Revising the SES: A Collaborative Process to Improve Assessment of Sexual Aggression and Victimization

By: Mary P. Koss, Antonia Abbey, Rebecca Campbell, Sarah Cook, Jeanette Norris, Maria Testa, Sarah Ullman, Carolyn West, and Jacquelyn White


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Abstract:
The Sexual Experiences Survey (SES) assesses victimization and perpetration of unwanted sexual experiences (e.g., Koss, Gidycz, & Wisniewski, 1987). Revised versions of the SES that resulted from the work of the SES Collaboration are now available. This article reviews weaknesses of the SES that were identified, strengths that were preserved, and methodological considerations in the measurement of unwanted sexual experiences that informed the revisions. The primary changes include: more behavioral specificity; conversion to gender neutrality; full crossing of unwanted acts and coercive tactics; and revised and updated wording for assessing consent, alcohol-related incidents, unwanted acts, and coercive tactics. For illustration, the full text of the revised victimization version and its scoring rules are provided. The article concludes with suggestions for future research. These suggestions aim to involve researchers in a coordinated agenda to develop data that clarify methodological questions and contribute to continued improvement in assessing sexual victimization and perpetration.

Article:
The original Sexual Experiences Survey (SES; Koss & Gidycz, 1985; Koss, Gidycz, & Wisniewski, 1987; Koss & Oros, 1982) has been widely used to assess victimization and perpetration of unwanted sexual acts including rape. The scale’s primary innovations were utilization of non-judgmental specific language and avoidance of legal terms to facilitate respondents’ abilities to identify and recall experiences that constitute the forms of unwanted sexual experiences. The SES introduced features that are now standard in measurement of perpetration and victimization (see Abbey, Parkhill, Beshears, Clinton-Sherrod, & Zawacki, 2006; Fisher & Cullen, 2000). Most particularly, these features include: (a) avoidance of terms such as rape that are poorly understood and differentially defined by respondents and (b) behaviorally specific descriptions of acts (unwanted sexual experiences) and tactics (behaviors used by perpetrators to compel sex acts against consent). The importance of behavioral specificity was reaffirmed by Fisher and Cullen (2000), who found that rape prevalence rates were nine times higher using items modeled on the SES compared to those based on the measurement approach used in the National Crime Victimization Survey.

The SES was developed in the late 1970s (Koss & Oros, 1982) and last revised in 1987 (Koss, Gidycz, & Wisniewski, 1987). It has fulfilled many research roles including serving as a measure
of prevalence, selection tool, predictor variable, and outcome measure in psychological, criminological, and health research settings. Not surprisingly, over time, the scale has evidenced deficiencies and has become dated. Across the years, the SES has been widely modified by researchers. Examples abound in the literature of studies with changes in the response format, reference period for recall, item wording, addition or deletion of questions according to the focus of the investigation, and some poorly conceptualized alterations that would have been repudiated by the original authors. Although these modifications do not seem to have undermined the usefulness or reliability of the measure, the result has been a proliferation of versions. Peer review has continued to accept the SES as a standardized measure; however, that designation is becoming less and less justifiable. Investigators’ modifications may have in part represented attempts to address deficiencies in the original SES. To enable continued use of a standard SES, we formed a collaboration (the SES Collaboration) consisting of nine scholars who have used the SES extensively in our research. This collaboration occurred over a period of 3 years using both face-to-face meetings and electronic discussion. During this time, we shared insights and data, debated issues, and iteratively wrote and revised multiple drafts aimed at reaching consensual decisions. Our way of working was heavily influenced by our shared appreciation for scholarship that reflects feminist process. We drew inspiration for our method of working from several papers that appeared in the special issue Innovations in Feminist Research edited by Crawford and Kimmel (1999) and published in this journal (e.g., Community Education Team, Wilfred Laurier University, 1999; Grossman, Kruger, & Moore, 1999; Mahlstedt, 1999; Stewart & Zucker, 1999).

We developed both long and short revisions—the SES Long Form Perpetration (SES-LFP), SES Long Form Victimization (SES-LFV), SES Short Form Perpetration (SES-SFP), and the SES Short Form Victimization (SES-SFV; see Appendix A). The differences between short and long forms include: (a) whether noncontact misdemeanor sex crimes are included—these items are of particular interest to criminologists and those working in sex offender assessment and treatment and (b) the number of behaviorally specific descriptions of experiences in which alcohol and drugs are associated with unwanted sex acts—these items are intended for researchers who focus on alcohol and other substances, as well as those who design and deliver alcohol prevention programs for young adults. The SES-SFP and SES-SFV are most closely modeled on the original SES. This article presents the full text and scoring rules for the SES-SFV as an illustration. All of the revised versions are available for free use by request to the first author.

We begin this article by reviewing the strengths and weaknesses we identified at the outset. Then, the methodological considerations and empirical literature that informed the revision process are briefly reviewed (for a comprehensive review, see Fisher & Cullen, 2000; also see Abbey, Parkhill, & Koss, 2005; Abbey et al., 2006; Abbey & McAuslan, 2004; Cook, 2002; Hamby & Koss, 2003; Testa, VanZile-Tamsen, Livingston, & Koss, 2004). The article concludes with an extensive list of topics for future research. The article does not contain psychometric data. Due to the volume of requests to use the SES, we felt it was important to disseminate revisions to stimulate work that would accumulate a sufficiently large sample to support psychometric analyses.
STRENGTHS AND WEAKNESSES IDENTIFIED

The SES has been widely used, which suggests that it has features that meet investigators’ needs. It is important to retain proven and familiar features in revisions of standardized instruments. We identified the following valuable characteristics: (a) clear definitions of rape and attempted rape that mapped onto legal statutes and inclusion of a spectrum of other unwanted sexual experiences, (b) behavioral specificity in the descriptions of both unwanted sexual acts and the tactics for compelling them, (c) versions to assess both perpetration and victimization, (d) item-level scoring to estimate incidence rates, (e) ordinal level scoring that placed respondents into mutually exclusive categories to facilitate reporting of prevalence rates, (f) consistent and acceptable evidence of reliability and validity, and (g) brevity.

In contrast to strengths, three criticisms of the SES have been widely disseminated in the public media. The first involves the alcohol question—“Have you had sexual intercourse when you didn't want to because a man gave you alcohol or drugs?” This item was modeled on Ohio law because the first author was then at an Ohio university. In that era, these statutes required that rape of an intoxicated woman involved intention by the perpetrator to use drugs to incapacitate the victim. Law reform has occurred since the 1970s. Many states have broadened the language that defines rape to include any penetration or attempted penetration of an incapacitated or intoxicated person, regardless of how that person became incapable of stopping what was happening (Seidman & Vickers, 2005). However, some states still differentiate degrees of sexual assault depending on whether the offender intentionally intoxicated the victim. Second, critics have charged that investigators count women as rape victims even though they do not use the word “rape” to label their experience (i.e., unacknowledged rape victims; see Gilbert, 2005). Failing to use a technical label does not negate the reality of an experience, and empirical data have well established the negative impact of rape even when unacknowledged (Fisher, Cullen, & Daigle, 2005; Fricker, Smith, Davis, & Hanson, 2003). The third criticism is that rape prevalence estimates include sexually coercive acts that do not constitute legally defined rape. That is not the case (see Koss, Gidycz, & Wisniewski, 1987).

These debates have overshadowed other weaknesses in the SES that we identified. These include (a) use of the term “intercourse,” which no longer has a universal meaning; (b) ambiguous assessment of consent because the original phrase “when you didn't want to” does not necessarily imply nonconsent; (c) heterosexist bias created by assessing only female victimization by male perpetrators and male perpetration against female victims; (d) lack of clarity in differentiating unwanted sexual contact and attempted rape, as well as sexual coercion items that inadequately represented people’s actual experiences; (e) failure to clearly specify that alcohol-associated rape involved impairment and inability to give consent or to stop what was happening; and (f) various methodological problems including early papers on the SES that used potentially inappropriate statistical approaches to determining reliability (see Koss & Gidycz, 1985; Koss & Oros, 1982), yet are still cited in contemporary publications. In addition to problems specific to the SES, there are general limitations of brief screening items that are characteristic of all surveys. In the material that follows, these issues are reviewed in more depth, and the modifications in the SES to respond to the limitations are described. We agree with Fisher and Cullen (2000) that the aim of revisions is to develop measures that are as accurate as possible, not to strive to produce the highest estimates.
REVISIONS AND RATIONALE

Definitions and Language

The SES was originally conceived to operationalize a continuum of unwanted sexual experiences that at the extreme reflected legal definitions of attempted rape and rape. Key elements of legally defined rape are force or incapacitation, nonconsent, and penetration or attempted penetration. Gylys and McNamara (1996) presented the SES items to prosecuting attorneys for ratings of consistency with Ohio state statutes. The findings were that the rape and attempted rape items mapped onto legal definitions as intended. The items designed to measure alcohol-associated rape did not, possibly due to changes in the law between the late 1970s and 1996. Two unwanted-sexual-contact items were rated as nonrape felony sex offenses and the remaining items were not classified as crimes (Gylys & McNamara, 1996). This mixture of items that do and do not qualify as crimes was retained in the revision. Restricting items only to those incidents that are crimes would ignore findings of the high frequency and emotionally distressing impact of noncriminalized sexual coercion (Abbey, Beshears, Clinton-Sherrod, & McAuslan, 2004; Livingston, Buddie, Testa, & VanZile-Tamsen, 2004; for a review see Spitzberg, 1999).

The original SES referred to unwanted sexual experiences as “sex play (fondling, kissing, or petting, but not intercourse),” “sexual intercourse (penetration of a woman's vagina, no matter how slight by a man's penis. Ejaculation is not required),” and “sex acts (anal or oral intercourse or penetration by objects other than the penis).” This language is problematic in light of recent research (Bogart, Cecil, Wagstaff, Pinkerton, & Abramson, 2000; Sanders & Reimisch, 1999). For example, 59% of the respondents in the latter study did not believe that oral–genital contact constituted having “had sex” with a partner, and 19% responded similarly regarding penile–anal intercourse. The revised SES drops the term “sexual intercourse” and substitutes behaviorally specific language to describe all the unwanted sex acts. We also separated oral, vaginal, and anal penetration into individual questions. In working to achieve behavioral specificity, our discussions revealed that there was a level that several of us viewed as being too frank based on their experience using the SES in community settings. For example, at one point, a draft wording had illustrated penetration by objects using examples of a dildo or candle. The concerns were that overly specific language could offend and may fail to cue responses from individuals penetrated by another object. A consensus was reached to remove this language as potentially counterproductive to disclosure for some respondents.

The consent language in the original SES also came under inspection because the phrase “when you didn't want to” does not establish that nonconsent was expressed. Sexual assault laws use a passive consent standard. This means that consent is assumed and sexual advances are considered welcome until some activity on the part of the victim occurs that to the reasonable person would indicate nonconsent. Nonconsent can be expressed verbally, physically, or by frozen fright (see Seidman & Vickers, 2005, for a legal analysis of consent).

The phrase “when you didn't want to” does not imply that any of these indicators of nonconsent occurred. We considered a number of alternate consent phrases including “when you indicated nonconsent verbally or by your behavior.” However, some of us feared that this language could negatively affect victims by subtly suggesting that only strong verbal or physical resistance constituted nonconsent. This effect would not only be contrary to our concern for the welfare of victimized persons, but could also interfere with disclosure and subsequently with the
measurement of resistance behaviors. We settled on the phrase “without my consent”; however, later in this article it is suggested that the impact of alternate consent language requires empirical study.

**Heterosexist Bias**

Rape laws in most states are now gender neutral, permitting both victim and offender to be either male or female, although the FBI Uniform Crime Reports continue to limit rape incidence to female victims. The original SES used gendered language. Specifically, each question to detect perpetration included the phrase “with a woman,” and each question about victimization began with “Has a man …” This approach precluded men from reporting victimization of any type and perpetration of nonconsensual same-sex acts. Likewise, the original versions did not measure ways in which women may potentially coerce sex from men and also prevented them from reporting same-sex victimization. A number of studies have appeared that attempted gender neutrality in victimization screening by modifying pronouns but no other text (e.g., Struckman-Johnson, 1988). Further examination of data generated by these modified items revealed that men's responses primarily referenced incidents in which they penetrated a woman but felt they did so due to perceived coercion including self-imposed, from the woman, or from peers (Struckman-Johnson, 1988; Struckman-Johnson & Struckman-Johnson, 1994; Struckman-Johnson, Struckman-Johnson, & Anderson, 2003). We acknowledge the inappropriateness of female verbal coercion and the legitimacy of male perceptions that they have had unwanted sex. Although men may sometimes sexually penetrate women when ambivalent about their own desires, these acts fail to meet legal definitions of rape that are based on penetration of the body of the victim. Furthermore, the data indicate that men's experiences of pressured sex are qualitatively different from women's experiences of rape. Specifically, the acts experienced by men lacked the level of force and psychologically distressing impact that women reported (Struckman-Johnson, 1988; Struckman-Johnson & Struckman-Johnson, 1994).

We worked diligently to develop item wording that captured men's sense of pressure to have sex and draw their responses into an appropriate category of coercion instead of to rape items. The revised wording is discussed in more detail later in the article.

Arguments for gender neutrality have many nuances. The “pro” position emphasizes that gender neutrality: (a) is legally grounded; (b) is more objective; (c) addresses the ethical standard for human research to respect all people; (d) confronts the growing awareness that dichotomizing gender and equating it with biological sex is overly simplistic; and (e) avoids causing offense or even formal complaints in educational, business, or community contexts, in which official policies may prohibit discrimination on the basis of race, gender, and sexual orientation. In addition, gendered versions present a practical problem in administration to mixed groups. To administer the male or female version accurately, the proctor has to make assumptions of gender by visual assessment, which is as problematic as making visual racial assessments. Other approaches that require respondents to self-identify as a man or a woman raise concerns about negative effects of public disclosure and exclusion of people who are transgendered.

At least three lines of argument align against use of gender-neutral questions. The first rationale for maintaining gendered questions is precedent, not only in past empirical studies, but also in contemporary practice. International public health language uniformly employs the term
“gender-based violence,” such as that used by the World Health Organization. Research in low- and middle-income countries routinely assesses only women's victimization as perpetrated by men. The extreme lack of knowledge about women's experiences in these settings and the harsh patriarchy that exists in many countries are the justifications. Second, some researchers believe that gendered versions are easier to read and understand. Third, concerns have been expressed that removing the gender context might suppress reporting. The latter two points are very important questions for empirical study because adoption of either gendered or gender-neutral questions requires balancing a number of potential issues about which we know very little.

Gender neutrality was adopted for the revised SES victimization and perpetration versions in the absence of empirical knowledge about the impact of doing so. Many of us felt that inclusion and respect for all people is a primary value of feminist research. Others clearly agreed with these values, yet felt that gendered versions are justified in studies that focus exclusively on female samples. However, it should be noted that this approach would fail to assess same-sex victimization. On the other hand, gender-neutral wording fails to provide information on the sex of the other person(s) because it is not implied by the question wording. This information is just one of many relevant variables that cannot be captured by brief screening measures, so follow-up questioning is essential whether gendered or gender-neutral wording is used (see Fisher & Cullen, 2000). The revised SES does provide a summary question on which respondents indicate whether the acts they have experienced or perpetrated involved females only, males only, or both females and males. We considered and rejected placing this question after each SES item because people may have experienced that unwanted act multiple times under different circumstances. Doing so would also have increased the number of responses required of participants, which is undesirable in a brief screening measure.

The revised SES could be easily converted by investigators to gendered administration with minimal wording substitutions or deletions. Moreover, modifications of the original SES that remain gendered are available, including one for victimization (Testa et al., 2004) and versions for both perpetration and victimization (Abbey et al., 2004, 2006). Investigators are encouraged to consider the complexity of gender when assessing sexual violence, weigh the options, and tailor the decision to the goals of the study. When gendered wording is used, due thought should be given to determining how to avoid presenting the survey in a way that communicates lack of validation or marginalization to some people in the sample.

**Sexual Coercion and Contact**

Unwanted sexual acts involving verbal coercion that stops short of threatened physical harm are not crimes; feminist legal scholars, however, suggest that making these acts illegal should be an advocacy goal (see Seidman & Vickers, 2005). Women rate sexual coercion at the midpoint of a seriousness scale on which forcible rape and rape when incapacitated are viewed as most serious (Abbey et al., 2004). Therefore, scholars have argued that coercion must be retained to accurately reflect women's experiences. The original SES items referenced misuse of authority and verbal pressure. Two percent of women reported sexual intercourse subsequent to misuse of authority and 25% reported that unwanted intercourse resulted from being “overwhelmed by a man's continual arguments and pressure” (Koss, Gidycz, & Wisniewski, 1987). Continuing to pursue authority-related sexual assault was rejected on grounds of low prevalence, and verbal coercion was expanded. Livingston and colleagues (2004) compared qualitative and quantitative
descriptive data from interviews with community women. Among their findings were that sexual coercion consisted of positive, neutral, and negative types. Positive persuasion was sweet talking and was the least common form. Negative verbal persuasion consisted of threats to end the relationship or go elsewhere for sex, expressions of dissatisfaction with the woman or their sex life, use of verbal aggression such as swearing or putdowns, and attempts to elicit sympathy. The investigators placed nagging or pleading for sex without emotionally charged messages into the neutral classification. We developed two new SES items focused on negative coercion to better reflect these empirical advances. The first references lies and false promises, threats to end the relationship, threats to spread false rumors, and insistent verbal pressure. The second includes the more highly negative coercive strategies including showing displeasure, criticizing someone's sexuality or attractiveness, and getting angry (without overt threats of or actual physical force).

Concerns have also been reported in reference to the original SES sexual contact and attempted rape items. The original contact item reads, “Have you had sex play (fondling, kissing, or petting, but not intercourse …)?” The attempted rape item says, “Have you had a man attempt sexual intercourse (get on top of you, attempt to insert penis …)?” In a recent study, investigators read narrative descriptions of the unwanted sex acts that respondents were disclosing and compared them to their self-report on SES items. Although coder–respondent agreement was high for rape and coercion incidents, it was considerably lower for contact and attempted rape incidents (Testa et al., 2004). The revised SES has modified wording on sexual contact and attempted rape items to further distinguish them for respondents. The revised sexual contact item reads, “Someone fondled, kissed, or rubbed up against the private areas of my body (lips, breast/chest, crotch, or butt) or removed some of my clothes without my consent (but did not attempt sexual penetration).”

**Alcohol-Associated Rape**
The largest community (Tjaden & Thoennes, 1998) and college-student victimization surveys (Fisher, Cullen, & Turner, 2000) have addressed rape when intoxicated by simply not measuring it. Not only is this strategy incompatible with legal definitions, it is most particularly ill advised given recent empirical data. Approximately 75% of rapes in a national study of college students were associated with alcohol use (Mohler-Kuo, Dowdall, Koss, & Wechsler, 2004). The original female SES item on alcohol-related rape was “Have you had sexual intercourse with a man when you didn't want to because a man gave you alcohol or drugs,” and the male version was “Have you engaged in sexual intercourse with a woman when she didn't want to by giving her alcohol or drugs?” Although some of us have found that the original SES alcohol item contributed valuable information, many critics argue that it fails to establish that the victim was incapacitated and unable to consent.

Our collaboration includes scholars who have published extensively on the relationship between alcohol and rape. Today, the ways in which alcohol and sexual assault are associated are much better understood. These circumstances include voluntary consumption, surreptitious administration as an incapacitation tactic, pressure to consume with intent to capitalize on lowered inhibitions and inability to stop what is happening, and opportunistic preying on incapacitated or even unconscious persons. Although we are not yet confident that respondents can differentiate these nuances, the revised SES Long Form contains 10 items to assess these circumstances. That degree of specificity is not feasible or desirable in a brief screening tool.
Therefore, we settled on one alcohol/drug item for the short forms that evidence suggests represents the most common pattern. The revised victimization wording is “taking advantage of me when I was too drunk or out of it to stop what was happening,” which is an item that has been used by Abbey and colleagues (see Abbey et al., 2004; Abbey & McAuslan, 2004). Other related studies include Brecklin and Ullman (2002), Testa and Livingston (1999), Testa et al. (2004), and Zawacki et al. (2005). Testa has a study under way comparing “When I had been drinking or using drugs and was too incapacitated to consent or stop what was happening” and “because he gave you alcohol or drugs without your knowledge or consent” to determine if different, unique experiences are identified by the use of two separate items or whether the first is sufficient.

**Cueing Disclosure**

Among the issues to be considered in a screening tool for unwanted sexual experiences is how to order the phrases within the items. Questions may begin with reference to the unwanted sexual acts (e.g., “have oral sex with me …,” “put his penis in my vagina or insert fingers or objects …,” “put his penis in my butt …”). Alternately, questions may begin with the specific behavioral tactics used by perpetrators to compel sex acts against consent (e.g., “threatened physical harm” or “used physical force such as holding you down with their body weight, pinning your arms, or having a weapon”). Abbey and colleagues (2005) compared responses on victimization and perpetration questions that differed in whether the unwanted sex act phrase or tactics phrase appeared first in the item. For perpetration reports among men, there was more disclosure when the means of obtaining unwanted sex appeared first. Differences in disclosure rates that exceeded 5% when tactic was present first were reported for 10 of 35 comparisons, virtually all of which were sexual coercion items. For women, the comparable figures were 11 of 35 comparisons. However, the pattern of significant differences among women was not systematic; they involved items that ranged from unwanted contact to rape. We decided to issue the revisions with the unwanted sex acts placed first on both victimization and perpetration versions for continuity with the original SES. However, we flagged this issue as one requiring greater empirical attention so that future revisions of question format can be based on replicated empirical findings.

**Reference Period and Response Format**

We observed that the recall periods in the original SES, which were “from age 14 on” and the “last school year” overlapped. Specifically, the former reference period contains the latter, and therefore, the responses are confounded. The revision contains the following instructions to avoid this problem: “The past 12 months refers to the past year going back from today.” The instructions for recall over a longer period state, “Since age 14 refers to your life starting on your 14th birthday and stopping one year ago from today.” We retained the cutoff of age 14 for consistency with the original SES; the intention was to differentiate adolescent and adulthood experiences from child sexual abuse. Testa and Livingston (1999) found that, among the women reporting an SES incident between 14 and 17 years of age, all but 1 of 13 incidents they examined qualitatively was perpetrated by a boyfriend or similar-aged peer. Incidents that occurred between ages 14 and 17 years had characteristics that are more similar to unwanted experiences involving peers than to child sexual assault (Livingston, Hequembourg, Testa, & VanZiile-Tamsen, 2007).

There are several facets to the response format discussion. Many researchers, including ourselves, have dispensed with the yes/no initial response option of the original SES and rely
solely on frequency assessment (i.e., “how many times”). Frequency assessment increases the variance and allows calculation of an overall victimization or perpetration score for the SES. However, readers are cautioned that pure frequency scoring equates less severe acts and less violent tactics with more serious ones. This practice is one of the reasons that the Conflict Tactics Scale as it is typically scored reveals that college women are equally or more violent than men in relationships (see White, Smith, Koss, & Figueredo, 2001, for a critique of a meta-analysis of this literature). Researchers are well advised to consider weighting by severity.

The SES has an implied weighting in that the acts appear in the order of bodily intrusiveness beginning with fondling and ending with anal penetration. Likewise, the coercive tactics begin with telling lies and end with using force. The exception is that the items that involve attempts not resulting in penetration appear at the end of the survey. The intent of this exception was to increase the likelihood that items referencing attempts do not draw off responses before participants reach the items referring to completed unwanted acts and as an additional method to further differentiate sexual contact from attempted rape. In scoring, however, attempted rape items should receive less weight even though they appear later in the survey. The severity ordering in the SES revisions is based on assumptions and legal precedent. Studies over the years have demonstrated that women rated sexual coercion at the midpoint of a seriousness scale (e.g., Abbey et al., 2004). In an attempt to address the severity weighting, Testa and colleagues (2004) asked about subjective trauma at the time of the incident and now. Rape was rated as more traumatic currently than all other types of experiences, which did not differ from each other. Further work is needed to support development of an empirically grounded approach to severity weighting.

A further scoring issue is duplicate counting, although there are solutions to this problem (see scoring rules in Appendix B). Responses to the tactic options that are provided for each of the unwanted sex acts do not necessarily refer to discrete incidents. For example, a woman could be both anally and vaginally raped by the same perpetrator as part of one offense. Likewise, a single unwanted sex act could have been compelled by more than one tactic. As an illustration, a perpetrator could lie, get angry, and use physical force all in the pursuit of one incident of oral sex against consent. Critics have charged that sexual violence researchers routinely justify their social agenda by duplicate counting of respondents (Gilbert, 2005; see Cook & Koss, 2005, for a rebuttal of Gilbert). This criticism is an error of fact when referring to prevalence. The SES has always been scored categorically by calculating victimization and perpetration prevalence percentages on the basis of the most serious sexual act respondents had sustained or perpetrated regardless of the overall number of affirmative responses to the SES. In contrast, incidence data focus on the frequency of individual tactics, disregarding whether each occurred alone or in combination with other coercive acts. This approach is appropriate to the study of risk factors for perpetration and victimization and informs the development of prevention programming. Education and prevention programs are most empirically grounded when they place priority on the highest frequency coercive behaviors. For example, data reviewed earlier suggested that the majority of rapes on college campuses involved alcohol-related coercion even if other tactics were used as well (Mohler-Kuo et al., 2004). These findings suggest that both individual and environmental prevention on college campuses should focus on alcohol use and its links with unwanted sex.
**Data Collection Method**

There are a large number of studies in the general survey literature that compare data collection methods including telephone, mail, and computer-assisted approaches (e.g., Turner et al., 1998). However, caution should be exercised in generalization of findings in other areas of inquiry into sexual assault. Even though many survey questions are personal, sexual assault is uniquely intimate and disclosure of victimization is inhibited by stigma, widespread beliefs that it is shameful, and cultural norms that victims are wholly or partially responsible for rape (Frazier, 2003; Koss & Figueredo, 2004; McMullin & White, 2006). Likewise, there are also barriers to disclosure of perpetration because the items reference illegal sex acts and underage drinking. Whenever there is the potential for criminal liability or damage to reputation, the risk level is raised from the human subject's protection perspective, and attention to privacy during administration and confidentiality or anonymity of responses is mandatory. Surveys are increasingly moving to computer-assisted survey interviewing (CASI) or web-based surveys instead of telephone, mail, or face-to-face administration. The new technologies raise questions of impact on participation, disclosure rates, reliability, and validity. Furthermore, they demand new strategies for protecting confidentiality.

Recently, the SES has been administered by CASI and mailed surveys (Abbey et al., 2005; Testa, Livingston, & VanZile-Tamsen, 2005; Turner et al., 1998) and by web-based methods (Fields & Chassin, 2006). Testa and colleagues (2005) found similar rates of disclosure of sexual victimization regardless of whether women completed a paper-and-pencil version of the SES mailed to their home or completed the SES via CASI in person at a central research site. Fields and Chassin's (2006) web-based crime survey included two of the SES-SFV rape items ($N = 2,972$ female students). The overall participation rate in the survey was 78%. However, of those who began the survey, 72% terminated or discontinued at some point. This is a huge limitation if it generalizes to other studies that focus on crime, and the reasons for discontinuation need to be better understood. Potential reasons for incomplete surveys could have been technical glitches, fatigue, or respondents who saved partially completed surveys but never returned to the site to finish them. The proportion of respondents who discontinued after they had already provided victimization data were 33% for rape, 25% for robbery, and 22% for physical assault. However, there was no examination of alternate versions testing the effects of question ordering to determine if the differences in completion rates by type of victimization could be explained. Sisco and Koss (2006) reported face-to-face group administration of the SES-LFs to both male and female students. Here discontinuation rates were low; however, students received course credit for participation. Clearly, comparative methods studies focused on sexual assault screening are urgently needed to inform the use of new technology.

We also raised concerns about whether the revisions lengthened the SES to a point at which fatigue-related suppression effects might occur on responses to the most serious unwanted experiences that appear later in the survey. If fatigue is shown to be an issue, the placement of the most serious unwanted experiences later in the survey might be questioned (see Abbey et al., 2005; Fricker et al., 2003). A related issue is the impact of placement of follow-up questions (also called incident reports) on disclosure rates, which we discuss shortly.
Reliability and Validity

The SES has demonstrated levels of internal consistency toward the low end of acceptability when measured by Cronbach's alpha (typically in the low .70s; for a review, see Cecil & Matson, 2006). One practical solution to improving internal consistency, increasing the number of items, takes advantage of the way alpha is estimated, yet does not resolve the crux of the issue. The central question is whether a latent or induced measurement model is appropriate for the SES. The matter is important because of its implications for how the SES is conceptualized in a particular research application and how reliability is calculated. The latent model is essentially a factor model (Edwards & Bagozzi, 2000). The latent model assumes that an unobserved construct is the common cause of a set of observed variables. In the case of sexual victimization, a latent model implies that sexual victimization influences all unwanted experiences (i.e., all the items on the SES) and that these experiences are necessarily interrelated. Were this assumption true, a measure of internal reliability would be an appropriate estimate. What this unobserved construct would be, however, other than sexual perpetration, is hard to identify. We are not aware of findings that support any common characteristics within potential victims that cause them to be sexually assaulted in multiple ways. Moreover, none of the purposes for which the SES is used to assess victimization, including as a measure of prevalence, selection tool, predictor variable, or outcome measure, theoretically requires that women's experiences be interrelated.

A more appropriate conceptualization of the SES victimization measure is as an induced model. In this model, the observed variables combine to form a new variable that represents a category or set of experiences. The SES uses categories (e.g., noncontact, sexual coercion, rape) to describe different forms of sexual assault. Goodman, Dutton, Weinfurt, and Cook (2003) used this framework to describe women's strategic responses to intimate partner violence. The induced model does not require that items in categories correlate with one another, just as no reason exists for two or more of women's experiences of sexual assault to necessarily be related to one another. Measures of internal reliability are not appropriate with the induced variable model.

The same logic may or may not apply to the SES to assess perpetration, depending on how the measure is being used in a particular study. If the purpose is to assess a latent factor that could be caused by a construct such as general aggression, then internal reliability is appropriate. However, for other uses, such as assessing how many participants report using various tactics to compel unwanted acts, the induced model might be better. Researchers should carefully consider which conceptual model best suits their purpose and report or not report internal reliability accordingly. If investigators opt to use the SES with a yes/no response format, although that is not the response format recommended in the revisions, the appropriate internal reliability test is the Kuder Richardson-20 (Rogers, 1995).

Follow-Up Questions

The SES is intended as a brief screening tool that can serve various roles in research design, including selection of participants for further study, a predictor of health or mental health impact, a criterion for identification of risk factors, and an outcome measure for prevention or interventions. The scale is also useful for providing incidence and prevalence information if samples are selected by reproducible methods and are generalizable. However, no brief measure can assess all relevant dimensions about victimization or perpetration. What responses to the
SES can do is identify areas for further inquiry. There are numerous methodological issues related to follow-up questions (or incident reports as they are typically called in criminology). Depending on the focus of a study, there are virtually unlimited amounts of additional information that could be relevant and helpful. Examples include gender and relationship of parties, whether the tactics reported occurred in single or multiple incidents, whether the presence of the defining characteristics of rape disclosed in self-report can be verified by follow-up questions, socio-demographic and cultural characteristics of participants, situational characteristics of the assault location, whether the act is acknowledged or unacknowledged as the crime that the item represents, victim resistance, perpetrator tactics, reporting to law enforcement, use of assault-specific services, responses of others, and impact of the experience on mental, physical, and social health.

Follow-up questions raise methodological questions of their own. If respondents are asked for follow-up information for every unwanted experience, this creates a large respondent burden. Another consideration is the impact of placement of follow-up questions relative to the screening items. What are the effects on disclosure if every positive response branches the respondent into detailed inquiry versus holding off until all screening items have been administered? The desire to obtain as much information as possible needs to be balanced by the concern that follow-up to every question may suppress disclosure, thus undermining the major purpose of the SES as a screening instrument.

If follow-up is to be selective, what criteria should the investigator impose? This issue is particularly problematic when respondents have had more than one experience of the same type of unwanted sex, such as vaginal penetration by force, which many surveys show often occurs an average of two or more times (e.g., Fisher et al., 2000). Examples of instructions that may be used to guide participants to select incidents on which to base their follow-up responses include: (a) the most recent, addressing concerns of many survey experts who consider memory for crime to deteriorate rapidly over time; (b) the most severe, noting that this choice can be objectively constrained by the investigator or subjectively defined by the respondent; (c) the most upsetting, acknowledging that this is a leading question; (d) the best remembered, accepting that this incident may not be the most frequent or severe; (e) random, realizing that this method is difficult to achieve in paper-and-pencil administration; or (f) those that caused injuries, recognizing that this criterion is most appropriate for public health studies and greatly reduces the number of respondents from whom to gather data.

CONCLUSIONS
We aimed to address measurement issues while maintaining the strengths of the original surveys. Our discussions identified many issues on which empirical data could inform future revisions in the SES and improve measurement of unwanted sexual experiences in general. Some of the issues we identified include:

**Language**

1. Do alternative consent phrases such as “did not consent” versus “when I indicated either verbally or physically that I did not want to” have an effect on disclosure rates and reporting of resistance? For this research question, as well as subsequent ones that follow referring to comparisons of different ordering of item phrases, language, length, or forms
of administration, the traditional experimental design would provide the most interpretable results.

2. What are the cognitive capabilities and age range within which the SES is valid and acceptable?

3. How do the revisions impact on respondent burden?

**Gender Neutrality**

1. What is the impact of gender-neutral language on disclosure rates compared to gender-specific language?

2. Does the gender-neutral wording of SES items work, as we intend, to capture the strategies women may use to coerce sex and situations where men perceive that they are coerced (Struckman-Johnson, Struckman-Johnson, & Anderson, 2003; Anderson, Kantos, Tanigoshi, & Struckman-Johnson, 2005)? Also, what are the rates of disclosures of same-sex experiences, male victimization, and female-perpetrated sex acts elicited by the revised gender-neutral questions?

3. How does removing the context provided by gender affect the reactions to the disclosed incidents? Comparisons of men and women on their reactions to specific victimization items might reveal differences on a variety of dimensions including the distress level induced, the label for the experience, and perceptions of how the experience has impacted their sexual or moral reputation.

4. Is there a category of male genital harm not involving penetration (testicle or penile infliction of pain or humiliation) or other unwanted sexual experiences involving men that are not currently captured on the victimization form? Likewise, might there be forms of female genital assault or other tactics that women use to pressure men into what they perceive as unwanted sex? If so, the experiences should be sufficiently prevalent to warrant inclusion in a screening measure.

**Cueing Disclosure**

1. How do participation and disclosure rates of unwanted sexual experiences on the SES-SF compare across different data collection methodologies including Internet-administered, CASI, mail, and in-person surveys? A related question is how these rates compare to disclosure of personal items that do not pertain to sexual assault (Percey & Mayhew, 1997). Ideally, the SES will be robust to different types of administration, yielding similar disclosure rates regardless of mode (e.g., Testa et al., 2005).

2. What are respondents’ perceptions of ease of responding and other relevant dimensions comparing tactics-first presentation to acts-first item wording? How does tactic-first versus act-first item format affect disclosure rates across the spectrum of severity?

3. Would the inclusion of additional items, such as the misdemeanor crime items from the Long Form SES prime and increase reporting of rape as suggested by Fisher and Cullen (2000) or does respondent fatigue develop that could suppress reporting on the items that appear later in the survey? Alternately, does extracting only the attempted rape or rape items from the SES to save time suppress disclosure compared to that obtained with the full set of items as Abbey et al. (2005) suggests?
**Item Format and Reference Period**

1. How do disclosure rates compare when follow-up questions are placed at the end of the SES-SF versus when they are administered after every individual screening item?
2. What are the effects of placing the SES-SF items in health, crime, or alcohol surveys compared to administering them in a survey exclusively focused on unwanted sexual experiences?
3. How do descriptive data compare when elicited for all experiences since age 14, all experiences in the last year, the most extreme sexual assault as defined objectively by the investigator, the most serious or alternatively the best remembered experience defined subjectively by respondents?

**Reliability**

1. How well does a latent factor model fit the perpetration data and an induced model account for the victimization data?
2. Do the revised SES versions result in a significantly higher number of disclosed incidents for the “since age 14” time frame compared to the reporting period limited to the “past year”? This is an important internal reliability issue; data should be logically consistent when different reference periods are used in the same survey (Hilton & Harris, 1998; Krahé, Reimer, Scheinberger-Olwig, & Fritsche, 1999).

**Validity**

1. How well do the SES-SF items operationalize legal definitions reflected in sexual assault statutes across the various states according to ratings by prosecutors? This question could be examined with the approach taken by Gylys and McNamara (1996). In addition, quantitative or qualitative follow-up of SES responses could verify the presence of the legally defining elements of rape, including force or incapacitation, non-consent, and penetration.
2. Does the behaviorally specific language in the SES-SF have the same meaning to respondents as it does to the survey authors? This question pertains to content validity and could be examined by using focus groups, comparison of narratives of unwanted sexual experiences to SES-SF responses, or scenarios depicting unwanted sex acts that were specifically designed to exemplify the acts that each item aims to detect (Fisher & Cullen, 2000). A specific focus should be placed on whether the revised SES-SF sexual contact and attempted rape items result in placement of respondents’ experiences into response choices consistent with the authors’ intended meaning of the items. Further, for all these issues, it is crucial to include individuals from many different backgrounds including ethnicity, socio-economic status, culture, and age because it is likely that words may have somewhat different meanings for various groups. An overarching goal for SES revisions would be to maximize interpretability across as many groups and subgroups as possible.
3. What are the correlations of the revised SES-SFV and SES-SFP to scores on other variables that are known to be associated with victimization and perpetration, with the original SES, and to various alternate measures of sexual assault? Other important construct validity questions include how well the revised SES-SFV and SES-SFP compare to other assessments of unwanted sexual experiences on social desirability,
disclosure rates, stability, and application in diverse groups. What variables might explain any observed differences within the same sample (Cook, 2002)?

In conclusion, the revised SES versions emerged from an extensive consultative process that involved the most active users of the SES. Our work confirms the observations of others that collaboration in feminist scholarship creates valuable insights and maximizes our impact in an era of scarce resources (see Campbell & Wasco, 2000). Although we shared a common purpose facilitated by our shared attitudes, knowledge, and conceptual frameworks, we also had differences of opinion, and the group was unable to reach consensus on some empirical questions. All of us have agreed to release these drafts for free use by the scholarly community and have developed a process for tracking use of the revised forms. However, it is important to stipulate that we see them as works in progress. A focused research agenda, involvement of a new generation of sexual violence researchers, and continued sophistication in the measurement of sexual aggression and victimization would be a satisfying outcome of our collaborative scholarship.

APPENDIX A: SEXUAL EXPERIENCES SURVEY SHORT FORM VICTIMIZATION (SES-SFV)

The following questions concern sexual experiences that you may have had that were unwanted. We know that these are personal questions, so we do not ask your name or other identifying information. Your information is completely confidential. We hope that this helps you to feel comfortable answering each question honestly. Place a check mark in the box (□) showing the number of times each experience has happened to you. If several experiences occurred on the same occasion—for example, if one night someone told you some lies and had sex with you when you were drunk, you would check both boxes a and c. “The past 12 months” refers to the past year going back from today. “Since age 14” refers to your life starting on your 14th birthday and stopping one year ago from today.

<table>
<thead>
<tr>
<th>Sexual Experiences</th>
<th>How many times in the past 12 months?</th>
<th>How many times since age 14?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Someone fondled, kissed, or rubbed up against the private areas of my body (lips, breast/chest, crotch or butt) or removed some of my clothes without my consent (but did not attempt sexual penetration) by:</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>a. Telling lies, threatening to end the relationship, threatening to spread rumors about me, making promises I knew were untrue, or continually verbally pressuring me after I said I didn’t want to.</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>b. Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force, after I said I didn’t want to.</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>c. Taking advantage of me when I was too drunk or out of it to stop what was happening.</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>d. Threatening to physically harm me or someone close to me.</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>e. Using force, for example holding me down with their body weight, pinning my arms, or having a weapon.</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>2. Someone had oral sex with me or made me have oral sex with them without my consent by:</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>a. Telling lies, threatening to end the relationship, threatening to spread rumors about me, making promises I knew were</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
untrue, or continually verbally pressuring me after I said I didn’t want to.

b. Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force, after I said I didn’t want to.
c. Taking advantage of me when I was too drunk or out of it to stop what was happening.
d. Threatening to physically harm me or someone close to me.
e. Using force, for example holding me down with their body weight, pinning my arms, or having a weapon.

3. If you are a male, check box and skip to item 4 □

A man put his penis into my vagina, or someone inserted fingers or objects without my consent by:

a. Telling lies, threatening to end the relationship, threatening to spread rumors about me, making promises I knew were untrue, or continually verbally pressuring me after I said I didn’t want to.
b. Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force, after I said I didn’t want to.
c. Taking advantage of me when I was too drunk or out of it to stop what was happening.
d. Threatening to physically harm me or someone close to me.
e. Using force, for example holding me down with their body weight, pinning my arms, or having a weapon.

4. A man put his penis into my butt, or someone inserted fingers or objects without my consent by:

a. Telling lies, threatening to end the relationship, threatening to spread rumors about me, making promises I knew were untrue, or continually verbally pressuring me after I said I didn’t want to.
b. Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force, after I said I didn’t want to.
c. Taking advantage of me when I was too drunk or out of it to stop what was happening.
d. Threatening to physically harm me or someone close to me.
e. Using force, for example holding me down with their body weight, pinning my arms, or having a weapon.

5. Even though it did not happen, someone TRIED to have oral sex with me, or make me have oral sex with them without my consent by:

a. Telling lies, threatening to end the relationship, threatening to spread rumors about me, making promises I knew were untrue, or continually verbally pressuring me after I said I didn’t want to.
b. Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force, after I said I didn’t want to.
c. Taking advantage of me when I was too drunk or out of it to stop what was happening.
d. Threatening to physically harm me or someone close to me.
e. Using force, for example holding me down with their body weight, pinning my arms, or having a weapon.

6. If you are male, check this box and skip to item 7. □
Even though it did not happen, a man TRIED to put his penis into my vagina, or someone tried to stick in fingers or objects without my consent by:

- Telling lies, threatening to end the relationship, threatening to spread rumors about me, making promises I knew were untrue, or continually verbally pressuring me after I said I didn’t want to.
- Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force, after I said I didn’t want to.
- Taking advantage of me when I was too drunk or out of it to stop what was happening.
- Threating to physically harm me or someone close to me.
- Using force, for example holding me down with their body weight, pinning my arms, or having a weapon.

7. Even though it did not happen, a man TRIED to put his penis into my butt, or someone tried to stick in objects or fingers without my consent by:

- Telling lies, threatening to end the relationship, threatening to spread rumors about me, making promises I knew were untrue, or continually verbally pressuring me after I said I didn’t want to.
- Showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force, after I said I didn’t want to.
- Taking advantage of me when I was too drunk or out of it to stop what was happening.
- Threatening to physically harm me or someone close to me.
- Using force, for example holding me down with their body weight, pinning my arms, or having a weapon.

8. I am: Female ☐  Male ☐  My age is ______ years and _______ months.
9. Did any of the experiences described in this survey happen to you one or more times?
   - Yes ☐
   - No ☐

What was the sex of the person or persons who did them to you?
   - I reported no experiences ☐
   - Female only ☐
   - Male only ☐
   - Both females and males ☐

10. Have you ever been raped?
    - Yes ☐
    - No ☐

APPENDIX B: SCORING RULES FOR THE SES-SFV

Scoring Based on Individual Items
To estimate the frequency of each type of unwanted sex act and/or the rate of each tactic to compel unwanted sex, calculate the percentage of respondents who respond yes to each choice a through e for each item 1 through 7.

Ordinal Scoring
To estimate the frequencies of different types of victimization or perpetration by grouping the items according to levels of severity, use the following rules. This goal can be accomplished two
ways. The first results in non-mutually exclusive groups; individual respondents may be represented in multiple categories because a single unwanted act could have involved multiple tactics or different forms of unwanted sex may might have occurred as part of one victimization incident. As a result, the results will exceed 100%.

1. Non-victim: all items checked 0
2. Sexual contact: item 1 checked any number of times on c, d, and e
3. Sexual coercion: any item 2 through 7 checked any number of times > 0 on a or b
4. Attempted rape: items 5, 6, or 7 checked any number of times > 0 to c, d, or e
5. Rape: items 3, 4, and 5 checked any number of times > 0 to c, d, or e

Use the following instructions to create non-redundant scores that place each respondent into a mutually exclusive category based on their most severe experience. This approach will result in percentages that total 100%. If both “since age 14” and “previous year” were measured, the scoring rules must be applied to both sets of responses and summed to create the lifetime prevalence estimate.

1. Nonvictim: all 7 items checked 0 times on a, b, c, d, and e
2. Sexual contact: item 1 checked any number of times > 0 on c, d, and e and no other responses > 0 to any other item 2 through 7
3. Sexual coercion: Any item 2 through 7 checked > 0 times to a or b and all options c through e on items 1 through 7 checked 0 times
4. Attempted rape: items 5, 6, or 7 checked any number of times > 0 to c, d, or e AND items 3, 4, and 5 checked 0 times to c, d, and e regardless of responses to any other items
5. Rape: items 3, 4, and 5 checked any number of times > 0 to c, d, or e regardless of responses to any other items

REFERENCES


