi-Experimental Design*. *Violence Against Women*. 15: 133-147; Fisher, B. and Cullen, F. 2000. *Measuring the Sexual Victimization of Women: Evolution, Current Controversies and Future Research*. In National Institute of Justice (ed.), *Measurement and Analysis of Crime and Justice*, Vol. 4. National Institute of Justice, Washington, DC; Kilpatrick, D. 2004. *What is Violence Against Women? Defining and Measuring the Problem*. *Journal of Interpersonal Violence*. 19: 1209-1234; Rand, M. and Rennison, C. 2005. *Bigger is not Necessarily Better: An Analysis of Violence Against Women Estimates from the National Crime Victimization Survey and the National Violence Against Women Survey*. *Journal of Quantitative Criminology*. 21: 267-291.

⁴See Kilpatrick, D., Edmunds, C., and Seymour, A. 1992. *Rape in America: A Report to the Nation*. Arlington, VA: National Victim Center and Medical University of South Carolina; Kilpatrick, D., Resnick, H., Rugiero, K., Conoscenti, L., and McCauley, J. 2007. *Drug-facilitated, Incapacitated, and Forcible Rape: A National Study*. Charleston, SC: Medical University of South Carolina and National Crime Victims Research and Treatment Center.

The test will assess the relative feasibility, cost, and error components of the two designs. More specifically, the test must address the relative accuracy and quality of the estimates of the prevalence and incidence of rape and sexual assault across the survey designs. The successful applicant will be asked to examine the evidence on the relative desirability of various design attributes for reporting of rape and sexual assault in the development of the two designs. The applicant will also be asked to assess whether an improved design could be implemented within the existing NCVS program and, if not, what vehicle would be appropriate.

Expected Benefits of this Research

This work will contribute to our understanding of sexual violence and the measurement of these crimes. This understanding, in turn, will provide routine information that can guide policies to prevent and respond to rape and sexual violence. More specifically, this research will—

- determine the optimal design for measuring rape and sexual assault.
- develop improved collection procedures for self-report data on rape and sexual assault.
- evaluate the accuracy, utility, and costs of improved collection procedures relative to those used heretofore.
- determine whether the optimal design can be accommodated within the current NCVS program or whether an alternative collection is necessary.
- provide improved measurement of rape and sexual assault.
- improve national estimates of rape and sexual assault.
- improve data collection methodology and measurement within the NCVS program.

Goals and Objectives

The goals of this solicitation are to develop and test two designs for collecting self-report data on rape and sexual assault and to compare outcomes of each design against the other and against the existing NCVS. BJS and the funding recipient will work concurrently with the CNSTAT panel to develop an optimal design for a self-report survey of rape and sexual assault. The successful applicant will then conduct a pilot test of the optimal design and the comparison design.

The funding recipient will evaluate the estimates of rape and sexual assault from each of the two designs and compare them with estimates from the existing NCVS. These comparisons will be used to determine whether the optimal design is feasible and yields higher quality data at relatively reasonable cost. In addition, the recipient is expected to provide an assessment of whether an improved rape and sexual assault data collection methodology can be implemented within the existing NCVS program or whether a separate survey collection is necessary.

The study has three key objectives:

1. Develop and pilot test an optimal design to collect self-report data on rape and sexual assault.
2. Develop and pilot test a comparison design using Random Digit Dialing (RDD) to collect self-report data on rape and sexual assault.
3. Conduct detailed analytical comparisons of the two designs against each other and the existing NCVS program.

To accomplish the first objective, the funding recipient will draw upon the CNSTAT panel's work on the desirability of various design attributes for reporting of rape and sexual assault and its determination of the optimal design for collecting self-reported data on these crimes. In approaching its work, the CNSTAT panel will consider the optimal design as one that maximizes data quality and accuracy of reporting. Members of the successful applicant's staff will be invited to all information-gathering meetings of the CNSTAT panel, and a mechanism will be worked out so that the applicant can be kept abreast of the panel's thoughts regarding optimal designs. For purposes of preparing cost estimates for this solicitation, applicants should assume that such a strategy would involve Computer-Assisted Personal Interviewing (CAPI) at the household level and ACASI at the individual level; however, the exact elements of the final design will not be determined before the end of Phase 2 (outlined below).

In developing the optimal design, the funding recipient and BJS will hold one or more meetings with stakeholders in the area of rape and sexual assault victimization. The purpose of these meetings is to gather information on (1) policy and program needs for data on rape and sexual assault; (2) varying legal definitions across states for rape and sexual assault; (3) best methods for representing the definitions in survey instruments so their meaning is clear to respondents; and (4) best methods for obtaining as complete reporting as possible, including methods whereby respondents may report anonymously.

Following development and build-out of the optimal design, the funding recipient and BJS will review the results with the CNSTAT panel in an effort to refine the design prior to pilot testing.

The second objective involves the development of a comparison design, using RDD with a dual frame to allow for the sampling of cell phone-only households. The purpose of the second design is to provide a point of comparison (to the optimal design) that is representative of previous efforts in measuring rape and sexual assault outside of the NCVS. In developing this design the funding recipient will review approaches used by previous researchers and surveys addressing rape and sexual assault, including NVAWS, the National Women's Survey (NWS), and the National Intimate Partner and Sexual Violence Survey (NISVS). In developing the comparison design, the funding recipient will have latitude to modify design features to some degree as exigencies require.

The third objective involves determining (1) the relative cost-benefit trade-offs among the three designs, (2) whether elements of a final design can operate within the existing NCVS program, and (3) how best to improve the measurement of the incidence and prevalence of rape and sexual assault in the existing NCVS, if the optimal design cannot be accommodated in the ongoing survey. This objective requires the funding recipient to conduct a rigorous evaluation of the optimal and comparison designs and to examine how data from the two data collection strategies compare with estimates obtained from the NCVS. Such an evaluation must include an assessment of the feasibility of each design as well as an assessment of the validity, reliability, data quality, cost-effectiveness, and relative yield of the differing collection strategies.

Assessing the quality of the data on sexual assault and rape produced by each design is extremely important in evaluating these procedures. Determining the relative accuracy of the data across designs is extremely difficult in self-report surveys because there is no gold standard of validity against which the results can be compared. The creativity with which applicants approach this task will be an important determinant of success.

One approach to establishing the quality of the data may involve demonstrating that specific procedures produce the results that past survey research practices say they should. If, for example, a sample obtained through RDD is highly selective in terms of the social attributes of the respondents and in terms of the incidence and prevalence of sexual crimes, then this would suggest that such data are not as representative as data obtained using other methods. This would also suggest that estimates based on RDD designs may have non-response biases and may be less accurate than estimates based on other sampling designs.

Moreover, if a two-stage screening procedure systematically excludes some events that fit the definition of rape and sexual assault, while a one-step procedure does not, then the one-step procedure could be deemed superior. These and other disaggregations of the data will indicate whether the optimal design is producing superior data for the reasons that theory and practice say they should. Assessing accuracy in this manner will require that the funding recipient be knowledgeable of the theory and practice of surveying for sexual crimes, and that they build into the instruments in each survey, information that will permit the necessary comparisons.