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**DEVELOPMENT AND VALIDATION OF  
THE CONTEMPORARY SEXUAL VIOLENCE SCALE**

by

Corey Frederick Doremus

A Dissertation

Submitted to the  
Department of Psychology  
College of Science and Mathematics  
In partial fulfillment of the requirement  
For the degree of  
Doctor of Philosophy  
at  
Rowan University  
September 13, 2023

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## Abstract

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DEVELOPMENT AND VALIDATION OF  
THE CONTEMPORARY SEXUAL VIOLENCE SCALE  
2022-2023  
DJ Angelone, Ph.D., and Meredith Jones, Ph.D.  
Doctor of Philosophy

College students face an increased risk of sexual violence victimization and perpetration compared to the general population. Although sexual violence experiences within this population have received substantial attention by researchers, studies typically focus on male perpetrators and female victims. Although a number of measures have been developed to assess male sexual violence perpetration, comparatively few have been developed to measure other types of SV such as female perpetration. The current project aimed to develop an empirically supported measure of sexual violence perpetration which assesses the frequency and severity of engagement in discrete sexual violence behaviors and tactics among individuals of all genders. This measure was developed within the context of both perpetration and victimization and captures sexual violence experiences at a higher level of detail than has been possible with existing measures. The final CSVS includes 130 items and showed moderate to strong correlations with the Sexual Experiences Survey (SES; Canan et al., 2020, Koss et al., 2007) as a whole ( $r_{\text{vict}(34)} = .722, p = <.001; r_{\text{perp}(34)} = .373, p = .025$ ). Overall, the CSVS represents a dynamic measure which leverages current technological approaches to deliver a lightweight yet granular SV measure for both victimization and perpetration. Future explorations of this measure will allow for a more specific assessment of participant SV experiences among behaviors of interest.

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# Chapter 1

## Introduction

### Background

Sexual violence (SV) as a construct is defined as sexual contact or behaviors between individuals wherein consent is either explicitly denied or when there is no ability to provide affirmative consent due to factors such as substance use, age, or specific duress (Basile, 2014). SV researchers have historically examined SV behaviors such as verbal and physical coercion, the use of substances, and disregarding lack of consent (Basile et al., 2002; Koss et al., 2007; Peterson et al., 2011). SV is the primary construct within the current study, and is defined within this study as above, however there are a number of historical terms which are used to describe the same (or very similar) constructs. For example, sexual aggression, SV, rape, sexual misconduct, and sexual assault are some of the more common terms used variably by researchers to describe overlapping behaviors including non-consensual sexual experiences and non-contact sexual harassment (Goodwin, 2016; Krahe et al., 2003; Krebs et al., 2021). The consequences of this usage include broad variation in both reported prevalence rates as well as the specific behaviors that have been categorized as SV.

Young adults are at substantial risk of experiencing SV, and this risk is further elevated among college students (Black et al., 2011; Mellins et al., 2017). Approximately 20-25% of women and more than 10% of men experience at least one instance of non-consensual sexual contact while attending college, while nearly 50% of women and 22% of men will encounter some form of SV such as sexual harassment, flashing, or being forced to watch another individual masturbate (Black et al., 2011; Krebs et al., 2009;

Luetke et al., 2020; Mellins et al., 2017). However, as these prevalence rates largely depend on an individual's own perception and categorization of their experiences, it is likely that the true prevalence of SV is actually higher than these estimates suggest (Krahé & Bieneck, 2003; Mellins et al., 2017).

SV perpetration and victimization have received considerable attention from sexologists. However, researchers historically focused primarily on the context of a male perpetrator and female victim, and have directed substantially less attention towards SV among female perpetrators (Bates & Weare, 2020; Krahé & Bieneck, 2003; Peterson et al., 2011; Struckman-Johnson et al., 2020). The prevalence of adult SV perpetration by women has been estimated to be between 7% and 25% as historically researchers have defined SV as only including sexual contact, physical coercion, or reporting of events to legal authorities (Krahé et al., 2003; Krahé & Berger, 2013; Krahé & Bieneck, 2003; Struckman-Johnson et al., 2020; Tomaszewska & Krahé, 2018). The estimated prevalence rates of female-perpetrated SV vary considerably between studies due to a number of factors, including the evolving nature of measurement models and assessment tools (Krahé & Berger, 2013; Struckman-Johnson et al., 2020) as well as substantial variability in chosen operational definitions of SV. These operationalizations are as much a product of environmental and cultural factors as they are specific research design. Perhaps the most important factors impacting prevalence rates have been the definitions used within a cultural context, how SV is defined in a study, and the specific measurement instruments used (Basile et al., 2002; Krebs et al., 2021). Essentially, SV events which do not clearly meet the specific operationalizations used to assess SV within a measure are not captured, which therefore reduces the observed prevalence rates



(Bouffard & Goodson, 2017; Krebs et al., 2021). Examples of these SV events include “forced-to-penetrate” (when an individual with a penis is coerced to engage in penetrative sex by another individual), stealthing (removal of a condom without consent during consensual sex) and recording or sharing sexual encounters without consent or knowledge. In fact, these types of SV are receiving increasing amounts of attention in the literature (Anderson et al., 2020; Bates & Weare, 2020; Struckman-Johnson et al., 2020). The specific sexual acts defined within a measure also influence the types of SV captured, for example if a measure does not clearly define terms such as penetrative sex it may not capture oral sex or the use of other implements. This phenomenon is of particular concern when examining SV perpetrated by women as many measures were initially developed and validated to assess SV in the context of male perpetration and female victimization (Krahé & Bieneck, 2003; Peterson et al., 2011). It is therefore likely that female-perpetrated SV is more commonly experienced than the current literature suggests (Struckman-Johnson et al., 2020), a consequence of less comprehensive tools that are currently available to study this nuanced construct .

### ***Male SV Victimization***

Historically, men have been much less likely to report experiences of SV victimization than women, although men represent nearly two-thirds of female-perpetrated SV victims (Davies & Rogers, 2006; Gambardella et al., 2020; Hodge & Canter, 1998; Walker et al., 2005). This disparity has been attributed to factors such as sexual scripts, gender norms, historical definitions of SV, and social influences, all factors which have largely framed SV in the context of heterosexual male perpetration and female victimization (Krahé & Bieneck, 2003; Peterson et al., 2011; Walfield et al.,

2020; Walker et al., 2005; Weare, 2018a). Sexual scripts and gender norms are also a factor in the perpetration of SV, such that higher endorsement of traditional gender norms and rape myth acceptance are associated with higher SV perpetration (Beshers & DiVita, 2019; McCarthy et al., 2018). An individual's attributions of power and agency within a sexual interaction also often result in increased experiences of shame and self-blame for those who have been victimized (Catton & Dorahy, 2020; Davies & Rogers, 2006). These feelings of shame are subsequently compounded by perceptions and experiences of victim-blaming following reporting of SV, and this association is significantly stronger for male victims (Catton & Dorahy, 2020). One potential explanation for differential responses by male victims may be internalization of societal rape myths (e.g., women are victims, men are perpetrators) and gender norms (e.g., only weak individuals are victims of SV) (Catton & Dorahy, 2020). Regardless of the specific factors which result in reduced reporting of SV victimization by men, one result is that prevalence estimates are likely inaccurate (Bates & Weare, 2020; D'Abreu et al., 2013; Walfield et al., 2020).

### ***Operational Definitions of SV***

The variability in definitions used by researchers for SV and specific sexual acts represents a serious ongoing methodological concern (Basile et al., 2002; Krahe et al., 2003; Krebs et al., 2021; Peterson et al., 2011). Generally, definitions of SV have been focused on both the specific type of sexual contact as well as related coercive strategies. However, some researchers choose to adopt a definition of SV depending on their specific research questions, such as referring only to explicitly non-consensual penetrative sex obtained through physical force, sexual intercourse following persistent verbal coercion, or sexual contact only in the context of explicit refusal (Basile et al.,

2002; Krahe et al., 2003; Krebs et al., 2021). While these definitional differences introduce substantial variability into the literature, the legal definitions used by jurisdictions can have much broader implications. For example, the legal definitions of rape historically used within criminal codes in some areas around the globe could only be applied to males or individuals with penises who have engaged in non-consensual penetrative sexual acts. Using this definition, prevalence rates derived from crime statistics differ from other SV research (Krahe & Bieneck, 2003; Krebs et al., 2021; Walfield et al., 2020; Weare, 2018b). While these definitional differences are commonly present within SV behaviors, they are even more pronounced when discussing SV tactics.

### ***Tactics Facilitating SV Behaviors***

In addition to the label or behavioral description of the consequential behavior (e.g., touching, vaginal penetration) there are a variety of tactics that perpetrators engage to secure such behavior. Tactics associated with SV perpetration vary substantially depending upon factors such as the relationship between the perpetrator and victim, the event-level social context, and previous sexual experiences of both the perpetrator and the victim (Koss et al., 2007; Struckman-Johnson et al., 2020). Coercive tactics have been grouped in multiple ways, but commonly tactics can be parsed into categories including verbal coercion, use of substances, and physical coercion (both direct physical harm and threats of harm), with several specific tactics present within each grouping. Verbal coercion refers broadly to the use of words to pressure an individual into engaging in unwanted sexual activity despite their resistance. This can be in the form of persistence following explicit refusal, using social or peer pressure, misuse of authority, persuasion, expressing dissatisfaction with relationship, and verbal aggression such as demeaning or

emotionally abusive language (Koss et al., 2007; Livingston et al., 2004; Struckman-Johnson et al., 2003).

Another SV perpetration tactic relies upon the use of alcohol or drugs to facilitate sexual interactions. In some cases these substances result in the total loss of an individual's ability to provide consent, while in other situations substances are used to overcome hesitation or ambivalence without outright incapacitation (Abbey, 2011; Gidycz et al., 2007; Koss et al., 2007; Krahe & Berger, 2013; Peterson et al., 2011). Importantly, the use of substances during a SV event does not necessarily mean that this use represents a specific tactic; substance use as a planned tactic to engage in SV is not the same as co-occurring substance use and SV. Ultimately, specific behaviors and their contextual occurrences are nuanced and have been measured in a wide variety of ways in the literature. Physical coercion encompasses both threats of and actual engagement in physical violence. These threats can be either specific (e.g., threatening to strike with a fist) or non-specific (e.g., "I'll hurt you") in nature (Koss et al., 2007; Struckman-Johnson et al., 2003; Tomaszewska & Krahe, 2018). Further, acts of physical violence are commonly represented in both legal and societal definitions of rape, which is typically considered one of the most severe forms of SV and greatly influences an individual's perception of an event as being SV (Basile et al., 2002; Krebs et al., 2021; Walfield et al., 2020).

### ***Current SV Measurement***

As noted above and supported throughout the literature, SV perpetration is a complex and multifaceted issue. The majority of SV measures were developed with items used to assess for these behaviors and tactics and were informed by conceptual models of

male SV perpetration (Krahé & Bieneck, 2003; Peterson et al., 2011; Struckman-Johnson et al., 2020). Further, patterns of female SV perpetration appear to be somewhat distinct when compared to male SV perpetration, and this likely results in different behaviors and tactics with no direct analogue (Krahé et al., 2003; Struckman-Johnson et al., 2003; Weare, 2018a). The most common types of perpetration tactics used by female perpetrators include verbal coercion and use of alcohol and other substances (Gambardella et al., 2020; Krahé et al., 2003; Krahé & Bieneck, 2003). Several measures have been either modified or developed to assess female perpetration of SV, although these have thus far been either limited in scope or tied to a specific conceptual model of SV perpetration and have focused on assessment of potential predictors (Peterson et al., 2011; Tomaszewska & Krahé, 2018; Weare, 2018a). Some measures of female SV perpetration explicitly identify victims who are men, while others allow for the respondent to specify victim gender. The landscape of SV measurement has evolved over time in response to these, and many other, research demands. A historical perspective is necessary to appreciate the trajectory of change among these methods of SV measurement and understanding.

One of the first and most commonly used SV measures is the Coercive Sexuality Scale (CSS; (Rapaport & Burkhart, 1984). The CSS assesses the frequency of several sexual behaviors through items such as “Placed hand on woman/man’s knee” and “Attempted to verbally convince a woman/man.” These items are rated along a four-point frequency from *never* to *often* (Rapaport & Burkhart, 1984). The items contained in the CSS are explicitly behavioral, however the timeframe is less clearly defined than in other measures. The items within the CSS have recently been modified based upon participant

gender in an attempt to capture female perpetration as well; however, many items are still closely linked to traditional gender roles and language such as “held a woman’s hand” and “placed hand on a woman’s breast”. The CSS appears to have good reliability: the original authors report a Cronbach’s Alpha of .96 (Rapaport & Burkhart, 1984), with recent studies finding a consistent Cronbach’s Alpha of .94 (Angelone et al., 2022:). The CSS is scored such that three subscales (coerced sexual behavior, sexual method, and coercive sexual methods) and an overall score are calculated.

One of the most widely used measures of SV has been the Sexual Experiences Survey (SES; Koss et al., 1987, 2007; Koss & Gidycz, 1985; Koss & Oros, 1982). In fact, although this measure was initially developed in 1987, numerous versions have been developed and utilized in the literature and it is best thought of as a series of separate measures as its evolution has led to dramatic changes across the measure’s lifespan. Further, these adaptations have occurred as a result of iterative refinement as the understanding of SV has evolved over time, and a version currently in development has adopted a modular approach (Anderson et al., 2023). This measure has several base versions with both short and long forms that focus on SV perpetration (short form (SES-SFP) or long form (SES-LFP)) and victimization (short form (SES-SFV) or long form (SES-LFV)). Notably, no version of the SES attempts to measure any single latent phenomena which underlies and drives all forms of SV, but instead captures explicit behaviors and perceptions as a formative assessment. The SES uses an induced measurement model, wherein it seeks to directly measure observable phenomena which may not be directly related to or driven by one latent construct.

One of the most recent versions of the SES presents several SV behaviors and asks participants to indicate in which behaviors they have previously engaged. Each behavior is accompanied by coercive tactics, and participants indicate which tactics they have used to facilitate each behavior (Koss et al., 2007). In fact, the inclusion and placement of behavior-specific tactics within variations of the SES continues to evolve as the literature has examined the role these tactics play in the overall SV landscape (Koss et al., 2007, Anderson et al., 2021). There are two timeframes for indicating frequency of these behaviors, the non-overlapping periods “How many times in the past 12 months” and “How many times since age 14,”. The time period of 14 or more years of age was chosen to assess for adult sexual abuse (ASA).

The Women’s Sexual Aggression Survey (WSAS; Krahe et al., 2003) is a brief survey that has more recently been developed to assess for SV perpetration by women against men and is broadly based on an earlier version of the SES. This survey is constructed such that participants respond to sets of items based upon a specific coercive strategy (e.g., “Have you ever made (or tried to make) a man have sexual contact with you against his will by threatening to use force or by harming him?”), with responses based upon types of sexual acts (e.g., “Kissing, petting”; “Sexual intercourse”; Oral sex”) and the type of relationship the participant has with the victim (e.g., “my (ex-) boyfriend”; a friend or acquaintance”; “an unknown man”) (Krahe et al., 2003). Further, the WSAS assesses for several behaviors not assessed by the SES; attempted sexual touch and attempted other sexual acts. These are in addition to the tactics not represented by the SES such as verbal pressure related to relationship termination.

The Post-Refusal Sexual Persistence Scale (PRSP; Struckman-Johnson et al., 2020; Struckman-Johnson et al., 2003) assesses both victimization and perpetration experiences following explicit indication of non-consent by a partner. This scale instructs participants to indicate the type and frequency of tactics that have resulted in engaging in sexual contact after their initial refusal (i.e., "since the age of 16, how many times has a male/female used any of the tactics on the list below to have sex contact with you after you have indicated 'no' to his/her sexual advance?"; Struckman-Johnson et al., 2003). This scale does not differentiate between specific sexual acts, rather it focuses on relevant tactics such as physical force, sexual arousal, emotional manipulation, and intoxication. Participants also indicate the number of times each tactic has been experienced. Following the initial PRSP victimization assessment, participants indicate which tactics have been used together during their most recent victimization event, and to provide an open-ended response relating the incident, and indicate their relationship with the perpetrator (Struckman-Johnson et al., 2003). Next, they are asked to indicate which tactics they have used following refusal from another person (always of the opposite binary sex) to engage in sexual activity (Struckman-Johnson et al., 2003). This scale has relatively good reliability, with reported Cronbach's Alpha of .79-.89 (Struckman-Johnson et al., 2020). Further, the PRSP includes tactics and behaviors related to persistence, wherein an individual attempts to initiate sexual contact and gain consent through continued asking or applying interpersonal pressure to another.

Overall, many of the current and historical measures of SV have undergone a number of revisions in efforts to remain representative of contemporary understanding of



SV behaviors. While a substantial proportion of these revisions increased the utility of given measures, several common issues are largely unaddressed in the extant literature.

### *Issues with SV Measurement*

**Use and Reporting of Psychometrics.** Psychometrics are fundamental to the use of any measure, and SV measurement faces the same considerations and shortfalls as many other areas of psychological measurement. One such issue has been the inconsistent use and reporting of psychometrics across studies. Often, researchers employ a measure and do not fully report meaningful or appropriate psychometrics in their manuscripts. This leads to a compounding issue wherein direct comparison of samples and results between studies are difficult, if not impossible. An example of this issue has been the reporting of the SES across its many versions. Researchers largely report statistical methods which are not ideal for this type of measure such as an overall scale-level Cronbach's alpha, when more flexible metrics such as hierarchical omega may be more appropriate (R. E. Anderson et al., 2020; Flora, 2020). In fact, preliminary psychometrics are not reported by the original authors, although they recommend that future researchers address this (Koss et al., 1987). Whereas scale reliability reporting represents an issue for future researchers, unclear aspects of the measure itself can pose a direct problem for participants.

**Time Period of Interest.** SV research can be divided into any number of subfields, however one common division in the research is that of child vs adult SV experiences. As a result of this common division, SV scales must, in some way, indicate the time period of interest to participants. The current version of the SES indicates two timeframes, "Since age 14" and "In the past year", with instructions clarifying that that

these timeframes do not overlap as “Since age 14” refers to a period ending one year ago (Koss et al., 2007). These periods are easily parsed as overlapping, leading to inconsistent interpretation and responses by participants, even in test-retest situations. Further, many measures such as the CSS (Rapaport & Burkhart, 1984) do not clearly delineate the time period of interest and rely upon researchers to make it clear to their participants. Inconsistent time periods of interest represent a similar problem to fluctuating definitions of SV and associated severity.

**SV Terminology and Intensity of Experience.** SV is often thought of as hierarchical in severity. While few researchers have ever suggested that a universal intensity of experience exists, many measures employ a researcher-imposed hierarchy on either scoring or measure structure. For example, the SES utilizes a number of scoring methods which indicate some version of “Most severe experience” without assessing directly for participant experiences (Davis et al., 2014). The PRSP assumes that SV events are strictly hierarchical in severity, and this may not align with the experiences and perceptions of all participants (Struckman-Johnson et al., 2003). Specifically, severity is thought of as being rigidly tied to the SV event itself and not personal experiences or contextual factors which is an assumption that, for example, places oral sex behaviors as always more severe than manual sex behaviors. Further, although terminology has largely evolved in response to sex-linked language and heteronormative assumptions, more fundamental considerations regarding gender are less frequently evidenced in the extant literature.

**Gender Considerations.** Many SV measures have evolved to include some way for respondents to indicate their own gender as well as that of related victims or

perpetrators. For example, the WSAS includes relationship indicators between participants and targets of their SV tactics and behaviors as this provides insight into the poorly understood pattern of female SV perpetration (Krahé et al., 2003). One limitation is that the WSAS focuses exclusively on female perpetrators and male victims of SV, without other potential dyadic pairings being considered. The WSAS also relies on a conceptual model which includes predictors of SV perpetration which have been adapted from male SV perpetration literature and which may not have direct analogues in female SV perpetration (Krahé et al., 2003).

On the other hand, the SES has been modified extensively for use with specific populations of interest including women in the LGBTQ+ community (Canan et al., 2020). Unfortunately, the SES has several identified limitations such as the inclusion of language which may cue participants to value judgments (such as “female wants”), and removing this language led to higher reported rates of SV perpetration and victimization from both men and women (Rueff & Gross, 2017). Additionally, many of the tactics and behaviors included in the SES suggest a heterosexist bias and are linked to cultural constructions of SV and gender norms (Canan et al., 2020; Koss et al., 2007). Recent versions of the SES utilize gender-neutral language in an attempt to address this issue; however, the authors note that certain acts (such as being forced to penetrate) are not captured by the current measure as they do not fit certain legal definitions of rape and are instead captured within other coercive tactics (Koss et al., 2007).

### ***Strengths in SV Measurement***

Although there are a number of identified issues within the extant SV measurement literature, there exists substantial strengths which can inform the current

study. The PRSP and WSAS both include a number of open-ended items that allow for additional context and presents opportunities for further item development, and measuring aspects of sexual behavior such as arousal and emotional manipulation are particularly noteworthy contributions in this measure as they are often not captured appropriately in other scales. Further, the many versions and revisions of the SES have resulted in significant evolution of both language, scoring, and dialogue surrounding relevant theoretical foundations of measurement. The SES has consistently grown as a result of focused research and reflection. In fact, the currently developing version of the SES employs a modular approach which seeks to more fully assess specific aspects of SV and to be deployed differentially based upon need.

### **Current Studies**

The aim of the current project was to develop a scale to assess adult SV perpetration and victimization. This measure, the Contemporary Sexual Violence Scale (CSVS), addresses many of the identified issues with existing measures such as the inclusion of all genders as both potential perpetrators and victims, detailed contextual information, and narrowly defined behavioral response choices. Further, the CSVS features a complex and dynamic delivery mechanism via Qualtrics to reduce participant burden and increase capture of specific SV behaviors. The bottom-up development of a measure of SV which assesses for specific behaviors and tactics therefore serves an integral role in understanding and examining all types of SV perpetration. This project follows measure development guidelines delineated by Boateng et al. (2018). To accomplish this: 1) items are explicitly behaviorally focused, which increases participants' ability to consistently interpret items in the context of their experiences; 2)

the measure is delivered dynamically, providing tailored follow-up choices to participants based upon their experiences which reduces participant burden and increases the level of information specificity; 3) participants are able to indicate victim or perpetrator gender for all items, reducing inherent heteronormative bias within items themselves; 4) each behavioral item which is endorsed will have follow-up questions which address related tactics, perceived severity and impact, and relationship to perpetrator or victim , an aspect that is not present within existing measures. This theoretical foundation informed the current two study process, with Study 1 focusing on the development of the measure and Study 2 concerning the validation of the measure.

## Chapter 2

### Study 1 Methodology

#### Participants

Participants for the development study were recruited in two phases: 13 participants for the initial item-generation phase with focus groups during fall 2022, and 136 participants for the preliminary pilot phase to winnow the generated items in spring 2023. Participants for Study 1 included college students recruited from a medium-sized public university in the northeastern United States for focus groups. 136 adult participants ( $M_{\text{age}} = 30.5$  years,  $SD = 11$ , range = 18-68) were recruited from the general population for the Study 1 measure construction portion of the study to be adequate for principal component analysis and validation (Boateng et al., 2018). These participants largely identified as white (77%) heterosexual (47%) men (54%) in committed monogamous relationships (42%) with women (44%). Full participant demographics are included in Table A1. Participants for the focus group phase of Study 1 were recruited via an undergraduate research participant pool, and participants for the development phase of Study 1 were recruited via the internet and social media posts.

#### Procedure

##### *Development*

Study 1 focused initially on item generation by drawing from existing measures of SV perpetration and victimization through a critical lens and involved several phases, including 1) focus groups, 2) expert judge evaluation, and 3) measure construction. Specifically, broad categories of SV behaviors (e.g., non-penetrative touching, penetrative insertions, oral sexual contact, and others) were identified in a number of

current and historical SV measures. Items from measures including the SES (Koss et al., 2007), the CSS (Rapaport & Burkhart, 1984), the Post-Refusal Sexual Persistence Scale (PRSP; (Struckman-Johnson et al., 2003), Sexual Risk Survey (SRS; (Turchik & Garske, 2009)) and Women's Sexual Aggression Survey (WSAS; (Krahé et al., 2003)) informed these broad behavioral categories. In addition, the previously identified strengths and limitations of current measures informed these items (Boateng et al., 2018). Each item is centered on a specific SV behavior such as penile-vaginal penetration or external manual stimulation of genitals. Further, the number of generated items was designed to be 2-3 times the desired final number of scale items (approximately 50) to allow for evaluation of various configurations of items as needed. Each item has victimization and perpetration versions which directly mirror each other. Types of SV tactics included physical coercion, verbal coercion, the use of substances, and persistence. These items are specific and were developed with the goal of reduced overlap between items to limit differences in interpretation and minimize potential demand characteristics or value-laden wording (Peterson et al., 2011; Struckman-Johnson et al., 2020). Example behavioral items include, "Has another person ever touched an external (non-genital) part of your body when you didn't want them to?" and "Has another person ever touched an intimate area of your body (such as breasts, butt, or genitals)?", allowing for clearer differentiation between genital and other physical contact.

**Focus Groups.** I conducted a series of focus groups and individual interviews with students recruited via the university's undergraduate participant pool. Specifically, two focus groups (with eight and six participants) and two individual interviews, for a total of 16 participants in the focus group phase of Study 1. These focus groups and

interviews were conducted online and lasted approximately 90 minutes. The goal of these groups was to generate and refine the wording, content, and form of these items without explicit data analysis goals. They began with a brief discussion and signing of informed consent, followed by a brief definition of common SV terminology and concepts. As these preliminary items used existing research as a foundation, input from non-researchers within a population of interest allowed for both updating language as well as identifying any gaps in experiences which were not already represented within the items. Participants engaged in discussion regarding a selection of generated items, and discussed the wording, delivery, interpretation, severity, and applicability of items. I then incorporated this feedback into refinement of item wording, content, and survey flow after recording, transcribing, and de-identifying. Participants received student participant pool (course) credit for their participation. Further, the focus groups addressed the flow of the survey itself and salient aspects of response choices to enhance participant experience and reduce burden in the final measure.

**Expert Judge Evaluation.** A panel of three expert judges, selected for their expertise within the fields of SV research and measure development evaluated these refined items for content validity (Food and Drug Administration, 2009; Grant & Davis, 1997). Clinical and research expertise in the relevant domains of SV guided expert judge selection. Specifically, judges demonstrated experience with SV research through publishing peer-reviewed articles concerned with SV assessment, measurement, or prevention (Boateng et al., 2018; Grant & Davis, 1997). The systematic evaluation included assessments of content validity such as domain representativeness, relevance, clarity, and specificity (Boateng et al., 2018; Clark & Watson, 1995; Haynes et al., 1995).



Definitions of each dimension comprised the beginning of evaluation materials, and judge feedback was measured using a 5-point Likert scale, with anchors of *1- not at all* to *5-completely* (Grant & Davis, 1997; Hinkin & Tracey, 1999; MacKenzie et al., 2011). Judges used a matrix as suggested in Hinkin and Tracey (1999) and MacKenzie et al. (2011), such that definitions of each aspect were listed as the column headers and the items as the rows. This allowed for clear distinction between each aspect of the domain of interest for each item. The order of both the items and the aspects in these matrices was randomized for each judge to prevent any order effects between items (MacKenzie et al., 2011). Additionally, judges had the opportunity to provide suggestions for any revision of items. A content validity ratio (CVR) was calculated from these expert panel ratings (Lawshe, 1975). The use of a 5-point scale and more liberal CVR allows for the inclusion of a greater number of items at this preliminary stage when utilizing a dynamic cutoff as it more completely captures the responses of the judges when compared to a 3-point scale.

### ***Measure Construction***

This phase of Study 1 had specific goals of 1) reducing extraneous items, and 2) assessing the resulting component structure, both to guide the final measure structure. Participants were recruited via social media and completed the preliminary survey (including all retained items) via Qualtrics. Inclusion criteria was intentionally broad: all individuals aged at least 18 years were welcome to participate. A randomized item order addressed potential order effects. Participants also had the opportunity to indicate attempted and completed acts for each behavior. Frequency of events is indicated via sliding scale ranging from “0” to “10+” as well as a free response option. The input of

focus groups guided this response range and was chosen to both allow for accuracy and to give respondents additional structure.

A separate subset of follow-up items assess related tactics and included verbal coercion (e.g., repeating, threatening to disclose to others, doubts related to sexuality, lying, withholding access to children, withholding access to resources, offering material incentives), arousal (disrobing self, disrobing partner, persistent foreplay, “dirty talk”, touching), physical coercion (threats of physical harm, restraint, threats of a weapon, physical harm), and substance use with coercive intent (alcohol, marijuana, cocaine, prescription medications, MDMA, GHB, Rohypnol, methamphetamine, others) (Koss et al., 2007; Struckman-Johnson et al., 2003; Weare, 2018a). For all behavioral items, participants indicated the gender of the target individual or perpetrator for each behavior using gender-inclusive responses. The reference period for responses included all adult (i.e., “since 14 years of age”) SV experiences.

One goal of the measure construction phase was to ultimately reduce the number of items using principal components analysis and focusing on maintaining a relatively proportional representation of the different sub-sets of the domains of interest in the subsequent iteration of the scale (Worthington & Whittaker, 2006). I conducted a principal components analysis to guide selection of relevant items, and a scale was assembled with representation of items for each sub-domain. This survey adopts a fundamentally gender-inclusive approach from a bottom-up perspective. When items must include reference to genitals or gender, respondents will only see versions of items which coincide with their initial demographic selections. Further, when possible, items omit any specific gendered language to increase overall parity between participant

experiences. I developed the CSVS with input from a population of interest, while many previous measures have not integrated such feedback at the development phase.

### **Data Analysis**

The psych package in R (Revelle, 2023) and SPSS were used to complete all data analysis in Study 1. Focus group content was reviewed for participant feedback given the supplied prompts. As these focus groups employed a cognitive interviewing model, specific responses and contextual information were compared across participants and group norms (Willis & Artino, 2013). Participant insights regarding survey length, delivery method, and item language resulted in the synthesis of initial items. Three expert judges then evaluated these items and provided ratings along several dimensions of content validity including domain representativeness, clarity, specificity, and relevance. Items with a CVR exceeding the critical value selected for this study of .80 were included in the questionnaire in Study 2. This value is somewhat less conservative than the universal value of .99 suggested due to the use of a 5-point scale instead of the 3-point used by Lawshe (1975) and the presence of the subsequent validity and reliability assessment. I calculated content validity ratios ratings using R and a critical value of .80 (Lawshe, 1975).

## **Study 1 Results**

### ***Focus Group Phase***

Sixteen college students participated in the two focus groups and two individual interviews. These included discussion of broad behavioral categories before discrete behaviors to reduce participant burden, such as the CSVS items “Has another person ever touched an external (non-genital) part of your body when you didn't want them to?” as a broad category, followed by discrete behaviors such as “Someone touched my butt under or without my clothes” and “touched part of my body with their mouth (such as kissing, nibbling, licking, or biting without injury)”, among others. It is important to note that the wording used here (i.e., “didn't want them to”) is not directly consistent with contemporary definitions of SV, and likely captures ambivalent behaviors that are not SV. The broad categories capture a larger proportion of behaviors and experiences while follow up items then differentiate SV from non-SV experiences. If a participant responds negatively to the broad behavioral category follow up items are limited or fully omitted, while a positive response prompts detailed questions. This iterative approach was largely influenced by focus group discussions, and the specific reasons discussed ranged from decreased survey burden to increased opportunity for participants to answer positively to the broad category even if subsequent specific items are not an exact match for their experiences. Several focus group participants reported previous survey experiences where the wording of an item prevented them from responding positively while they felt their actual experiences were slightly different but still applicable. Additional insights gathered from these focus groups and interviews shaped specific wording for a number of items, such as decreased reliance on terms such as “stealthing” in favor of more behaviorally

descriptive items including “removed a condom without my knowledge or consent”. These insights led to the creation of 150 initial items across categories before expert judge review.

### ***Expert Judge Phase***

The panel of expert judges provided detailed feedback regarding the initial SV items. Items with a CVR value greater than .80 were retained, leading to 130 total SV items which were included on each version of the survey following these ratings. Final items included behavioral categories (8), specific follow-up items (46), and tactics (76).

### ***Measure Construction Phase***

After I confirmed the final survey items with the expert judges panel, 136 participants completed the survey online in Qualtrics. The survey begins with assessment of the eight behavioral categories and specific follow-up items are included based upon positive participant responses to a given category. Principal components analysis resulted in a scree plot of these components, and initially 11 components with eigenvalues above the observed plateau were retained at this stage while 30 components with sub-critical eigenvalues were deleted. Components which were deleted contained small numbers of items where, by definition, were more closely related to items within the retained components. Critical evaluation of the loadings guided by item-level content similarities (e.g., attempted and completed genital touching) resulted in a five- components structure. Table A2 includes all rotated loadings for these final five components. Based upon the nature of the items contained within these components, I labeled these components “Non-genital contact”, “Genital contact”, "Insertion”, “Forced penetration”, and “Reproductive/Relational” based upon the prevailing item content as well as the

theoretical decisions leading to their final structure. Table A3 represents the final components and related behavioral items.

## Chapter 3

### Study 2 Methodology

#### Participants

36 participants were randomly held out from the development sample recruited for Study 1 (Boateng et al., 2018). Full participant demographics are included in Table A1.

#### Procedure

To assess for convergent validity, participants completed two existing measures of SV via a holdout sample from the development survey. These established measures included the Sexual Experiences Survey-Short Form (SES-SFP and SES-SFV) versions with gender-inclusive language (Canan et al., 2020; Koss et al., 2007). The SES-SFP is likely the most commonly used measure of SV perpetration, while the SES-SFV is likewise frequently used to assess SV victimization, and both employ specific behavioral language which aligns with the domains of SV which are of interest in the current study (Canan et al., 2020; Koss et al., 2007). Reliability of the CSVS was assessed using hierarchical omega (Flora, 2020) and convergent validity was assessed in the context of these established measures.

#### Measures

##### *Sexual Experiences Survey*

The Sexual Experiences Survey – Short Form Perpetration/Victimization (SES-SFP/SFV) assesses seven sexually aggressive behaviors (e.g., “I had oral sex with someone or had someone perform oral sex on me without their consent by”) and 5 tactics for each behavior (e.g., “Showing displeasure, criticizing their sexuality or attractiveness, getting angry but not using physical force, after they said they didn’t want to”) with 3

additional items (i.e. “Did you do any of the acts described in this survey one or more times?”; “What was the sex of the person or persons to whom you did them?”; and “Do you think you may have ever raped someone?”) for a total of 38 items (Koss et al., 2007). While the psychometric properties of this scale are not reported by the original authors, it has been found to have test-retest reliability of (partial  $r(60) = .69, p < .001$ ) (R. Anderson et al., 2017). The SES-SFP has modest convergent with the sexual coercion subscale of the Conflict Tactics Scale – 2 (Straus et al., 1996), with  $r$  values between .14 and .31, although it is important to note that these scales measure slightly different constructs (R. Anderson et al., 2017). Further, the SES-SFP has been found to have internal consistency of  $\rho(402) = .67, p < .001$  (R. Anderson et al., 2017). The SES was specifically chosen as it is a mirror measure with both the victimization and perpetration versions being analogous to each other.

### **Data Analysis**

The psych package in R (Revelle, 2023) and SPSS were used to complete all data analysis in Study 2. Responses from the questionnaire in Study 2 were analyzed via principal components analysis (PCA) in SPSS. This PCA was conducted using principal components analysis extraction and served to identify which constructs are associated with variance across items (Boateng et al., 2018; Worthington & Whittaker, 2006). Interpretation of the results of the component analysis used an oblique rotation as the subscales of many established SV measures demonstrate a moderately high degree of intercorrelation. This intercorrelation likely represents both the use of multiple tactics concurrently as well as completed events being more readily remembered than attempted SV (R. Anderson et al., 2017; Boateng et al., 2018; Worthington & Whittaker, 2006).



Components were retained at first following a critical eigenvalue of one, however theory informed final decisions regarding items loading weakly across multiple components or whose content was incongruent with other items within the component (Worthington & Whittaker, 2006). While this approach may be more likely to retain components with weaker item loadings, it also allows for more flexibility and empirically-based judgment for items which load onto multiple components. Ultimately, employing the data rules previously delineated resulted in a five component model, all components demonstrated eigenvalues greater than two. Reliability was examined through calculating a hierarchical omega (Flora, 2020). Convergent validity was assessed using Pearson correlation with the SES-SFP for each analogous CSVS subscale.

## Study 2 Results

### *Victimization*

On the CSVS, 52% of participants indicated that they had experienced victimization via a “yes” response to at least one broad SV behavior. 52% indicated that they had experienced touching of intimate areas, 15% have had another individual initiate oral sex on their genitals while unwanted, 16% have had another person initiate oral sex on themselves while unwanted, 20% have had objects or the body parts of another inserted into their body, 17% have had a penis inserted while unwanted, and 16% have had part of their body inserted into another person without wanted to do so. The CSVS demonstrated a hierarchical omega total of 0.95 for the victimization version discrete behaviors. As a number of separate components are present within this scale, the individual hierarchical omega for each component is as follows (where V=victimization and P=perpetration): Non-genital contact:  $\omega_{hV} = .93$ ,  $\omega_{hP} = 0.94$ ; Genital contact:  $\omega_{hV} = .86$ ,  $\omega_{hP} = .89$ ; Insertion:  $\omega_{hV} = .75$ ,  $\omega_{hP} = .80$ ; Forced penetration:  $\omega_{hV} = .81$ ,  $\omega_{hP} = .82$ ; and Reproductive/Relational:  $\omega_{hV} = .58$ ,  $\omega_{hP} = .74$ .

On the SES-SFV, 36% of participants experienced intimate touching without their consent, while 14% have experienced non-consensual oral sex. 3% have had body parts or items inserted into their body without consent, and 6% have been forced to penetrate another person’s body with their penis without consent. On the SES-SFV 47% of participants indicated at least one past-year SV victimization experience.

### *Perpetration*

For CSVS perpetration, 22% of participants endorsed at least one broad SV perpetration behavior. 22% had touched the intimate areas of another while it was

unwanted, 5% have initiated oral sex on another person's genitals, 6% have had another person initiate oral sex on them, 3% had inserted objects or other body parts into another while it was unwanted, 4% have inserted their penis into another person, and 8% have inserted another person's body parts into their body while it was unwanted. The perpetration version of the CSVS demonstrated a hierarchical omega of 0.94. Again, the individual omega total for each component is as follows: Non-genital contact:  $\omega_{hp} = 0.94$ ; Genital contact:  $\omega_{hp} = .89$ ; Insertion:  $\omega_{hp} = .80$ ; Forced penetration:  $\omega_{hp} = .82$ ; and Reproductive/Relational:  $\omega_{hp} = .74$ .

On the SES-SFP, 11% indicated intimate physical touching, while 8% have perpetrated non-consensual oral sex. 8% inserted items or their body parts inserted into another person's body without consent, and 6% have been perpetrated forced-to-penetrate experiences, wherein they inserted another person's penis into their body without consent. For the SES-SFP, 28% endorsed SV perpetration in the past year.

### ***CSVs and SES Comparison***

The CSVS showed overall moderate to strong correlations with both versions of the SES when compared on dichotomous SV outcomes as a whole ( $r_{vict(34)} = .722$ ,  $p < .001$ ;  $r_{perp(34)} = .373$ ,  $p = .025$ ). Correlations between generally analogous subscales were generally non-significant, although both oral victimization ( $r_{oralvict(34)} = .604$ ,  $p < .001$ ) and penetrative touch perpetration ( $r_{pentouchperp(34)} = .344$ ,  $p = .040$ ) were significantly correlated across the CSVS and SES. Full correlations are present in Table A4 and Table A5. Further, as the SES and CSVS are markedly different in structure, there do not exist perfectly analogous subscales and composites based upon items with comparable face interpretations were used as basis of comparison.

It is important to note that the weak correlations demonstrated between the SES and CSVS subscales represent unique contributions from each measure, as every subscale had dichotomous positive responses on one measure that were not present on the other measure.

## **Chapter 4**

### **Discussion**

The CSVS represents a dynamic measure of SV victimization and perpetration experiences. It includes a number of behaviors which are well-represented in commonly used SV measures as well as behaviors, tactics, and contextual information which has largely been either uncaptured or present only in narrowly focused measures without substantial generalizability. The structure of this survey and its fundamental electronic delivery via Qualtrics allow for a flexible approach which dramatically reduces the burden on participants. This measure must be used electronically. Further, in place of coding a large number of unexperienced items, the current survey only offers specific follow-up questions should a participant endorse a broader behavioral category. This reduces the administration time for a large proportion of participants who have not experienced many SV events. In addition to these benefits to user and researcher experience, the iterative and increasingly specific structure of this measure allows for a very nuanced set of follow-up items once a broader category is endorsed. Specifically, the goal of this structure is to capture experiences without participants self-limiting their responses due to item wording and demand characteristics. The CSVS allows participants to indicate their relationship(s) with the other person, the context, related tactics, and their subjective intensity of the behavior.

The final format of this measure is the direct result of the richness and variety of data that was captured during all stages of development. A definitionally-constrained formative construct such as “genital contact” or even the broader “non-penetrative physical contact” does not inherently have any predictive utility or relationship with each

discrete behavior. These constructs are empirically defined, therefore measurement of component behaviors provides an inventory of similarly defined experiences rather than a measure of a larger underlying latent construct. The observed and defined components therefore serve as subscales of SV within this larger inventory.

Although there were unique perpetration and victimization experiences captured by both the CSVS and SES measures, there were instances wherein a participant endorsed dichotomous victimization or perpetration on one scale, and not the other. This may be due to how the items themselves are phrased, with the SES adopting a combined approach with several behaviors combined in each item and the CSVS having discrete behaviors. It is possible that participants may extrapolate beyond the provided behaviors for the SES, building upon the pattern of items and responding to behaviors that may be similar to those stated, but beyond the explicit scope. Further, the approach used in the CSVS may have the opposite effect, with participants responding positively to a single behavioral item where they may not when they are combined. As several participants in both the development and validation groups endorsed dichotomous perpetration or victimization on one scale and not the other, there are a number of potential factors underlying these response patterns which merit further focused investigation.

### **Limitations**

There are several limitations with the current study. One limitation is the limits of direct comparison between this measure and existing SV measures due to the variety of ways in which SV behaviors have historically been assessed. The CSVS utilizes a behaviorally-focused structure that begins with broad categories and includes specific behaviors in individual follow-up items, with a goal of a single type of behavior per item.

This is not consistent with many established scales which combine several behaviors in a given item. This limits direct comparison between the CSVS and other SV measures without collapsing several CSVS items into a single variable, which is reductive and decreases the interpretability of the associated tactics. For example, a participant may indicate that they have experienced unwanted non-penetrative touching of a specific body region on the CSVS, but they would be unable to select this exact behavior on other scales such as the SES-SFV. Another example of this is the SES-SFV item “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:”. If a participant has been kissed, but not fondled or rubbed up against they may elect to not respond positively to this item as they do not fit all or some of the behaviors. Similar limitations exist between existing measures, and researchers have often compared scales through dichotomizing or otherwise reducing more specific items into lower-dimensional categories.

Of note, the age of sexual consent varies substantially between states and countries, and although 14 commonly used as a dividing age in the discussion of adult SV compared to childhood SV in the extant literature, no choice of cutoff age is without inherent issue. This is a limitation as depending upon the cultural and legal norms of a participant’s environment, they may view younger or older ages as being adult or child sexual violence, which would skew their responses given this cutoff. Future versions of the CSVS may incorporate additional items asking participants to indicate their personal views on what cutoff would be appropriate or to elicit feedback during the survey itself for future items representing behaviors which were not captured.

Our participants were recruited through mechanisms that are inherently tied to selection bias in several ways. Participants who chose to engage with this study may therefore represent any number of unidentified self-selection biases which are not shared with the larger population of all adults. Further, the sample sizes present at different points in this study may not fully represent the experiences of the broader population and are therefore dependent upon specific sample characteristics. Lastly, participant responses may be impacted by temporal effects such that they may have rated the severity and impact of their experiences differently based upon the length of time between the experience and responding to this survey, such as rating more recent experiences as more severe than similar historical experiences due to potential recency effects.

The goal of this measure is to assess for SV perpetration and victimization across the adult lifespan and inclusive of all populations. By focusing on discrete behavioral items, the CSVS allows for a flexible mechanism regardless of population characteristics. Ideally this measure will be of utility in both research and clinical settings, while the granular item-level analysis will likely be of more use in a research capacity, the availability of a scale which detects SV experiences lends itself to clinical use as well.

### **Future Directions**

Future research could allow for the CSVS to be validated within specific populations, including specific sexual orientation, gender identities, or with individuals who already engage in a specific behavior of interest such as dating and sexual networking applications. As the behavioral items which are the core of the CSVS structure are designed to be applicable to varied sexual experiences and are tailored to each participant's demographic information, it would be possible to validate or establish



norms for this measure within any given population of interest. Further, new or modified behavioral items could easily be incorporated into the CSVS given its dynamic structure to suit a specific research question.

One major strength of the CSVS is that it was designed to be delivered online via Qualtrics. Beyond the ease of use that is inherent to utilization of a popular electronic survey system, the more dynamic elements of the survey are complex and sharing the survey as a whole as a Qualtrics survey allows researchers to easily deploy the CSVS without more advanced technical knowledge. This would also likely reduce the opportunities for researcher-entered errors and would allow for flexible standardized syntax for scoring and analyses. Input or survey logic errors are a common concern when deploying a new study, and through sharing the CSVS directly many of these concerns can be mitigated.

Additionally, the CSVS is designed to be a relatively “lightweight” addition to an existing survey battery, allowing those participants with no or little SV history to quickly and accurately indicate that without adding substantial participant burden, while still capturing detailed data from those participants with relevant SV experiences. As this survey is delivered in a dynamic manner via Qualtrics, adding new behavioral categories with specific follow-up items does not impact the established sections of the measure. As types of SV frequently emerge in the literature, this flexibility will allow for the CSVS to adapt to changing research demands.

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## Appendix A

### Tables

Table A1

<i>Demographic Information</i>			
Variable	Response	N	%
Gender	Woman	48	36%
	Man	73	54%
	Non-Binary / Third Gender	14	10%
	Transgender	9	7%
	Cisgender	26	19%
Race / Ethnicity	African-American / Black / African Origin	4	3%
	American Indian / Native American / Alaskan / Aboriginal	1	1%
	Asian-American / Asian Origin / Pacific Islander	13	9%
	Asian-American / Asian Origin / Pacific Islander	116	77%
	European Origin / White	1	1%
	Middle Eastern-American / Middle Eastern	15	10%
	Preferred not to disclose / Not listed	10	7%
	Hispanic/Latinx/Spanish	120	90%
	Not Hispanic/Latinx/Spanish	6	4%
Prefer not to say			
Orientation	Heterosexual/straight	75	47%
	Homosexual/gay/lesbian	12	8%
	Bisexual	35	22%
	Unsure/questioning	6	4%
	Queer	11	7%
	Asexual	13	8%
	My Orientation is not listed here	7	4%
	Prefer not to say	0	0%
Sexual Experience	Entirely heterosexual	55	40%
	Largely heterosexual but some homosexual experience	30	22%
	Largely heterosexual but considerable homosexual experience	7	5%
	Largely heterosexual but considerable homosexual experience	4	3%
	Equally heterosexual and homosexual	4	3%
	Largely homosexual but considerable heterosexual experience	4	3%
	Largely homosexual but some heterosexual experience	13	10%
	Largely homosexual but some heterosexual experience	1	1%
	Entirely homosexual	18	13%
No answer			
No sexual experience			



Sexual Desire	Entirely heterosexual desire	41	30%
	Largely heterosexual but some homosexual desire	37	27%
	Largely heterosexual but considerable homosexual desire	16	12%
	Equally heterosexual and homosexual desire	8	6%
	Largely homosexual but considerable heterosexual desire	9	7%
	Largely homosexual but some heterosexual desire	10	7%
	Entirely homosexual desire	8	6%
	No answer	1	1%
	No sexual desire	6	4%
Relationship	Single	55	39%
	In a committed relationship with someone of the opposite sex	44	31%
	In a committed relationship with someone of the same sex	11	8%
	Divorced	3	2%
	Married to someone of the opposite sex	24	17%
	Married to someone of the same sex	5	4%
Sexual Relationship	In an exclusive/monogamous sexual relationship	59	42%
	In a non-exclusive/non-monogamous sexual relationship	12	9%
	Engaging mainly in casual sexual encounters	14	10%
	Not engaging in sexual activity right now	51	37%
	My current sexual relationship status isn't listed here	3	2%

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Table A2

<i>Item Component Loadings</i>					
Item	Comp onent 1	Comp onent 2	Comp onent 3	Comp onent 4	Comp onent 5
“How many times has someone ____ when you did not want it?”	-	-	-	-	-
Touched my arms, legs, hands, feet, back, or shoulders	0.40	0.35	-0.01	0.25	0.20
Attempted to touch my arms, legs, hands, feet, back, or shoulders, but did not do it	0.35	0.39	-0.56	0.14	0.13
Touched my face or neck	0.50	0.31	-0.21	0.35	0.13
Attempted to touch my face or neck, but did not actually do it	0.41	0.33	-0.47	0.22	0.15
Touched my chest over my clothes	0.52	0.38	0.02	0.28	0.05
Attempted to touch my chest over my clothes, but did not actually do it	0.43	0.47	-0.41	-0.02	-0.07
Touched my chest under or without my clothes	0.60	0.23	0.29	-0.02	0.05
Attempted to touch my chest under or without my clothes, but did not actually do it	0.59	0.38	-0.25	-0.40	0.03
Touched my butt over my clothes	0.49	0.40	0.12	0.29	0.08
Attempted to touch my butt over my clothes, but did not actually do it	0.63	0.17	-0.40	0.24	-0.22
Touched my butt under or without my clothes	0.68	0.09	0.26	-0.06	0.01
Attempted to touch my butt under or without my clothes, but did not actually do it	0.77	-0.11	-0.16	-0.07	-0.30
Touched my genitals over my clothes	0.65	0.30	0.11	0.37	0.11
Attempted to touch my genitals over my clothes, but did not actually do it	0.77	0.24	-0.11	0.04	-0.19
Touched my genitals under or without my clothes	0.68	0.27	0.18	0.09	0.08
Attempted to touch my genitals under or without my clothes, but did not actually do it	0.73	0.07	-0.25	-0.03	-0.26
Touched part of my body with their mouth (such as kissing, nibbling, licking, or biting without injury)	0.42	0.28	0.19	-0.08	0.30
Put their fingers into my butt	0.17	0.33	0.66	-0.03	0.14
Put my fingers into their butt	0.02	0.24	0.30	-0.17	-0.29
Put their penis into my butt	0.34	0.16	0.64	-0.06	-0.18

Attempted to touch part of my body with their mouth (such as kissing, nibbling, licking, or biting without injury), but did not actually do it	0.37	0.06	-0.20	-0.38	0.23
Attempted to put their fingers into my butt, but did not actually do it	0.64	-0.29	-0.21	-0.37	0.35
Attempted to insert an object (including sex toys) into my butt, but did not actually do it	0.62	0.03	0.15	-0.46	0.28
Attempted to put my fingers into their butt, but did not actually do it	0.49	-0.28	-0.25	-0.33	0.34
Attempted to put their penis into my butt, but did not actually do it	0.66	-0.14	0.36	-0.27	-0.01
Put their fingers into my vagina	0.25	0.59	0.21	-0.19	-0.28
Inserted an object (including sex toys) into my vagina	0.02	0.09	0.09	0.04	0.15
Put their mouth or tongue onto my vagina	0.16	0.39	-0.25	-0.29	-0.19
Put their tongue into my vagina	0.02	0.15	-0.28	-0.32	0.00
Attempted to put their fingers into my vagina, but did not actually do it	0.29	0.57	0.34	-0.31	-0.29
Put my penis into their butt	0.51	-0.42	0.18	0.27	-0.55
Put my penis into their vagina	0.16	0.17	0.05	0.51	0.18
Put my penis into their mouth	0.50	-0.46	0.09	0.10	0.16
Grabbed my penis	0.58	-0.37	0.20	0.26	0.31
Grabbed my testicles	0.59	-0.34	0.26	0.28	0.30
Attempted to put my penis into their butt, but did not actually do it	0.82	-0.51	-0.02	-0.08	-0.15
Attempted to put my penis into their vagina, but did not actually do it	0.05	-0.14	0.12	0.25	0.33
Attempted to put my penis into their mouth, but did not actually do it	0.82	-0.51	-0.02	-0.08	-0.15
Attempted to grab my penis, but did not actually do it	0.82	-0.51	-0.02	-0.08	-0.15
Attempted to grab my testicles, but did not actually do it	0.69	-0.47	-0.10	-0.11	-0.05
Told me they were taking birth control or otherwise could not get pregnant, but they were actually able to	0.29	-0.18	-0.01	0.43	-0.41
Removed the condom from their penis during sex without telling me	0.09	0.24	0.41	-0.15	0.17

Table A3

*Final Component Structure*

1 – Non-genital contact

touched my arms, legs, hands, feet, back, or shoulders  
attempted to touch my arms, legs, hands, feet, back, or shoulders, but did not do it  
touched my face or neck  
attempted to touch my face or neck, but did not actually do it  
touched my chest over my clothes  
attempted to touch my chest over my clothes, but did not actually do it  
touched my chest under or without my clothes  
attempted to touch my chest under or without my clothes, but did not actually do it  
touched my butt over my clothes  
attempted to touch my butt over my clothes, but did not actually do it  
touched my butt under or without my clothes  
attempted to touch my butt under or without my clothes, but did not actually do it

2- Genital Contact

touched my genitals over my clothes  
attempted to touch my genitals over my clothes, but did not actually do it  
touched my genitals under or without my clothes  
attempted to touch my genitals under or without my clothes, but did not actually do it  
grabbed my penis  
grabbed my testicles  
attempted to grab my penis, but did not actually do it  
attempted to grab my testicles, but did not actually do it  
touched part of my body with their mouth (such as kissing, nibbling, licking, or biting without injury)  
attempted to touch part of my body with their mouth (such as kissing, nibbling, licking, or biting without injury), but did not actually do it

3- Insertion

put their fingers into my butt  
put their penis into my butt  
attempted to put their fingers into my butt, but did not actually do it  
attempted to insert an object (including sex toys) into my butt, but did not actually do it  
attempted to put their penis into my butt, but did not actually do it  
put their fingers into my vagina  
inserted an object (including sex toys) into my vagina  
put their mouth or tongue onto my vagina

put their tongue into my vagina  
attempted to put their fingers into my vagina, but did not actually do it

#### 4- Forced Penetration

put my fingers into their butt  
attempted to put my fingers into their butt, but did not actually do it  
put my penis into their butt  
put my penis into their vagina  
put my penis into their mouth  
attempted to put my penis into their butt, but did not actually do it  
attempted to put my penis into their vagina, but did not actually do it  
attempted to put my penis into their mouth, but did not actually do it

#### 5- Reproductive/Relational

told me they were taking birth control or otherwise could not get pregnant, but they were actually able to  
removed the condom from their penis during sex without telling me

Table A4

*Subscale Correlations – Pearson R*

Victimization Subscales	SES Item 1	SES Item 2	SES Item 3	SES Item 4
CSVS Non-Genital Contact	.248	-	-	-
CSVS Genital Contact	-	<b>.604*</b>	-	-
CSVS Insertion	-	-	-.135	-
CSVS Forced Penetration	-	-	-	-.41

Table A5

*Subscale Correlations – Pearson R*

Perpetration Subscales	SES Item 1	SES Item 2	SES Item 3	SES Item 4
CSVS Non-Genital Contact	.102	-	-	-
CSVS Genital Contact	-	-.51	-	-
CSVS Insertion	-	-	<b>.344*</b>	-
CSVS Forced Penetration	-	-	-	-.41

## Appendix B

### CSVSV Development and Validation Survey

Instructions: Thank you for agreeing to participate in this survey. As you progress through the questions, please keep the following information in mind:

Please pay close attention to each question, many may appear similar but are in fact not the same question

Unless otherwise specified, please respond to the following questions based on your personal experiences **since the age of 14 years old**

Many questions allow for multiple answers, you'll be able to select several choices when the answer choices have a square box

Please don't use the browser back button or reload pages while taking this survey as unpredictable things may occur

Genitals: What genitals have you had in your life?

**Please note:** This question is asked for the wording of later questions which concern genitals directly and will update based on this response [Multi-select: I currently have a vagina; I currently have a penis; I used to have a vagina; I used to have a penis]

Broad Victimization Matrix – [No; Yes; I'm not sure]

Has another person ever touched an external (non-genital) part of your body when you didn't want them to?

Has another person ever made physical contact with an external (non-genital) part of your body and you didn't want it to happen?

Has another person ever touched an intimate area of your body (such as breasts, butt, or genitals) when you didn't want them to?

Has another person ever began performing oral sex on you when you didn't want them to?

Has another person ever had you perform oral sex on them and you didn't want it to happen?



Has another person ever inserted anything (their fingers, parts of their body, objects) into part of your body when you didn't want them to?

Has another person ever inserted their penis into part of your body and you didn't want it to happen?

Has another person ever put part of your body into their mouth, butt, or vagina when you didn't want them to?

Behaviors List V Which of the following have you experienced although it was unwanted? [Multi-select] Another person...

- touched my arms, legs, hands, feet, back, or shoulders
- attempted to touch my arms, legs, hands, feet, back, or shoulders, but did not do it
- touched my face or neck
- attempted to touch my face or neck, but did not actually do it
- touched my chest over my clothes
- attempted to touch my chest over my clothes, but did not actually do it
- touched my chest under or without my clothes
- attempted to touch my chest under or without my clothes, but did not actually do it
- touched my butt over my clothes
- attempted to touch my butt over my clothes, but did not actually do it
- touched my butt under or without my clothes
- attempted to touch my butt under or without my clothes, but did not actually do it
- touched my genitals over my clothes
- attempted to touch my genitals over my clothes, but did not actually do it
- touched my genitals under or without my clothes
- attempted to touch my genitals under or without my clothes, but did not actually do it
- touched part of my body with their mouth (such as kissing, nibbling, licking, or biting
- without injury)
- put their fingers into my butt
- inserted an object (including sex toys) into my
- put my fingers into their butt
- put their penis into my butt
- attempted to touch part of my body with their mouth (such as kissing, nibbling, licking, r biting without injury), but did not actually do it
- attempted to put their fingers into my butt, but did not actually do it

- attempted to insert an object (including sex toys) into my butt, but did not actually do it
- attempted to put my fingers into their butt, but did not actually do it
- attempted to put their penis into my butt, but did not actually do it
- put their fingers into my vagina
- inserted an object (including sex toys) into my vagina
- put their mouth or tongue onto my vagina
- put their tongue into my vagina
- attempted to put their fingers into my vagina, but did not actually do it
- attempted to insert an object (including sex toys) into my vagina, but did not actually do it
- attempted to put their mouth or tongue onto my vagina, but did not actually do it
- attempted to put their tongue into my vagina, but did not actually do it
- put my penis into their butt
- put my penis into their vagina
- put my penis into their mouth
- grabbed my penis
- grabbed my testicles
- attempted to put my penis into their butt, but did not actually do it
- attempted to put my penis into their vagina, but did not actually do it
- attempted to put my penis into their mouth, but did not actually do it
- attempted to grab my penis, but did not actually do it
- attempted to grab my testicles, but did not actually do it
- told me they were taking birth control or otherwise could not get pregnant, but they were actually able to
- removed the condom from their penis during sex without telling me

**The following items (Marked as “LM”) are repeated for each selected behavioral item, which replace the Field text**

Number of events V How many times has someone  $\{lm://Field/1\}$  when you did not want it? [1;2;3;4;5;6-10;More than 10; I’m not sure]

Recency V How recently have you experienced this? If there have been multiple times please indicate all relevant time periods. [In the past month; In the past year; 1-5 years

ago; 5-10 years ago; 10-15 years ago; 15-20 years ago; More than 20 years ago; I'm not sure]

Tactics V What did this person do before or while engaging in this behavior? [Multi-select]

- Asked to do so repeatedly
- Asked to do so repeatedly, even after I told them no
- Threatened to tell my partner that I cheated if I didn't do it
- Told me that I owed it to them
- Told me that if I loved them I'd do it
- Threatened my employment
- Threatened to keep me from seeing my children
- Pressured me to do it
- Called me negative names or mocked me
- Said things about my sexuality or sexual ability
- Said things about my body or attractiveness
- Lied to me
- Used dirty talk or was sexually explicit
- Used dirty talk or was sexually explicit even after I told them no
- Told me that they were already sexually excited
- Told me that my friend would do it
- Took off their clothes
- Took off their clothes and underwear
- Took off my clothes
- Took off my clothes and underwear
- Touched my arm or hand lightly
- Grabbed my arm or hand
- Grabbed my arm or hand and did not let go
- Touched my chest
- Grabbed my chest
- Touched my neck
- Grabbed my neck
- Touched my shoulders or back
- Touched my butt
- Grabbed my butt
- Touched my genitals
- Grabbed my genitals
- Rubbed their genital area against my butt
- Rubbed their butt against my genitals
- Moved my hand to part of their body
- Grabbed their genitals, but did not expose them
- Rubbed their genitals, but did not expose them
- Touched my chest under my shirt or bra
- Grabbed my chest under my shirt or bra
- Touched my back under my shirt
- Put their hand down my pants/ up my skirt and touched my butt

- Put their hand down my pants/ up my skirt and grabbed my butt
- Put their hand down my pants/ up my skirt and touched my genitals
- Put their hand down my pants/ up my skirt and grabbed my genitals
- Kissed my hands or body
- Kissed my face
- Kissed my lips
- Showed or sent me photos of my body that I never sent to them
- Showed or sent me photos of their body
- Showed or sent me photos of someone else's body
- Exposed their bare chest to me
- Exposed their genitals to me
- Pressured me to drink more alcohol
- Kept refilling my drink or brought me more drinks without me asking
- Pressured me to smoke weed
- Pressured me to smoke more weed
- Pressured me to use ecstasy
- Pressured me to use more ecstasy
- Pressured me to use molly
- Pressured me to use more molly
- Pressured me to use GHB
- Pressured me to use more GHB
- Pressured me to use another substance
- Gave me something without my knowledge
- They did this while I was too drunk or otherwise unable to think clearly
- Did not stop with previously consensual sexual activity when I told them to
- Held me down with ropes or cuffs
- Prevented me from leaving by threatening to hurt me
- Prevented me from leaving by locking the door
- Hit me with their hands or feet
- Bit me with their mouth
- Threatened me with a weapon or object
- Hit me with a weapon or object
- Choked me with their hands or an object
- Select this item and you'll be able to write in your response
- They didn't do any of these things

Tactics V Q Said or did something that was not listed above [Free text]

Consent V Was there discussion of consent before, during, or after this event? [Multi-select]

- No, there was no discussion of consent at all
- Yes, before this event and I did not give consent for this
- Yes, before this event and I had initially given consent but told them to stop and they did not
- Yes, during this event and I did not give consent for this

- Yes, during this event and I was not able to give consent
- Yes, after this event and I did not give consent
- Yes, after this event and I was not able to give consent

RelPerpH V What was your relationship to this person at that time? [Multi-select]

- Stranger
- Acquaintance
- Friend
- Sibling
- Parent
- Family Member
- Previous sexual partner
- Current sexual partner
- Previous romantic partner
- Current romantic partner
- Someone I met from a dating app or site
- My Employee
- My Work Superior
- Other
- Not sure how to characterize it
- Prefer not to answer

RelPerpH V Q What was your relationship to this person at that time? [Free text]

RelPerpC V What is your current relationship to this person? [Multi-select]

- Stranger
- Acquaintance
- Friend
- Sibling
- Parent
- Family Member
- Previous sexual partner
- Current sexual partner
- Father or Mother of my children
- Previous romantic partner
- Current romantic partner
- Someone I met from a dating app or site
- My Employee
- My Work Superior
- Someone in a position of authority over me

- Other
- Not sure how to characterize it
- Prefer not to answer

RelPerpC V Q What is your current relationship to this person? [Free text]

GenderPerp V What was this person's gender? [Multi-select]

- Woman
- Man
- Non-binary/ third gender
- Transgender
- A gender that is not listed here
- Not sure

GenderPerp V Q What was this person's gender? [Free text]

GenitalsPerp V What genitals did this person's body have? [Multi-select: A penis; A vagina; I'm not sure]

Severity V How severe and impactful to your life was this event? [0-100 slider – 0 (Not at all) 100 (More than most other things in my life) [Severity; Impact on life; I'd like to provide an additional measurement here (you'll be able to write this in)]

Severity V Q What was your additional measurement that you provided above? [Free text]

**The next set of questions may appear to be similar to ones you've already seen, but they are actually different. Please read them carefully before responding.**

Broad Perpetration Matrix – [No; Yes; I'm not sure]

- Have you ever touched an external part of another person's body when they possibly didn't want you to?
- Have you ever made physical contact with an external part of another person's body and they may not have wanted it to happen?
- Have you ever touched an intimate area of another person's body when they possibly didn't want you to?
- Have you ever began performing oral sex on another person when they may have not wanted it to happen?
- Have you ever performed oral sex on another person and they may have not wanted it to happen?

- Have you ever inserted anything into part of another person's body when they possibly didn't want you to?
- Have you ever inserted your penis into part of another person's body and they may have not wanted it to happen?
- Have you ever put part of another person's body into your mouth, butt, or vagina when they possibly didn't want you to?

Behaviors List P Which of the following behaviors have you done although it was unwanted or may have been unwanted by another person? [Multi-select]

- touched their arms, legs, hands, feet, back, or shoulders
- attempted to touch their arms, legs, hands, feet, back, or shoulders, but did not do it
- touched their face or neck
- attempted to touch their face or neck, but did not actually do it
- touched their chest over their clothes
- attempted to touch their chest over their clothes, but did not actually do it
- touched their chest under or without their clothes
- attempted to touch their chest under or without their clothes, but did not actually do it
- touched their butt over their clothes
- attempted to touch their butt over their clothes, but did not actually do it
- touched their butt under or without their clothes
- attempted to touch their butt under or without their clothes, but did not actually do it
- touched their genitals over their clothes
- attempted to touch their genitals over their clothes, but did not actually do it
- touched their genitals under or without their clothes
- attempted to touch their genitals under or without their clothes, but did not actually do it
- touched part of their body with my mouth
- put my fingers into their butt
- inserted an object into their butt
- put their fingers into my butt
- put my penis into their butt
- attempted to touch part of their body with my mouth , but did not actually do it
- attempted to put my fingers into their butt, but did not actually do it
- attempted to insert an object into their butt, but did not actually do it
- attempted to put their fingers into my butt, but did not actually do it
- attempted to put my penis into their butt, but did not actually do it
- put my fingers into their vagina

- inserted an object into their vagina
- put my mouth or tongue onto their vagina
- put my tongue into their vagina
- attempted to put my fingers into their vagina, but did not actually do it
- attempted to insert an object into their vagina, but did not actually do it
- attempted to put my mouth or tongue onto their vagina, but did not actually do it
- attempted to put my tongue into their vagina, but did not actually do it
- put their penis into my butt
- put their penis into my vagina
- put their penis into my mouth
- grabbed their penis
- grabbed their testicles
- attempted to put their penis into my butt, but did not actually do it
- attempted to put their penis into my vagina, but did not actually do it
- attempted to put their penis into my mouth, but did not actually do it
- attempted to grab their penis, but did not actually do it
- attempted to grab their testicles, but did not actually do it
- told them I was taking birth control or otherwise could not get pregnant, but I was actually able to
- removed the condom from my penis during sex without telling them

Number of events P How many times have you  $\{lm://Field/1\}$  when the other person did not want it or may have not wanted it? [Select one]

- 1
- 2
- 3
- 4
- 5
- 6-10
- More than 10
- I'm not sure

Recency P How recently have you engaged in this? If there have been multiple times please indicate all relevant time periods. [In the past month; In the past year; 1-5 years]



ago; 5-10 years ago; 10-15 years ago; 15-20 years ago; More than 20 years ago; I'm not sure]

Tactics P What did you do before or while engaging in this behavior? [Multi-select]

- Asked to do so repeatedly
- Asked to do so repeatedly, even after they told me no
- Threatened to tell their partner that they cheated if they didn't do it
- Told them that they owed it to me
- Told them that if they loved me they'd do it
- Threatened their employment
- Threatened to keep them from seeing their children
- Pressured them to do it
- Called them negative names or mocked them
- Said things about their sexuality or sexual ability
- Said things about their body or attractiveness
- Lied to them
- Used dirty talk or was sexually explicit
- Used dirty talk or was sexually explicit even after they told me no
- Told them that I was already sexually excited
- Told them that their friend would do it
- Took off my clothes
- Took off my clothes and underwear
- Took off their clothes
- Took off their clothes and underwear
- Touched their arm or hand lightly
- Grabbed their arm or hand
- Grabbed their arm or hand and did not let go
- Touched their chest
- Grabbed their chest
- Touched their neck
- Grabbed their neck
- Touched their shoulders or back
- Touched their butt
- Grabbed their butt
- Touched their genitals
- Grabbed their genitals
- Rubbed my genital area against their butt
- Rubbed my butt against their genitals
- Moved their hand to part of my body
- Grabbed my genitals, but did not expose them

- Rubbed my genitals, but did not expose them
- Touched their chest under their shirt or bra
- Grabbed their chest under their shirt or bra
- Touched their back under their shirt
- Put my hand down their pants/ up their skirt and touched their butt
- Put my hand down their pants/ up their skirt and grabbed their butt
- Put my hand down their pants/ up their skirt and touched their genitals
- Put my hand down their pants/ up my skirt and grabbed their genitals
- Kissed their hands or body
- Kissed their face
- Kissed their lips
- Showed or sent them photos of their body that they never sent to me
- Showed or sent them photos of my body
- Showed or sent them photos of someone else's body
- Exposed my bare chest to them
- Exposed my genitals to them
- Pressured them to drink more alcohol
- Kept refilling their drink or brought them more drinks without them asking
- Pressured them to smoke weed
- Pressured them to smoke more weed
- Pressured them to use ecstasy
- Pressured them to use more ecstasy
- Pressured them to use molly
- Pressured them to use more molly
- Pressured them to use GHB
- Pressured them to use more GHB
- Pressured them to use another substance
- Gave them something without their knowledge
- I did this while they were too drunk or otherwise unable to think clearly
- Did not stop with previously consensual sexual activity when they told me to
- Held them down with ropes or cuffs
- Prevented them from leaving by threatening to hurt them
- Prevented them from leaving by locking the door
- Hit them with their hands or feet
- Bit them with their mouth
- Threatened them with a weapon or object
- Hit them with a weapon or object
- Choked them with my hands or an object
- Select this item and you'll be able to write in your response
- I didn't do any of these things

Tactics P Q Said or did something that was not listed above [Free response]

Consent P Was there discussion of consent before, during, or after this event?

- No, there was no discussion of consent at all
- Yes, before this event and they did not give consent for this
- Yes, before this event and they had initially given consent but told me to stop and I did not
- Yes, during this event and they did not give consent for this
- Yes, during this event and they were not able to give consent
- Yes, after this event and they did not give consent
- Yes, after this event and they were not able to give consent

RelVictH P What was your relationship to this person at that time? [Multi-select]

- Stranger
- Acquaintance
- Friend
- Sibling
- Parent
- Family Member
- Previous sexual partner
- Current sexual partner
- Previous romantic partner
- Current romantic partner
- Someone I met from a dating app or site
- My Employee
- My Work Superior
- Other
- Not sure how to characterize it
- Prefer not to answer
- 

RelVictC P What is your current relationship to this person?

- Stranger
- Acquaintance
- Friend
- Sibling
- Parent
- Family Member
- Previous sexual partner
- Current sexual partner
- Father or Mother of my children
- Previous romantic partner
- Current romantic partner
- Someone I met from a dating app or site

- My Employee
- My Work Superior
- Someone in a position of authority over me
- Other
- Not sure how to characterize it
- Prefer not to answer
- 

GenitalsVict P What genitals did this person's body have? [Multi-select: A penis; A vagina; I'm not sure]

Severity P How severe and impactful to your life was this event? [0-100 slider – 0 (Not at all) 100 (More than most other things in my life) [Severity; Impact on life; I'd like to provide an additional measurement here (you'll be able to write this in)]

Severity P Q What was your additional measurement that you provided above? [Free text]