

# Measuring the Sexual Victimization of Women: Evolution, Current Controversies, and Future Research

*by Bonnie S. Fisher and Francis T. Cullen*

In the 1970s, the growing interest in the victimization of women prompted claims that rape and sexual assault in the United States, heretofore rendered invisible, were rampant. Existing data sources, including the Federal Bureau of Investigation's Uniform Crime Reports and the Bureau of Justice Statistics' National Crime Survey (later called the National Crime Victimization Survey), were roundly criticized for methodological flaws that led to the substantial underreporting of the sexual victimization women experienced. These concerns in turn led to the quest to construct measures that would more accurately assess the true extent of females' sexual victimization. This essay examines the development and key methodological issues characterizing this effort to measure the extent and types of sexual victimization perpetrated against women.

In the 1980s, Koss and others constructed detailed surveys devoted to measuring sexual victimization. They made three methodological advances: (1) the use of legal statutes as the basis for developing measures of rape and other victimizations; (2) the development of "behaviorally specific" questions that used graphic language describing the elements of a criminal victimization, so as to cue respondents to recall victimization incidents; and (3) the assessment of a wide, as

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opposed to a narrow, range of sexually victimizing conduct. Researchers in the 1990s incorporated these advances into their surveys and merged them with the methodology utilized by the National Crime Victimization Survey. From Koss and others, they borrowed the strategy of asking behaviorally specific questions to cue or “screen” respondents who may have been sexually victimized. From the National Crime Victimization Survey, they employed an “incident report,” which relied on detailed questions to determine whether a criminal victimization took place and, if so, how it should be categorized.

The research in the 1990s has provided valuable findings but also has illuminated a host of methodological issues that warrant further attention. Many of these issues involve the potential inconsistencies, if not biases, in responses that are introduced by the screen questions—incident report methodology. To resolve these issues, the next generation of research on sexual victimization might benefit from more sophisticated surveys that obtain qualitative data from respondents within the confines of a structured survey instrument.

## ABSTRACT

Until the 1970s, relatively little consideration was given to the ways in which females were victimized criminally (Belknap 1996). However, at this time, criminologists—many of them female scholars who embraced feminist theory and were politicized by the prevailing social movements of the 1960s—turned their attention to examining the sexual victimization of women in the United States. Rape was reconceptualized as a crime of power—of males using their physical and social dominance to sexually assault women “against their will” (see, e.g., Brownmiller 1975). There also was an increasing effort to illuminate that rape was not confined to “stranger” victimizations but could be perpetrated by men that females knew intimately. This observation resulted in the creation of a new language to speak of intimate rapes—terms such as “acquaintance rape,” “date rape,” and “marital rape” (see Parrot and Bechhofer 1991; Russell 1982, 1984). Advocates simultaneously campaigned to implement legal changes that afforded rape victims more protection in the criminal justice system, including, for example, rape shield laws, police units trained to work more sensitively and effectively with rape victims, and rape crisis centers (Geis 1977; Goldberg-Ambrose 1992; Jensen and Karpos 1993; Muehlenhard et al. 1994).

Feminist scholars often argued that the sexual victimization of women was integral to patriarchy and thus was widespread in the United States. The difficulty, however, was that the empirical literature on the extent and nature of sexual victimization was sparse. The main sources of the extent of criminal victimization in the Nation—the Uniform Crime Reports (UCR) and the National Crime Survey (NCS)—were deemed hopelessly biased. Scholars claimed that these data sources substantially underestimated the true incidence of rape—the UCR because it relied on reported crimes when many rapes were not reported to the police, and the NCS because it was ostensibly poorly designed to elicit reports of rape from interviewees who had, in fact, been raped (Gordon and Riger 1989; Koss 1992, 1993a, 1993b; Russell 1984). The critical issue was how to develop measurement strategies that would reveal the “true” extent in American society of not only rape but also other forms of sexual victimization.

This task was taken up by a number of scholars—with Mary Koss and her colleagues being the most influential—who over the past two decades have used specially designed surveys to ask women about the extent of their sexual victimization (e.g., DeKeseredy and Kelly 1993; Schwartz and Pitts 1995; Kilpatrick, Edmunds, and Seymour 1992; Koss and Oros 1982; Koss and Gidycz 1985; Koss, Gidycz, and Wisniewski 1987). This research generally revealed that the extent of rape was considerably higher than that reported by the official UCR statistics or by the Government-sponsored NCS data. Further, this work showed that a large percentage of women had experienced types of sexual victimization that neither the UCR nor the NCS measured, namely, sexual

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coercion and unwanted sexual contact. These data thus suggested that the sexual victimization of women was a pervasive and multifaceted social problem that warranted both the attention of policymakers and governmental intervention (Crowell and Burgess 1996; Fitzgerald 1996; Goodman et al. 1993; Koss 1992; Koss, Gidycz, and Wisniewski 1987).

Despite the growth in the number of research studies, investigators have continued to be plagued by the daunting issue of how to accurately measure the extent and nature of rape and other types of sexual victimization. Serious methodological controversies exist and affect who is, and is not, counted as a victim. In particular, researchers have come to realize that conceptually defining and then operationalizing sexual victimization are complicated and, to a degree, imperfect enterprises—especially when deciding when an unwanted sexual advance crosses the line from imprudence to criminal behavior.

These methodological challenges have opened the way for conservative commentators to charge that the supposed “epidemic of rape” is an invention of feminist scholars. What about the data showing that rape is widespread? The critics accuse feminists of merely finding what they set out to find—of using research methods that are so flawed and ideologically biased that they present estimates of rape that are inflated many times over (Gilbert 1991, 1995; Roiphe 1993). In particular, critics contend, the definitions of rape and the survey questions used to measure rape are so broadly or poorly phrased that they “pick up” and count as rape a wide diversity of conduct, most of which could hardly be considered criminal in a legal sense.

In this contentious context—and after nearly three decades of concern about and research into the rape and sexual victimization of women—we have reached the point where it is useful to “take stock” of what we have learned and what we need to learn. The purpose of this essay is to review how the major studies have defined and operationalized rape and other types of sexual victimization. We attempt to elucidate what is distinctive about each of these approaches and to convey the strengths and potential problems inherent in given measurement strategies. This analysis is intended to set the stage for discussing the definitional and operationalization issues that will have to be addressed and rigorously examined if we are to advance our understanding of sexual victimization beyond its current level.

Specifically, in the section on the National Crime Victimization Survey (NCVS), we pay special attention to the strengths and weaknesses of the NCVS' attempt to measure sexual victimization through a two-step process that involves "screen questions" and an "incident report." In the next section, we turn our attention to the evolution of surveys specifically designed to measure sexual victimization. We focus in particular on Koss' classic "Sexual Experiences Survey" instrument and the critical analyses it elicited. In the following section, we consider more recent studies that have attempted to employ more sophisticated methods for measuring sexual victimization. We next review our own research as a vehicle for exploring central methodological issues that continue to confront the measurement of sexual victimization. Finally, we conclude this essay with recommendations for future research that attempts to measure sexual victimization.

Before embarking on this excursion through the evolution of the methods used to measure sexual victimization, three additional considerations must be mentioned. First, this essay examines only research based on victimization surveys, the main method used to measure the sexual victimization of women. For two reasons, we do not examine official measures of sexual victimization—including revisions to the UCR through the National Incident-Based Reporting System (NIBRS)<sup>1</sup>: the space available to us is restricted, and official statistics measure only crimes known to law enforcement, which are a small fraction of the sexual victimizations that occur. Lack of space also precludes us from examining sexual harassment. Its definition and measurement are plagued by some of the same issues that we discuss in this chapter (see, for review, Fitzgerald 1996; Gruber 1990).

Second, our essay focuses primarily on the nature and implications of the methodological choices researchers have made in developing questions and designing survey instruments to measure sexual victimization. We do not assess how other methodological choices—such as in drawing samples, in the context in which surveys are conducted, and in training interviewers—might affect individuals' responses on sexual victimization surveys and, in turn, the findings these surveys report. We urge interested readers to consult the emerging literature on these and related issues (see, e.g., DeKeseredy and Schwartz 1998; Lynch 1996a, 1996b; Koss 1992, 1993a, 1993b, 1996; Koss and Cook 1993; Schwartz 1998; see also Cantor and Lynch in this volume).

Third, it also is beyond the scope of this essay to examine systematically how legal definitions of rape and sexual assault might affect estimates of sexual victimization for specific jurisdictions. Thus, we do not examine whether variations in how States define rape and sexual assault potentially influence how many sexually victimizing acts are counted as "crimes" in given jurisdictions. We also do not consider whether specific legal definitions of these acts may

influence what acts victims in different States report to the police or report as crimes on victimization surveys. Even so, throughout this essay, we do consider how statutory legal definitions shape the content and interpretation of victimization surveys that are intended to measure *criminal* sexual victimization.

For example, the crime of rape traditionally has been defined as carnal knowledge of a person forcibly and against the person's will (see Searles and Berger 1987; Spohn and Horney 1992). But what does "carnal knowledge" encompass? At one time, this category included only penile-vaginal penetration, but legal reforms in the 1980s expanded this concept to cover, in many States, sexual penetration generally (i.e., vaginal, oral, and anal) and with different objects (e.g., tongue, bottle). Further, the construct of "against a person's will" now includes not only whether physical force was used or bodily harm threatened, but also whether the victim was unconscious or unable to give consent due to a young age, mental illness, mental retardation, or the administration of an intoxicating or anesthetic substance (Gilbert 1997; Searles and Berger 1987; Spohn and Horney 1992).

The challenge is how to develop measures that can count all acts that, according to these legal definitions, would fall under the rubric of rape. Researchers have generally followed one of two strategies: (1) select the statute of a specific State and use this to guide what legal elements are measured, or (2) select the elements of rape that are common to most State legal statutes and measure these. These strategies do not obviate fully the possibility of measurement error being introduced, but researchers learned early on that the failure to use a reasonable legal definition of rape to inform their analysis could result in far greater imprecision in what was "counted" as a rape. The trickier issue, as researchers discovered, was how to word questions in a survey instrument that were capable of measuring the legal elements of rape. How many questions were asked, how questions were sequenced, what behaviors were described, what specific words were used—all these became the focus of critical analyses and, in some cases, of ideological dispute. Much of the discussion to follow will dwell on these important details and on their implications for measuring rape and other forms of sexual victimization.

## The National Crime Victimization Survey

The major victimization survey in the United States is the National Crime Victimization Survey, originally termed the National Crime Survey. The NCS and the NCVS have been major sources of information about sexual victimization, although they have also been widely criticized for potentially underestimating the amount of rape in America. The NCS was redesigned into the

NCVS during the late 1980s and early 1990s, in part to address this shortcoming in the measurement of sexual victimization (see Bachman and Taylor 1994; Canter and Lynch in this volume). Annual estimates of rape and sexual assault from the redesigned NCVS were made available starting in 1993.

The NCVS is under the auspices of the Bureau of Justice Statistics (BJS). Like its NCS predecessor, the redesigned NCVS is a national household-based survey of an individual's experiences with crime victimization, whether or not the incidents were reported to the police. Using a stratified multistage cluster sample, the NCVS collects victimization data from a sample of about 90,000 individuals living in about 45,000 housing units (U.S. Department of Justice [DOJ], BJS 1997, appendix II). The survey employs a rotating panel design of housing units, with each unit being in the sample for 3.5 years; new households are constantly being added to the sample as other households complete their time in the sample. All household members age 12 and older are interviewed by male and female interviewers every 6 months during this period (seven times in all). The first interview is not employed in the reported estimates but is used only to bound the second interview, thus establishing a 6-month reference period for respondents. Thereafter, the previous interview serves as the bound for the subsequent interview. The first and fifth interviews are done in person; all others are conducted by telephone. Further, the NCVS uses computer-assisted telephone interviewing (CATI).

## **How the NCVS measures victimization**

The major feature of the NCVS is that victimization is measured in a two-step process. Respondents are first read a series of "screen questions" on whether a victimization may have occurred and, if so, they are then interviewed through a lengthy "incident report" about what may have occurred. In the NCVS, the interviews include seven individual-level screen questions. The intent of the screen questions is to "cue" respondents, or jog their memory, as to whether they had experienced a criminal victimization within the 6-month reference period. For this reason, these questions are intended not to be redundant and are designed to elicit a "yes" or "no" regarding victim incidents (Lynch 1996a, 1996b). When a respondent says "yes" to any screen question, the interviewer then asks him or her "what happened?" (i.e., "briefly describe the incident[s]"). The interviewer then asks "how many times" that type of incident occurred during the reference period. Examples of screen questions are furnished in exhibit 1, which is presented in the section on screen questions.

At the conclusion of the screen questions, the interviewer administers an "incident report" for each time a respondent mentioned an incident had occurred. This incident report contains detailed questions about the nature of the incident

(e.g., month, time, and place of incident; characteristics of the offender; police reporting behavior). It includes questions that ask whether the offender hit, tried to attack, or threatened the respondent, how the respondent was attacked or threatened, and whether injuries were suffered.

It is essential to understand that the NCVS uses the incident report *to determine, and thus count, whether a victimization has occurred*. Again, the purpose of the screen questions is to cue the respondent to remember victimization events. Answering “yes” to a screen question only allows the respondent to gain entry into the incident report. At this point, the respondent must answer “yes” to more detailed questions and/or give a verbal account describing a victimization to be counted as having experienced a particular type of victimization. An example of how incident report questions are used to categorize a victimization is presented later in exhibit 2.

Notably, most sexual victimization surveys use only a one-step process, essentially measuring victimization through a series of “cueing” questions that are meant to prompt respondents to recall victimization incidents. The risk of this one-step approach—that is, of not having an incident report—is that it may include reports of victimization that, on closer scrutiny, would not qualify legally as a rape or other type of sexual victimization. The advantage of the NCVS is that the incident-report questions in essence confirm or validate what occurred to the respondent and thus *potentially* allow for a more valid categorization of incidents as to (1) whether they took place and, if so, as to (2) what type of victimization transpired. Despite this advantage, the quality of the NCVS as a measure of sexual victimization is contingent on how well the screen questions cue respondents and whether the incident report validly classifies what respondents experienced in the course of a victimization incident. These issues will occupy much of our attention in the sections to follow.

## The first step in measuring sexual victimization: NCVS screen questions

In the original NCS, the respondents were asked four screen questions that assessed whether they were “attacked” or otherwise physically threatened. The NCS assumed that this broad-based inquiry into being attacked would prompt respondents who had suffered an attack involving rape to answer “yes” to one of these four questions. As critics correctly pointed out, however, the respondents were never asked *directly* or explicitly if they had experienced a completed or attempted rape (Eigenberg 1990; Koss 1992, 1993a). The use of an *indirect* means on the NCS to “cue” respondents as to their rape victimization, critics argued, would almost certainly mean that some rape or attempted



rape victims would not respond “yes” to any of the four screen questions. Accordingly, the NCS was held to be biased in the direction of underestimating the true incidence of rape and attempted rape victimization (see, e.g., Koss 1992, 1993a, 1996). Nearly all studies of rape in the United States have reported estimates much higher than those found by the NCS (see Bachman and Taylor 1994). Moreover, the NCS only measured one type of sexual victimization, rape, and thus did not assess sexual assault.

Given these considerations, the major redesign efforts of the NCS were concentrated in the cueing strategy used in the screening interview. First, new screen questions were added to the NCVS that directly asked respondents about “rape, attempted rape, and any other type of sexual attack” and about “forced or unwanted sexual acts.” Second, all the NCS screen questions were reworded and new “cues” or information about a potential victimization incident were added. The purpose of adopting more specific cues in the screen questions was to expand the frame of reference for the respondents so as to better stimulate their recall of an incident, thus helping to reduce underreporting because of forgotten incidents.

Thus, the revised NCVS screen questions begin with a reference to a type of criminal victimization that may have been experienced (e.g., “were you attacked or threatened”), which is followed by a list of short cue responses about the potential victimization. This list includes cues regarding specific places or situations in which the victimization could have occurred (e.g., “at work or at school”), objects that could have been used (e.g., “with any weapon, for instance, a gun or knife”), actions that could have been associated with the victimization (e.g., “face-to-face threats”), and people who potentially might have perpetrated the criminal act (e.g., “a relative or family member”) (U.S. DOJ, BJS 1994). Each of these cues is intended to diminish the effects of subjective interpretations of the questions and to help the respondent structure the recall task before answering the question, “Did any incidents of this type happen to you?” (See exhibit 1.)

Exhibit 1 lists the four screen questions used on the NCVS to screen for potential incidents of rape and sexual assault. The interviewer asks each respondent these screen questions. The interviewer also is instructed to “briefly describe incident(s)” that the respondent noted. This verbatim account is recorded by the interviewer but is not part of the data files that BJS archives at the Inter-University Consortium for Political and Social Research at the University of Michigan. The numbers used in exhibit 1—40a, 41a, 42a, and 43a—correspond to the question numbers used on the NCVS.

**Exhibit 1. Specific NCVS individual-level screen questions designed to elicit reports of rape, sexual assault, and unwanted sexual contact**

NCVS screen questions
<p>40a. (Other than any incidents already mentioned,) since _____, 19 _____, were you attacked or threatened OR did you have something stolen from you—(a) At home including the porch or yard—(b) At or near a friend's, relative's, or neighbor's home—(c) At work or school—(d) In places such as a storage shed or laundry room, a shopping mall, restaurant, bank, or airport—(e) While riding in any vehicle—(f) On the street or in a parking lot—(g) At such places as a party, theater, gym, picnic area, bowling lanes, or while fishing or hunting—OR (h) Did anyone ATTEMPT to attack or ATTEMPT to steal anything belonging to you from any of these places?</p> <p>41a. (Other than any incidents already mentioned,) has anyone attacked or threatened you in any of these ways (<i>Exclude telephone threats</i>)—(a) With any weapon, for instance, a gun or knife—(b) With anything like a baseball bat, frying pan, scissors, or stick—(c) By something thrown, such as a rock or bottle—(d) Include any grabbing, punching, or choking—(e) Any rape, attempted rape, or other type of sexual attack—(f) Any face-to-face threats—OR (g) Any attack or threat or use of force by anyone at all? Please mention it even if you are not certain it was a crime.</p> <p>42a. 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 (<i>Exclude telephone threats</i>)—(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?</p> <p>43a. 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?</p> <p>_____          Note: Question numbers are from the individual screen questions in the basic screen questionnaire (Perkins et al. 1996, 124–125).</p>

In the research literature, most discussion of the NCVS has centered on questions 41a, 42a, and 43a in exhibit 1 (see Bachman and Taylor 1994; Koss 1992, 1996). BJS uses these questions to screen for all types of personal crimes that the NCVS measures (Perkins et al. 1996). For our purposes, we also included the first question in exhibit 1 (question 40a) because it specifically asks the respondent about being threatened in different places. Note that verbal threats are part of the NCVS' definition of rape and sexual assault (see next section). This means that the NCVS uses incidents involving only threats—as opposed to limiting counts to attempted or completed acts—in its estimates of rape and sexual assaults.

Again, the screen questions are, in essence, “gatekeepers” to the respondent proceeding on to complete an incident report. As a result, the wording of each question is important to the reporting of an incident. In the second question in exhibit 1 (question 41a), respondents are explicitly asked about rape, attempted rape, and other types of sexual attack (instead of the omnibus “attack you” or “try to attack you” question that was used in the NCS screen questions). The term “types of sexual attack” is a broad cue to respondents and may work to capture a range of sexual victimization incidents that can then screen into an incident report for further clarification.

Critics of the second question point out that this type of question rests on several assumptions: the respondent knows how rape is defined, perceives what happened to her or him as rape, and remembers the experience with this conceptual label (Gilbert 1997; Koss 1992, 1993a). What do the empirical data show with respect to these assumptions? First, in one study (Russell 1982), some incidents reported by the respondents as rape or attempted rape victimizations did not satisfy the legal criteria for rape—a source of overreporting. Second, other studies point to the possibility of underreporting, because rape victims frequently fail to realize that their victimization qualifies as a crime and avoid using the term “rape” to describe their experience. Koss (1988) reported, for example, that only 27 percent of the college women labeled their experiences with forced, unwanted intercourse as rape.

Although BJS employs question 42a on the NCVS instrument to screen for all types of personal crimes, this question could be used to screen for rape and sexual assault because it makes reference to potential offenders who could sexually victimize a respondent. Given that a majority of rapes and other forms of sexual victimization are committed by someone the victim knows, this question helps to dispel notions that the survey is only measuring incidents committed by strangers (see Crowell and Burgess 1996; Koss 1992). Although the term “attacked or threatened” used in this question is an indirect way to ask about rape or sexual assault, the term is broad enough to capture a range of incidents

that may, or may not, be sexual victimizations (or even victimizations of any kind) once the incident-level responses are taken into account to classify the incident. In this respect, the question could encourage reporting. Use of the term, however, assumes that respondents will make the connection between being attacked or threatened and unwanted sexual experiences (Koss 1992). If respondents do not make this connection, then the gatekeeping function of this question may hinder respondents on the NCVS from reporting a rape or sexual assault incident.

Question 43a on the NCVS explicitly provides the respondents, especially hesitant ones, with a second chance to report a sexual victimization; this is also the case for respondents who do not use the term “rape” or “sexual assault” to label their respective incident. Within this question, a general definition of what is being measured is provided to the respondent so that she or he knows what type of experience the interviewer is asking about. The question is behavior specific; it twice specifically asks respondents about incidents involving “forced or unwanted sexual acts” and about the respondent being “forced or coerced to engage in unwanted sexual activity.” The terms used are explicit, yet they are broad enough to include a range of incidents that can be clarified in the incident report. As a gatekeeping question, it could cue or otherwise encourage respondents to report their victimization incidents to the interviewer. Koss (1992) points out several other advantages to this line of questioning that include minimizing the street-violence context within the item. She also suggests, however, that this question might be strengthened if respondents were told to mention the incident even if they were not certain it was a crime (e.g., see question 41a).

How well do these four questions screen for incidents whose final classification is a rape or a sexual assault? Using data from the 1992 to 1996 incident file, we examined the degree of agreement between the screen question on which the incident screened into an incident report and the final crime classification given to each incident. We found that 93.4 percent of the incidents counted as rapes and 94.8 percent of the incidents counted as sexual assaults were screened into the incident report on one of these four questions. By comparison, in the NCS, the proportion of incidents counted as rape that had screened into the incident report (on the four questions used to screen for rape victimization) was about 10 percentage points lower (Dodge 1984). Taken together, these results suggest that the revised NCVS screen questions were an improvement over those used in the NCS and were the main source for those incidents counted as sexual victimizations by the survey in the 1992 to 1996 data. Note, however, that the figures cited do not tell us the extent to which the four NCVS screen questions were able to cue all respondents who had been sexually

victimized to report this fact to the interviewer. As such, we cannot estimate how many incidents were not cued by these incident questions and thus never reached the incident report.

## The second step in measuring sexual victimization: The NCVS incident report

### *Operationalizing completed, attempted, or threatened rape*

In the NCVS, rape is defined as follows:

Forced sexual intercourse including both psychological coercion as well as physical force. Forced sexual intercourse means vaginal, anal, or oral penetration by the offender(s). This category also includes incidents where the penetration is from a foreign object such as a bottle. Includes attempted rapes, male as well as female victims, and both heterosexual and homosexual rape. Attempted rape includes verbal threats of rape. (U.S. DOJ, BJS 1997, 149)

This definition incorporates the legal definition of rape found in the rape reform legislation passed in the 1970s and 1980s. Koss (1993a) criticizes the NCVS' definition for being ambiguous with respect to the term "psychological coercion." She suggests that this term is probably meant to refer to verbal threats of bodily harm or rape, which she notes are crimes. She warns, however, that the term may suggest to respondents "such situations as those involving false promises, threats to end the relationship, continual nagging and pressuring, and other verbal strategies to coerce sexual intercourse" (p. 60), which, as she points out, are undesirable but not crimes.

As presented in detail in exhibit 2, there are four ways in which the respondent in an incident report can be counted as having experienced a completed rape. In essence, these are the ways the NCVS uses to operationalize its definition of rape. Even if respondents indicate on the screen question that they have been sexually victimized, they do not count as victims unless they answer one of these four sequences of questions in the incident report in a manner consistent with the NCVS' measurement criteria for rape (e.g., a "don't know" response on a key question may cause an incident not to be counted as a rape victimization).<sup>2</sup>

First, respondents who answer "yes" to question 24 in exhibit 2 about being hit or attacked may, in response to the subsequent question regarding how they were attacked, state that they were raped. Note that the interviewer asks this as an open-ended question (see footnote a in exhibit 2). Second, respondents may answer "yes" to question 24 but then state that something other than rape

Exhibit 2. Operationalizing completed rape in the NCVS incident report

Initial question	Conditional response	Skip question	Final type of crime classification
24. Did the offender hit you, knock you down, or actually attack you in any way?	Yes →	29. How were you attacked? Any other way? <i>Mark (X) all that apply.</i> <sup>a</sup>	<b>Raped</b> <sup>b</sup> → Completed rape
<sup>a</sup> The interviewer asked this as an open-ended question and then listened to the respondent's reply while marking items on the list. Included were the following: raped, tried to rape, sexual assault other than rape or attempted rape, shot, shot at (but missed), hit with gun held in hand, stabbed/cut with knife/sharp weapon, attempted attack with knife/sharp weapon, hit by object (other than gun) held in hand, hit by thrown object, attempted attack with weapon other than gun/knife/sharp weapon, hit, slapped, knocked down, grabbed, held, tripped, jumped, pushed, and other.			
<sup>b</sup> If raped, the respondent was asked: "Do you mean forced or coerced sexual intercourse?" If no, the interviewer asked the respondent, "What do you mean?"			
24. Did the offender hit you, knock you down, or actually attack you in any way?	Yes →	29. How were you attacked? Any other way? <i>Mark (X) all that apply.</i>	<b>Raped</b> <sup>d</sup> → Completed rape
<sup>c</sup> The interviewer asked this as an open-ended question and then listened to the respondent's reply while marking items on the list. Included were the following: none, raped, attempted rape, sexual assault other than rape or attempted rape, knife or stab wounds, gun shot, bullet wounds, broken bones or teeth knocked out, internal injuries, knocked unconscious, bruises, black eyes, cuts, scratches, swelling, chipped teeth, or other.			
<sup>d</sup> If raped, the respondent was asked: "Do you mean forced or coerced sexual intercourse?" If no, the interviewer asked the respondent, "What do you mean?"			

Exhibit 2 (continued)

Initial question	Conditional response	Skip question	Final type of crime classification
24. Did the offender hit you, knock you down, or actually attack you in any way?	No →	27. What actually happened? Anything else? <i>Mark (X) all that apply.</i>	Completed rape
25. Did the offender TRY to attack you?	→	<i>Unwanted sexual contact with force</i> →	Do you mean forced or coerced sexual intercourse including attempts? <sup>f</sup>
26. Did the offender THREATEN you with harm in any way?	→		
<p><sup>e</sup> The interviewer asked as an open-ended question and then listened to the respondent's reply while marking items on the list. Included were the following: something taken without permission, attempted or threatened to take something, harassed, argument, abusive language, unwanted sexual contact with force (grabbing, fondling, etc.), unwanted sexual contact without force (grabbing, fondling, etc.), forcible entry or attempted forcible entry of house/apartment, forcible entry or attempted forcible entry of car, damaged or destroyed property, attempted or threatened to damage or destroy property, or other.</p> <p><sup>f</sup> If the respondent said "yes," the interviewer was instructed to go back to question 24 and change it to a "yes" response, delete entries for questions 25, 26, and 27, and then proceed accordingly (see row 1).</p>			
24. Did the offender hit you, knock you down, or actually attack you in any way?	No →	28b. How were you threatened? Any other way? <i>Mark (X) all that apply.</i>	Completed rape
25. Did the offender TRY to attack you?	No →	<i>Unwanted sexual contact with force</i> →	Do you mean forced or coerced sexual intercourse including attempts? <sup>g</sup>
26. Did the offender THREATEN you with harm in any way?	Yes →		
<p><sup>g</sup> If the respondent said "yes," the interviewer was instructed to go back to question 24 and change it to a "yes" response, delete entries for questions 25, 26, and 28, and then proceed accordingly (see row 1).</p>			

occurred when they were attacked. However, when asked whether they suffered any injuries, they may note that they were raped.

Third, if a respondent says “no” to the initial three bodily harm questions (questions 24, 25, and 26 in exhibit 2), she or he is then asked what actually happened. If the respondent mentions “unwanted sexual contact with force,” then the interviewer asks, “Do you mean forced or coerced sexual intercourse including attempts?” If the respondent answers “yes,” then the interviewer changes the “no” response to a “yes” for the question, “Did the offender hit you, knock you down, or actually attack you in any way?” The interviewer then proceeds as in the first example of how rape is operationalized. Fourth, the interviewer employs a similar process in the last means of operationalizing completed rape if the respondent says that she or he was threatened with “unwanted sexual contact with force.” Note that in these question sequences, it is assumed that there is a shared definition among the respondents about the word “intercourse,” and that the respondents know the kinds of penetration this word covers. Koss (1992, 73) points out, however, that it is “unknown whether women who have had forms of unwanted penetration other than vaginal, and whether men who have been sodomized, will respond to this wording.” Her point is well taken; well-designed experiments will be needed to further examine the possibility Koss raises.

In addition to completed rape, the NCVS includes measures of attempted rape and verbal threats of rape. There are six ways to operationalize attempted rape and two ways to operationalize verbal threat of rape. Recall that the BJS definition of attempted rape includes verbal threats of rape. Note that few other studies include verbal threats when counting attempted rapes (see, e.g., Fisher and Cullen 1998; Koss, Gidycz, and Wisniewski 1987).

Four of the six ways to operationalize attempted rape use the identical series of questions employed to operationalize completed rape, with the exception that the respondent either (1) answers “yes” that an attack was tried or physical harm threatened, and/or (2) volunteers that a rape was attempted. There are also two questions that explicitly ask if the offender tried to attack the respondent (yes or no response) (see NCVS question 25) and how the offender tried to attack the respondent (open-ended question) (see NCVS question 28a). In the latter question, if the respondent says she or he was verbally threatened with rape and some other type of bodily harm, then the incident is classified as an attempted rape. Similarly, the series of questions that begins with asking the “threaten you with harm in any way” question (see NCVS question 26) follows a similar line of questioning and responses for an attempted rape classification.



Verbal threats of rape follow the same question series as those for attempted rape. If the respondent says “verbal threat of rape” when asked how the offender tried to attack or threatened the respondent, the incident is classified as a verbal threat of rape. In the NCVS, these are counted under the “attempted rape” estimates.

### *Operationalizing sexual assault*

In the redesign of the NCS, sexual assault was incorporated into the NCVS to measure types of sexual victimization other than rape—an important methodological change. Indeed, many researchers have argued and empirically documented that sexual victimization is not unidimensional and limited to rape but is multidimensional, covering a variety of types of sexual transgressions (see Fisher and Cullen 1998). In any event, consistent with the statutory reforms of this period, sexual assault is defined as:

a wide range of victimizations, separate from rape or attempted rape. These crimes include attacks or attempted attacks generally involving unwanted sexual contact between the victim and offender. Sexual assaults may or may not involve force and include such things as grabbing or fondling. Sexual assault also includes verbal threats. (U.S. DOJ, BJS 1997, 149)

Five types of sexual assault are operationalized in the NCVS: (1) sexual attack with serious assault, (2) sexual attack with minor assault, (3) sexual assault without injury, (4) unwanted sexual contact without force, and (5) verbal threats of sexual assault other than rape.

The respondent is asked the same series of questions as in the rape sequence of questions. The differences are in the respondent’s descriptions of how the offender attacked, tried to attack, or threatened to attack the respondent. How sexual assault is operationalized is a bit more complex than how completed rape, attempted rape, or verbal threats of rape are operationalized. Therefore, more clarifications in the line of questioning are needed to ensure that a sexual assault is being measured and not a rape. For example, if the respondent indicates that the offender tried to attack her or him with unwanted sexual contact with force (e.g., grabbing, fondling), the interviewer is instructed to ask the respondent, “Do you mean forced or coerced sexual intercourse including attempts?” If the respondent says “yes,” then the interviewer changes the “did the offender hit you” question to “yes” and proceeds accordingly to the “how were you attacked” question. Here the respondent can describe a rape, attempted rape, sexual assault other than a rape or attempted rape, or anything else that happened.

## Comparison of the NCS and the NCVS victimization estimates

The introduction of the changes noted above produced substantial differences in BJS victimization estimates from the NCS and the NCVS data. Split sample tests of the two designs produced a 40-percent increase in the overall level of victimizations reported in the NCVS as compared with those reported in the NCS (Lynch 1996a). More relevant to our concerns are whether changes in the definition of rape and in how it is operationalized affected the estimates of rape victimization in the NCVS. Recall that a criticism of the NCS was that it substantially underestimated rape victimization.

First, Taylor and Rand (1995) reported that the revisions resulted in the NCVS-method rates that were 323 percent higher for completed rape and 96 percent higher for attempted rape than the NCS-method rates. Second, the split test results also revealed a 250-percent increase in rape estimates using the NCVS methods compared with the NCS methods (Lynch 1996a). Caution should be exercised, however, when attempting to compare the old estimates of rape with the new ones, even when adjustments have been made to the data that take into account these methodological improvements. Anomalies in the distribution of male and female victims in the 1992 NCS rape estimates raise questions about the adjustments of rape estimates (see Rand, Lynch, and Cantor

1997). Third, the redesign estimates show that the number of completed rapes exceeds the number of attempted rapes. For example, in 1997, the NCVS estimates that there were 115,000 completed rapes and 79,000 attempted rapes. This pattern was not evident in the NCS; with the exception of one year (1988), the number of attempted rapes was always greater than the number of completed rapes.

*The incident report has the major advantage of asking detailed questions that might count victimization incidents that other methods would omit or omit victimization incidents that other methods would erroneously include.*

## The NCVS and beyond

Several major strengths characterize the NCVS: a large national sample; panel design; the possibility of comparing rates of sexual victimization over time and to other forms of criminal victimization; and a clearly bounded reference period. With regard to measuring the sexual victimization of women, however, critical methodological issues will continue to surround the potential biases in the use of the screen question-incident report format. The NCVS screen questions are a marked improvement over those used

to measure rape in the NCS. Even so, as we will see later, other researchers have argued that more detailed and more graphically worded questions would be more likely to elicit reports of sexual victimization from women who had, in fact, been victimized.

The use of the incident report—much understudied by scholars in this area—is a source of potential methodological rigor and bias. The incident report has the major advantage of asking detailed questions that might allow the NCVS (1) to count victimization incidents that other methods would omit or (2) not to count victimization incidents that other methods would erroneously include. Alternatively, the incident report might also result in women who had been victimized being deleted from the victimization count because they failed to answer questions in a way that conformed with the NCVS' coding scheme. We will return to these issues in the pages ahead.

## The Specially Designed Sexual Victimization Survey: Koss' Contribution

The NCVS (and its predecessor, the NCS) was designed to measure criminal victimization generally in the United States, of which sexual victimization was but one form. Given its broader mandate, the NCVS may have limited ability to measure rape and other forms of sexual victimization. An alternative strategy would be to develop victimization surveys that focus exclusively on women's sexual victimization. By exploring such victimization in both more depth and breadth, it might be possible to arrive at a more accurate empirical assessment of the extent to which women are sexually victimized in the United States.

Early attempts at such surveys date back to at least the 1950s. Research by Kirkpatrick and Kanin (1957; Kanin 1957), for example, attempted to define and empirically measure "erotic aggressiveness" or "erotic offensiveness" by males against females in dating-courtship relationships on a university campus. Their methods and sampling design are still used today in sexual victimization research. They developed and distributed a self-report "schedule" to female students enrolled in one of 22 "varied" university classes during the academic year (September 1954 to May 1955). Their questionnaire distinguished five degrees of erotic aggressiveness: attempts at (1) "necking," (2) "petting above the waist," (3) "petting below the waist," (4) "sex intercourse," and (5) "sex intercourse

*The uses of specially designed surveys generally reveal that sexual victimization is not rare and is more widespread than that found by official statistics and by the NCS/NCVS.*

with violence or threats of violence.” The questions focused on the extent to which the respondents were “offended” by intimacy level, frequency, and number of men during the academic year (Kirkpatrick and Kanin 1957, 53). In essence, this was a victimization survey. Among the 291 female students, they found that a large proportion had experienced a sexual victimization. During the academic year, 55.7 percent of women reported being offended at least once at some level of erotic intimacy, with 6.2 percent stating that they had been subjected to “aggressively forceful attempts at sex intercourse in the course of which menacing threats or coercive infliction of physical pain were employed” (p. 53).

Kirkpatrick and Kanin’s research did not trigger a movement to study women’s sexual victimization. In fact, their work was largely neglected until rediscovered two decades later when, sensitized to females’ victimization by a changed social context, scholars returned to this topic. Still, their research is important in showing a finding that would tend to be repeated in later studies: the uses of specially designed surveys generally reveal that sexual victimization is not rare and is more widespread than that found by official statistics and by the NCS/NCVS.

In this regard, the most influential instrument constructed to measure sexual victimization is Koss’ “Sexual Experiences Survey,” which was developed in the 1980s and used extensively by subsequent researchers. This section will focus on the nature and criticisms of this survey. First, however, we will examine the work of Russell (1982), whose early research also introduced important methodological considerations.

## Russell’s sexual victimization survey

Much of the sexual victimization research—including Koss’ pathbreaking study—has been conducted using college student samples, in part because of their convenience and in part because this is a social domain in which such victimization is elevated. In contrast, Russell (1982) randomly selected 930 adult female residents in San Francisco from a probability sample of households. Sixty-four percent of the original sample of 2,000 completed the interview. Sensitive to the possible effects of the gender of the interviewer, Russell employed professionally trained female interviewers; their race and ethnicity were matched to that of each respondent. Whenever possible, she had them interview selected respondents in person and in a private setting. The interviews were conducted during the summer of 1978.

Several features of this study are noteworthy. First, previous research had provided respondents, if at all, with only a brief or ambiguous definition of rape. In contrast, Russell’s definition of rape was patterned after the legal definition

of extramarital rape in California as “forced intercourse (e.g., penile-vaginal penetration) or intercourse obtained by threat of force, or intercourse completed when a woman was drugged, unconscious, asleep, or otherwise totally helpless and hence unable to consent” (1982, 84). Second, as presented in exhibit 3, she then operationalized rape using several “behaviorally specific” questions with respect to rape (e.g., “38 questions on sexual assault and abuse,” p. 85). A “behaviorally specific” question is one that does not ask simply if a respondent “had been raped” but rather describes a victimization incident in graphic language that covers the elements of a criminal offense (e.g., someone “physically forces you . . . to have sexual intercourse”). Notably, researchers have found that multiple, behaviorally specific questions are associated with greater disclosure by respondents about being sexually victimized (see Crowell and Burgess 1996, 35). Third, for every episode of rape and attempted rape elicited, the interviewer administered a separate questionnaire. Included was a “description of the assault sufficiently detailed to ensure that one of the criteria

**Exhibit 3. Examples of Russell’s questions used to elicit experiences of rape or attempted rape**

Rape or attempted rape questions <sup>a</sup>
<p>1. Did a _____<sup>b</sup> ever physically force you, or try to force you, to have any kind of sexual intercourse (besides anyone you’ve already mentioned)?</p> <p>2. Have you ever had any unwanted sexual experience, including kissing, petting, or intercourse with a _____<sup>b</sup> because you felt physically threatened (besides anyone you’ve already mentioned)? IF YES: Did [<sup>c</sup>] (any of them) either try or succeed in having any kind of sexual intercourse with you?</p> <p>3. Have you ever had any kind of unwanted sexual experience with a _____<sup>b</sup> because you were asleep, unconscious, drugged, or in some other way helpless (besides anyone you’ve already mentioned)? IF YES: Did [<sup>c</sup>] (any of them) either try or succeed in having any kind of sexual intercourse with you?</p> <p>4. At any time in your life, have you ever been the victim of a rape or attempted rape?</p> <p><sup>a</sup> Russell provided the wording only for these 4 of her 38 questions.</p> <p><sup>b</sup> The interviewers asked the respondents these questions three times: first about strangers, second about acquaintances or friends, and third about dates, lovers, or ex-lovers.</p> <p><sup>c</sup> Russell used the pronoun “he” here because she had already asked the respondents about any unwanted sexual experiences with females.</p>

for defining the assault as a rape or attempted rape had been met” (Russell 1982, 86). Fourth, for the first three questions in exhibit 3, she asked if they had been perpetrated by (1) strangers; (2) acquaintances or friends; and (3) dates, lovers, or ex-lovers.

Russell’s development and use of behaviorally specific questions based on the legal criteria for rape set a new standard for the operationalization of rape—one that the best of subsequent research would build on. Her approach potentially reduced measurement error inherent in previous studies. Thus, the use of a legally based definition of rape meant that she was likely to have assessed victimizations that would qualify legally as a rape. The use of behaviorally defined questions both increased the likelihood that respondents would be cued to victimization incidents that had transpired and diminished the likelihood that respondents would “read into” and thus differentially interpret the victimization questions they were asked to answer. Further, similar to the NCS and the NCVS, Russell suggested the importance of using followup questions to further explore or to “confirm” responses to initial questions about sexual victimization experiences, thus minimizing the possibility of counting as rape incidents those that did not qualify legally for this categorization. Finally, by asking about victimizations perpetrated not only by strangers but also by intimates, she potentially cued respondents to include “acquaintance” and “date” rapes that might otherwise have gone unreported to the interviewer.

*The choice of definition of rape, which has played a large role in the exchange between the feminist scholars and their critics, has a significant impact on estimates that are reached regarding the magnitude of rape estimates.*

All these factors—the number of questions asked, the manner in which they were presented, and her followup questions—likely contributed to Russell’s reported rape estimates (1982, 85). She found that 41 percent of the women reported at least one completed or attempted extramarital rape during their lifetime. Over the past year (12 months prior to interview), 3 percent of the women reported that they had experienced a completed rape or attempted rape. Further, Russell was among the first researchers to compare her survey results with those reported in the UCR and the NCS and to question why statistical discrepancies existed. She tried, for example, to make her incidence rape rates as comparable as she could to the UCR and the NCS rates. She reported that her rates were higher than both the UCR and the NCS. Although Russell’s rape estimation and extrapolation procedures and her response rate have been criti-

cized, this critical line of thinking about government-produced rape estimates helped to give direction to future researchers (see Gilbert 1997, 121–123).

## Context for Koss' research

Much of the sexual victimization research through the 1980s and even into the 1990s focused on measuring one type of sexual victimization—rape. Even within this narrow definition of sexual victimization, the most persistent and troubling problems had been the lack of a widely agreed-upon definition of rape. With the proliferation of rape research, this issue became even more salient to estimating the extent to which rape occurs. Some studies provided no definition of rape or any type of sexual victimization that was being measured; others provided a broad definition; and still others rigorously defined rape using criteria derived from legal rape reform statutes (see Kilpatrick et al. 1987; Leidig 1992; Muehlenhard and Linton 1987; Rivera and Regoli 1987). Even within those rape studies that used legally derived definitions, there were discrepancies. Some studies, for example, included rape of a person who was given alcohol or drugs (Koss, Gidycz, and Wisniewski 1987) or intoxicated (Schwartz and Pitts 1995), while others excluded this type of victimization (Kilpatrick, Edmunds, and Seymour 1992). The choice of definition, which has played a large role in the exchange between the feminist scholars and their critics, has a significant impact on estimates that are reached regarding the magnitude of rape estimates. Even when similar definitions are used, variations in estimates across studies can result because of other methodological choices, such as sample composition, reference frame, and question wording (see Lynch 1996a, 1996b; Koss 1992, 1993a, 1996).

Separate from but related to this problem is the lack of a generally agreed-upon operational definition of sexual victimization—one that can be used in research and theory building in this area (see Bachman and Taylor 1994; DeKeseredy 1995; Koss 1996, 1993a, 1993b; Gilbert 1997, 1995). For example, although rape (and other types of sexual victimization) includes the notion of nonconsensual sexual behavior, the operational definitions for rape used by researchers have varied along several dimensions. For example, studies using a single question—no matter how broad it is—obtain lower rates of rape (e.g., Gordon and Riger 1989) than studies that use several questions that ask explicitly about a specific type of behavior (e.g., Russell 1982; Koss, Gidycz, and Wisniewski 1987; see also Crowell and Burgess 1996). Thus, whether a study counts a sexual encounter as a rape is affected by which criteria are used to determine the following: whether the sexual penetration is a rape (e.g., by bodily part, object), whether the sexual encounter has been nonconsensual, and whether an offender actually used force or the threat of force. Measurement issues also arise when the age at which the victimization occurred is used in calculating rape estimates. All these methodological issues underlie who eventually determines when a rape has occurred—the investigator or the survey respondent. In essence, the issues of defining and operationalizing rape and other forms of



sexual victimization are epistemological because they raise critical issues about what we know and how we know it.

To address the lack of a standardized instrument for measuring rape (and thereby address the aforementioned methodological issues) and to measure a broad range of different types of sexual victimization, Koss and associates developed the Sexual Experiences Survey (SES). As we will discuss, her instrument was not without its critics (Gilbert 1995, 1997; Roiphe 1993). Nonetheless, the SES and subsequent modified versions have been used in many sexual victimization studies both inside and outside the United States (DeKeseredy and Schwartz 1998; Lane and Gwartney-Gibbs 1985; Schwartz and Pitts 1995).

## Koss' Sexual Experiences Survey instrument

Koss and associates (1982, 1985, 1987) had two goals in their study of sexual victimization. First, they sought to broaden the scope of what was assumed to fall under the category of sexual victimization. Working with Oros and Gidycz, Koss developed a measure of sexual victimization that represented a continuum of sexual victimization, what she refers to as a “dimensional view” where “rape represents an extreme behavior on a continuum with normal male behavior within the culture” (Koss and Oros 1982, 455). Their continuum ranged from intercourse achieved through verbal coercion (e.g., continual arguments and pressure) and threatened force, to intercourse achieved against consent through use of physical force (i.e., rape). Second, they wanted to develop an instrument capable of measuring what Koss refers to as “hidden” rapes—incidents that were not reported to the police but nonetheless met the legal definition of rape (Koss and Oros 1982, 455).

### *Origins of the SES*

Koss and Oros' first attempt at developing a behavioral self-report instrument was called “The Sexual Experiences Survey” (see first column of exhibit 4). It contained 13 yes-no formatted questions about a range of coercive sexual experiences, including completed and attempted rape. Their instrument included, like Russell's survey, a direct question to the women respondents about whether they had ever been raped (see question 13). Out of a sample of 2,016 college women, 23.6 percent reported ever having been raped (questions 10, 11, 12, and 13:  $n=62$ , 165, 129, and 120, respectively) and 26.9 percent reported ever having experienced an attempted rape (questions 8 and 9:  $n=368$  and 175, respectively).



## Exhibit 4. Versions of Koss' Sexual Experiences Survey

Sexual Experiences Survey: Original version (Koss and Oros 1982) <sup>a</sup>	Sexual Experiences Survey: Revised version (Koss, Gidycz, and Wisniewski 1987) <sup>b</sup>
<p><b>Have you ever:</b></p> <ol style="list-style-type: none"> <li>Had sexual intercourse with a man when you both wanted to?</li> <li>Had a man misinterpret the level of sexual intimacy you desired?</li> <li>Been in a situation where a man became so sexually aroused that you felt it was useless to stop him even though you did not want to have sexual intercourse?</li> <li>Had sexual intercourse with a man even though you didn't really want to because he threatened to end your relationship otherwise?</li> <li>Had sexual intercourse with a man when you didn't really want to because you felt pressured by his continual arguments?</li> <li>Found out that a man had obtained sexual intercourse with you by saying things he didn't really mean?</li> <li>Been in a situation where a man used some degree of physical force (twisting your arm, holding you down, etc.) to try to make you engage in kissing or petting when you didn't want to?</li> <li>Been in a situation where a man tried to get sexual intercourse with you when you didn't want to by threatening to use physical force (twisting your arm, holding you down, etc.) if you didn't cooperate, but for various reasons sexual intercourse did not occur?</li> <li>Been in a situation where a man used some degree of physical force (twisting your arm, holding you down, etc.) to try to get you to have sexual intercourse with him when you didn't want to, but for various reasons sexual intercourse did not occur?</li> <li>Had sexual intercourse with a man when you didn't want to because he threatened to use physical force (twisting your arm, holding you down, etc.) if you didn't cooperate?</li> <li>Had sexual intercourse with a man when you didn't want to because he used some degree of physical force (twisting your arm, holding you down, etc.)?</li> <li>Been in a situation where a man obtained sexual acts with you such as anal or oral intercourse when you didn't want to by using threats or physical force (twisting your arm, holding you down, etc.)?</li> <li>Have you ever been raped?</li> </ol> <p><sup>a</sup> Version administered to females.</p> <p><sup>b</sup> The following experiences are operationalized with the noted items: (1) sexual contact [1, 2, and 3], (2) attempted rape [4 and 5], (3) sexual coercion [6 and 7], and (4) rape [8, 9, and 10].</p>	<ol style="list-style-type: none"> <li>Have you given in to sex play (fondling, kissing, or petting, but not intercourse) when you didn't want to because you were overwhelmed by a man's continual arguments and pressure?</li> <li>Have you had sex play (fondling, kissing, or petting, but not intercourse) when you didn't want to because a man used his position of authority (boss, teacher, camp counselor, supervisor) to make you?</li> <li>Have you had sex play (fondling, kissing, or petting, but not intercourse) when you didn't want to because a man threatened or used some degree of physical force (twisting your arm, holding you down, etc.) to make you?</li> <li>Have you had a man attempt sexual intercourse (get on top of you, attempt to insert his penis) when you didn't want to by threatening or using some degree of force (twisting your arm, holding you down, etc.), but intercourse <i>did not</i> occur?</li> <li>Have you had a man attempt sexual intercourse (get on top of you, attempt to insert his penis) when you didn't want to by giving you alcohol or drugs, but intercourse <i>did not</i> occur?</li> <li>Have you given in to sexual intercourse when you didn't want to because you were overwhelmed by a man's continual arguments and pressure?</li> <li>Have you had sexual intercourse when you didn't want to because a man used his position of authority (boss, teacher, camp counselor, supervisor) to make you?</li> <li>Have you had sexual intercourse when you didn't want to because a man gave you alcohol or drugs?</li> <li>Have you had sexual intercourse when you didn't want to because a man threatened or used some degree of physical force (twisting your arm, holding you down, etc.) to make you?</li> <li>Have you had sex acts (anal or oral intercourse or penetration by objects other than the penis) when you didn't want to because a man threatened or used some degree of physical force (twisting your arm, holding you down, etc.) to make you?</li> </ol>

### *The revised SES*

A few years later, Koss and Gidycz (1985, 422) reworded the SES questions to increase the clarity of key terms (e.g., sex play), improve communication to the respondents about the legal definition of rape, and measure more “degrees” of sexual victimization. This new version is presented in the second column of exhibit 4. As can be seen, the 10 yes-no formatted questions (compared with 13 questions in the original version) were developed to reflect Koss and Oros’ original continuum of sexual victimization from the most severe form (rape) to no victimization. There are other noteworthy changes in the revised SES. First, the original SES contained a question that directly asked the respondent if she had been raped (number 13), but the revised version does not. Second, the original instrument did not contain either rape or attempted rape questions that include the criterion “because a man gave you alcohol or drugs” (see revised version questions 5 and 8).

The SES made several methodological improvements and contributions to the measurement of sexual victimization. First, similar to Russell’s rape questions but unlike the NCS, Koss, Gidycz, and Wisniewski (1987) embedded a definition of what they were measuring into their questions. As question 1 reads, Koss and associates defined sex play for the respondents as “fondling, kissing, or petting, but not intercourse.” They use colloquial terms like Russell did to stimulate recall in some respondents, but they also raise the measurement standards; they provide definitions of what terms mean so as to minimize measurement error between what they actually want to measure and how the respondent interprets the terms. With respect to the term “sexual intercourse,” Koss and Gidycz move beyond the limited clarification or lack of clarification given to respondents in past studies. What they mean by sexual intercourse is clearly defined within the context of their rape questions.

Second, similar to Russell, who grounded her definition of rape in the California statutes, Koss and Gidycz (1985) define rape according to the Ohio Revised Code (1980). Thus, their rape questions (questions 4, 5, 8, 9, and 10) are explicit as to the legal criteria for rape—type of penetration, force or threat of force, and no consent (see exhibit 4). To operationalize penetration, they use the term “sexual intercourse” and, as can be seen in question 4 that measures attempted rape, they tell the respondent exactly what they mean (“get on top of you, attempt to insert his penis”). In a footnote to their table 3, they wrote, “sexual intercourse was defined as penetration of a woman’s vagina, no matter how slight, by a man’s penis. Ejaculation was not required” (p. 167). It is not clear where in the questionnaire this definition appeared (e.g., the directions or introduction) because it is not explicitly written into any of the 10 questions.

To measure other forms of penetration that the Ohio rape law also encompasses, they ask on the SES about experiencing “sex acts—anal or oral intercourse or penetration by objects other than the penis” (see question 10). Force or threat of force is operationalized as physical force, and examples are provided for the respondents (e.g., “twisting your arm”; see question 9). Lack of consent is defined for the respondent as “when you didn’t want to” (for example, see question 8).

Third, similar to Russell, Koss and Gidycz (1985) use behaviorally specific language to measure a specific type of sexual victimization. This is unlike the NCS, which did not provide respondents with graphic descriptions of sexual victimizations. Instead, the NCS depended on the respondent to interpret and label an incident as a completed or attempted rape using a question that asked about a wide range of types of incidents, of which rape might be one. Wyatt and Peters (1986) have used the expressions “wide funnel” and “inverted funnel” to make the distinction between the two types of questions (as cited in Koss 1993a).

The use of behaviorally specific questions, according to Koss (1993a, 209), attempts “to put before the respondent detailed scenarios for the type of experiences the interviewer seeks to identify.” Within each of their 10 questions, Koss and Gidycz (1985) specify the behaviors involved. For example, in question 4, which measures attempted rape, the question contains descriptive words about the behavior of the offender (e.g., “get on top of you, attempt to insert his penis”) rather than words about the respondent’s state of mind (e.g., thinking that the offender intended to have sexual intercourse). This distinction is important. In addition to providing explicit definitions of critical terms, this form of questioning potentially minimizes the measurement error that may occur because of a discrepancy between the investigator’s and the respondent’s classification of a victimization incident. What the investigator labels as rape and what the respondent labels as rape may differ considerably (see Fisher and Cullen 1999; Koss 1988). For example, Koss reports that nearly three-fourths of college women who met the legal definition for rape failed to use this term as the label for their experiences.

Unlike most surveys at this time, which used a single item to measure rape, Koss and Gidycz (1985) employed three separate questions to measure rape. Each question specifies a different experience that, according to the law at this time, constituted a rape. They also utilized multiple questions to measure the three other types of sexual victimization. Once again, each question presents a different description of the experience to the respondent.

### *Findings from the SES*

Moving beyond the numerous studies of college students undertaken at a single university or a limited number of institutions, Koss, Gidycz, and Wisniewski (1987) conducted a national-level study of college women. They used a two-stage sampling design to choose schools and then students. First, to select schools, they used a cluster sampling design to sample every *x*th cluster, according to the proportion of total enrollment accounted for by the region. Ninety-three colleges and universities were selected; 32 agreed to participate. Second, from these schools, classes were randomly selected into the sample (for the details of the sampling design, see Koss, Gidycz, and Wisniewski 1987, 163–165). The revised SES was part of a 330-question self-report questionnaire (National Survey of Inter-Gender Relationships) administered by post-master's degree psychologists (men and women) to those students who attended the selected classes that day. The response rate was 98.5 percent. The exact field period was not stated, but it was during the 1984–85 academic year.

To measure four types of sexual victimization, Koss and Gidycz created four categories using the following procedures: (1) rape (a yes response to questions 8, 9, or 10 and any lower numbered items); (2) attempted rape (a yes response to questions 4 or 5 but not to any higher items); (3) sexual coercion (a yes response to questions 6 or 7 but not to any higher numbered items); and (4) sexual contact (a yes response to questions 1, 2, or 3 but not to any higher numbered questions) (see exhibit 4). They also created a “not victimized” category (no to all the questions). Using these scoring procedures, the respondents were classified according to the highest degree of sexual victimization that they reported. Two of the types of sexual victimization on the SES are criminal—completed rape and attempted rape—and two are not—sexual coercion and sexual contact. By including all of these types of sexual victimization, they broadened the definition of sexual victimization to include experiences that may not be criminal but nonetheless victimize women.

To estimate the prevalence of sexual victimization, Koss and associates (1987) asked the respondents about their experiences since age 14. To obtain 1-year estimates, they asked respondents about their experiences since the previous academic year, from September to September (for freshmen, this would have been their senior year in high school).

More than half of the college women (53.7 percent) reported some form of sexual victimization since age 14. Just over 14 percent (14.4 percent) of the women had experienced sexual contact, and 11.9 percent had experienced sexual coercion. Most notably, 12.1 percent had experienced attempted rape, and 15.4 percent had been raped. Taken together, these latter two figures meant that

since age 14, more than a quarter (27.5 percent) of the sample had suffered a victimization that met the State of Ohio's legal definition of rape.

In terms of 1-year estimates, Koss and colleagues (1987) reported that 323 women, 10.1 percent of their sample, had experienced an attempted rape, and that 207 women, 6.5 percent of their sample, had been raped. They also calculated the 1-year rate for attempted/completed rape at 166 per 1,000 female students. When examining the number of sexual victimization incidents (as opposed to the number of women victims), the 1-year incident rate for the Koss, Gidycz, and Wisniewski data is 278 attempted/completed rapes per 1,000 female students (167.2 for attempted rape and 110.8 for completed rape) (p. 168).

Like Russell, Koss, Gidycz, and Wisniewski (1987) then took the important step of comparing their results to those published in the NCS. To avoid a biased comparison, they recalculated their data to include only those incidents that met the definition of rape employed by the NCS, which limited rape to penile-vaginal penetration (and excluded acts such as oral and anal intercourse and sexual intercourse made possible by intentionally incapacitating a victim). Even under this more restrictive definition, Koss and associates (1987, 168) concluded that the rape victimization rate computed from their survey was "10–15 times greater than rates that are based on the NCS." This finding was truly startling, for it suggested that rape victimization was extensive and thus a serious social problem.

Methodologically, Koss, Gidycz, and Wisniewski's study raised two important issues. First, it called into question the accuracy of the questions used by the NCS to measure rape. Their data seemed to confirm that the NCS methodology was incapable of prompting numerous rape victims to report their victimizations to interviewers. Second and relatedly, Koss and associates showed that when multiple behaviorally defined questions are used—questions that assess the full domain of acts that qualify as rape under legal statutes—many sexual victimizations that would not be measured by less detailed and rigorous methods are reported by respondents. Underlying their work is the assumption that many women who have been raped do not readily report this fact on victimization surveys unless they have been asked to answer questions that specifically describe a particular kind of behavior. Koss, Gidycz, and Wisniewski thus were most concerned with overcoming the problem, found in previous works, of underestimating the true extent of sexual victimization. As we will see, this concern results in Koss and associates being criticized for using a methodology that may have created the opposite measurement error, of overestimating the extent to which women are sexually victimized.

## Gilbert's criticisms of Koss' definition and operationalization of rape

Gilbert (1997), among others, has accused Koss and associates of engaging in "advocacy research," which he defines as "playing fast and loose with the facts in the service of a noble cause" (1992, 7) (see also Roiphe 1993). Gilbert bases his accusations on methodological limitations of her work that he has detailed in several publications (1991, 1992, 1997). His central thesis is that Koss' research has exaggerated the extent of rape, and that her findings have been uncritically accepted because they reinforce feminist notions that entrenched patriarchal relationships in America generate widespread sexual exploitation of women. Gilbert rests his case on two main charges.

First, of the five questions used to measure rape, two involved a man attempting or completing forced intercourse "by giving you alcohol or drugs." Koss and colleagues used this phrasing to operationalize those acts that qualify as rapes under the Ohio Revised Code, which read "for the purpose of preventing resistance the offender substantially impairs the other person's judgment or control by administering any drug or intoxicant to the other person" (as cited in Koss, Gidycz, and Wisniewski 1987, 166). Notably, 44 percent of the rape victims in Koss and colleagues' study were counted as victims because they answered "yes" to these two questions that involved rape accomplished through purposeful intoxication.

Gilbert characterizes these two rape questions as "awkward and vaguely worded" because they lack any notion of the man's intention, how much alcohol the respondent ingested, and whether the alcohol or drugs led the respondent not to offer her consent. For example, what does having sexual intercourse with a man because he "gave you drugs or alcohol" mean? Did he order a beer or wine for the respondent? Was the respondent too intoxicated to consent (Gilbert 1991, 59)? Gilbert goes so far as to suggest that perhaps "the woman was trading sex for drugs, or perhaps a few drinks lowered her inhibitions so that she consented to an act that she later regretted" (1997, 116). He contends that the question could have been worded more clearly to denote "intentional incapacitation of the victim" (1997, 117). The larger point, of course, is that an unknown number of respondents might have answered "yes" to these two items even though their sexual experiences did not qualify legally as a rape (see also Muehlenhard et al. 1994).

Consistent with Gilbert's criticisms, subsequent research using Koss' SES instrument to measure rape and attempted rape in both the United States and Canada has altered the phrase regarding someone giving a woman drugs or alcohol. For example, in their study of rape among college women at Ohio

University, Schwartz and Pitts (1995, 17) changed question 8 to read: "Have you had sexual intercourse when you didn't want to because you were drunk or high?" DeKeseredy and Kelly (1993) used the same wording in their national study of women abuse on college and university campuses.

Second, Gilbert questions more fundamentally whether the questions developed by Koss and associates are, in any methodologically rigorous way, capable of validly measuring sexual victimization. Two troubling anomalies are found in Koss and associates' data. First, nearly three-quarters (73 percent) of the women categorized as rape victims in the study did not, when asked, believe they had been raped (see also Roiphe 1993). Second, about four in ten stated that they subsequently had sexual relations with the person who had purportedly raped them (Gilbert 1997, 116). Gilbert argues that it is highly unlikely that such a large proportion of college-educated women would be so uninformed or sexually inexperienced as (1) to misinterpret when they had, in fact, been raped and/or (2) to become involved again with a "rapist." The more plausible interpretation, contends Gilbert, is that Koss and associates' measure is hopelessly flawed, cueing respondents to answer "yes" to questions measuring rape even though the nature of their sexual experience would not, if examined in detail, qualify legally as a rape.

Koss has offered reasonable rebuttals to Gilbert's criticisms. For example, Koss and Cook (1993) note that even when the two items involving rape due to alcohol and drugs are removed from statistical calculations, the extent of rape in Koss and associates' sample remains disquietingly high (9.3 percent of the sample experiencing, in one year, attempted or completed rape). Further, Koss does not find it so implausible that many women, raised with a limited conception of rape as involving only attacks by strangers, might fail to define forced intercourse by an acquaintance as a rape. It also is possible that women might subsequently have sexual relations with their attacker because they blamed themselves for the previous encounter or because this person again attacked them (see Gilbert 1997).

The heated nature of the debate typically leads scholars to take sides for or against Koss or Gilbert. We suspect that becoming an advocate for a given position obfuscates more than it illuminates. In any case, we would share one broad comment on the Koss-Gilbert exchange. Koss' research must be seen as rigorous and pathbreaking for its time, but it should not be treated as sacrosanct. The challenge is to move beyond the initial state-of-the-art measure—in this instance, Koss' SES—to develop more valid measures of sexual victimization. Gilbert's concerns cannot be dismissed simply because they are conveyed in an inhospitable manner. Much more quantitative and qualitative research is needed to settle the methodological issues raised in the Koss-Gilbert debate,



including how question wording affects the accuracy of respondents' answers and to what extent women who have experienced a legally defined rape comprehend this fact.

## Measuring Sexual Victimization in the 1990s

During the 1990s, investigators built on the methodological insights from researchers such as Koss and her associates in the previous decade, from the Koss-Gilbert methodological debates, and from criticisms of the NCS and the redesigned NCVS. Several features characterized the studies undertaken by this "next generation" of investigators. Thus, they (1) broadened the scope of sexual victimization to include sexual coercion and unwanted physical contact, (2) included newly criminalized offenses such as stalking, and (3) used nationally representative samples of women. Perhaps most important, however, these investigators sought to operationalize sexual victimization by using behaviorally specific questions that were consciously grounded in the existing legal definition of rape (or other types of sexual victimization).

Again, this was the approach taken, most notably, by Koss in her SES. The next generation of investigators attempted to improve on Koss' work in two ways. First, some researchers in the 1990s employed questions that were more graphically explicit than those in the SES. The new series of questions not only included a description of the behavior in question but also provided a definition of what behaviors that act in question entailed. Second, some scholars in this "next generation" incorporated into their measures a strength that, as we noted, has marked the NCVS—an "incident report." The incident report not only allows researchers to gather more details about a given victimization incident but also helps to classify the incident as to the *type* of sexual victimization, if any, the respondent had experienced.

Some of the methodological advancements we have identified were incorporated in two major national studies completed during the 1990s that examined sexual victimization among women, which we discuss in the next two sections.

## The National Women's Study

According to Lynch (1996a, 1996b), the most frequently cited estimates of the incidence of rape in the United States are drawn from the NCS/NCVS and from the National Women's Study undertaken by Kilpatrick, Edmunds, and Seymour (1992). The National Women's Study (NWS) is a 3-year (1990–92) longitudinal study of a sample of women 18 years and older. The NWS used a



probability sample of 4,008 adult Americans, including a group of 2,000 women ages 18 to 34 who were oversampled. Kilpatrick and colleagues designed three waves of telephone interviews to collect information about the respondents' major mental health problems and alcohol and drug-related problems and consumption. In the first and second waves, they measured forcible rapes that had occurred (1) any time during the respondent's lifetime and (2) within the past 12 months, respectively. Professionally trained female interviewers were employed by the survey firm Schulman, Ronca, and Bucvalas (SRBI) to administer the survey.

With respect to forcible rape, the first wave of interviews was unbounded, but the second wave was bounded by the previous interview. In the first interview, respondents were asked about their lifetime forcible rape experiences. In the second interview, respondents were asked to report their forcible rape experiences for the year since their last interview—that is, the 1-year period between wave one and wave two. In both wave one and wave two, those respondents who in the screen questions reported an incident, skipped into a sequence of questions about the characteristics of the rape incident(s) (e.g., whether they reported the incident to the police; their relationship to the attacker). Responses to these questions were not used to verify what happened but to classify the event; the responses to the screen questions were used to estimate the extent of lifetime and annual rape, respectively (see exhibit 5). The third interview did not contain any questions about forcible rape or any other forms of sexual victimization.

Eighty-five percent of the women contacted participated in wave one. At wave two, 81 percent of the wave one participants ( $n=3,220$ ) were located and participated in the study. The participation rate at time two was therefore 68.9 percent of the original sample.

### ***Definition and operationalization of forcible rape***

Kilpatrick and colleagues (1992) admit to using a “very conservative definition of rape—one which would be legally defined as forcible rape or criminal sexual assault in most States.” They define rape as:

an event that occurred without the woman's consent, involved the use of force or threat of force, and involved sexual penetration of the victim's vagina, mouth, or rectum.

Attempted rape was not covered by this definition; accordingly, the NWS measured and reports data only on completed rape.

Kilpatrick, Edmunds, and Seymour (1992, 15) used four questions to operationalize their definition of rape, which according to them “provide clear answers for the first time to the critical elements of forcible rape: use of force or threat of force, lack of consent; and sexual penetration.” Similar to Koss’ SES instrument, each question is directly worded to describe a narrow behavior. For example, in the NWS questionnaire (question 48), the respondent is asked, “Has a man or a boy ever made you have sex by using force or threatening to harm you or someone close to you?” It is possible that some respondents might find this question to be ambiguous; if so, then measurement error might be introduced because these respondents might potentially overreport or underreport their sexual victimization experiences. To minimize the possibility that respondents would be confused about what kinds of experiences the question covers, Kilpatrick and colleagues use a followup statement to clarify the specific type of behavior they are asking the respondent about. Thus, in question 48, they follow up with a statement that defines what “sex” means: “Just so there is no mistake, by sex we mean putting a penis in your vagina.” A similar followup statement containing an explicit definition of the behavior in question is also incorporated in the oral sex question (see question 49 in exhibit 5).<sup>3</sup>

Unlike the SES instrument, Kilpatrick and colleagues broaden the criterion of “threat of force” to include threats of harm not only to the respondent but also to “someone close to” the respondent (see question 48 in exhibit 5). This wording is used explicitly only in the question measuring penile-vagina penetration and not in the questions measuring other types of penetration (i.e., oral, anal). Further, there is no explanation why this wording on “threats to someone close to you” is used to operationalize rape but is not mentioned in the definition of rape employed by the NWS researchers (see definition quoted previously).

According to the NWS, 13 percent of the women in the sample reported having experienced a completed rape at least once during their lifetime (Kilpatrick, Edmunds, and Seymour 1992, 2). Less than 1 percent (0.7 percent) of the women surveyed had experienced a completed rape within the past 12 months. Kilpatrick and associates (1992, 2) compare their estimate of the number of women age 18 or older who were raped during a 12-month period—683,000—with the 1990 NCS annual estimate of completed and attempted rapes for females age 12 and older—130,000—and claim that “the *National Women’s Study* estimate was still 5.3 times larger than the NCS estimate.”

This comparison must be interpreted with caution, or at least placed within an appropriate context. First, the NCS and the NWS have different definitions of completed rape. The NCS includes only penile-vaginal penetration, whereas the NWS includes more types of penetration. Second, the NCS’ estimate includes completed and attempted rapes, whereas the NWS is limited to completed

Exhibit 5. NWS questions used to elicit experiences of completed rape

Completed rape questions <sup>a</sup>
<p>Another type of stressful event that many women experience is unwanted sexual advances.<sup>b</sup> Women do not always report such experiences to police or discuss them with friends or family. The person making the advances isn't always a stranger, but can be a friend, boyfriend, or even a family member. Such experiences can occur any time in a woman's life—even as a child. Regardless of how long ago it happened or who made the advances:</p> <p>48.<sup>c</sup> Has a man or boy ever made you have sex by using force or threatening to harm you or someone close to you? Just so there is no mistake, by sex we mean putting a penis in your vagina.</p> <p>49. Has anyone ever made you have oral sex by using force or threat of harm? Just so there is no mistake, by oral sex, we mean that a man or boy put his penis in your mouth or somebody<sup>d</sup> penetrated your vagina or anus with his mouth or tongue.</p> <p>50. Has anyone ever made you have anal sex by force or threat of harm?<sup>e</sup></p> <p>51. Has anyone ever put fingers or objects in your vagina or anus against your will by using force or threat?</p> <p>52.<sup>f</sup> During your lifetime, how many times (different occasions) have you been forced to have (sex/oral sex/anal sex) or been forcibly penetrated with fingers or objects? Please include any incidents that may have happened when you were a child.</p> <p>53. Did this (any of these incidents) occur before you were 18 years old?</p> <p>54. Did this incident (any of these incidents) occur within the past 12 months or since the last time you were interviewed?</p> <p><sup>a</sup> Unless noted, the wording of the questions came from the appendix of <i>Rape in America: A Report to the Nation</i> (Kilpatrick, Edmunds, and Seymour 1992).</p> <p><sup>b</sup> This sentence is taken from Lynch (1996b, 139).</p> <p><sup>c</sup> Question numbers were taken from Lynch (1996b, appendix).</p> <p><sup>d</sup> Lynch's (1996b) version reads "... or someone, male or female. ..."</p> <p><sup>e</sup> Lynch's (1996b) version reads "[J]ust so there is no mistake, by anal sex we mean that a man or boy put his penis in your anus."</p> <p><sup>f</sup> Questions 52 through 54 come from Lynch (1996b).</p>

rapes. (Note, though, that the NCS does divide its rape counts into completed ( $n=60,710$ ) and attempted ( $n=63,760$ ); 1990 figures cited here.) Third, the NWS includes females age 18 and older, whereas the NCS includes females age 12 and older. The NCS' results cannot be easily aggregated to match the sample of those 18 years and older because published reports on the NCS use the noncomparable age category of 16 to 19 years old. Note, however, that the NCS data tapes are publicly available, and thus comparable estimates by age could potentially be calculated from these data. Fourth, the NCS estimates cited in the *Rape in America* report include males and females; the NWS includes only females. Fifth, as Lynch (1996a, 1996b) points out, comparing estimates may be confounded because the NWS and the NCS use different procedures for bounding the victimization reference period.

### ***Methodological lessons learned***

What methodological advances in measuring rape did the NWS introduce or emphasize? First, moving beyond the many case studies of college women (i.e., surveys of women attending one or two universities), the NWS used a nationally representative sample of adult women. As Koss (1993b, 1063) points out, the sample did exclude "several potentially high-risk groups for rape," for example, women living in college residences and women serving in the military. When the NWS was undertaken, however, it was the only national-level study of women in the general U.S. population other than the NCS. Relatedly, wave two of the NWS, which was used to compute the NWS' annual estimates of rape victimization, was bounded by the wave-one interview. Bounding has been shown to reduce measurement error associated with "telescoping"—that is, of respondents counting as victimizations events that occurred outside the reference period that the survey covered (see Lehn and Skogan 1981, 1984). Because panel studies are rare in this area of research (again, the NCVS being the notable exception), this type of bounding is not found in the extant published literature.

Second, unlike many previous surveys, the investigators furnished the respondents with a clearly worded introduction to their rape questions, which contained several cues (1) as to the possibility that a sexual experience may have occurred even though it had not been disclosed to the police, family, and/or friends and (2) as to whom potential offenders might include (i.e., not "always a stranger, but can be a friend, boyfriend, or even a family member"). This introduction is meant to guard against respondents not reporting rape incidents to interviewers because they did not believe that victimizations unreported to others, or committed by people they knew, "counted" as rape.

Third, a special contribution of the NWS is the wording the researchers developed in the four questions used to measure completed rape. They attempted to employ wording that described the specific behavior in question in very graphic detail (e.g., “by oral sex, we mean that a man or a boy put his penis in your mouth or somebody penetrated your vagina or anus with his mouth or tongue”). These behaviorally specific questions were used to cue the respondent to the particular domain of behavior that was being measured. In this way, the researchers were attempting to minimize measurement error by making sure that respondents would understand what kinds of sexual experiences were covered by the questions being asked.

Despite these advantages, the NWS had three main limitations—issues that later research would address: (1) the definition of rape does not include incidents when the victim was incapacitated, (2) it measured only forcible rape and not attempted rape or other forms of sexual victimization, and (3) it did not employ an incident report to “check” or validate whether respondents who answered “yes” to the rape questions should be counted as rape victims.

## **The National Violence Against Women Survey**

Building on the NWS, Tjaden and Thoennes (1998a) designed and executed the National Violence Against Women (NVAW) Survey, introducing it to respondents as a survey on personal safety. The NVAW Survey includes questions about general fear of violence and about incidents of actual or threatened violence experienced during the respondent’s lifetime and annually by different types of perpetrators. Sixty types of perpetrators were assessed (e.g., specific parent, spouse, specific ex-spouse, specific partner, cousin). Specific types of violence included sexual assault (i.e., rape and attempted rape), physical assault (i.e., slapping, getting beat up, using a gun on the victim), and stalking.

The NVAW Survey is a nationally representative sample of 8,000 English-speaking and Spanish-speaking women 18 years of age and older who reside in households throughout the United States (Tjaden 1996, 1). Using random-digit dial within U.S. Census regions to draw the sample, eligible women in each household were identified (see Tjaden and Thoennes 1998a, 14). If, for example, more than one woman was eligible, a designated respondent was randomly selected using the “most recent birthday method” (see Tjaden 1996, 2). Using CATI, professionally trained female interviewers employed by SRBI pretested the survey and administered the NVAW Survey from November 1995 to May 1996. The NVAW Survey’s participation rate was 72 percent (see Tjaden 1996, 3–4).

### ***Definitions and operationalization of rape***

Tjaden and Thoennes (1998a, 13) defined rape as:

an event that occurred without the victim's consent, that involved the use or threat of force to penetrate the victim's vagina or anus by penis, tongue, fingers, or objects, or the victim's mouth by penis. The definition included both attempted and completed rape.

Exhibit 6 shows how the NVAW Survey operationalized rape. Note that unlike the NWS, the NVAW Survey measures both completed rape and attempted rape.

The influence of the NWS is evident in the questions used by Tjaden and Thoennes. First, both surveys begin the questioning about rape with an introduction for the respondents as to the nature of the questions that follow. Second, both studies use a lifetime reference frame of “regardless of how long ago it happened” to cue respondents. Third, the questions used in the NWS and the questions used in the NVAW Survey provide the respondent with a behaviorally specific definition.<sup>4</sup> For example, in question F1 in exhibit 6, the question asks the respondent if “a man or boy ever made you have sex by using force or threatening to harm you or someone close to you?” Fourth, to minimize any respondent confusion regarding what behavior the question is asking about, the respondent is provided with a definition as to type of behavior in question. For example, question F3 includes the phrase “by anal sex we mean that a man or boy put his penis in your anus” (see Tjaden 1996, F1–F6). According to Tjaden and Thoennes (1998a, 3), “These questions were designed to leave little doubt in the respondents’ minds as to the type of information being sought.”

By contrast, differences in the wording of the screening questions used in the NVAW Survey and the NCVS are striking. As we have discussed, the NVAW Survey uses five behaviorally defined screen questions to prompt respondents to report sexual experiences that meet the legal definition of rape used in many States. This approach thus relies on multiple questions, all narrowly worded, to ask about only one type of crime—rape. The NCVS, however, uses a more general approach in its screen questions. Thus, the screen questions employ general terms—such as asking respondents whether they have experienced “forced or unwanted sexual acts”—to capture a wide range of sexual victimizations, of which rape is but one type. The word rape is also used in the NCVS screen questions but not in the NVAW Survey. Finally, the NCVS classifies incidents based on responses to the questions in the *incident* report and not on responses to the screen questions (see Bachman 1998). As we will discuss, the NVAW Survey uses screen questions, not its perpetrator report, to count whether a sexual experience has been a completed rape, attempted rape, or other type of victimization.

*Perpetrator report for rape*

After the NVAW Survey interviewer asks the five questions presented in exhibit 6, she then asks the respondent questions concerning the type of perpetrator(s). Unlike the NCVS, which has the interviewers administer a separate incident-level report for the number of times the respondent indicates the incident happened, the NVAW Survey has the interviewers administer a detailed sexual assault report for each type of perpetrator. Within this report, the respondent is asked on how many different occasions the specific perpetrator forced or tried to force the respondent to have sex or forcibly penetrate the respondent with

**Exhibit 6. NVAW Survey questions used to elicit experiences of rape and attempted rape**

Rape and attempted rape questions*
<p>F1. We are particularly interested in learning about violence women experience, either by strangers, friends, relatives, or even by husbands and partners. I'm going to ask you some questions about unwanted sexual experiences you may have had either as an adult or a child. You may find the questions disturbing, but it is important we ask them this way so that everyone is clear about what we mean. Remember the information you provide is confidential.</p> <p>Regardless of how long ago it happened, has a man or boy ever made you have sex by using force or threatening to harm you or someone close to you? Just so there is no mistake, by sex we mean putting a penis in your vagina.</p> <p>F2. Has anyone, male or female, ever made you have oral sex by using force or threat of force? Just so there is no mistake, by oral sex we mean that a man or boy put his penis in your mouth or someone, male or female, penetrated your vagina or anus with their mouth.</p> <p>F3. Has anyone ever made you have anal sex by using force or threat of harm? Just so there is no mistake, by anal sex we mean that a man or boy put his penis in your anus.</p> <p>F4. Has anyone, male or female, ever put fingers or objects in your vagina or anus against your will by using force or threats?</p> <p>F5. Has anyone, male or female, ever <b>attempted</b> to make you have vaginal, oral, or anal sex against your will, but intercourse or penetration did not occur?</p> <p>* These questions were asked only of the female respondents.</p>

his/her fingers or other object; the respondent is then asked when this incident happened. In the case of a single incident, the respondent is asked when this incident happened with respect to the number of years ago or in the past 12 months. If there is more than one incident, then the respondent is asked when was the first time this incident happened and when was the most recent time it happened. Once again, the response is with respect to the number of years ago or in the past 12 months (see Tjaden 1996, J1–J2). Unlike the NWS and the NCVS, the NVAW Survey is not bound by a previous interview because it is a cross-sectional design.

### ***Classifying victimizations***

In the NVAW Survey, the interviewers ask about four types of offenses—each with their own set of screen questions. For rape, the questions in exhibit 6 are used to determine whether the respondent experienced a completed rape or an attempted rape. The perpetrator report is used to determine when the rape occurred, not if a rape occurred. If a respondent answers “yes” to any of these questions, she is then “counted” as a rape victim. However, Tjaden and Thoennes do provide separate estimates for completed rape and attempted rape (see following discussion).

Thus, the NVAW Survey assumes that coherent sets of questions that cover a given domain of conduct (e.g., rape) and that these questions worded in a behaviorally specific way will yield accurate responses from women as to whether they have been sexually victimized. In contrast, the NCVS assumes that the main purpose of such questions—which it calls “screen questions”—is to cue the respondent to recall that she had experienced some type of sexual victimization during the reference period. The NCVS then assumes that the set of questions in the incident report is needed to probe more carefully the detailed nature of the victimization experience (“what actually happened”). Accordingly, the NCVS uses the second set of questions to classify victimizations.

### ***Comparison of rape results***

Tjaden and Thoennes results revealed that 17.6 percent of the surveyed women reported having experienced a completed (14.8 percent) or attempted rape (2.8 percent) during their lifetime. The NVAW Survey’s estimate of completed rape is only slightly higher than the NWS’ lifetime estimate of 13 percent. The NVAW Survey also found that 0.3 percent of the women reported experiencing a completed or attempted rape in the previous 12 months.

Tjaden and Thoennes (1998a, 4) note that it is difficult to make direct comparisons between their estimates and the NCVS rape estimates. Bachman (1998,



15–16), however, attempted to address this issue by disaggregating the NCVS data to create rape estimates that would be more comparable to the NVAW Survey. Thus, she compares annual rape estimates for women 18 years and older who were raped by a lone offender. She reports that the NVAW Survey's rape estimate of 0.35 victims per 100 women is higher than the NCVS estimate of 0.16 victims per 100 women. She argues that "this difference underscores the very sensitive nature of estimation procedures and how slightly different methodological procedures can result in quite diverse estimates" (p. 16).

Making comparisons between the NWS and the NVAW Survey is also complicated. As noted, these studies share many features: (1) moving beyond the common reliance on college student samples, both used a nationally representative sample of women age 18 and older; (2) they employed the same survey firm (SRBI) whose professionally trained interviewers used CATI; (3) both used a lead-in introduction to the screen questions to alert respondents that victimizations could involve incidents unreported to the police and committed by intimates; (4) their screen questions contained similar wording and both are behaviorally specific about the types of experiences in question; and (5) both used responses to their respective screen questions and timeframe questions to determine lifetime and annual estimates. Despite these similarities, the NWS asked questions only about completed rape, not about attempted rape, whereas the NVAW Survey measured both completed rape and attempted rape. Of course, it might be possible to compare the NWS and the NVAW Survey figures for completed rapes. However, Tjaden and Thoennes (1998a) do not report annual estimates for completed and attempted rape separately. As a result, at this time, no comparison can be made to Kilpatrick, Edmunds, and Seymour's (1992) NWS annual estimate for completed rape.

### *Stalking*

In the NVAW Survey, Tjaden and Thoennes also collected data on a form of victimization that has earned increasing public and legal attention: stalking. To date, only two national-level studies do so: the NVAW Survey and Fisher and Cullen's (1998) college women study (see discussion following). Building their definition of stalking from the model antistalking codes for States developed by the National Institute of Justice, Tjaden and Thoennes (1998b, 2–3) defined stalking as:

a course of conduct directed at a specific person that involves a repeated visual or physical proximity, nonconsensual communication, or verbal, written or implied threats, or a combination thereof, that would cause a reasonable person fear with repeated meeting on two or more occasions.

They clarify this definition by stating that “the NVAW Survey does not require stalkers to make a credible threat against the victim, but it does require victims to feel a high level of fear.”

Space precludes a detailed review of how stalking is operationalized by Tjaden and Thoennes (1998b, 17). Still, we can note that in the NVAW Survey, 8.1 percent of the women reported being stalked at some time in their life; only 1 percent of the women reported being stalked in the previous 12 months. Tjaden and Thoennes’ (1998b) estimates of stalking, however, are dependent on what level of fear they use to “count” a respondent as a victim. Unlike other criminal offenses, legal statutes often assert that stalking is a crime only if it induces fear of being harmed in a reasonable person.

The question that emerges is what it means legally to say that someone is “fearful” and, in turn, how this concept should be measured in victimization surveys. Tjaden and Thoennes made the decision to use a stringent criterion, counting as stalking victims only those women who said that stalking behavior had made them feel “very” frightened. However, if the standard is lowered to include women who said they felt “somewhat” or “a little” frightened, then the prevalence of stalking victimization in the NVAW sample rises markedly. Thus, the lifetime estimate increases from 8.1 to 12 percent, and the estimate for the past 12 months jumps from 1 to 6 percent. These results again reveal the challenge of measuring the victimization of women and how methodological decisions can affect the estimates that researchers produce.

## **The National College Women Sexual Victimization Study: Assessing Screen Question-Incident Report Methodology**

As we have reviewed, two very different methods have evolved over the past two decades for measuring different types of sexual victimization. First, Koss’ SES, Kilpatrick’s NWS, and Tjaden and Thoennes’ NVAW Survey all used behaviorally specific questions both to cue respondents to disclose their sexual victimization and, if so, to classify victims as to the type of victimization experienced. Second, the NCVS used an incident report to classify incidents as to the type of crime, if any, that the victim experienced. The strength of the behaviorally defined questions is that the respondent is provided with descriptive cues within a scenario framework. Using *only* behaviorally specific questions, however, assumes both that the respondent understands the experience she is being asked about and that these questions are able to cue accurate recall by the respondents (i.e., a rape question cues all rape victims to answer yes; an attempted rape question cues all attempted rape victims to

answer yes; and so on). These assumptions are problematic, especially in the absence of followup questions to probe in detail what actually transpired in any given incident.

Herein lies the strength of the NCVS and its use of an incident report. As discussed, the NCVS' measurement process includes screen questions about the criminal act followed by a series of short cues. Each victimization the respondent reports (answers "yes" to) is then followed up with a detailed incident report that contains multiple questions about what occurred during the incident. The responses to these questions are then used to classify the type of victimization that occurred.

In our national study of sexual victimization among college women, we combined these two approaches to operationalize rape and other types of sexual victimization (see Fisher and Cullen 1998). From Koss and similar researchers, we borrowed the idea to include in the design a series of behaviorally specific, graphically worded cueing or screen questions across a range of sexual victimizations. From the NCVS, we incorporated into the design the screen question-incident report method. The result is a method that measures sexual victimization by cueing and screening potential victims with behaviorally defined questions and then classifies the type of victimization, if any, through a detailed incident report.

## **Overview of the National College Women Sexual Victimization Study**

We designed the National College Women Sexual Victimization (NCWSV) Study to estimate the extent of different forms of sexual victimization among college women and to examine risk factors associated with such victimizations. We collected sexual victimization data from a random sample of female undergraduate and graduate college students during the 1996–97 academic year. A total of 4,446 college women enrolled at 233 2-year and 4-year schools were selected using a two-stage probability sampling design (see Fisher and Cullen 1998, ch. 2).

Approximately 2 weeks before a respondent was called, she was sent a cover letter that explained the nature of the study and its procedures (e.g., telephone call from a female interviewer, an 800 number and an e-mail address to contact for more information, voluntary participation, confidentiality). The cover letter was clear that the intent of the study was to examine the extent and nature of unwanted sexual victimizations. Like the NWS (Kilpatrick, Edmunds, and Seymour 1992) and the NVAW Survey (Tjaden and Thoennes 1998a, 1998b), we contracted with SRBI to administer our surveys using CATI; they employed

professionally trained female interviewers. The field period began in late February and ended in early May 1997. The response rate was 84.6 percent. Before undertaking the survey, the content and flow of the cover letter, the introduction to the survey, and the screen questions were discussed during two focus groups conducted at the University of Cincinnati. We also pretested the survey instruments in spring of 1996 with a random sample of 100 female students enrolled at the University of Cincinnati.

### *Defining rape*

Broadening the types of sexual victimization that previous researchers had assessed (cf. Koss, Gidycz, and Wisniewski 1987; Muehlenhard and Linton 1987), we measured 12 different forms of sexual victimization that included rape, sexual coercion, unwanted sexual contact, various threats, and stalking. Following the tradition of grounding our definition of rape in legal statutes, we defined rape to include unwanted penetration (completed and attempted) by force or threat of force. Penetration included penile-vaginal, mouth on genitals, mouth on someone else's genitals, penile-anal, digital-vaginal, digital-anal, object-vaginal, and object-anal. As shown in exhibit 7, we used 12 behaviorally specific questions to screen for different types of sexual victimization. All contain the same reference period—"since school began in the fall of 1996." The reference period was approximately a half of a year long, which is similar to that used in the NCVS.

Similar to the NWS (Kilpatrick, Edmunds, and Seymour 1992) and the NVAW Survey (Tjaden and Thoennes 1998a, 1998b), we included an introduction that explained the context of the study, cued respondents as to different situations and various potential perpetrators, and alerted them that graphic language would be used on the survey. The rape questions (questions 7, 8, 9, 10, and 12) were similar, if not identical, to the ones used in the NWS (Kilpatrick, Edmunds, and Seymour 1992) and the NVAW Survey (Tjaden and Thoennes 1998a). Within the first four questions (i.e., the completed rape questions), we provided a graphic description of the behavior in question and a definition of what was meant by each term we used.<sup>5</sup> We designed the other screen questions to cue respondents to sexual coercion (questions 18, 19, and 20), unwanted sexual contact (questions 14 and 16), and stalking (question 24).

When a respondent said "yes," that she had experienced the type of behavior asked about in the screen question, she was asked which different incidents of this type had happened to her (see footnote 1 in exhibit 8). Similar to the NCVS, for every different incident, the interviewer completed an incident report.

## Exhibit 7. NCWSV Study screen questions

## Sexual victimization screen questions

Women may experience a wide range of unwanted sexual experiences in college. Women do not always report unwanted sexual experiences to the police or discuss them with family and friends. The person making the advances is not always a stranger, but can be a friend, boyfriend, fellow student, professor, teaching assistant, supervisor, co-worker, somebody you meet off campus, or even a family member. The experience could occur anywhere: on- or off-campus, in your residence, in your place of employment, or in a public place. You could be awake, or you could be asleep, unconscious, drunk, or otherwise incapacitated. Please keep this in mind as you answer the questions.

Now, I'm going to ask you about different types of unwanted sexual experiences you may have experienced since school began in the Fall 1996. Because of the nature of unwanted sexual experiences, the language may seem graphic to you. However, this is the only way to assess accurately whether or not the women in this study have had such experiences. You only have to answer "yes" or "no."

7. Since school began in the Fall 1996, has anyone **made** you have **sexual intercourse** by using **force or threatening to harm** you or someone close to you? Just so there is no mistake, by intercourse I mean putting a penis in your vagina.

8. Since school began in the Fall 1996, has anyone **made** you have **oral sex by force or threat of harm**? By oral sex, I mean did someone's mouth or tongue make contact with your vagina or anus or did your mouth or tongue make contact with someone else's genitals or anus.

9. Since school began in the Fall 1996, has anyone **made** you have **anal sex by force or threat of harm**? By anal sex, I mean putting a penis in your anus or rectum.

10. Since school began in the Fall 1996, has anyone ever used **force or threat of harm to sexually penetrate you with a foreign object**? By this, I mean for example, placing a bottle or finger in your vagina or anus.

12. Since school began in Fall 1996, has anyone **attempted but not succeeded** in making you take part in any of the unwanted sexual experiences that I have just asked you about? *This would include threats that were not followed through.* For example, did anyone threaten or try but not succeed to have vaginal, oral, or anal sex with you or try unsuccessfully to penetrate your vagina or anus with a foreign object or finger?

14. Not counting the types of sexual contact already mentioned, have you experienced any **unwanted or uninvited touching of a sexual nature** since school began in the Fall 1996? This includes forced kissing, touching of private parts, grabbing, and fondling, even if it is over your clothes. Remember this could include anyone from strangers to people you know well. Have any incidents or **unwanted or uninvited touching of a sexual nature** happened to you since school began in the Fall 1996?

*continued*

## Exhibit 7 (continued)

## Sexual victimization screen questions

16. Since school began in Fall 1996, has anyone **attempted or threatened but not succeeded in unwanted or uninvited touching of a sexual nature?**

18. I have been asking you about unwanted sexual contact that involved force or threats of force against you or someone else. Sometimes unwanted sexual contact may be attempted using threats of nonphysical punishment, promises of *rewards* if you complied sexually, or simply continual *verbal pressure*. Since school began in Fall 1996, has anyone made or tried to make you have sexual intercourse or sexual contact when you did not want to by making **threats of non-physical punishment** such as lowering a grade, being demoted or fired from a job, damaging your reputation, or being excluded from a group for failure to comply with requests for any type of sexual activity?

19. Since school began in the Fall 1996, has anyone made or tried to make you have sexual intercourse or sexual contact when you did not want to by **making promises of rewards** such as raising a grade, being hired or promoted, being given a ride or class notes, or getting help with course work from a fellow student if you complied sexually?

20. Since school began in the Fall 1996, has anyone made or tried to make you have sexual intercourse or sexual contact when you did not want to by simply being **overwhelmed by someone's continual pestering and verbal pressure?**

22. Not counting any incidents we have already discussed, have you experienced any other type of unwanted or uninvited sexual contact since school began in the Fall? Remember, this could include sexual experiences that may or may not have been reported to the police or other officials, which were with strangers or people you know, in variety of locations both on- and off-campus, and while you were awake, or when you were asleep, drunk, or otherwise incapacitated.<sup>a</sup>

24. Since school begin in the Fall 1996 has anyone—from a stranger to an ex-boyfriend—someone *repeatedly* followed you, watched you, phoned, written, e-mailed, or communicated with you in other ways in a way that *seemed obsessive and made you afraid or concerned for your safety?* This includes waiting outside your class, residence, workplace, other buildings, or car.<sup>b</sup>

<sup>a</sup> Each question was asked using a “yes-no” response set. After each series of questions or question (7, 8, 9, and 10; 12; 14; 16; 18, 19, 20; 22), the following question was asked: “How many different incidents of [type of sexual victimization] happened to you since school began in the Fall 1996?”

<sup>b</sup> After the stalking screen question, the following question was asked: “How many people exhibited this type of behavior toward you since school began in the Fall?”

Exhibit 8. NCWSV Study: Operationalizing rape and attempted rape

Initial question	Response	Skip question	Response	Skip question	Response	Final classification
R12. Was the sexual contact in this incident threatened, attempted, or completed (at least some sexual contact actually happened)?	<i>Completed</i> →	R13. Tell me which of the following actually occurred to you during this incident. Just say yes or no. Did you experience . . . <b>READ LIST AND MULTIPLE RECORD</b>	Any response from 1 through 8 in footnote 1 →	R17. Was physical force actually used against you in this incident?  R18. Were you threatened with physical force in this incident?	Yes →	Completed rape
R12. Was the sexual contact in this incident threatened, attempted, or completed (at least some sexual contact actually happened)?	<i>Attempted</i> →	R15. What (other) type of unwanted sexual contact was attempted? <sup>c</sup> <b>READ LIST AND MULTIPLE RECORD</b>	Any response from 1 through 8 in footnote 1 →	R17. Was physical force actually used against you in this incident?  R18. Were you threatened with physical force in this incident?	Yes →	Attempted rape

<sup>a</sup> The list included: (1) penis in your vagina, (2) a mouth on your genitals, (3) your mouth on someone else's genitals, (4) penis in your anus or rectum, (5) finger in your vagina, (6) finger in your anus or rectum, (7) another object in your vagina, (8) another object in your anus or rectum, or (9) none of these.

<sup>b</sup> If the respondent said "no" to R17, she was then asked R18.

<sup>c</sup> The list included: (1) penis in your vagina, (2) a mouth on your genitals, (3) your mouth on someone else's genitals, (4) penis in your anus or rectum, (5) finger in your vagina, (6) finger in your anus or rectum, (7) another object in your vagina, (8) another object in your anus or rectum, (9) touching, grabbing, or fondling of your breasts or genitals under your clothes, (10) touching, grabbing, or fondling of your breasts or genitals over your clothes, (11) kissing, licking, or sucking, (12) some other form of unwanted sexual contact, and (13) none of these.

<sup>d</sup> If the respondent said "no" to R17, she was then asked R18.

### *Operationalizing rape in the incident report*

Modeled after the NCVS incident report, we also designed two incident reports: (1) one for rape, sexual coercion, unwanted sexual contact, and threats, and (2) one for stalking. In the first incident report, we obtained information (1) to determine exactly what type(s) of sexual victimization occurred and to what degree (completed, attempted, or threatened), (2) to document information about the characteristics of the incident, and (3) to understand the reporting behaviors of the victim.

To determine if the respondent had experienced a rape (either completed or attempted), we developed a series of questions as shown in exhibit 8. First, the interviewer asked the respondent if the incident was threatened, attempted, or completed (see question R12 in exhibit 8). Depending on her response, the interviewer then asked the respondent which sexual act(s) was completed, which act(s) was attempted, and/or which act(s) was threatened. We collected information on these three degrees of victimization because we believed that an incident could be a single victimization, but it could also involve a series of victimizations that led to the most serious type of victimization experienced.

A respondent could answer one of the three responses or all three responses because it was possible that a single incident resulted in more than one victimization, either of the same type or of a different type. For example, if a respondent reported that there was attempted vaginal-penile penetration with force and completed unwanted sexual contact (e.g., touching of her breasts or buttocks) with the threat of force, then there were two victimizations during this one incident: an attempted rape and completed sexual coercion. Another incident could have included the same type of victimization: a completed penile-vaginal penetration with force and an oral-genital penetration with force (both are completed rapes). Information was collected on all victimizations for that respondent arising from a single incident.

Because some incidents involved more than one type of victimization, counting each would have inflated our counts of the different types of victimization. To address this methodological concern, we classified each incident as to the most severe type of sexual victimization that the respondent experienced with that specific incident. Koss and associates (1987, 165) also used this “most severe” scoring procedure for respondents in her study. The NCVS uses this type of procedure, too.

As shown in row 1 of exhibit 8, if the respondent indicated that the sexual contact was completed, she was then asked which type(s) of penetration were completed. The interviewer read her a list of different types of penetration (see footnote 1 in exhibit 8). The respondent answered with a “yes” or “no” answer to one, some, or all the types of penetration.



The respondent was then asked two questions about the use of physical force or threatened use of physical force (see questions R17 and R18 in exhibit 8). First, the interviewer asked her if physical force was used against her (see R17 in exhibit 8). If she said “yes,” the incident was classified as a completed rape. If she said “no” to question R17, the interviewer asked the respondent if she was threatened with physical force (see R18 in exhibit 8). If she said “yes,” the incident was classified as a completed rape.

As shown in row 2 of exhibit 8, an incident was classified as an attempted rape using the same series of questions that we discussed for a completed rape incident. The one difference is that the respondent indicated that the sexual contact included an attempted type(s) of penetration.

### **Study results**

Close to 2 percent (1.7 percent) of the college women in our sample experienced a completed rape since school had begun in fall of 1996. Slightly more than 1 percent (1.1 percent) of the sample experienced an attempted rape. The percent of the respondents who experienced either a rape or an attempted rape was 2.5 percent. Note that in the 1997 NCVS, this pattern of the number of completed rapes being higher than attempted rapes is also found.

How do these results compare with other studies? To our knowledge, no published studies used a similar reference period and employed a national sample of randomly selected women who were currently enrolled in either 2-year or 4-year schools. Koss’ study, however, comes the closest to ours in terms of methods (behaviorally defined questions, sample). If we take her 1-year estimates for completed rape and attempted rape where we have a comparable definition (i.e., alcohol and drugs question estimates are excluded from the calculations)<sup>6</sup> and project them for our reference period (6.91 months),<sup>7</sup> we can roughly compare our results with her results. We see that our estimates of completed rape are similar to Koss’ estimates (1.7 compared with 2.1 per 1,000 female students). Our estimate of attempted rape is lower than her estimate (1.1 compared with 3.3 per 1,000 female students).

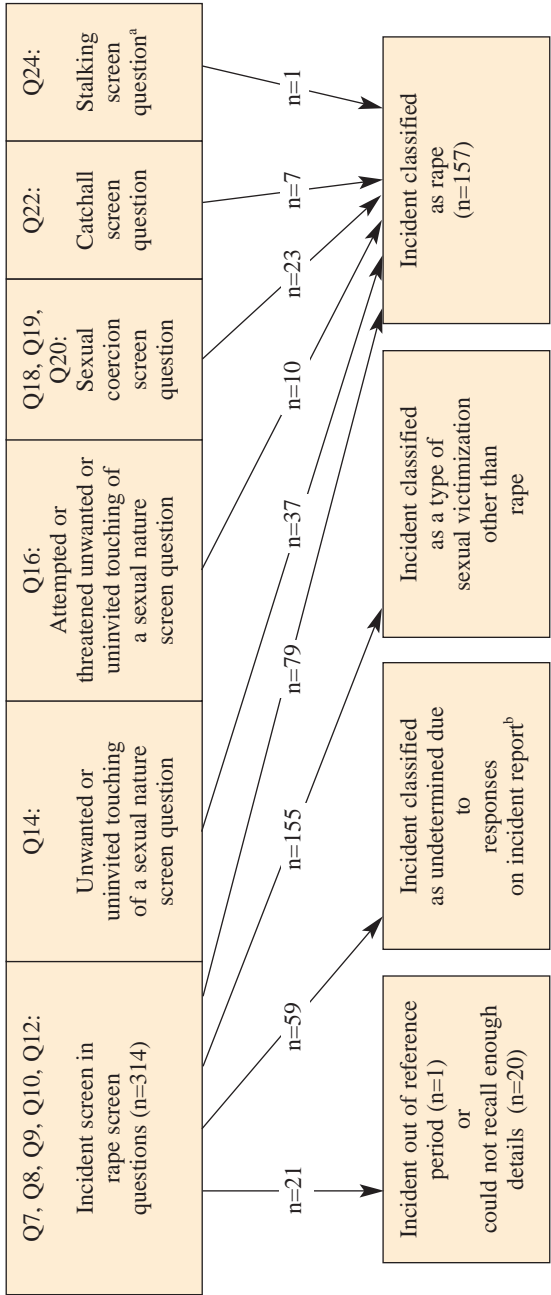
***As with the measurement of any phenomena, measurement error can and does occur.***

***The issue then becomes to identify the potential sources of bias and determine their effects.***

### **Potential sources of measurement error**

As with the measurement of any phenomena, measurement error can and does occur. The issue then becomes to identify the potential sources of bias and

Exhibit 9. NCWSV Study: Incident classification



<sup>a</sup> In the stalking incident report, if the respondent indicated that the perpetrator made or attempted to make the respondent have unwanted sexual contact, she was then asked if she had mentioned this incident(s) when asked about unwanted sexual intercourse or contact earlier in the survey. If she said “no,” the interviewer then administered a sexual victimization incident report for that incident(s).

<sup>b</sup> We could not determine what happened because the respondent refused to answer or said “don’t know,” to questions that would have allowed us to classify the incident.

determine their effects. In this next section, we discuss the ways in which we believe our screen question-incident report method addresses some of the sources of measurement bias that we argue are inherent in studies that estimate rape from behaviorally specific questions and those that use the incident report format.

### ***Answering “yes” to a behaviorally specific rape question(s)***

Studies such as Koss’ college women, Kilpatrick’s NWS, and Tjaden and Thoennes’ NVAW Survey use behaviorally specific questions to cue respondents as to the type of behavior in question. They then use a “yes” response to the rape questions to count the number of rape victims to generate their rape estimate. The assumption here is that since the question is explicit in describing what is being measured, measurement error will be minimized. That is, they make the assumption that a “yes” response to any of their respective rape screen questions is a necessary and sufficient condition to classify whether or not the respondent is a rape victim.

In exhibit 9, we present results from our NCWSV Study suggesting that this assumption is not supported and that using only a single step of “cueing” questions to measure victimization could result in the number of rape victims being *overestimated*. Thus, in the NCWSV Study, 314 victimization incidents screened into the incident report on the behaviorally specific screen questions that were designed to cue respondents to report this fact to the interviewer. Of these 314 incidents, however, only 25.2 percent were ultimately classified as a rape once respondents were probed further as to what occurred with questions in the incident report (see exhibit 9). In contrast, nearly half (49.4 percent) of the incidents that entered the incident report via the rape screen questions were classified as a type of sexual victimization other than a rape. Further, the fact that a respondent answered “yes” to a rape screen question does not necessarily mean that it can be determined that a victimization had, in fact, occurred. Slightly more than a fourth (25.5 percent) of the incidents cued by the screen questions could not subsequently be classified in the incident report. Here, 18.8 percent of these incidents could not be classified because the respondent refused to answer or said “don’t know” to questions that would have allowed us to classify the incident (e.g., refused to answer the force questions but indicated that penetration took place). In 6.7 percent of the incidents, the respondent could not recall enough details to complete an incident report, or the incident was out of the reference period. Research studies that count incidents such as these as rapes thus risk including incidents in their victimization totals that may not qualify legally as rapes.

Use of the incident report dramatically changed our rape estimate. If we had counted all 314 incidents that screened in on our rape screen question, our

victimization rate would have been 1.6 times higher than our rate calculated from the incident report—70.6 per 1,000 college women, compared with 44.8 per 1,000 college women.

### ***Answering “yes” to a non-rape screen question***

Conversely, previous research—such as the studies that use Koss’ SES—assume that women who answered “yes” to a cueing question meant to measure sexual victimizations other than rape did *not* experience a rape victimization. Again, this method assumes that behaviorally specific cueing questions are capable of directly measuring a specific type of victimization. It does not consider that non-rape cueing or screen questions might prompt a “yes” answer that, upon further questioning, is discovered actually to have been a rape. If this occurs, then relying exclusively on cueing or screen questions can produce a second kind of measurement error in which rape incidents are *underestimated*.

As we discussed, our method allowed respondents to screen into an incident report from any of our 12 screen (or cueing) questions. Screening in on a non-rape screen question did *not* mean that the respondent in the incident report could not answer questions in such a way that we would eventually classify her incident as a rape. Instead, regardless of the screen questions that the respondent answered “yes” to, the detailed incident report questions as to what happened allowed for the possibility that the incident could be classified as a rape if the respondent’s answers meet the required criteria.

As the results in exhibit 9 show, close to half (49.7 percent) of the incidents that we classified as a completed rape or an attempted rape screened in on our *non-rape* screen questions. A closer look at our findings reveal that all five non-rape screen questions yielded at least one incident that we classified as a rape. For example, the two non-rape screen questions that subsequently resulted in the highest number of classified rape incidents were the unwanted or uninvited touching question and the sexual coercion question (23.6 percent and 14.6 percent of the rape incidents, respectively). Again, a method that relied only on cueing questions and that did not include an incident report would have omitted these incidents from the count of rape incidents experienced by women in the sample.

These results raise two fundamental questions which are at the core of measuring rape and other forms of sexual victimization: (1) Why do women who answer “yes” to a rape screen question subsequently not answer questions in the incident report that would allow the incident to be classified as a rape? And (2) why do women who answer “no” to a rape screen question and “yes” to some other screen question eventually answer “yes” to questions in the incident

report that allow the incident to be classified as a rape? Although we are unable to provide data on these questions, we raise them because they are issues that are central to understanding the measurement of rape and thus need to be examined further by future researchers.

### *Is it rape?*

As noted, Gilbert (1997) has questioned whether measurement devices such as Koss' SES are validly measuring rape victimization when a large proportion of those categorized as rape victims (nearly three-fourths in Koss' study) do not define what happened to them as a "rape." Our study attempted to examine this issue. In each incident of rape, we asked victims, "Do you consider this incident to be rape?" For the 86 incidents categorized by our definition of completed rape, in 46.5 percent (n=40) of the incidents women answered "yes" to this question, in 48.8 percent (n=42) of the incidents they answered "no," and in 4.7 percent (n=4) of the incidents they answered "don't know." For attempted rape incidents, in only 2.8 percent of the incidents (n=2) did the respondents define their victimization as rape. In 95.8 percent (n=68) of the incidents women answered "no," and in 1.4 percent (n=1) of the incidents women answered "don't know."

How should we interpret these data? The attempted rape data are problematic because we did not ask specifically whether the respondents believed a rape had been "attempted." Putting this issue aside, what should be made of the data showing that only about half of the women who qualified as completed rape victims in our study defined their victimization in this way?

At best, we can present two competing perspectives. Skeptical of victimization survey data, conservative commentators are reluctant to count any event that the victims themselves do not label as "rape" (Gilbert 1997). After all, it can be argued, adult women know when a rape has occurred. In contrast, feminist commentators wish to count as a rape any event that conforms to the legal standard for rape: unwanted sexual penetration by force or threat of force (Koss 1992, 1996). In their view, female victims may manifest a lack of knowledge of the law or false consciousness when they define forced sexual penetration as something other than a rape. In reality, to our knowledge no research has yet been undertaken that systematically explores why women on surveys who are victims of coerced sexual assault do, or do not, define that incident as a rape. Accordingly, which of these two interpretations is more or less correct cannot be definitively substantiated.

Other data from our study, however, complicate this issue still further. The question, "Do you consider this incident to be rape?" was asked not only of

those categorized as rape victims but also *for every respondent who indicated some form of sexual victimization*. Beyond the completed rape and attempted rape victims, 40 women in the sample defined their sexual victimization as a rape.

It is possible, of course, that these female students who defined themselves as rape victims did not know the legal requirements of rape and thus mischaracterized what happened to them. An alternative possibility, however, is that surveys on sexual victimization using close-ended questions—even when using behaviorally specific screen questions and carefully worded incident-report questions—fail to capture rapes that actually take place. For example, the line between a “threat” and an “attempt” may, in real circumstances, be a thin one that only can be ascertained by more probing closed-end questions or by asking open-ended questions that then lead to further questions that ask the respondent to examine what she meant. It also may be that forms of “pestering/verbal pressures” may escalate to the point where they become “force or threat of force.”

Again, issues such as these can only be clarified by further research that uses followup questions to ask respondents why they did or did not define an act as a rape. At this stage, we must admit that victimization surveys leave significant methodological questions unanswered and thus can provide only “ballpark” estimates of how much rape and other types of sexual victimization occur. It is important to realize, however, that response biases on these surveys may not, as conservative commentators contend, only be in the direction of overestimating the extent of rape. As our results suggest, there also is the possibility of underestimating how much rape victimization actually takes place.

### ***Stalking***

To our knowledge, our NCWSV Study is the first national-level survey to estimate the extent of stalking committed against college women. Using State-level legal statutes as our guidelines, we defined stalking much the way Tjaden and Thoennes did: the same person exhibiting repeated behavior that seemed obsessive and made the respondent afraid or concerned for her safety.

The screen question used to measure stalking is shown in exhibit 7 (see question 24). Given that stalking by definition involves repeated behaviors, we developed a separate incident report for this form of victimization. Similar to our sexual victimization incident report, the stalking incident report contained questions about when the stalking took place, characteristics of the offender(s), the nature of any injuries sustained, and police reporting behavior.

To operationalize stalking, we asked the respondent about what the person did that seemed obsessive and frightening to the respondent. These included: followed you, waited outside or inside places for you, watched you from afar, telephoned when you did not want the person to, sent unwanted letters or cards, sent unwanted e-mail messages, or made other unwanted contact. To document that the incident was repeated, we asked the respondents how often these events occurred.

Our results revealed that 13.1 percent of the women in our sample had been stalked at least once since the academic year had begun. Recall that the NVAW Survey's annual stalking estimate ranged from 1 to 6 percent, depending on how fearful a woman had to be to count as a stalking victim. There are three main differences between our study and the NVAW Survey that could affect our respective estimates of stalking. First, we did not include some of the behaviors that the NVAW Survey did (e.g., vandalized property, left unwanted items); alternatively, the NVAW Survey did not include behaviors that we queried about (e.g., stalking through e-mail). Second, as we have noted, Tjaden and Thoennes (1998b) used a stringent criterion in their definition of stalking; respondents had to feel very frightened or fear bodily harm to be counted as a stalking victim. We used the terms "made you afraid or concerned for your safety" and "frightening" to operationalize the fear criterion used in many State-level statutes of stalking. Third, we employed a national-level college women sample. The NVAW Survey employed a national-level sample of women from the community at large. The limited research to date suggests that stalking victims tend to be young, and thus we may have measured stalking among a group of high-risk women (Fisher, Cullen, and Turner 1999; Tjaden and Thoennes 1998b).

Although important insights about stalking can be drawn from Tjaden and Thoennes' NVAW Survey and from our NCWSV Study, the methodology for measuring stalking remains in its preliminary stages. Far more research is needed to develop more valid screen questions and an incident report capable of capturing more precisely what occurred during the panoply of victim-offender encounters that combine to comprise a stalking "incident."

## **Verbatim responses in the National Violence Against College Women Study**

During the same time as the NCWSV Study, we conducted another national-level study to examine the extent and nature of violence among college women—the National Violence Against College Women (NVACW) Study. Acts of violence that we collected data on included rape, sexual assault, robbery, aggravated assault, simple assault, and unwanted sexual contact.

We revised and tailored BJS' NCVS to the needs of this study. Accordingly, in terms of measuring violence—specifically rape and sexual assault—we used all of the violent screen questions contained in the NCVS. In the incident report, we included those questions that were needed to determine the type of violent incident that the respondent had experienced (e.g., what happened, what was attempted, what was threatened, use of a weapon). Since we were dealing with a college student sample, we tailored some response sets so that they would be more relevant to this sample. For example, we asked whether the incident happened on or off campus, and we followed up with a closed-ended question that asked where specifically on campus or off campus the incident had transpired (for details, see Fisher and Cullen 1999). The response rate for this study was 91.6 percent.

The research design used in the NVACW Study is identical to the one used in the NCWSV Study in every way except three. First, the wording of the screen questions and of questions used in the incident report differed from the NCWSV Study. Except for the changes we noted, the screen questions and incident report questions were identical to those used in the NCVS. Second, rape and sexual assault were defined and operationalized according to how BJS defines, and the NCVS operationalizes, these two types of sexual victimizations.

Third, like the NCVS, the NVACW Study collected two sets of *verbatim responses* from open-ended questions in which respondents *used their own words* to describe their victimization experience to the interviewer. The first of these questions was asked for each incident reported in the screen question. The interviewer asked the respondent to “briefly describe the incident.” The second of these questions was asked at the end of the incident report. The interviewer instructed the respondent again to describe what happened. After each question, the interviewer recorded the respondent’s description using the respondent’s own words.

These verbatim responses are not structured or designed to measure in a systematic way what kind of victimization occurred. We included them originally in the survey only because they are part of the NCVS interview schedule. After completing the study, however, we realized that the respondents’ personal descriptions of their victimization incidents might be used as a potential source of data. In particular, these descriptions offered the opportunity to compare how a woman’s responses were coded using the closed-ended questions with what she stated had occurred to her in her verbatim responses.

Because the verbatim responses were not devised to collect detailed information on the victimization incident, it is at times difficult to discern whether the incident described by a given respondent would meet all the legal criteria for the



criminal offense of rape. To address this problem, we coded each verbatim response in two ways: (1) the most serious offense the verbatim seemed to suggest occurred, and (2) the least serious offense the verbatim seemed to describe. Across all respondents, we were then able to aggregate this coding to reach, based on the verbatim responses, a count that would range from a low number (i.e., only cases “definitely” described as a completed rape are counted as a completed rape) to a high number (i.e., all cases that “seem” to be a completed rape are counted as a completed rape). In essence, we used qualitative data to secure a quantitative estimate of the lower and upper bounds of rape in the sample, based on the content of the verbatim responses. In exhibit 10, we provide a sample of verbatim responses that we coded as a completed rape or an attempted rape. The first two columns are the verbatim responses, and the third column is the range of our coding classification for that incident (see Fisher and Cullen 1999).

Again, we analyzed the verbatim responses for all victimization incidents (rape and other forms of sexual and violent victimization). Across all the verbatim responses analyzed, how many could be interpreted as describing a completed, attempted, or threatened rape? (see exhibit 11). This is the upper bound estimate. Alternatively, using a “conservative” interpretation of the verbatim responses, what is the least number of rapes one might conclude occurred among the female students surveyed? As can be seen from exhibit 11, the lower bound and upper bound range is fairly wide: Based on the verbatim responses, there could be as few as 12 rape incidents in the sample or as many as 42 rape incidents in the sample. It is noteworthy that the upper bound figure is more than twice as high as the number of rape incidents computed from the responses to the closed-ended questions ( $n=20$ ).

The findings on the verbatim responses suggest two further conclusions. First, the ambiguity of the descriptions of the incidents given by many respondents makes it risky to conclude that the upper bound estimate is the “true” or “most accurate” measure of rape incidents in the sample. Still, it is important to note that many of the verbatim responses that were coded as rape came from the incidents categorized as sexual assault and unwanted sexual contact by the closed-ended questions. This result raises the possibility that the NCVS’ closed-ended questions miscategorize at least some—and potentially a significant number of—rape incidents. Second and relatedly, future research may benefit from exploring how the verbatim descriptions of sexual-related incidents may be conducted in a more structured way (1) to collect more information on the incident and (2) to permit a more definitive categorization of the incident. If so, then it might be possible to explore more systematically the correspondence between the closed-ended and verbatim responses from the NCVS and, in turn, to develop a more accurate measure of sexual victimization.

Exhibit 10. Sample of verbatim responses from the NVACW Study

Verbatim responses from open-ended questions: Screen question	Verbatim responses from open-ended questions: Incident question	Type of crime code or range of type of crime code based on verbatim responses
<b>Rape<sup>a</sup></b>	I went to visit one of my friends, and we were all hanging out together, then we went to my friend's house, down into the basement. The friend that I had gone to see went upstairs and left me alone with this other friend. He told me he was going to get me, and I tried to get out but he pushed me down and <b>raped me</b> . I knew that he had a gun, so I was afraid to do anything.	Completed rape
<b>Sexual assault</b>	While walking home from work someone walked up to me and asked the time and then he walked past me 15 to 20 feet. Later he was following me I walked 3 blocks and then someone else passed me and then a few blocks more <b>they were behind me with a gun in my back</b> they asked for money and I had none so <b>they took me behind a house and assaulted me there</b> .	Sexual attack with serious assault to Completed rape
A guy <b>tried to rape me</b>	I invited him in ( <i>who?</i> ) <sup>b</sup> he was a friend of mine. He tried to do stuff that I didn't want to do. I hit him and kicked him out of my room.	Attempted rape
Someone <b>tried to force himself sexually upon me</b>	I was driving him home from a bar and I asked him to wait in the car because I had to go to the bathroom I got back in the car and said thank you and <b>he tried to force himself on me I pushed him off and he tried again with more force I told him again to get off, he tried again with more force but</b> didn't hurt me. I pushed him off and told him to get out of my car at that point.	Sexual attack with minor assault to Attempted rape

<sup>a</sup> Operative words used in coding are in boldface.

<sup>b</sup> This is the interviewer's question.

## Impact of screen question-incident report method on rape estimates

The NCWSV Study and the NVACW Study provide an opportunity to explore how the screen question-incident report method used to measure rape might influence rape estimates. Recall both studies used the same sampling design, sent

Exhibit 11. Changes in incident estimates and rates from closed-ended questions in the incident survey, using the verbatims from all the incidents coded a “sexual” type of crime (n=145)

Type of incident	Frequency distribution based on closed-ended questions in incident report	Rate per 1,000 female students	Frequency distribution based on verbatim responses: Lower bound	Rate per 1,000 female students	Frequency distribution verbatim responses: Upper bound	Rate per 1,000 female students
Rape	20	4.51	12	2.70	42	9.48
Completed rape	9	2.03	4	0.90	13	2.93
Attempted rape	8	1.81	6	1.35	26	5.87
Verbal threat of rape	3	0.68	2	0.45	3	0.68

a cover letter to selected respondents, and had the same reference period and field period. What differed was the wording used in the screen questions and questions in the incident report. A comparison of the two studies revealed that the estimate of rape in the NCWSV Study is substantially higher than in the NVACW Study. For example, the rate of completed rapes per 1,000 female students was 9.5 times larger in the NCWSV Study compared with the NVACW Study—19.34 and 2.03, respectively. The incidence rate of attempted rape also revealed a similar pattern. The NCWSV Study had markedly higher estimates—8.8 times larger—than the NVACW Study estimates (15.97 compared with 1.81 attempted rapes per 1,000 female students) (Fisher and Cullen 1999). These results suggest, then, that even with a redesigned format, surveys using the NCVS method to measure rape victimization are likely to report far lower rates of victimization than surveys using behaviorally specific screen questions—even when these questions, as in the NCWSV Study, are also accompanied by an incident report similar to the NCVS.

## Conclusion: Directions for Future Research

Measuring sexual victimization is a challenging enterprise—the “biggest methodological challenge in survey research” (Smith 1987, 185). Although at times committed by strangers in public places, sexual victimization incidents, including rapes, are most often perpetrated by someone the victim knows, in a residence, and with one or more of the parties using alcohol, drugs, or both. Discerning how much force has been used, or the extent to which consent has not been given, is a daunting methodological task; objective behaviors may be open to diverse interpretations or “constructions of reality” by the people involved in an incident and by researchers seeking to measure what has occurred. This situation is complicated by the fact that many victims deny that their victimization has crossed the line to an attempted or completed rape, and that most do not report their victimization to the police, often saying that the incident was not “serious enough” to warrant such a step (see, e.g., Fisher and Cullen 1998). Some researchers suggest that whether a victim defines an act as a rape or reports it to the police is irrelevant to whether a crime has transpired; others argue, however, that these very facts raise doubts about whether a sexual victimization has taken place (see, e.g., Gilbert 1997; Koss 1996, 1993a).

Some scholars’ interest in measuring sexual victimization has been fueled, at least in part, by their political values. Without such value-laden interest, the progress in this area might have been slower and our understanding of the extent of sexual victimization might have been commensurately limited. The risk, however, is that the politicization of the normally prosaic issue of how to measure crime/victimization pushes scholars into competing camps—one seeming to have a stake in finding as much sexual victimization as possible

and the other seeming to have a stake in finding as little sexual victimization as possible. The ensuing “advocacy battles” may at times produce good scholarship, but they also risk generating more heat than light.

The challenge, we believe, is to learn from the existing research and methodological debates and then to map out what paths the next generation of research might profitably pursue. At the risk of sounding trite, the aim is not to seek methodologies that produce higher or lower estimates of sexual victimizations but, rather, to develop measures that are the most accurate possible. The past two decades of research have been invaluable in moving us toward this goal, but the knowledge of how best to measure sexual victimization remains in a preliminary stage. From the early rape studies to the most recent ones, we have learned that “best” is not a single-item measure. Heeding Blalock’s (1970, 111) advice—“With a single measure . . . one can remain blissfully unaware of the possibility of measurement [error]”—where should future research head? We have several suggestions.

First, a major step forward in measuring sexual victimization was taken with the development by Koss and others of behaviorally specific questions to “cue” respondents to report a victimization to an interviewer. These questions use a variety of words that are meant to define key legal elements of a criminal victimization, especially force and consent. At issue, however, is whether the words used to capture these legal elements mean the same thing to all respondents—or mean the same thing to respondents as they do to the researchers who carefully craft the questions.

For example, these cueing or screen questions commonly employ such words as “have sex,” “intercourse,” “using force,” “threatening or attempting harm,” and “unwanted or uninvited” contact. At what point does having sex occur? What does intercourse mean? What constitutes force, or a threat, or an attempt? What makes an act unwanted or uninvited? More salient, on a survey questionnaire, what do these words *mean* to respondents? Is there consensus or discord on what, for example, “intercourse by force” means? For example, the term “sex”—which according to the *American Heritage Dictionary* means sexual intercourse—may have different meanings other than the meaning in the dictionary for college students. A recently published article in the *Journal of the American Medical Association* addressed the issue of what students considered as having “had

*These issues are important because, to the extent that these words and phrases are differentially interpreted, they will cue very different responses by women who may have experienced the same type of incident.*

sex.” Using a sample of undergraduate students at a Midwestern school, Sanders and Reinisch (1999) reported that individual attitudes varied regarding behaviors defined as having “had sex.” Thus, 59 percent of the respondents indicated that oral-genital contact did not constitute having “had sex” with a partner, and 19 percent responded similarly regarding penile-anal intercourse. These results suggest that it is essential for researchers to explicitly define for the respondents what is meant by intercourse and what types of penetration are being asked about.

These issues are important because, to the extent that these words and phrases are differentially interpreted, they will cue very different responses by women who may have experienced the same type of incident. One line of research, therefore, should be to explore what respondents believe terms such as force, attempt, threaten, and unwanted mean to them *in the context of a victimization survey*. This task could be addressed through focus groups that discuss in detail what specific words on a survey instrument mean to them. Another possibility would be to construct vignettes that experimentally vary different types of, say, force and then see how women define the “force” used in the vignette (e.g., if this act occurred to them, would they say that “force” was used against them?) (Schwartz 1998).

***In our own research, we use a combination of behaviorally specific questions to cue the recall of incidents and an incident report that asks a series of more detailed questions.***

Second, we have only a beginning understanding of the validity of the cueing or screen questions used in sexual victimization surveys and of how different questions might prompt women to report, at higher or lower levels, their having been sexually victimized. Take, for example, the case of measuring rape victimization. The research using incident reports shows that women eventually classified as rape victims are cued or “screen into” the incident report not only by questions designed to cue the recall of a rape victimization but also by questions designed to cue the recall of other sexual victimizations and of other nonsexual types of assault (Fisher and Cullen 1998; Percy and Mayhew 1997). Research that only uses behaviorally specific “rape” questions thus would fail to count

women whose recall is prompted by other types of cueing or screen questions. Beyond this example, our knowledge of what questions or combinations of questions are most effective in cueing the reporting of victimization incidents remains underdeveloped. Systematic studies using experimental designs are needed to investigate how the range and wording of questions affect how respondents report victimizations in interviews.

Third and relatedly, there is a need for conceptual work in deciding precisely what behaviors fall under the domain of “sexual victimization.” By analogy, the early self-report scales developed to measure delinquency usually contained only a limited number of items (e.g., six) and tended to measure petty forms of delinquency (e.g., shoplifting, joy riding, fist fights). Subsequently, scholars developed much lengthier measures (e.g., 25 to 50 items) that used multiple items to assess different types of delinquent acts, ranging from status offenses to petty thefts to serious violence, and including crimes committed in the home, in school, and in the community. Most of the measures using cueing or screen questions are relatively short and do not use a large number of items to operationalize different types of sexual victimization (e.g., different types of rapes). Again, research is needed to explore whether more comprehensive sets of cueing questions would be more effective in prompting respondents to report rape and other victimization incidents.

Fourth, in our own research, we have opted for using a combination of behaviorally specific questions to cue the recall of incidents and an incident report that asks a series of more detailed questions to determine how the incident should be classified. This approach has the advantage of using responses to detailed questions, rather than a simple “yes” response to a screen question, to categorize incidents. Still, we have only a preliminary understanding of what sources of measurement error the use of incident reports might introduce.

For example, in our NCWSV Study, nearly 1 in 5 incidents that were initially classified as a rape by the responses to the screen questions were then classified as “undetermined” because the respondents either refused to answer or answered “don’t know” to one or more questions in the incident report used to categorize incidents as a rape. It is possible, of course, that the incident report “did its job” by diverting from our count of rape victimizations those incidents that did not meet all of the legal criteria for rape (i.e., criteria measured by the questions in the incident report). It also is possible, however, that some “real” rape victims were not counted because they did not understand questions in the incident report or wearied at having to answer a second round of questions about a potentially painful event in their lives. In the absence of further research, discussions of possible measurement error associated with the use of incident reports will remain speculative.

Fifth, we also might entertain the possibility that new methods should be used to conduct surveys of sexual victimization (Schwartz 1998). Percy and Mayhew (1997) note that the 1994 British Crime Survey (BCS) included an innovative approach to measuring the victimization of women: having women use computers to read and answer questions on the BCS. When compared with the cue or screen questions normally used in the BCS, the completion of cue questions on

a computer resulted in a reporting of victimization that was 10 times higher than that normally reported in the survey to interviewers (7.5 percent versus 0.1 percent in the past year). These findings must be qualified, because the items in each measure of sexual victimization, though similar, were not identical to those in the BCS, and the responses to the computer survey were not validated by asking more detailed questions about the nature of the incident. Still, these caveats aside, the computer-assisted survey almost certainly produced more reports of victimization.

Why is this so? In general, the use of computers has been found to increase the self-reporting of a variety of sensitive behaviors, such as drug use, sexual conduct, and violence (Percy and Mayhew 1997; Turner et al. 1998). In a similar way, publicly revealing a sexual victimization incident to an interviewer may be embarrassing or otherwise discomforting. If the perpetrator of the event is an intimate, the respondent may fear that their reporting of this information might be overheard by or otherwise “get back to” the perpetrators (Crowell and Burgess 1996). In contrast, the computer may overcome these feelings of sensitivity by furnishing the kind of anonymity that encourages more “open answers” (Percy and Mayhew 1997, 147).

As Percy and Mayhew (1997, 147) understand, however, this computer approach to measuring sexual victimization is not yet “state of the art” but only a “methodological toe in the water.” One daunting challenge will be to design computer-based surveys that respondents who answer “yes” to screen questions can then easily and reliably use to answer complex incident reports. If this is not possible, it may be necessary to combine methods, using the computer for screen questions and interviewers for the incident report. The more significant problem, however, may be that “the validity of a measure is assessed relative to a ‘true’ score. Without a true score of sexual victimization, or any valid independent criterion, it is only possible to assess the relative efficacy of different survey methods” (Percy and Mayhew 1997, 146). Of course, how to obtain a “true score” of sexual victimization has been the challenge researchers have struggled with for the past two decades. Still, through in-depth interviews with a sample of respondents, it might be possible to develop a reasonable appraisal of whether they were victimized. The respondents’ “true score” or baseline data would then be compared with the respondents’ scores on various victimization surveys, including those that have study participants use computers to convey their victimization.

Sixth and relatedly, an inherent restriction to existing strategies for measuring sexual victimization—whether it is Koss’ SES, the NCVS, or our method of trying to combine these two approaches—is that they rely on a preexisting sequence of questions that is inflexibly used with all respondents. In our research, however,



we were struck by the potential insights that could be gained from the “verbatim” responses that interviewers obtained in our NVACW Study that employed the NCVS methodology. It would have been methodologically useful at key junctures in the survey to have paused and asked respondents to explain, in their own words, what happened to them or why they were answering a question in a particular way. For example, if a respondent had screened into the incident report on a rape question but then failed to answer “yes” that she had been “forced” to have intercourse, it would have been useful for the interviewer to have had the flexibility to probe further why this discrepancy in the responses was occurring. Or, if a respondent was classified as a rape victim but then said that she was not “raped,” we would have liked to have probed why she answered in this way. More generally, a detailed description of what the incident entailed would have furnished information to clarify whether the closed-ended questions were accurately capturing the “reality” of the incident.

In this regard, then, we would propose that sexual victimization surveys be refined to include what we might call “structured qualitative” questions. On a general level, it would be important to collect data by having respondents “tell their story” of what the incident entailed (i.e., give a longer verbatim account of “what happened” to them) (see Smith 1994). On a more specific level, survey instruments could be developed that, in a more structured way, instructed interviewers at what point they should probe for and record more information. For example, if a respondent said that “force” was used, the interviewer might then use a series of probes to elicit a description of the precise kind of force the assailant employed.

These qualitative data would be useful in three regards. First, they could be used to code incidents more accurately by providing supplementary information on what respondents had experienced. Second, the results from structured qualitative surveys could be compared in experimental studies with the results from traditional surveys that measure victimization only through yes-no answers to a series of closed-ended questions. We should note that research in other fields, such as the measurement of stressful life events, has used this method of “intensely probing” respondents, within the context of a structured questionnaire, to provide verbatim response that explained “what actually happened” to you (Shrout et al. 1989). Third, verbatim accounts could shed light on the process of sexual victimization—what exactly happened, what decisions were made when and why, and what actions were taken when and why. This type of understanding could (1) help in the development of a continuum of sexual victimization, and (2) inform sexual victimization prevention programs as to intervention points (see Leidig 1992).

Seventh, sexual “victimization” can be viewed as a reality that is “socially constructed,” with participants interpreting and giving meaning to what occurred in a victimization incident (e.g., it was or was not a “rape”). Research on the measurement of sexual victimization, however, is largely predicated on the assumption that, like other illegal acts, incidents of criminal sexual victimization comprise an objective reality that can be measured. In this view, which we generally endorse, how people construct reality is best seen as a potential source of measurement error, confounding how they might answer a victimization survey. The methodological task, then, is to puncture socially constructed realities and to find out “what really happened” by developing carefully worded questions that are immune to differential interpretation by respondents. Note that this approach owes much to Koss and other feminist researchers who first developed behaviorally specific questions to measure the legal elements of sexual victimization. They understood that relying on how respondents socially constructed victimizations would lead many women who had been sexually assaulted, but were not aware of the criminal nature of this assault, *not* to report on a survey that they had been victimized criminally.

For virtually any other crime (e.g., larceny, burglary, robbery), the idea of measuring objective, rather than socially constructed, reality would raise barely a ripple of concern. With sexual victimization, however, the nagging understanding remains that how people socially construct sexual victimization incidents may be a large, not a small, source of “measurement error” in how people respond to questions on victimization surveys. We have already noted the importance of exploring what the wording of questions means to respondents and the need to probe respondents to determine what they may have experienced in a victimization incident. But we also need to know more about how a range of factors—for example, sociodemographic characteristics, individual personality traits, political consciousness, friendship support networks, and personal and vicarious experiences with previous victimization—affect how people interpret sexual victimization incidents, and then how these factors may influence responses on victimization surveys.

Developing a methodology to explore these issues is likely to be a formidable task. Again, vignette research may be a beginning strategy that is not cost prohibitive. Here, respondents (1) would be given scenarios describing incidents involving and not involving sexual victimization, (2) would be instructed to imagine that they were a participant in these incidents, and (3) would be asked to complete a survey reporting “what happened to them.” The respondents would also complete a battery of questions measuring their personal and social characteristics. The final step would be to assess if responses to the victimization questions are conditioned by these characteristics and, if so, to what degree. In

turn, these findings might be used to inform field studies that would probe the impact of these characteristics within the context of actual victimization surveys.

Eighth and finally, there is a need for longitudinal studies that explore the sexual victimization of women over the life course. With the limited exception of the NCVS (which follows households for 3 years), the major national studies of sexual victimization have used cross-sectional designs. Although valuable, these approaches have inherent limitations: the lack of a clear time bound for the reference period of the survey; the necessity to measure lifetime prevalence rates of victimization retrospectively; and the inability to explore how developmental processes, including past victimization, are potentially implicated in current victimization experiences.

In closing, we recognize that the measurement of sexual victimization will remain an imperfect endeavor. The nature of sexual victimization, and the often deeply felt reactions victims experience, undoubtedly restrict what can be measured by traditional social science survey methods. Even so, we do not believe that we have reached the limits of what we can measure and know in this area. Moreover, regardless of whether the “true” prevalence of rape annually is 1 percent or 5 percent, we understand that advocates need to move ahead and continue to establish programs to protect women against sexual victimization. While this important task proceeds, however, researchers should not relinquish their obligation to muddle through the difficult and often uninspiring task of worrying about the wording and sequencing of questions on surveys. Survey methodologists have consistently shown that question wording and sequencing, response set ordering, and closed-ended compared with open-ended questions do influence estimates (see Lyberg et al. 1997). Although research of the measurement of sexual victimization has come a long way, it has now reached the point of illuminating not intractable truths, but the critical questions that remain to be investigated.

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## Notes

1. Unlike the UCR, NIBRS is incident based and includes four categories of sex offenses (forcible rape, forcible sodomy, sexual assault with an object, and forcible fondling). Note that the NIBRS definition of forcible rape differs from the UCR definition. For example, male and female victims are included in the NIBRS definition whereas only female victims are included in the UCR definition. Also, lack of consent is an explicit criteria in the definition of rape. Similar to the UCR, NIBRS includes only those crimes known to the police (see U.S. Department of Justice, Bureau of Justice Statistics and Federal Bureau of Investigation 1997).

2. In a personal communication with Jan Chaiken and Michael Rand (March 4, 2000), they wrote:

In the NCVS, all questionnaires for which any rape or sexual assault code is entered in any of the pertinent items are reviewed to determine whether the codes reflect the written entries [of the interviewers] in the [respondents'] summaries [of what happened]. Where there are clear indications that the coded entries [from the incident report] are not correct, they are edited, using guidelines developed by BJS and Bureau of the Census staffs. This procedure has proven beneficial towards improving the NCVS estimates of rape and sexual assault by removing, to the extent possible, the discrepancies existing between the coded and written entries.

3. The anal sex and digital-object questions do not contain an explicit definition of sexual penetration like the first two questions do; however, both questions are behavior specific.

4. Unlike the Kilpatrick, Edmunds, and Seymour study (1992), Tjaden and Thoennes defined anal sex within their question (see exhibit 6, question F3). The digital-object question is similar to the NWS question in terms of being behavior specific.

5. In addition to behaviorally defining penile-vaginal, oral, and anal penetration, we also provided an explicit behavioral definition for digital-object penetration. Neither the NWS nor the NVAW Survey did this. Our attempted rape screen question included threats of rape but our subsequent discussion of our classification method will clarify that this screen question was not used to ultimately classify any reported incidents.

6. In our incident report, we did not explicitly ask the respondents about being incapacitated due to alcohol or drugs at the time of the incident. Therefore, unlike those researchers who have used Koss' SES or a modified version (see DeKeseredy and Schwartz 1998), we did not use being incapacitated due to alcohol or drugs as a criterion to define rape. The NWS and the NVAW Survey also did not measure directly whether respondents were unable to give their consent to sexual activity because they were incapacitated due to alcohol or drugs. Note, however, that the introduction to our screen questions does explicitly tell the respondents that "You could be awake, or you could be asleep, unconscious, drunk, or otherwise incapacitated. Please keep this in mind as you answer the questions" (see exhibit 7).

7. We summed the total number of days from September 1, 1996, to the date of the interview across all the respondents and divided this sum by the total number of respondents (average number of days=209.43). We then summed the total number of days from September 1, 1996, to May 31, 1997 (273 days). This sum then was divided by the total number of months (30.33). The average reference period was 6.91 months (209.43/30.33).

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