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# The Role Of Sexual Scripts In Men's And Women's Interpretation And Endorsement Of Items Measuring Self-Reported Sexual Aggression

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THE ROLE OF SEXUAL SCRIPTS IN MEN'S AND WOMEN'S INTERPRETATION  
AND ENDORSEMENT OF ITEMS MEASURING SELF-REPORTED SEXUAL  
AGGRESSION

by  
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## Abstract

Previous research on sexual aggression mainly focused on men as perpetrators and women as victims; more recently, the focus has shifted to include women as perpetrators of sexual aggression as well. This study sought to examine two different measures of sexual coercion perpetration (Revised Sexual Experiences Survey and the Post-Refusal Persistence Scale) in terms of their convergent validity for both men and women and examine gender differences and similarities in item interpretation. In addition, participant agreement with traditional and non-traditional sexual scripts was examined for its association with endorsement of coercion. Participants were 648 individuals (426 women, 222 men) recruited from an undergraduate psychology subject pool and an online convenience sample, ranging in age from 18 to 62, with a mean age of 24 years. The majority of the sample was White (66.7%) and Black (19.9%). All measures were completed online anonymously. Specific hypotheses predicted that, for men, sexual attitudes that involve traditional male roles and traditional female roles in sexual relationships would be associated with perpetration of sexual coercion, and for women, attitudes involving traditional male roles and non-traditional female roles would be associated with perpetration of sexual coercion. Results suggest that convergent validity for the two measures is less than optimal; overall, participants were more likely to endorse items on PRPS than the SES-LFP. Item interpretation analysis revealed that more than twice the percentage of women that provided a description of an endorsed act indicated a false positive, compared to men, suggesting that women are more likely to endorse perpetration items incorrectly on the SES than are men. For women, endorsement of traditional male sexuality and rejection of traditional female sexuality was associated

with endorsing use of sexually coercive tactics; for men, traditional male sexuality was most associated with coercion. Research and intervention implications are discussed.

## The Role of Sexual Scripts in Men's and Women's Interpretation and Endorsement of Items Measuring Self-Reported Sexual Aggression

Sexual aggression among adults, including rape, sexual assault, and sexual coercion, is a topic of importance due to the negative psychological consequences many victims experience. Much of past research has focused on men as the perpetrators and women as the victims of these acts; however, beginning in the 1970s and 1980s, researchers began asking men about victimization, and some men reported being victimized by other men or by women (Struckman-Johnson, 1988). Though the prevalence of women's perpetration of sexual aggression appears to be comparatively less than perpetration by men, some men do experience victimization by women. Not much is known about what predicts perpetration of sexual aggression by women, and there is a need for a better understanding of the ways in which heterosexual aggression perpetrated by women is similar to and different from that perpetrated by men.

### **Defining Sexual Aggression**

For the purposes of this study, the terms *sexual aggression* and *sexual coercion* will be defined as “any form of behavior directed toward the goal of making another person engage in sexual contact with the actor against the target person's will” (Krahe, Waizenhofer, & Moller, 2003, p. 220). These forms of behavior include verbal, psychological, and physical tactics, as well as exploitation of an incapacitated state. Verbal and psychological tactics typically include insistence, telling lies, making false promises, threatening blackmail, threatening to end the relationship, and making the person feel guilty or ashamed. Physical tactics include behaviors such as holding someone down, blocking the exit, slapping, hitting, pushing, or using a weapon;

threatening physical harm is often included in this category as well. Exploitation of an incapacitated state is either purposely getting a person drunk or high to obtain sexual contact or taking advantage of a person who is already drunk or high.

Both public and academic understandings of sexual assault and rape often have been driven by legal definitions, and these definitions have guided the research questions asked. Sexual assault and rape traditionally have been legally defined as being perpetrated by men against women because laws described the acts in gendered terms, requiring the body to be penetrated in order for victimization to have occurred and specifically referring to the act of penile-vaginal intercourse (Estrich, 1987; Herman, 2003; Koss, 1994). It is only recently, in 2012, that the United States Department of Justice broadened the definition of rape to include any nonconsensual penetration of the vagina or anus by body part or object and nonconsensual oral penetration by another person's sexual organ. According to this new definition, the gender of the perpetrator and victim will not be used to determine if the act was rape or not (Basu, 2012).

Perhaps as a consequence of the previous legal definitions of rape, most research has only investigated men's aggression against women. For example, the widely used Sexual Experiences Survey (SES; Koss & Gidycz, 1985), a measure originally designed to ask women about their experiences of sexual victimization and men about their experiences of sexual perpetration, contained questions formatted such that the definitions of rape and attempted rape followed legal statutes. This instrument avoided use of terms such as "rape" and instead used behaviorally descriptive items assessing various sexual acts obtained using various types of coercion. Consistent with many legal definitions, Koss and colleagues note in their revision of the SES (Koss et al., 2007) that



the key feature of rape is penetration of the body of the victim, and therefore, a woman who forces or coerces a man into vaginal-penile intercourse cannot have perpetrated rape. In some instances, researchers have broadened the definition of rape to include penetration of other areas of the body, such as the anus (e.g., Tjaden & Thoennes, 2000), but even in these cases, the word rape is used to indicate that the perpetrator has penetrated the body of the other person with a penis, restricting perpetration of rape to men, but allowing victimization to occur to both men and women. In many states, a woman cannot rape a man legally, given her lack of a penis with which to penetrate his body, but there are many ways in which a woman can coerce a man into sexual contact. This contact may include traditional penile-vaginal intercourse, but also acts such as oral sex, kissing, and fondling.

To better describe and define how sexual coercion may be perpetrated by both men and women, researchers have typically used a continuum of acts that are behaviorally descriptive, as opposed to labels such as rape. Using these descriptions, as opposed to labels, helps avoid confusion among participants about the definitions of terms like “rape” and “sexual assault” and allows participants to endorse acts that have occurred to them or that they have perpetrated without requiring the participants to label these acts as “rape” or “sexual assault.” Sexually coercive and aggressive acts are typically described as ranging from kissing to fondling or touching to oral, anal, or vaginal penetration (Waldner-Haugrud & Vaden-Gratch, 1997). The coercive methods used to perpetrate these sexual acts can range from verbal and psychological coercion (including persuasion, threats, lies, and exploitation of authority) to exploiting an

incapacitated state, such as intoxication, to use of physical force and weapons (Waldner-Haugrud & Vaden-Gratch, 1997).

### **Prevalence of sexual aggression perpetration**

Research has revealed that men's sexual aggression against women is relatively prevalent. For example, to evaluate the scope of women's sexual victimization and men's sexual perpetration, Koss, Gidycz, and Wisniewski (1987) conducted a national survey of over 6,000 college men and women using the SES. Over 4.0% of men endorsed perpetrating rape, and over 3.0% of men reported attempting rape as the most extreme level of sexual aggression perpetrated; approximately 7% of men reported using tactics of coercion to obtain intercourse. A larger number of college men, 42%, in the Craig, Kalichman, and Follingstad (1989) study, endorsed using verbal coercion to obtain sexual intercourse on the SES. Rando, Rogers, and Brittan-Powell (1998) used a modified version of the SES (5 items measuring rape and sexual assault) to measure 191 college men's sexually aggressive behaviors. Overall, 8.9% of men responded yes to one or more of these items. Aberle and Littlefield (2001) used the complete original version of the SES (Koss & Oros, 1982) with a sample of college men ( $N=76$ ); 22.4% of the men responded yes to at least one of the items. Using a different measure of sexual aggression, in the Mosher and Anderson (1986) study, 44% percent of college men endorsed using verbal tactics to obtain intercourse; 66% endorsed getting a woman drunk to have sex with her; and 19% endorsed using a tactic of force or threat of force to obtain intercourse.

Although there are many studies reporting the prevalence of men's perpetration of sexual aggression against women, there are fewer studies investigating women's perpetration against men. West and Rose's (2000) study of low-income African

American women found that 19.5% had inflicted nonconsensual kissing, 10.3% had inflicted nonconsensual genital fondling, and 6.9% had inflicted nonconsensual oral sex on a male partner in a dating relationship. Unfortunately, in this study, the strategies used to obtain nonconsensual sex were not defined. In another study, approximately 18% of college women reported using physical or verbal coercion to obtain sexual intercourse from a man in response to items on a modified version of the SES (Russell & Oswald, 2001).

In a sample of German women (Krahé, Waizenhöfer, and Möller, 2003), 3.2% reported using verbal coercion to obtain a sexual act (i.e., kissing and petting, intercourse, or oral sex) from a man. In this sample, 5.6% of women endorsed exploiting a man's incapacitated state to gain a sexual act, and 2% reported using physical force to obtain sexual acts.

Approximately 15% of college women in Struckman-Johnson, Struckman-Johnson, and Anderson's (2003) sample, responding to the Postrefusal Sexual Persistence Scale, endorsed using one or more types of emotional manipulation and deception, which would be considered verbal tactics. Five percent reported that they had exploited a man's incapacitated state, and less than 3% reported using physical force, threats, and harm.

**Summary of prevalence findings.** In general, reported prevalence rates for women's perpetration of sexual coercion are lower than those for men. However, the prevalence of men's and women's use of sexually coercive tactics varies widely depending on which behaviors are assessed and how the questions are worded. Therefore, the measurement instrument that is used to assess men's and women's sexual aggression likely has important implications for the finding of the study.

### **Measurement of sexual aggression**

Many researchers of women's sexual aggression have opted to use measurement scales designed for men, adapting them for women by reversing the gendered language in the items. For example, the Sexual Experiences Survey is commonly used to measure men's sexual aggression. Ross and Allegier (1996) critiqued the reported psychometric properties of this measure, citing several problems in how it has been used. First, many researchers have used a version of the 10-item SES published in 1987 (Koss, Gidycz, & Wisniewski, 1987); however, there are no published reliability and validity statistics for these items. Many researchers have mistakenly cited the psychometrics reported for the 1985 version (Koss & Gidycz, 1985), which is different in content. Second, in some studies the SES is adapted or changed in some way and actual items being used to measure perpetration or victimization are not reported, making comparisons between studies impossible. Lastly, they pointed out that it was not known how participants were interpreting the items that they were either rejecting or endorsing. They asked college men to answer four items on the original SES (Koss & Oros, 1982) and participate in a confidential interview to describe what they thought the item was asking during administration. They found that the men reported a range of interpretations for each item, emphasizing the need for precise wording and a better understanding of what participants believe they are endorsing. It is also possible that men and women may interpret sexual aggression items differently, a possibility that was not explored in Ross and Allegier's (1996) study.

The SES has recently been revised a second time (Koss et al., 2007) in several key ways. Most notably, each item is now gender-neutral so that both men and women

can be asked questions about their experiences with sexual perpetration or victimization. This revised version was published in a descriptive non-research report; therefore, the validity and reliability of these new items have not been established. Interpretive concerns for the individual items also have yet to be addressed with a research sample.

The Post-Refusal Sexual Persistence Scale (PRPS; Struckman-Johnson, Struckman-Johnson, & Anderson, 2003) was developed to specifically assess sexual acts that occur after the receiver has indicated non-consent; thus, the authors considered these acts to be coercive. The questions are written so that men are asked about experiences with women, and women are asked about experiences with men, with both sexes as perpetrator and victim. The scale assesses four levels of coercion: non-verbal sexual arousal tactics, emotional manipulations and lies, alcohol and drug intoxication, and tactics of physical force and harm. Coercive tactics were selected from the literature on sexual aggression. Reliability and validity statistics were not reported for this measure.

Strang, Peterson, Hill, & Heiman (in press) compared men's reports of sexual coercion and aggression on a short form of the revised SES and a modified and expanded version of the PRPS. They found that there were substantial reporting discrepancies across the two measures. However, they did not assess women's reports on the two measures, nor did they evaluate how participants were interpreting the items on the measures.

There is a need for these measures of sexual aggression to be further validated and refined based on empirical findings. It is not entirely clear what is actually being measured or endorsed by respondents; this is especially true when these measures are used to assess the understudied topic of women's sexual aggression perpetration.

Measures of sexual aggression that are appropriate for men might not be valid with women. Kolivas and Gross (2007) noted that comparing men's and women's interpretations of items will help to clarify discrepancies and inform future survey techniques.

### **Sexual scripts and beliefs about sexually normative behavior**

Men's and women's reports of sexual aggression perpetration on existing measures may be influenced by what they consider to be normative sexual behavior. Gagnon and Simon (2005, p. xii) first described sexual scripts, which guide behavior in sexual interactions by providing normative expectations about the setting and the actions taken by the actors in the sexual scene. Traditional sexual scripts describe the series of behavioral events that are socially expected to occur in a sexual encounter. These scripts tend to presume male interest; men are always expected to be interested in gaining sexual access to a woman. For example, Edgar and Fitzpatrick's (1993) study of undergraduate men and women found that both genders had similar scripts: Men were described as initiators of sex, and women's role included providing token resistance (i.e., initially refusing sex even though she planned to eventually "give in"). This script in particular supports men's perpetration of sexual coercion and aggression; according to the script, it is normative behavior for a man to pursue a woman for sex and to believe that her saying "no" does not indicate that he should stop.

It is important to note that sexual scripts are culturally specific. Much of the research in the area of cultural scripts has been conducted with White college students; however, in Seal, Smith, Coley, Perry, and Gamez's (2008) sample of minorities and blue collar workers, they found that Black men showed more adherence to traditional gender

roles in sexual interactions than non-Black men (male initiation and female controlled boundaries) whereas Black women did not.

Research on sexual scripts has included investigations of their impact on various types of behaviors in sexual interactions, including sexual coercion and aggression. For instance, sexually aggressive young German men (Krahe, Bieneck, & Scheinberger-Olwig, 2007) endorsed risk elements, such as alcohol consumption, ambiguous communication of sexual intentions, and a high level of sexual activity in their sexual scripts at higher rates than non-aggressive men.

The traditional scripts may also have an impact on women's perpetration of sexual coercion and aggression. Traditional sexual scripts dictate that men are responsible for initiating sexual activity and that sexual prowess and multiple partners is desirable for men (Littleton & Axson, 2003). Thus, it is assumed that men will always want and agree to sex. If men are always expected to want sex, it is likely implied to both the female perpetrator, those who may hear about the act, and the male victim that sexual aggression by women against men cannot be a crime, or even a problem. For example, Clements-Schreiber, Rempel, and Desmarais (1998) asked women about their beliefs about male and female sexuality and their hypothetical willingness to use sexual coercion with an unwilling or reluctant man. The belief that men are readily accessible to women and disagreement with the notion that women need and want sex less than do men were both predictive of women's hypothetical willingness to use pressure tactics.

Of course, women's use of sexual coercion and aggression is not consistent with women's role of refusing and feigning disinterest in sex as described by traditional sexual scripts. Anderson and Savage (2005) suggested that sexual scripts for women have

changed dramatically in the United States in the prior three or four decades; namely, women are no longer expected to avoid sex, but are now expected to be sexually active and assertive. This conclusion also was put forth by O'Sullivan and Byers (1993) based on their study of 201 male and female college students. Their study revealed that 56% of respondents reported having been involved in a situation during the past year in which the woman wanted more sexual intimacy than the man. The fact that many participants in their study reported a situation in which the woman wanted more sexual intimacy than the man challenges the script that women are sexually passive gatekeepers. If women sometimes desire more sexual contact than their partners, this could influence women's use of sexual coercion and aggression. Thus, perhaps women are particularly likely to sexually aggress if they endorse traditional scripts for the male sexual role (i.e., that men are always willing and eager for sex), but reject the traditional scripts for the female sexual role (i.e., they reject the idea that women should refuse sex).

In general, it seems likely that in research assessing men's and women's sexual aggression, a participant's interpretation of what a researcher is asking of them may be influenced by their sexual scripts or their expectations as to how heterosexual interactions should typically proceed. For example, women who perpetrate sexual aggression may not realize that their sexual behavior is perceived as nonconsensual or forceful by their male partners because they may expect that men are always in the mood for sex. Similarly, a man who perpetrates sexual aggression may not interpret his coercive behavior as aggressive because he may assume that women say no but mean yes.

There are many gaps and limitations in the current research on the similarities and differences in men's and women's sexual aggression perpetration. First, the ways in



which we research this topic are shaped by the questions we ask and how we define sexually aggressive behavior within a changing sexual context. There is a need to consider whether the instruments used to measure sexual aggression should be based on gender neutrality, asking the same questions of both men and women, or if more specific instruments for each gender are required. It is also unclear whether men and women have differing thresholds for endorsing the use of sexual aggression against a partner.

### **Study Objectives**

The present study used self-report data from adult men and women about their perpetration of sexually coercive tactics, their written sexual scripts, and endorsement of sexual attitudes and beliefs. The first aim was to examine the validity of two different measures of men's and women's sexual aggression. The goals associated with this first aim were as follows:

- (1a) Compare the responses of participants to questions on the Revised SES and the Post-Refusal Persistence Scale to investigate whether there is convergent validity across these two measures in men's and women's self-reported perpetration of sexual aggression.
- (1b) Examine gender differences in the convergent validity among the two measures of sexual aggression in order to investigate whether the scales are equally valid for men and women.
- (1c) Examine whether there are gender differences in how the questions are being interpreted by assessing qualitatively how men and women interpret the items on the sexual aggression scales. Specifically, instances of false positives (i.e., endorsement of sexual aggression in cases in which the act does not meet research

definitions) and instances of false negatives (i.e., non-endorsement of sexual aggression in cases in which the act does meet research definitions) on a measure of sexual aggression would be examined and rates of false positives and false negatives for men and women would be compared.

As discussed, sexual scripts guide beliefs about sexual behavior and likely have an impact on enacted behavior. Therefore, the second aim of this study was to identify the sexual scripts endorsed by participants and their association with self-reported past perpetration. For this study, sexual scripts were measured qualitatively by having participants write sexual scripts and quantitatively using three proxy variables that are closely related to traditional sexual scripts—sexual stereotypes, sexual double-standards, and belief in women’s token resistance. Aim 2 involved testing the following specific study hypotheses:

(2a) For men, sexual attitudes (as measured by sexual stereotypes, sexual double standards, and belief in women’s token resistance) that involve traditional male roles (i.e., men as seekers and initiators of seek) and traditional female roles (i.e., women as sexual gatekeepers) in sexual relationships would be associated with perpetration of sexual coercion. Specifically, high scores on the Sexual Stereotypes Questionnaire (both the Male Sexual Accessibility factor and the Gender Dependent Sex Drive factor), Sexual Double Standard Scale, and Token Resistance to Sex Scale would be associated with men’s reports of sexual coercion.

(2b) For women, attitudes involving traditional male roles and non-traditional female roles would be associated with perpetration of sexual coercion.

Specifically, high scores on the Sexual Stereotypes Questionnaire Male Sexual Accessibility factor and low scores on the Sexual Stereotypes Questionnaire Gender Dependent Sex Drive factor, the Sexual Double Standard Scale, and the Token Resistance Scale would be associated with women's reports of sexual coercion.

(2c) For both men and women, generating a sexual script (in response to an open-ended prompt) that involves traditional gender roles would be associated with perpetration of sexual coercion.

## **Methods**

### **Participants**

Participants were drawn from the University of Missouri-St. Louis psychology subject pool, consisting of undergraduate students enrolled in psychology courses, and an online convenience sample. The latter group was directed to the survey through advertisements on Craigslist.com and on websites listing online psychological studies. The ads stated that participants were sought for a study on "sexual interactions." Participation was limited to individuals who were 18 years of age and older. Separate links were used for the subject pool, the participants recruited through Craigslist.com advertisements, and participants recruited through the website listing online psychological studies. Participants recruited through the subject pool received course credit for their participation. Online participants had the option at the end of the survey to enter a raffle to win a \$100 gift certificate for an online store. Our final sample consisted of 649 individuals (426 women, 222 men) ranging in age from 18 to 62, with a mean age of 24 years. See the Analyses section for a discussion of the removal of various

participants from the final sample. The racial/ethnic makeup of the sample was: 66.7% White/European American; 19.9% Black/African American; 6.0% bi- or multi-racial; 5.5% Asian; 0.8% American Indian/Alaskan Native; and 1.3% Other. Seven individuals did not respond to this question. Overall, 86.9% ( $n = 564$ ) of the full sample indicated a heterosexual orientation, 4.5% were gay or lesbian ( $n = 29$ ), 6.6% bisexual ( $n = 43$ ), and 1.2% undecided ( $n = 8$ ). The majority of participants in the final sample were recruited through the subject pool (85.3%), with the rest coming from the online convenience samples (7.3% from Craigslist and 7.4% from an online psychology research website).

### **Measures**

Participants completed all measures electronically via SurveyMonkey, an online data collection tool. They were asked to complete items regarding demographics, substance use, childhood sexual abuse, sexual aggression perpetration and victimization, and beliefs about traditional male and female roles in sexual interactions.

#### **Revised Sexual Experiences Survey (Long-Form Perpetration; SES-LFP).**

This measure (Koss et al., 2007) consists of seven items measuring perpetration and is a revision of the most commonly used measure of sexual perpetration and victimization (Koss & Gidycz, 1985). For the current study, analyses focused on the perpetration items. The SES-LFP does not measure women's perpetration of nonconsensual penile-vaginal intercourse, so an additional item similar in structure to the other items was added for women to answer regarding vaginal intercourse, such that both men and women were asked about coercing an opposite sex partner into heterosexual vaginal intercourse (i.e., "I had penile-vaginal (penis-vagina) sex with a man without his consent by..."). Each item describes completed or attempted sexual contact of varying degrees occurring

without the victim's consent, and allows the participant to indicate how many times (on a scale from 0 to 3 or more) they have engaged in that act as a result of 13 different coercive tactics (e.g., verbal coercion, taking advantage of intoxication, physical force). For this study, after each item assessing coerced or forced oral sex, anal sex, or penile-vaginal intercourse, participants were asked follow-up questions: "If you have done this 1 or more times, please describe what happened during the most recent incident in as much detail as possible (e.g., what was the context, what did you say, what did the other person say, what was the outcome). If you have never done this, have you ever done anything similar to this behavior? If yes, please describe the most recent incident in which you engaged in a similar behavior in as much detail as possible (e.g., what was the context, what did you say, what did the other person say, what was the outcome)." These qualitative questions were included to identify false positives and false negatives in participants' responses to the SES items; this strategy has been successful in prior studies of sexual victimization (Peterson & Muehlenhard, 2007).

**Revised Sexual Experiences Survey (Short-Form Victimization; SES-V).** The short version of the victimization form of the SES was also administered. Although the focus is on perpetration in this study, several studies have shown that sexual victimization is associated with sexual perpetration (Anderson, 1998; Krahe, Waizenhofer, & Moller, 2003); thus, the victimization form was administered for descriptive purposes and to allow the researcher to control for victimization in regression analyses.

**Post-Refusal Persistence Scale (PRPS).** This scale (Struckman-Johnson, Struckman-Johnson, & Anderson, 2003) consists of 19 items measuring the use of various coercive sexual tactics perpetrated by participants after their partner has refused a

sexual advance. The original instructions read, “Since the age of 16, how many times have you used any of the tactics on the list below to have sexual contact (genital touching, oral sex, or intercourse) with a [person of the opposite sex] after he/she indicated ‘no’ to your advance?” To conform to guidelines used by the SES-LFP and allow for accurate comparison, this question was changed to read “Since the age of 14...” Also, to allow for accurate comparison with the SES, the list of items was administered four different times to assess use of these tactics to obtain (1) genital touching, (2) oral sex, (3) anal sex, and (4) intercourse separately. Participants were asked to indicate the number of times each tactic had been used. Nineteen tactics were given that group into four categories: 1) Sexual arousal (persistent kissing and touching; perpetrator taking off own clothes; perpetrator taking off target’s clothes); 2) Emotional manipulation and deception (repeatedly asking; telling lies; using authority of older age; questioning target’s sexuality; threatening to break up; using authority of position; threatening self-harm; threatening blackmail); 3) Exploitation of the intoxicated (taking advantage of a drunken target; purposefully getting a target drunk); and 4) Physical force, threats, and harm (blocking target’s retreat; using physical restraint; using physical harm; threatening physical harm; tying up a target; threatening with a weapon).

**Sexual Scripts.** Participants’ sexual scripts were captured using a modification of the instructions originally described by Krahe and colleagues (2007). All participants wrote a script in response to the following prompt:

Please imagine the following situation and describe the typical progression of events in such an encounter (e.g., describe the thoughts and actions of each individual), not in terms of how you think they will happen to you, but in terms of

how you think they will happen to most people in general:

A woman and a man have sex with each other for the first time.

Please do not think of a particular situation but imagine how such situations typically happen for most people.

**Sexual Stereotypes Questionnaire.** The SSQ measures attitudes about male and female sexuality and availability, two concepts that are important to traditional sexual scripts. To develop this questionnaire, Clements-Schreiber and colleagues (1998) conducted a pilot study asking women to generate statements about men's sexuality. Factor analysis of the combined statements revealed two underlying factors: Male Sexual Accessibility (seven items) and Gender-Dependent Sex Drive (3 items). Cronbach's alpha for the first factor was .72, and for the second factor it was .74. These ten items were used to measure participants' beliefs about traditional male and female sexual behavior expectations (e.g. men are expected to seek and want sex; women should be gatekeepers and sexually selective). Cronbach's alpha for Male Sexual Accessibility in this study was .72, and for Gender-Dependent Sex Drive, it was .76.

**Sexual Double Standard Scale.** This scale was developed by Muehlenhard and Quackenbush (1998) to measure agreement with the traditional sexual double standard. It has 26 items that are rated on a Likert scale from 0 (*disagree strongly*) to 3 (*agree strongly*). A higher score indicates greater agreement with the traditional beliefs about male and female sexual behavior. The authors report that the measure had reliability scores ranging from .73 to .76 in a sample of university students, and it correlates significantly with the Attitudes Toward Women scale, which measures acceptance of traditional gender roles. In our sample, Cronbach's alpha for this measure was .65.

Traditional sexual scripts include the idea that men should desire and seek sex and women should avoid sex and function as gatekeepers; these ideas are consistent with acceptance of a sexual double-standard.

**Token Resistance to Sex Scale.** This scale (Osman, 1998) contains eight items that measure a respondent's belief that women say no to sex when they mean yes (i.e., token resistance). Traditional sexual scripts suggest that women resist sex in order to fulfill their role as gatekeepers even though they may sometimes actually want sex. Each item is rated on a Likert scale from 1 (*strongly agree*) to 7 (*strongly disagree*). Osman has reported a Cronbach's alpha of .86 for this measure with a sample of college men (Osman, 2003). It correlates positively with Muehlenhard and Felt's (1998) measure of belief in token refusal, and has predicted perceptions of date rape in several studies; that is, a greater belief in token resistance has been associated with a man being less likely to perceive a situation as rape (Osman, 1998; Osman & Davis, 1997, 1999a, 1999b). Cronbach's alpha for this scale in the present study was .90.

**Daily Drinking Questionnaire (DDQ;** Collins, Parks, & Marlatt, 1985).

Participants were asked to answer six questions related to their use of alcohol, specifically the time spent drinking and the amount consumed. Questions asked about both the typical amount and time spent drinking as well as the amount and time spent drinking in the past month. A large body of research has shown that alcohol use is associated with sexual perpetration (e.g., see Testa, 2002 for a review); thus, the alcohol use measure was administered for descriptive purposes and to control for alcohol use in the primary analyses.



**Childhood Sexual Abuse.** Ten items taken from Finkelhor's (1979) measure of childhood sexual abuse were used to assess participants' sexual experiences prior to the age of 14 with a person five or more years older than the participant, as well as unwanted or coercive experiences prior to age 14 with a person of any age. Based on past research, child sexual abuse has been found to be associated with sexual perpetration, although the relationship may be mediated by other factors (e.g., Loh & Gidycz, 2006). Nevertheless, given the statistical relationship between child sexual abuse and adult perpetration, this measure was administered for descriptive purposes and to control for history of child sexual abuse in the regression analyses.

### **Procedure**

After accessing the SurveyMonkey site, participants read an informed consent statement assuring them that their participation in the study was voluntary and that their answers were anonymous. Next, they completed the measures described above. Last, the non-subject pool participants had the option to provide an email address so that they could be entered into a raffle to win a gift certificate. The email address was not connected to their questionnaire data. Subject pool participants completed a form to receive course credit for their participation; this information was also not connected to their questionnaire data.

## **Results**

### **Data Preparation and Descriptive Analyses**

The initial sample consisted of 851 respondents. Because of the centrality of gender to the research question, one respondent who did not provide his or her gender was eliminated. Also due to the small group size that would not allow for statistical

comparisons, five individuals who reported that they were female-to-male transgendered and one person who indicated an intersex condition were removed. Next, 196 participants who were missing 15% or more of responses to any of the major scales in the survey (SES-LFP, PRPS, SSQ, TRSS, and SDSS) were removed. Last, a visual inspection of the data led to the removal of a respondent whose data were outliers and who had provided qualitative answers of an odd nature. The final sample size was 648 (426 women, 222 men). Five hundred and fifty-three (85.3%) of these responses were collected via the undergraduate subject pool, 47 (7.3%) from craigslist.com, and 48 (7.4%) from the psychology research website. Missing data in the SES-LFP and the PRPS were not replaced and were treated as non-endorsement of sexual aggression; data missing in the SSQ, TRSS, and SDSS were replaced in SPSS using series means.

Participants' responses on the SES and the PRPS were scored to determine whether they endorsed perpetrating verbal coercion, physical coercion, and/or exploitation of an incapacitated state for each type of sexual act. The corresponding items on each scale were summed and a dichotomous variable of perpetration was created indicating endorsement or denial for each of these sexual tactics.

In this sample, 73 women (17.1%) reported using some form of coercion on either the SES-LFP or the PRPS or both (64 indicating verbal coercion, 22 indicating exploitation of an incapacitated state, and 8 reporting use of physical force), and 70 men (31.5%) reported using coercion (66 indicating verbal coercion, 23 indicating exploitation of an incapacitated state, and 6 indicating use of physical force). Forty-five women (10.6%) and 60 men (27%) reported using some form of coercion (verbal, intoxication, or force) on either the SES-LFP, the PRPS, or both to gain oral sex; 54 women (12.7%) and

46 men (20.7%) reported using coercion to have vaginal sex; and 7 women (1.6%) and 15 men (6.8%) reported using coercion to have anal sex. Notably, 29 women (6.8%) and 24 men (10.9%) reported that they had never engaged in either consensual or nonconsensual oral, penile-vaginal, or anal sex with either a man or a woman.

### **Analyses for Aim 1**

**1a: Comparison of SES-LFP and PRPS.** To investigate convergent validity between the SES-LFP and PRPS, bivariate correlations were run separately for men and women on these scores to determine whether reported perpetration of each type of aggression on one scale was associated with reporting that type of aggression on the other measure. For both men and women, any endorsement of coercion on one scale was associated with endorsing any coercion on the other scale. More specifically, answering yes to use of verbal coercion and exploitation of an incapacitated state on the SES-LFP (i.e., oral sex, vaginal sex, or anal sex through verbal coercion; oral sex, vaginal sex, or anal sex through intoxication ) was positively correlated with that category of answers on the PRPS. Cell numbers were too low to calculate correlations for use of physical force for either men or women. Although the categories of verbal coercion and exploitation of an incapacitated state on the SES-LFP were positively correlated with the answers to the PRPS in those categories for both men and women, this was largely driven by the lack of endorsement for the items on both measures (i.e., most people said no to both of the measures). However, participants who did endorse an item on one measure often did not endorse that category of item on the other measure. For example, 60 women endorsed using verbal coercion on the PRPS, but only 12 women endorsed this on both the PRPS

and the SES-LFP. See Tables 1 through 4 for a comparison of responses between the two measures.

Tables 1a and 1b.

*Comparison of Endorsement of Any Strategy on the SES-LFP and the PRPS*

Women		<u>PRPS</u>		<u>Total</u>
		No (% of total)	Yes (% of total)	
<u>SES-LFP</u>				
	No	337 (79.5%)	58 (13.7%)	395 (93.2%)
	Yes	10 (2.4%)	19 (4.5%)	29 (6.8%)
	Total	347 (81.8%)	77(18.2%)	424

*Note.* Point biserial correlation coefficient ( $r_{pb}$ ) = .33,  $p < .001$ .

Men		<u>PRPS</u>		<u>Total</u>
		No (% of total)	Yes (% of total)	
<u>SES-LFP</u>				
	No	145(66.2%)	40(18.3%)	185(84.5%)
	Yes	3(1.4%)	31(14.2%)	34(15.5%)
	Total	148(67.6%)	71(32.4%)	219

*Note.*  $r_{pb} = .54$ ,  $p < .001$ .

Tables 2a and 2b.

*Comparison of Verbal Coercion Endorsement on the SES-LFP and the PRPS*

Women		<u>PRPS Verbal Coercion</u>		<u>Total</u>
		No (% of total)	Yes (% of total)	
<u>SES-LFP Verbal</u>				
Coercion	No	347(81.8%)	60(14.2%)	407(96.0%)
	Yes	5(1.2%)	12(2.8%)	17(4.0%)
	Total	352(83.0%)	72(17.0%)	424

*Note.*  $r_{pb} = .29$ ,  $p < .001$ .

Men		<u>PRPS Verbal Coercion</u>		<u>Total</u>
		No (% of total)	Yes (% of total)	
<u>SES-LFP Verbal</u>				
Coercion	No	147(67.1%)	44(20.1%)	191(87.2%)
	Yes	3(1.4%)	25(11.4%)	28(12.8%)
	Total	150(68.5%)	69(31.5%)	219

*Note.*  $r_{pb} = .48$ ,  $p < .001$ .

Tables 3a and 3b.

*Comparison of Endorsement of Exploitation of an Intoxicated State on the SES-LFP and the PRPS*

Women	<u>PRPS Intoxication</u>		<u>Total</u>
	No (% of total)	Yes (% of total)	
SES-LFP			
Intoxication	No 397(93.6%)	15(3.5%)	412(97.2%)
	Yes 7(1.7%)	5(1.2%)	12(2.8%)
	Total 404(95.3%)	20(8.3%)	424

*Note.*  $r_{pb} = .30, p < .001$ .

Men	<u>PRPS Intoxication</u>		<u>Total</u>
	No (% of total)	Yes (% of total)	
SES-LFP			
Intoxication	No 193(88.1%)	14(6.4%)	207(94.5%)
	Yes 3(1.4%)	9(4.1%)	12(5.5%)
	Total 196(89.5%)	23(10.5%)	219

*Note.*  $r_{pb} = .51, p < .001$ .

Tables 4a and 4b.

*Comparison of Physical Force Endorsement on the SES-LFP and the PRPS*

Women	<u>PRPS Physical Force</u>		<u>Total</u>
	No (% of total)	Yes (% of total)	
SES-LFP Physical			
Force	No 416(98.1%)	3(0.7%)	419(98.8%)
	Yes 4(0.9%)	1(0.2%)	5(1.2%)
	Total 420(99.1%)	4(0.9%)	424

*Note.* Correlation not calculated because of small cell sizes.

Men	<u>PRPS Physical Force</u>		<u>Total</u>
	No (% of total)	Yes (% of total)	
SES-LFP Physical			
Force	No 213(97.3%)	5(2.3%)	218(99.5%)
	Yes 1(0.5%)	0	1(0.5%)
	Total 214(97.7%)	5(2.3%)	219

*Note.* Correlation not calculated because of small cell sizes.

**1b: Gender differences on the SES-LFP and PRPS.** Next, to determine whether there were significant differences between men and women in their consistency of reporting perpetration across measures, a test to determine whether there were significant differences in the strengths of the correlations between men and women was run. Men were more consistent in their reporting between the two measures overall,  $p < .01$ , and they were more consistent in their reports of using verbal coercion,  $p < .01$ , and intoxication,  $p < .01$ . See Table 5 for all of the correlation comparisons.

Table 5.

*Phi Coefficient Comparison for the Consistency of Men's and Women's Answers to the SES-LFP and PRPS*

	Men <i>r</i>	Women <i>r</i>	Phi coefficient difference
Any coercion	.54	.33	$p < .002$
Verbal coercion	.48	.29	$p < .007$
Exploitation of an incapacitated state	.51	.30	$p < .003$
Physical force	not calculated	not calculated	

**1c: False positives and false negatives on the SES-LFP.** The qualitative answers provided to the SES-LFP items (i.e., the descriptions of the situations described in the items or the descriptions of the situations that were “similar” to the situations described in the items) were coded for false negatives and false positives in response to the behavior each item queried. Specifically of interest were cases in which the participant endorsed an SES item, but his or her experience did not seem to fit the

situation described in the item and cases in which the participant did not endorse an SES but described something “similar” that actually did seem to fit the situation described in the item. Eighty three individuals (38 females and 45 males) provided 204 descriptions of behavior they believed was referenced in the SES-LFP queries or that was similar to what was being referenced. These responses were independently coded by two raters (the author and the dissertation chair) using the definitions and descriptions provided in the SES-LFP queries; they were coded as (1) accurate, (2) unclear, or (3) false positive/negative. There was initial inter-rater agreement of 62.8% (128 out of 204 responses) overall. Disagreement was resolved via discussion between the two raters.

For answers that received a final coding of “false positive” (the participant endorsed the item as having perpetrated that behavior but their answer was judged not to be appropriate), initial agreement was 57.1% (initial disagreement on 9 out of 21 responses that received a final code of false positive) between the two raters. For answers that were coded as “false negative” (the participant did not endorse the item as having perpetrated the behavior, but the “something similar” response met the requirements for the query), there was an initial agreement rate of 66.7% (initial disagreement on 5 out of 15 responses that were given a final code of false negative).

Overall, 68 people endorsed at least one item on the SES-LFP, and 57 of them (26 women and 32 men) wrote a description of the endorsed act. Of these individuals, 15 (10 women and 5 men) gave us descriptions that indicated a false positive. Comparatively, more than twice the percentage of women that provided a description of an endorsed act (38.5%) provided a false positive response, compared to men (15.6%); this difference approaches but does not quite reach significance based on a Fisher’s exact test,  $p = .07$ .

Overall, 60 people endorsed the “something similar” follow-up item on the SES, and 41 provided a description of the similar act (19 women and 22 men). Of these individuals, 12 (5 women and 7 men) gave us descriptions that indicated a false negative. This proportion is not significantly different between men and women based on a Fisher’s exact test,  $p = 0.74$ .

Of all the SES descriptions that were written, 63 (30.9%) were rated as “unclear,” meaning that the participant did not provide enough information or specific enough information for the raters to make a determination. Because of the large number of unclear responses, it is likely that there were more false negatives and false positives. In addition, 11 people who endorsed an item did not provide a description for us to analyze, and 19 people who endorsed something similar did not provide a description for at least one of their similar responses.

There were some common themes observed among the false positive and false negative responses. Notably, the false positives included five female participants indicating perpetration on the close-ended question and then providing a description of a time when they were victimized. For example, one female participant endorsed “I put my penis (if you are a man) or I put my fingers or objects (if you are a man or a woman) into a woman’s vagina without her consent by: Using force, for example holding them down with my body weight, pinning their arms, or having a weapon” and then provided this response:

He was one of my friends. One night, one of my friends, not him, threw a party.

Im<sup>1</sup> not good at drinking and also don't like drinking much. I just like having a party so I joined with them. While drinking, we had a game that if someone lost in

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<sup>1</sup> All qualitative responses are reported as written including any spelling and grammatical errors.



the game, someone had to pick her or him and to do what they wanted in a private room for them. I got picked by him and we went into a room. Suddenly, He forced me into a bed and kissed, putting his finger into mine.....But no weapon.. I tried to get up and yelled at him. After he got his mind back, he said to me sorry but i just ran out of the door, slamming it a quite loud (Participant 343, female).

Another participant endorsed “I had oral sex with someone or had someone perform oral sex on me without their consent by: Threatening to physically harm them or someone close to them” and gave this description: “I never did it to anybody else but I did have the relative that did to me when younger” (Participant 20, female). A third participant endorsed “I had oral sex with someone or had someone perform oral sex on me without their consent by: Using force, for example holding them down with my body weight, pinning their arms, or having a weapon” and gave this description:

This was done to me by a close friend. I constantly refused his sexual pressuring. It involved physical alterations, and was a very frightening time. He ended up leaving the party, and then I left shortly after (Participant 168, female).

Other false positives included individuals (2 women and 3 men) who endorsed a specific coercion tactic but described something different in their response. For example, several participants endorsed using verbal coercion or force, but then described something that, although seemingly non-consensual (in that it involved ignoring a partner’s protests), did not involve actively coercing or forcing the sexual act:

i was trying to get them in the mood of sex. they would pull my hand an try to make me stop, i just figure they are playing [hard] to get, so i keep doing it until

they want to have sex (Participant 573, male, in response to “I put my penis (if you are a man) or I put my fingers or objects (if you are a man or a woman) into a woman’s vagina without her consent by: Telling lies, threatening to end the relationship, threatening to spread rumors about them, making promises about the future I knew were untrue, or continually verbally pressuring them after they said they didn’t want to”).

After dating for six months, about a month ago my partner and I had sex. My partner and I were fooling around in his apartment sexually and I put his penis inside of my vagina. We weren't talking during this particular sexual interaction. We had sex for a few minutes, and when we finished I asked him if he was okay. I knew that he had said in the past that he didn't want to have sex until he was married. He said he was okay but I could tell that he was a little unsettled. We have talked about it a few times since then about it, and he admitted he was angry at the time but is now okay. We have had sex a few times since then. Having sex does not upset him now (Participant 424, female, in response to “I had penile-vaginal [penis-vagina] sex with a man without his consent by: Telling lies, threatening to end the relationship, threatening to spread rumors about them, making promises about the future I knew were untrue, or continually verbally pressuring them after they said they didn’t want to”).

In addition, two women described beginning an act on someone who was asleep (not from drugs or alcohol), which although seemingly coercive, does not clearly fit within any of the SES-LFP queries:

It was a Saturday night and we had rented a hotel to relax before going home. My partner was sleeping. I was horny so I massaged his penis. After he became hard I unbuckled and unbutton his belt and gave him oral sex until he woke up. I asked if he wanted me to stop. He said "no it feels good. keep going." I kept going until he came and we proceed to have sex afterwards (Participant 55, female, in response to "I had oral sex with someone or had someone perform oral sex on me without their consent by: Telling lies, threatening to end the relationship, threatening to spread rumors about them, making promises about the future I knew were untrue, or continually verbally pressuring them after they said they didn't want to").

My recent boyfriend was sleeping in the bed with me and I woke up all types of horny so I rubbed his penis until get got hard enough for me to put inside my vagina not soon after i started he woke up but I guess it felt to good to him because he didnt say anything he just smacked my butt and we kept going (Participant 319, female, in response to "I had penile-vaginal (penis-vagina) sex with a man without his consent by: Finding someone who was asleep or unconscious from drugs and when they came to (regained consciousness) they could not stop what was happening").

False negatives included responses from individuals who had clearly used the tactic described, but for reasons unknown decided not to endorse the item:

After a fraternity party, I thought I was going to hook up with a guy. when he seemed uninterested, I tried to manipulate him by making him feel abnormal since he didn't want oral sex. He eventually complied (Participant 47, female, responded "no" to "I had oral sex with someone or had someone perform oral sex on me without their consent by: Showing displeasure, criticizing their sexuality or attractiveness, getting angry but not using physical force after they said they didn't want to").

I tell me significant other when he is weak in the hips h has to get strong in the lips. That is, if he can't get an erection or sustain one, he has to perform oral sex (Participant 362, female, "no" to "I had oral sex with someone or had someone perform oral sex on me without their consent by: Showing displeasure, criticizing their sexuality or attractiveness, getting angry but not using physical force after they said they didn't want to).

when i give my girlfriend head sometimes she too tired from cumming to give me head so i guilt her into it. i mean its only fair (Participant 588, male, "no" to "I had oral sex with someone or had someone perform oral sex on me without their consent by: Telling lies, threatening to end the relationship, threatening to spread rumors about them, making promises about the future I knew were untrue, or continually verbally pressuring them after they said they didn't want to").

I haven't forced anyone to have sex if they didn't want to but I have told lies, made promises etc. to convince them to do it (Participant 594, male, “no” to I put my penis (if you are a man) or I put my fingers or objects (if you are a man or a woman) into a woman’s vagina without her consent by: Telling lies, threatening to end the relationship, threatening to spread rumors about them, making promises about the future I knew were untrue, or continually verbally pressuring them after they said they didn’t want to”).

Me and my boyfriend at the time were together alone, and I wanted to have sex and he did not, he just wanted to kiss and cuddle. At this point we have had been sexually involved for a while. I pretty much begged, and showed displeasure that he didn't want to have sex. I ended up persuading him by getting him aroused and constant verbal pressure (Participant 631, male, “no” to “I had oral sex with someone or had someone perform oral sex on me without their consent by: Telling lies, threatening to end the relationship, threatening to spread rumors about them, making promises about the future I knew were untrue, or continually verbally pressuring them after they said they didn’t want to”).

## **Analyses for Aim 2**

**Descriptive statistics: Sexual scripts attitudes endorsement.** The TRSS, SSQ, and SDSS were scored according to instructions provided by the scale authors, yielding a total SDSS score, a mean score for the TRSS scale, and a mean score for the two factors within the SSQ. The Token Resistance to Sex scale was reverse scored so that a higher

score indicates more endorsement of more traditional sexual roles, similar to high scores on the SSQ and SDSS. These scales were all significantly positively correlated with one another (see Tables 11 and 12). Independent samples t-tests revealed that, as a group, men scored significantly higher than women on the SDSS ( $t[646]=-4.60, p < .001$ ), TRSS ( $t[639]=-5.18, p < .001$ , and both SSQ factor 1 ( $t[646]=-3.84, p < .001$ ) and SSQ factor 2 ( $t[646]=-3.30, p < .001$ ), indicating that men have greater endorsement of the sexual double standard, token resistance to sex, and traditional beliefs about male and female sexual behavior than do women. See Table 6 for these scores.

Table 6

*Men's and Women's Scores on the Sexual Double Standard Scale, Token Resistance to Sex Scale, and the Sexual Stereotypes Questionnaire*

	Mean (Women/Men)	SD (Women/Men)	Minimum (Women/Men)	Maximum (Women/Men)
SDSS	7.45 / 9.60***	4.92 / 6.81	-3.00 / -1.63	31.00 / 40.00
SSQ factor 1	3.08 / 3.32***	0.75 / 0.78	1 / 1	5 / 5
SSQ factor 2	2.41 / 2.68***	1.00 / 0.96	1 / 1	5 / 5
TRSS	2.40 / 2.97***	1.25 / 1.32	1 / 1	6.88 / 7.00

\*\*\*Mean difference between men and women is significant at  $p < .001$ .

Note. SSQ factor 1 = Male Sexual Accessibility; SSQ factor 2 = Gender Dependent Sex Drive. For SDSS, SSQ factor 1, and SSQ factor 2, women = 426 and men = 222. For TRSS, women = 423 and men = 218. Possible ranges are: SDSS (-30 to 48), SSQ factor 1 (1 to 5), SSQ factor 2 (1 to 5), and TRSS (1 to 7).

The two largest racial/ethnic groups in the sample, European Americans and African Americans, were also compared on these variables. As a group, African Americans scored significantly higher than European Americans on the SDSS ( $t[549]= 6.52, p < .00$ ), TRSS ( $t[542]= -2.28, p < .02$ , and SSQ factor 1 ( $t[549]=-4.09, p < .00$ ), indicating that African Americans have greater endorsement of the sexual double

standard, token resistance to sex, and traditional beliefs about male sexual behavior. See Table 7 for these scores.

Table 7

*African Americans' and European Americans' Scores on the Sexual Double Standard Scale, Token Resistance to Sex Scale, and the Sexual Stereotypes Questionnaire*

	Mean (EA/AA)	SD (EA/AA)	Minimum (EA/AA)	Maximum (EA/AA)
SDSS	7.31/10.87***	5.04/6.47	-3.00/-3.00	31.08 / 31.00
SSQ factor 1	3.08/3.39***	0.76/0.78	1.00 / 1.00	5.00 / 5.00
SSQ factor 2	2.46/2.52	1.00/1.05	1.00 / 1.00	5.00 / 5.00
TRSS	2.47/2.77*	1.25/1.39	1.00 / 1.00	7.00 / 7.00

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Note. SSQ factor 1 = Male Sexual Accessibility; SSQ factor 2 = Gender Dependent Sex Drive. For SDSS, SSQ factor 1, and SSQ factor 2, women = 426 and men = 222. For TRSS, women = 423 and men = 218. Possible ranges are: SDSS (-30 to 48), SSQ factor 1 (1 to 5), SSQ factor 2 (1 to 5), and TRSS (1 to 7).

Between African American women and European American women, African American women scored significantly higher than European American women on the SDSS ( $t[358] = -5.97, p < .00$ ) and SSQ factor 1 ( $t[358] = -5.33, p < .00$ ), indicating greater endorsement of the sexual double standard and traditional male sexuality.

Between African American men and European American men, African American men scored significantly higher on the TRSS ( $t[185] = -2.47, p < .02$ ) and the SDSS ( $t[189] = -3.84, p < .00$ ), indicating greater endorsement of token resistance to sex and the sexual double standard. See Tables 8 and 9 for these scores.

Table 8

*African American Women's and European American Women's Scores on the Sexual Double Standard Scale, Token Resistance to Sex Scale, and the Sexual Stereotypes Questionnaire*

	Mean (EA/AA)	SD (EA/AA)	Minimum (EA/AA)	Maximum (EA/AA)
SDSS	6.54/9.99***	4.01/6.49	-3.00/-3.00	18.00 / 31.00
SSQ factor 1	2.93/3.40***	0.71/0.77	1.00 / 1.00	5.00 / 5.00
SSQ factor 2	2.35/2.51	1.01/1.04	1.00 / 1.00	5.00 / 5.00
TRSS	2.28/2.51	1.20/1.26	1.00 / 1.00	6.75 / 6.88

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Note. SSQ factor 1 = Male Sexual Accessibility; SSQ factor 2 = Gender Dependent Sex Drive. For SDSS, SSQ factor 1, and SSQ factor 2, women = 426 and men = 222. For TRSS, women = 423 and men = 218. Possible ranges are: SDSS (-30 to 48), SSQ factor 1 (1 to 5), SSQ factor 2 (1 to 5), and TRSS (1 to 7).

Table 9

*African American Men's and European American Men's Scores on the Sexual Double Standard Scale, Token Resistance to Sex Scale, and the Sexual Stereotypes Questionnaire*

	Mean (EA/AA)	SD (EA/AA)	Minimum (EA/AA)	Maximum (EA/AA)
SDSS	8.65/13.01***	6.26/5.96	-1.04/1.00	31.08 / 30.00
SSQ factor 1	3.33/3.37	0.78/0.82	1.00 / 1.00	5.00 / 5.00
SSQ factor 2	2.67/2.53	0.94/1.08	1.00 / 1.00	5.00 / 4.33
TRSS	2.81/3.41*	1.27/1.50	1.00 / 1.00	7.00 / 7.00

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Note. SSQ factor 1 = Male Sexual Accessibility; SSQ factor 2 = Gender Dependent Sex Drive. For SDSS, SSQ factor 1, and SSQ factor 2, women = 426 and men = 222. For TRSS, women = 423 and men = 218. Possible ranges are: SDSS (-30 to 48), SSQ factor 1 (1 to 5), SSQ factor 2 (1 to 5), and TRSS (1 to 7).

Independent samples t-tests revealed that participants identifying as heterosexual scored significantly higher on the SDSS than those identifying as gay, lesbian, or



bisexual ( $t[629] = 2.95 p < .01$ ). All other scores were not significantly different. See

Table 10.

Table 10

*Heterosexuals' and Lesbians', Gays', and Bisexuals' Scores on the Sexual Double Standard Scale, Token Resistance to Sex Scale, and the Sexual Stereotypes Questionnaire*

	Mean (H/LGB)	SD (H/LGB)	Minimum (H/LGB)	Maximum (H/LGB)
SDSS	8.48/6.31**	5.72/5.45	-3.00/-3.00	40.00 / 21.00
SSQ factor 1	3.18/3.02	0.76/0.86	1.00 / 1.29	5.00 / 4.71
SSQ factor 2	2.53/2.30	1.01/0.97	1.00 / 1.00	5.00 / 4.67
TRSS	2.61/2.33	1.30/1.29	1.00 / 1.00	7.00 / 7.00

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Note. SSQ factor 1 = Male Sexual Accessibility; SSQ factor 2 = Gender Dependent Sex Drive. For SDSS, SSQ factor 1, and SSQ factor 2, women = 426 and men = 222. For TRSS, women = 423 and men = 218. Possible ranges are: SDSS (-30 to 48), SSQ factor 1 (1 to 5), SSQ factor 2 (1 to 5), and TRSS (1 to 7).

For the purposes of Aim 2, a dichotomous outcome variable was created for each type of coercion; if a participant indicated on either the PRPS or the SES-LFP that he or she had perpetrated that type of coercion, regardless of the sexual activity (oral, vaginal, and/or anal sex), it was coded as “yes.” Otherwise, that variable was coded as “no.” Due to the low number of men and women endorsing use of exploitation of an incapacitated state and physical force, these two tactics were combined to create a “sexual assault” tactic category.

**Co-variates.** The SES-Victimization questions were scored according to the guidelines provided by Koss (Koss et al., 2007). Participants missing 15% or more of the SES-V or CSA measure were removed from analyses including these variables; the remaining missing values were treated as non-endorsement. Fifteen women and 14 men

were removed due to missing SES-V data, and five men and three women were removed due to missing CSA data. Of our entire sample, 22.6% reported experiencing verbal coercion to engage in oral sex, heterosexual vaginal sex (women only), or anal sex; 14.2% endorsed experiencing an attempted rape, and 21% reported experiencing rape. Of the women only, 27.8% reported experiencing verbal coercion; 18.5% reported experiencing an attempted rape; and 27.3% reported experiencing a rape. Of the men only, 12% reported experiencing verbal coercion; 5.5% endorsed experiencing an attempted rape; and 8% reported experiencing a rape.

The questions about childhood sexual abuse were coded into two dichotomous variables measuring the presence or absence of childhood (1) kissing and/or fondling, and (2) oral, vaginal, and/or anal sex. One hundred and two women (25.1%) and 21 men (10.5%) endorsed childhood kissing and/or fondling, and 46 women (11.3%) and 15 men (7.5%) endorsed childhood oral, vaginal, and/or anal sex.

Dichotomous categories were created to indicate whether a participant reported experiencing any type of victimization (childhood kissing and fondling, childhood sex, SES-V coercion, SES-V attempted rape, and SES-V rape). Forty-four men (22%) and 205 women (50.5%) reported experiencing at least one of these categories of victimization.

Participants were asked to think of the occasion during the past month on which they drank the most; 28.5% reported drinking no alcohol in the past month, and more than half (52.5%) reported drinking 3 or fewer drinks. Thirty-five individuals (5.8%) reported consuming 15 or more drinks on one occasion.

To examine the association between victimization status, use of alcohol, and perpetration of sexual coercion tactics, point biserial correlations were run among six victimization variables (any reported victimization, coercion, attempted rape, rape, childhood kissing and fondling, and childhood sex), three perpetration variables (any reported perpetration, verbal coercion, sexual assault), and the largest amount a participant reported drinking in the past month. For women, all victimization variables were significantly positively correlated with all perpetration variables, except the childhood sex variable and the childhood kissing and fondling variable, which were not significantly associated with perpetrating sexual assault. That is, women reporting victimization were more likely to also report perpetration. The largest amount a woman drank on one occasion during the previous month was significantly positively associated with two variables: being the victim of attempted rape and having been raped. As women's reports of drinking larger amounts at one time increased, so did their reports of being the victim of attempted or completed rape. Conversely, for men, the largest amount drunk was significantly positively associated with only the three perpetration variables: As men's reports of drinking increased, so did their reports of perpetration. Similar to the women, all victimization variables were significantly positively correlated with perpetration, except for the childhood sex variable, which was not associated with perpetration of coercion or use of verbal coercion. See Tables 11 and 12 for a summary of all correlations.

Table 11.

*Women's Intercorrelations Between Victimization Variables and Coercion Variables (n = 406)*

	1	2	3	4	5	6	7	8	9
1. Perpetration of sexual assault	-								
2. Largest ETOH consumed	.07	-							
3. Any perpetration	.57**	.10	-						
4. Any victimization	.19**	.05	.26**	-					
5. CSA sex	.08	-.04	.13**	.35**	-				
6. CSA kissing and fondling	.10	-.03	.19**	.57**	.55**	-			
7. Rape victim	.19**	.12*	.19**	.61**	.13*	.15**	-		
8. Attempted rape victim	.28**	.13**	.21**	.47**	.09	.11*	.66**	-	
9. Coercion victim	.16**	.04	.21**	.62**	.14**	.22**	.50**	.46**	-
10. Perpetration of verbal coercion	.37**	.06	.92**	.25**	.14**	.20**	.17**	.17**	.21**

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p \leq .001$ .

Table 12.

*Men's Intercorrelations Between Victimization Variables and Coercion Variables (n = 200)*

	1	2	3	4	5	6	7	8	9
1. Perpetration of sexual assault	-								
2. Largest ETOH consumed	.19**	-							
3. Any perpetration	.56**	.24**	-						
4. Any victimization	.37**	.05	.28**	-					
5. CSA sex	.17*	-.02	.01	.54**	-				
6. CSA kissing and fondling	.21**	.06	.18*	.65**	.65**	-			
7. Rape victim	.22**	.04	.19**	.56**	.41**	.26**	-		
8. Attempted rape victim	.30**	.03	.16*	.45**	.26**	.20**	.50**	-	
9. Coercion victim	.36**	.06	.24**	.70**	.30**	.28**	.51**	.38**	-
10. Perpetration of verbal coercion	.51**	.23**	.98**	.29**	.01	.19**	.20**	.17**	.25**

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p \leq .001$ .

**2a and 2b: Relationship between attitudes and perpetration for men and women.** To analyze the relationship between the sexual attitudes and beliefs endorsed in the TRSS, SDSS, and SSQ scales and the reported perpetration of types of sexual coercion on the SES-LFP and PRPS, logistic regressions were conducted for each type of coercion. Because these scales measured beliefs about heterosexual sex, five participants (2 women and 3 men) were removed from the analyses for endorsing same-sex perpetration.

Four logistic regressions were conducted—two for men and two for women—using (1) verbal coercion perpetration and (2) sexual assault perpetration as the outcome

variables and the TRSS score, SDSS score, SSQ male sexual accessibility factor score, and SSQ gender dependent sex drive factor score as the predictors.

Hypothesis 2a was partially supported: For men, both the male accessibility factor score,  $\beta = .74, p < .001$ , and the SDSS score,  $\beta = .09, p < .001$ , were predictive of endorsing the use of verbal coercion. Thus, men who more strongly endorsed attitudinal statements about traditional male and female sexuality were more likely to have used verbally coercive tactics to have sex than men who endorsed these statements less strongly. For this regression model,  $X^2(4, n = 219) = 33.93, p < .001$ . See Table 13.

Next, the sexual assault category, which combined reports of exploitation of an incapacitated state and physical force, was examined. For men, the male sexual accessibility factor was significantly predictive,  $\beta = .88, p = .006$ . Thus, for men, endorsement of traditional male sexuality was predictive of using tactics that are typically defined as sexual assault. The overall model was significant,  $X^2(4, n = 219) = 13.41, p = .009$ . See Table 14.

Hypothesis 2b was also partially supported: For women, both the male sexual accessibility factor,  $\beta = .55, p = .003$ , and the gender dependent sex drive factor,  $\beta = -.31, p = .03$ , were predictive of endorsing the use of verbal coercion. Thus, women who endorsed attitudinal statements about traditional male sexuality and rejected attitudinal statement about traditional female sexuality were more likely than other women to have used verbally coercive tactics to have sex. For this regression model,  $X^2(4, n = 424) = 13.94, p = .007$ . See Table 13.

For women, the male sexual accessibility factor,  $\beta = .69, p = .01$ , and the SDSS score,  $\beta = .07, p = .05$ , were significantly predictive of sexual assault perpetration. The

overall model was significant,  $\chi^2(4, n = 424) = 12.21, p = .02$ , indicating that endorsement of traditional male sexuality and the sexual double standard were predictive of using sexual assault tactics. See Table 14.

Table 13

*Summary of Logistic Regression Analysis for Variables Predicting Endorsement of Perpetration of Verbal Coercion*

Variable	B	SE B	Wald's $\chi^2$	Odds ratio
<u>Men</u> ( $n = 219$ )				
TRSS	.02	.13	.01	1.02
SDSS	.09	.03	13.54***	1.10
SSQ-MSA	.74	.23	10.42**	2.09
SSQ-GDSD	-.12	.17	.52	.89
<u>Women</u> ( $n = 424$ )				
TRSS	.08	.11	.53	1.08
SDSS	-.01	.03	.08	.99
SSQ-MSA	.55	.18	9.00**	1.73
SSQ-GDSD	-.31	.14	5.01*	.74

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$

Table 14

*Summary of Logistic Regression Analysis for Variables Predicting Endorsement of Perpetration of Sexual Assault*

Variable	$\beta$	SE $\beta$	Wald's $X^2$	Odds ratio
<u>Men</u> ( $n = 219$ )				
TRSS	.27	.18	2.33	1.31
SDSS	-.01	.03	.02	1.00
SSQ-MSA	.88	.32	7.62**	2.42
SSQ-GDSD	-.06	.21	.09	.94
<u>Women</u> ( $n = 424$ )				
TRSS	-.17	.17	.97	.84
SDSS	.07	.04	3.87*	1.07
SSQ-MSA	.69	.27	6.37*	1.98
SSQ-GDSD	-.27	.20	1.81	.77

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$

Next, these logistic regressions were repeated while controlling for victimization status and alcohol consumption habits to examine whether the predictors remained significant after considering the contribution of these well-established correlates. For both men and women, in the first step, the largest amount a participant drank in the past month, the dichotomous variable assessing childhood sexual abuse involving kissing and/or fondling, the dichotomous variable assessing childhood sexual abuse involving oral, vaginal, and/or anal sex, the dichotomous variable assessing whether one was an adult victim of sexual coercion, the dichotomous variable assessing whether one was the adult victim of attempted rape, and the dichotomous variable assessing whether one was an adult victim of rape were entered. In the second step, the TRSS score, SDSS score, SSQ male sexual accessibility factor score, and SSQ gender dependent sex drive factor score were entered.



For men, the childhood victimization variables and the alcohol use variable were predictive of verbal coercion in step 1; the adult victimization variables were not. In step 2, the childhood victimization variables remained significant, but not the alcohol variable. In addition, the SDSS variable was also predictive,  $\beta = .11, p < .001$ , as was the male sexual accessibility factor,  $\beta = .84, p = .003$ . Stereotypical attitudes about male and female sexuality were associated with perpetration of sexual coercion even after controlling for alcohol use and sexual victimization. For this regression model,  $X^2(10, n = 196) = 60.24, p < .001$ . See Table 15.

Next, the predictors of sexual assault were evaluated. For men, having been sexually coerced as an adult,  $\beta = 1.83, p = .003$ , and the largest amount drunk,  $\beta = .11, p = .01$ , were significantly predictive in step 1; in step 2, the adult sexual coercion variable and largest amount drunk remained significant, with the addition of being the adult victim of attempted rape,  $\beta = 2.74, p = .006$ , and the male sexual accessibility factor,  $\beta = 1.31, p = .002$ . Thus, belief in traditional male sexuality and alcohol consumption continued to be predictive of the use of sexual assault tactics for men, even after the contribution of these correlates. For this regression model,  $X^2(10, n = 196) = 44.86, p < .001$ . See Table 16.

For women, when assessing use of verbal coercion, the childhood kissing and fondling variable,  $\beta = .76, p = .03$ , and being the adult victim of coercion,  $\beta = .68, p = .04$ , were significant in the first step. In the second step, the childhood kissing and fondling variable,  $\beta = .74, p = .03$ , and the adult coercion victim variable,  $\beta = .91, p = .01$ , both remained significant; in addition, the male sexual accessibility factor,  $\beta = .70, p = .001$ , was significant. Thus, for women, endorsement of traditional male sexuality

continued to be a significant predictor of using verbal coercion for sex after controlling for other predictors of sexual aggression. For this regression model,  $\chi^2(10, n = 403) = 44.87, p < .001$ . See Table 15.

For women, being an adult victim of attempted rape,  $\beta = 1.82, p = .003$ , was significantly predictive of perpetrating sexual assault in step 1; it remained significant in step 2,  $\beta = 1.93, p = .006$ . In addition, both the SDSS variable,  $\beta = .12, p = .004$ , and the SSQ Male Sexual Accessibility factor,  $\beta = .67, p = .03$ , were also significant; belief in traditional male sexuality and the sexual double standard (i.e., traditional male and female sexuality) were predictive of endorsing perpetration of sexual assault after controlling for alcohol use and victimization status. For this regression model,  $\chi^2(10, n = 403) = 42.50, p < .001$ . See Table 16.

Table 15

*Summary of Logistic Regression Analysis for Variables (including Co-variates) Predicting Endorsement of Perpetration of Verbal Coercion*

Variable	B	SE B	Wald's $\chi^2$	Odds ratio
<u>Men</u> (n = 196)				
Step 1				
Largest amount drunk	.09	.03	7.17**	1.09
CSA kissing	2.15	.83	6.73**	8.60
CSA sex	-2.78	1.10	6.35*	.06
Adult coercion victim	1.14	.60	3.59	3.13
Adult attempted rape victim	.57	.82	.48	1.76
Adult rape victim	1.00	.78	1.69	2.73
Step 2				
Largest amount drunk	.06	.04	2.69	1.06
CSA kissing	2.53	.92	7.58**	12.53
CSA sex	-3.19	1.29	6.12*	.04
Adult coercion victim	1.28	.68	3.58	3.61

Adult attempted rape victim	1.13	.90	1.58	3.08
Adult rape victim	1.07	.88	1.48	2.91
TRSS	.02	.16	.02	1.02
SDSS	.11	.03	12.24***	1.11
SSQ-MSA	.84	.28	8.97**	2.32
SSQ-GDSD	-.30	.21	2.02	.75
<u>Women (n = 403)</u>				
Step 1				
Largest amount drunk	.04	.03	1.14	1.04
CSA kissing	.76	.34	4.93*	2.13
CSA sex	.25	.43	.33	1.28
Adult coercion victim	.68	.33	4.20*	1.98
Adult attempted rape victim	.34	.41	.68	1.40
Adult rape victim	.20	.39	.26	1.22
Step 2				
Largest amount drunk	.03	.04	.92	1.03
CSA kissing	.74	.35	4.47*	2.09
CSA sex	.33	.44	.55	1.38
Adult coercion victim	.91	.34	7.04**	2.49
Adult attempted rape victim	.12	.43	.07	1.12
Adult rape victim	.26	.41	.42	1.30
TRSS	.08	.12	.37	1.08
SDSS	.01	.03	.03	1.01
SSQ-MSA	.70	.20	11.74**	2.01
SSQ-GDSD	-.25	.15	3.06	.78

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$

Table 16

*Summary of Logistic Regression Analysis for Variables (including Co-variants)  
Predicting Endorsement of Perpetration of Sexual Assault Tactics*

Variable	B	SE B	Wald's $\chi^2$	Odds Ratio
<u>Men</u> (n = 196)				
Step 1				
Largest amount drunk	.11	.04	6.12*	1.12
CSA kissing	.62	.79	.63	1.87
CSA sex	.14	.99	.02	1.15
Adult coercion victim	1.83	.62	8.64**	6.25
Adult attempted rape victim	1.67	.88	3.57	5.27
Adult rape victim	-.56	.95	.35	.57
Step 2				
Largest amount drunk	.09	.05	3.78*	1.10
CSA kissing	-.16	.88	.03	.85
CSA sex	1.09	1.12	.95	2.98
Adult coercion victim	2.12	.68	9.72**	8.29
Adult attempted rape victim	2.74	1.00	7.47**	15.41
Adult rape victim	-1.12	1.03	1.16	.33
TRSS	.25	.22	1.32	1.28
SDSS	-.01	.04	.06	.99
SSQ-MSA	1.31	.42	9.73**	3.72
SSQ-GDSD	.04	.28	.02	1.04
<u>Women</u> (n = 403)				
Step 1				
Largest amount drunk	.04	.05	.84	1.05
CSA kissing	.44	.51	.75	1.55
CSA sex	.21	.62	.11	1.23
Adult coercion victim	.24	.49	.24	1.27
Adult attempted rape victim	1.82	.62	8.58**	6.19
Adult rape victim	-.11	.60	.03	.90
Step 2				
Largest amount drunk	.05	.05	1.00	1.05
CSA kissing	.21	.52	.16	1.23
CSA sex	.34	.65	.27	1.41
Adult coercion victim	.49	.52	.89	1.64
Adult attempted rape victim	1.93	.70	7.71**	6.91

Adult rape victim	-.11	.68	.03	.90
TRSS	-.15	.20	.53	.86
SDSS	.12	.04	8.16**	1.12
SSQ-MSA	.67	.31	4.61*	1.95
SSQ-GDSD	-.15	.22	.48	.86

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$

**2c: Sexual scripts and perpetration.** The qualitative sexual scripts provided by participants in response to the open-ended prompt were coded independently by two raters (the author and the dissertation chair) to assess for endorsement of traditional male and female sexual roles. Each code was rated as being present for the male, for the female, or for both the male and female or it was described as being sex-neutral (meaning that the theme was mentioned but was not specified as being specific to the man or the woman). These codes were then translated into codes indicating whether the endorsement was consistent with traditional or nontraditional sexual roles (as described in Table 17). A research definition of each code was used by the raters; disagreement was resolved by the researchers.

Table 17.  
*Sexual Script Code Definitions*

Category	Description <sup>a</sup>	Tradition- al script	Non- traditional script	Inter-rater agreement on presence of code	Number of participants who included traditional version of script
Initiation	Who suggested sex? Who made first move?	Male initiation of sex	Female initiation of sex	61.7%	63
Doubts	Feeling of concern/hesitation/ worry/uncertainty about having sex	Female doubts about sex	Male doubts about sex	92.0%	30

Conquest	References to sex for the sake of conquest (e.g., “wanted to ‘get some,’” “I ‘got’ her,” How can I get some?” “Succeeded in getting sex.”)	Male conquest	Female conquest	97.6%	13
Lack of enjoyment	Including a mention of pain, lack of arousal; lack of orgasm, lack of pleasure, or a sense that it was “so-so” rather than good; lack of satisfaction	Female lack of enjoyment	Male lack of enjoyment	91.8%	27
Enjoyment	Orgasm/sexual pleasure/sexual arousal/sexual satisfaction	Male enjoyment	Female enjoyment	82.1%	20
Resistance	Initially saying no or stopping the sexual behavior	Female resistance	Male resistance	98.4%	5
Driven by desire	Overcome with desire or arousal; driven by hormones; driven to engage in sex by strong arousal/desire/sexual tension/ etc.	Male being driven by desire	Female being driven by desire	98.1%	0
Testing limits	Pushing sexual boundaries/testing limits (trying to move forward with sex to see if their partner will allow it – e.g., trying to take off his/her clothes to see how he/she responds; moving on to more intimate acts and seeing if their partner	Male testing limits of female	Female testing limits of male	99.4%	4

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	stops them). This usually signifies that this person is setting the pace for sex (i.e., trying to move the other person along).				
Persuasion	One person tries to talk the other person into sex or persuade the other person to have sex.	Male using persuasion to get sex	Female using persuasion to get sex	98.4%	7
Experienced/confident	References to one or both people being sexually experienced or confident OR references to one person being more experienced or confident or less nervous than the other person.	Male being sexually experienced and confident	Female being sexually experienced and confident	96.6%	5

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Six hundred and twenty five participants (412 women, 213 men) provided a qualitative sexual script in response to the prompt. Many individuals did not include reference to any traditional or non-traditional sexual roles in the scripts; examples of scripts with no sexual roles mentioned include: “First they start by kissing and fondling then they move to intercourse (Participant 12, female); A look leads to a touch, or perhaps a kiss and some verbal teasing following by caressing kissing and eventually a heavy make out session with much fondling and eventually they get it on (Participant 16, female); get a little drunk, start snuggling then both parties get horny, then forplay for a bit, then bowchicawowow (Participant 487, male).”

Overall, 87 women (21.1%) and 39 men (18.31%) included at least one traditional male or female sexual role in their script, as defined in Table 17. For example, these participants included traditional scripts in their responses:

woman - more invested emotionally than the man, not as pleased with the physical interaction as the man, less satisfied. man - not thinking with emotions, one track mind, feeling of relief/satisfaction (Participant 24, female).

He may or may not have taken her to diner or they could have met at a bar, they both had a few cocktails she invites him upstairs. They watch TV and talk over a glass of wine. They begin to kiss, he puts his hand up her shirt testing her limits and keeps going until she pushes away, which she doesn't. They retire to the bedroom and start kissing heavily and clothes begin to come off. She asks if he has a condom, he doesn't and she lets him penetrate her anyways. The thoughts of them: All night he is thinking about getting her more drunk and how many drinks is it going to take to get her into bed? She wonders if there is a future here and if he is thinking the same thing. When they get to the house and start fooling around he is excited hes going to get some and she is worried about whether he will call her the next day (Participant 43, female).

the man is nervous and excited. the woman really likes/loves the man, and is nervous about what is soon to happen. the man and woman kiss and begin to gradually remove each others clothing. the woman hesitates saying, "i don't know if we should be doing this". the man reassures the woman that sex will be



pleasurable for the both of them. the woman is worried about what her parents/others will think. the man is excited about what his friends will think. the woman is wondering if she and the man will still be together after they have sex. the man wonders when will be the next time they have sex (Participant 553, male).

Six (4 women and 2 men) individuals included at least one non-traditional male or female role in their script. All of these scripts related to female initiation of sex and/or female enjoyment of sex:

Based on my in-depth analysis of television shows and locker room boasting, I believe this typically happens, for most people, under the following circumstances: 1.) The relationship has been developing for about the course of a month (sometimes less, sometimes more) 2.) The man and woman feel a certain pressure and obligation to have sex at this point; continuing on without have sex makes them feel like social pariahs. 3.) There is a general assumption that the man would not dismiss any sexual activity, but the woman typically initiates it (makes the suggestion that they have sex) 4.) I believe that, typically, when couples have sex for the first time, its a random activity that happens at any given point of the day; it is not necessarily reserved for night and the couple does not necessarily sleep together afterwards (Participant 444, male).

Female enjoyment was mentioned only by female participants:

The woman and the man already have it in their minds that they are going to be having sex for the first time on a particular night. The man invites the woman

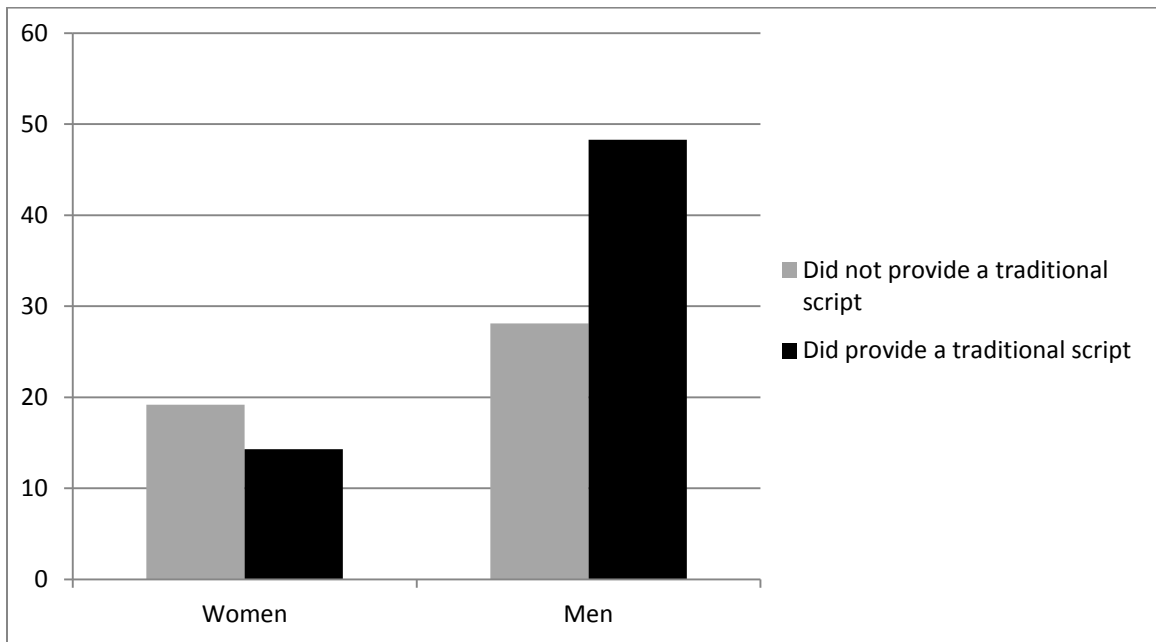
over to his house. Somehow they end up in the man's bedroom. They start off watching tv and the man begins make his move. First touching or rubbing somewhere on the woman's body then he begins to kiss her. The woman is at first hesitant but soon begins to loosen up. Next clothes are removed. The woman gets under the covers because she is not completely comfortable with the man seeing her naked. The man gets a condom and puts it on. Next he finds his way between the woman's legs and penetrates her. The woman is still slightly uncomfortable but after a while pleasure completely takes over her. . . . (Participant 58, female).

Less than 1.0% of both the female and male respondents included a non-traditional role in their script. For that reason only analyses based on the presence or absence of traditional sexual roles could be conducted. Additionally, most participants who mentioned a traditional role related to one gender also mentioned a corresponding traditional role for the other gender; thus, separate analyses related to traditional male versus female roles could not be conducted.

A logistic regression was conducted using a dichotomous variable measuring whether the participant had endorsed using any type of coercion as the outcome variable. Gender was entered in the first step, and inclusion/non-inclusion of a traditional role was entered in the second step. The interaction between inclusion of a traditional role and gender was entered in the third step. Results partially supported Hypothesis 2c: Gender was significant in the first step,  $B = .75, p = .001$ , with men being more likely to use coercion. In step 2, gender remained significant,  $B = .75, p = .001$ , and inclusion/non-inclusion of traditional roles was not significant. In the last step, the interaction variable was the only significant predictor,  $B = .61, p = .04$ . Thus, for men, inclusion of a

traditional role in their script was significantly associated with having endorsed using coercion,  $p = .04$ . For women, inclusion of a traditional role was not significantly associated with endorsement of coercion,  $p = .39$ . See Figure 1 for this interaction.

Figure 1. Percentage of Men and Women Endorsing Use of Coercion Based on Inclusion of a Traditional Sexual Script



Bivariate correlations with the traditional role inclusion and sexual attitudes and beliefs endorsed in the TRSS, SDSS, and SSQ scales revealed a small significant positive correlation with the SSQ Male Sexual Accessibility factor,  $r = .10$ ,  $p = .01$  and no significant relationship with the other attitudinal variables, suggesting that spontaneous inclusion of traditional scripts in response to the open-ended question was not strongly related to endorsing the quantitatively assessed attitudes associated with traditional sexual scripts.

Table 18  
*Bivariate Correlations for Traditional Role Inclusion and Sexual Attitudes and Beliefs Endorsed in the TRSS, SDSS, and SSQ scales*

	SDSS	SSQ male sexual accessibility factor	SSQ gender dependent sex drive	TRSS.
Traditional sexual role included in script	.06	.10*	.06	.02

\* $p = .05$ .

## Discussion

### Aim 1: Measure Validity

The first aim of this study was to compare the responses of participants to questions on the Revised Sexual Experiences Survey and the Post-Refusal Persistence Scale to investigate whether there is convergent validity across these two measures in men's and women's self-reported perpetration of sexual aggression. For all participants, each category of answers on the SES-LFP was positively correlated with the category of answers on the PRPS. In relation to reports of physical force, no correlation could be calculated because only a small number of participants endorsed perpetration on either measure.

Although each category of answers to the SES-LFP was positively correlated with the answers to the PRPS, this was largely driven by the lack of endorsement for the items on both measures (i.e., most people said no to both of the measures). Participants who did endorse an item on one measure often did not endorse that category of item on the other measure. This is perhaps the most notable observation in the comparison between

the two measures: For both men and women, convergent validity for endorsement of perpetration is less than optimal. Overall, participants were more likely to endorse items on PRPS than the SES. These measures were not identical; however, they were designed to measure very similar experiences. Thus, this discrepancy is surprising. However, the discrepancy is consistent with findings from another study that compared the SES with a modified PRPS in men only (Strang et al., in press); that study found high rates of discrepant reports of sexual aggression perpetration as well.

Although one might assume that more endorsement on a measure indicates that it is more useful for pinpointing perpetrators, this is not necessarily the case. More endorsement may be due to a question being written too broadly, or with too little detail, such that individuals can interpret it as applying to them when the intent of the question was to describe a different, more specific circumstance. Ideally, the goal would be to find a middle ground between a measure that fails to correctly categorize a large number of actual perpetrators (i.e., has a high rate of false negatives) and a measure that wrongly categorizes a large number of non-perpetrators (i.e., has a high rate of false positives). To do so, questions on a measure must be specific enough so that the act or experience described is not easily misconstrued, yet not so specific that individuals reading it may believe that their experience does not quite fit the description in the item due to inconsequential contextual differences. Certainly, this is a challenging task.

The two measures used in this study, the SES-LFP and the PRPS, were designed with different intents. The SES was written with the intent of describing acts in such a way as to conform to the legal definitions of sexual assault and rape (Koss & Gidycz, 1985); the PRPS was not necessarily designed to measure rape as it is legally defined

(Struckman-Johnson, Struckman-Johnson, & Anderson, 2003). Thus, they differ in ways that are subtle, but potentially quite important. First, the way in which consent is defined differs between the two measures. The SES-LFP uses the phrase “without their consent” in each of the item stems, whereas the PRPS asks if tactics were used “after he/she indicated ‘no’ to your advance.” The first phrase, “without their consent,” implies that the person failed to give approval to the sexual activity, either verbal or otherwise; in contrast, the PRPS frames it in such a way that the person would have to give disapproval, either verbal or otherwise. Based on this, the target who does or says nothing that can be taken for approval or disapproval would fit much more easily into the SES-LFP queries, because they have technically not given consent. However, although this suggests that rates of reporting should be higher on the SES-LFP than on the PRPS, this was not the case in the present study. It may be that the phrase “without their consent” sounds more legalistic, and, thus, individuals may be discouraged from endorsing the item in an effort to avoid being labeled as a criminal. In addition, the SES-LFP repeats the phrase “without their consent” in each item, whereas the PRPS only states “after he or she indicated no” at the very beginning of each act’s stem item, prior to the listing of the tactics. The repetition of “without their consent” may invoke more socially desirable responding as compared to the single initial presentation. Variation may also occur in what each individual believes non-consent (“without their consent”) means. Although some individuals may interpret “without their consent” to mean that their partner doesn’t provide explicit verbal agreement, another person may think that non-consent must be displayed by some type of strong physical action against the initiator. Hickman and Muehlenhard (1999) found that men and women most often communicated their consent

to sexual activity by “not resisting: letting their partner undress them, not stopping their partner from kissing or touching them, not saying no” (p.271). Thus, if consent is communicated by passivity, non-consent might be assumed to require active resistance. For example, one of the participants was clearly making a good attempt to read and respond to the questions, but something about the wording of the SES-LFP seems to have confused him:

I haven't forced anyone to have sex if they didn't want to but I have told lies, made promises etc. to convince them to do it (Participant 594, male, “no” to “I put my penis (if you are a man) or I put my fingers or objects (if you are a man or a woman) into a woman’s vagina without her consent by: Telling lies, threatening to end the relationship, threatening to spread rumors about them, making promises about the future I knew were untrue, or continually verbally pressuring them after they said they didn’t want to”).

Thus, although this individual appears to have read the item and the example tactics and recognized that he had used several of them, he seemed to infer from the SES-LFP item that force was needed to make a “yes” response in this case. It seems possible that he interpreted the inclusion of the phrase “without her consent” to mean that some type of force was necessary in addition to the verbal tactics that he endorsed. Notably, this same respondent chose the “3+” response on the PRPS item asking if he had “tried to talk him or her into it by repeatedly asking to obtain vaginal intercourse.” Both of these items are asking about use of verbal coercion for vaginal intercourse and yet the opposite response was given. Clearly, in this case, endorsement of the item is the appropriate selection, but this respondent was unwilling or unable to make this response on the SES-LFP.

It is also worth noting that although the PRSP scale was intended to measure completed sexual aggression, the instructions read, “Since the age of 14, how many times have you used any of the tactics on the list below to have sexual contact (genital touching, oral sex, or intercourse) with a [person of the opposite sex] **after he/she indicated ‘no’ to your advance?**” It is feasible that a few individuals endorsed items on the PRSP and not the SES-LFP because they attempted sexual aggression but did not complete it (i.e., they used the tactic with the goal of obtaining sexual contact, but the sexual contact did not actually occur).

Second, there are differences between the two scales in the behavioral specificity of the items. Both measures avoid the use of labels, such as rape and sexual assault, but vary in degree of behavioral specificity and in the presentation of the behaviorally specific items. The PRPS breaks out behaviorally specific tactics into one item apiece that are short and easy to read (e.g. “tried to talk him/her into it by repeatedly asking”). The SES-LFP also provides behaviorally specific tactics, but has them placed together so that each item prompt has a variety of specific strategies that are grouped under the same general tactic heading (e.g. “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”). Although the intent of this grouping is most likely to provide a number of examples for the respondent, it may potentially be confusing to an individual who has used one of the tactics, but not the entire grouping.

The final general difference between the two measures that could be accounting for the increased level of responding on the PRPS is the length and amount of reading a participant must do. The SES-LFP, designed to be legally accurate, is much longer and



more repetitive than the PRPS, which does not make distinctions in the items based on legalities. Though the intent of the SES-LFP is important (differentiating between sexual assault that can be legally prosecuted and sexual coercion that cannot be prosecuted but is still non-consensual), the length of the measure may potentially lead to respondent fatigue or even misreading of the items.

Overall, these two measures differ in ways that could lead to some discrepancies in reporting for both men and women; however, the wide discrepancies found in the sample's reports were unexpected. The next question was whether men, as a group, would be more consistent than women as a group, or vice versa. As for gender-related consistency between the two measures, men were significantly more consistent in their overall reports of using coercion between the two measures; men also were more consistent in reporting use of verbal coercion and exploiting intoxication. This indicates that a new measure designed to assess women's perpetration of coercion against men may be more appropriate and accurate for use with women.

Given the gender differences in the consistency of responses, it was important to assess whether men and women were interpreting items on measures of sexual aggression differently. The qualitative answers provided as follow-up responses to endorsement of items on the SES-LFP were examined for gender differences in how the questions are being interpreted, by assessing qualitatively how men and women interpret the items on one of the sexual aggression scales.

The qualitative answers given in response to the added SES-LFP queries were challenging to code as being true positive, false positive, true negative, or false negative. Coding was completed by two raters who are both very familiar with this topic area and

the query criteria, and yet initial disagreement between raters was higher than expected. This disagreement was most often due to the ambiguity of the qualitative responses themselves. As stated in the results section, 63 of the qualitative responses were ultimately determined by the raters to be “unclear,” meaning that the participant did not provide enough information or specific information for the raters to make a determination. This category included responses such as:

it was a party and i was the bartender. things basically got crazy and everyone was drunk. i wasn't even sure what i was doing and i don't really remember much because i was drinking too (Participant 1, female, in response to “I had oral sex with someone or had someone perform oral sex on me without their consent by: Serving someone high alcohol content drinks when they appeared to be regular strength drinks until they were too intoxicated (*drunk*) to give consent or stop what was happening”).

In the past 6 months I have engaged in a night of heavy drinking. Although I did not use physical force or much less any verbal force, I do feel a sense of guilt and remorse on this particular occasion. The woman I was in a sexual relationship with was not enebriated. Though my memory is very sketchy of the events, I do remember the next morning her telling me that I was rather aggressive. She explained to me that I was not forceful with her by trying to acheive sexual intercourse, but rather I was being forceful because apparently I believed at the time that that behavior was warranted (Participant 483, male, in response to “If you have never done this, have you ever done anything similar to this behavior?”

after answering no to “I had oral sex with someone or had someone perform oral sex on me without their consent by: Telling lies, threatening to end the relationship, threatening to spread rumors about them, making promises about the future I knew were untrue, or continually verbally pressuring them after they said they didn’t want to.

Some of the unclear responses may have reflected a lack of motivation or fatigue on participants’ part, such that they simply failed to provide enough detail to interpret their meaning. Other ambiguous responses (such as the second example above) may reflect a genuine lack of clarity about the details of the sexual encounter. These questions were being answered through the lens of time, and participants’ memory for the necessary details of the situation may be imperfect, particularly if substances were involved. Therefore, in some ways this type of inquiry is inherently limited based on the retrospective nature.

Although ambiguous responses accounted for much of the coding difficulty, some of the initial coding disagreement was due to the fuzzy boundaries between what counts as consensual versus coercive sex. For example, the coders frequently disagreed about how drunk a person needed to be in order to qualify as too intoxicated “to give consent or stop what is happening” (Koss et al., 2007). The coders also struggled with some instances in which the participant described their coercive or aggressive behavior as “playful” or “a game” but it wasn’t clear whether the other person perceived it as joking or serious. Thus, although the wording of the SES-LFP is highly precise and specific, it was still sometimes difficult for the coders to determine whether real life situations fit the

items on the scale. Given this, it is not surprising that participants struggled with this as well.

Overall, 68 people endorsed at least one item on the SES-LFP. Of these individuals, 17 (or 25.0%) gave us descriptions that indicated a false positive. Potentially the most concerning finding related to these false positives were the five female participants who indicated perpetration on the close-ended question and then provided a description of a time when they was victimized. There are several possible reasons for why this occurred. One may be that women, in general, expect to be asked about victimization rather than perpetration (none of the men in our sample provided this type of false positive). As is the case with the history of how the SES was developed (Koss & Gidycz, 1985), women have traditionally been asked about victimization and men about perpetration. This expectation may lead to false positive endorsement by women of items asking about perpetration, and may be part of the explanation for some of the reports of relatively high rates of female perpetrators (Anderson, 1998; Russell & Oswald, 2001; Struckman-Johnson, Struckman-Johnson, & Anderson, 2003). Simply put, if women are raised in a culture in which they are taught to expect sexual victimization by men as a possibility, and if they also experience it as a reality, then when reading these types of questions they may cue in to certain words or phrases and assume that they are being asked about their victimization experiences. One of our false positive respondents did acknowledge that she was not the perpetrator but the victim; yet, she still endorsed the close-ended item as having perpetrated the act. For some women, perhaps the need to share their victimization experience is powerful enough to override the intent of the question.

In addition to the victimization responses, other false positives included both men and women who endorsed a specific coercion tactic in response to the SES-R items but described something different in their response. For example, several participants described simply continuing the sexual act in spite of the other person's nonconsent. These instances do not appear to clearly fit within the confines of any of the various tactics (verbal, exploitation of an incapacitated state, physical force), yet still do appear to have been nonconsensual (in that the other person expressed unwillingness or at least a reluctance to continue). An examples of this is: "girl said no, did it anyway (Participant 547, male, in response to "Even though it did not happen, I TRIED to put in my penis (men only) or I tried to put my fingers or objects (all respondents) into a woman's vagina without their consent by: Telling lies, threatening to end the relationship, threatening to spread rumors about them, making promises about the future I knew were untrue, or continually verbally pressuring them after they said they didn't want to.") Thus, though they are most likely appropriately being catalogued as coercive, they are not representative of the grouping of tactics measured by the SES-LFP. The goal with these measures is to be as accurate and descriptive of people's experiences as possible, and this type of response is problematic on that account. Additional items may need to be added to measures of sexual aggression to capture nonconsensual sex in which the perpetrator simply ignores the other person's protests rather than actively coercing or forcing sex.

Further, two of the female respondents described beginning an act on someone who was asleep (not from drugs or alcohol); items measuring rape through intoxication on the SES-LFP ("Finding someone who was asleep or unconscious *from drugs/from alcohol* and when they came to (*regained consciousness*) they could not stop what was happening.")

are written in a slightly ambiguous way such that one could potentially interpret it to mean that the person was *either* (1) asleep or (2) unconscious from drugs or alcohol, though the item was intended to capture acts done to a person who was asleep from substances or unconscious from substances (J. Norris, personal communication, March 15, 2012). Beginning sex while the other person is asleep suggest that the sex is occurring without the target's consent (as the person is asleep and cannot consent), but the response is being misclassified under the exploitation of an incapacitated state. Again, although this seems to be a misreading of the item's intent; sex with someone who is asleep does seem clearly coercive. Notably two men also described having sex with a sleeping partner as part of their "something close" responses. Additional items may be needed to capture this type of sexual coercion.

Overall, 66.7% of the false positive responses came from women. Ten women and five men gave us descriptions that indicated a false positive; that is, more than twice the percentage of women that provided a description of an endorsed act (38.5%) indicated a false positive, compared to men (15.6%). Although this a relatively small sample, these numbers suggest that women may be more likely to endorse perpetration items incorrectly on the SES-LFP than are men. Thus, more research may be needed to refine measures of sexual aggression perpetration for use with women.

Overall, 61 people endorsed the "something similar" follow-up item on the SES-LFP, and of these individuals, 12 gave us descriptions that indicated a false negative (19.7%). The proportion of men and women providing false negative responses was not significantly different. As mentioned earlier in this discussion, the false negative responses usually contained evidence that the person had used the tactic described, but

for some reason they did not believe that they should endorse the item. From the overall numbers (see Tables 1), one can see that respondents were much more likely to endorse an item representing a certain type of tactic and act on the PRPS than on the SES-LFP. This was also true of those whose descriptions indicated a false negative on the SES-LFP. Although it is impossible to ascertain that all of the endorsements on the PRPS are true positives and not false positives (follow-ups on the PRPS were not attempted due to expected respondent fatigue), at least some of the false negative responses on the SES-LFP were recorded as true positives on the PRPS.

These numbers seem to indicate that there is a relatively high amount of misunderstanding occurring, both in over- and underestimating whether behavior fits the queries, at least for the SES-LFP. Twenty-five percent of those who endorsed items on the SES-LFP gave us a false positive, and about 20.0% of those who wrote a “something similar” response had provided a false negative. That does not include all of the responses that could not be categorized due to their vague nature, or those respondents who simply did not provide a descriptive response when appropriate.

This brings into question what is most important when attempting to ask people about their experiences of being sexually coercive. Certainly the goal is accuracy, but how is that best accomplished? Does one achieve greater accuracy with more specifically worded questions, or does one adapt the question, perhaps making it less specific, so that the respondent is more likely to recognize their behavior in the wording? The answer to this question is not obvious from our results, but it is clear that our current methods are not perfect and there is much room left for improvement.

What may be concluded from the current results is that it likely is not enough to update measures that were designed for use with men in order to use them with women. Women were less consistent than men in how they endorsed items on the two measures and provided twice as many false positives; these false positives included beginning a sexual act on a man while he was sleeping and instances in which women had experienced victimization rather than perpetration. In addition to the original Revised SES-LFP items, an item measuring coerced and forced vaginal sex for women ("I had penile-vaginal [penis-vagina] sex with a man without his consent by...") was added; the existing item only allowed women to aggress against other women, and not men ("I put my penis [if you are a man] or I put my fingers or objects [if you are a man or a woman] into a woman's vagina without her consent by..."). This addition of the item measuring coerced and forced intercourse against men challenges the idea that only an individual who is physically penetrated can be consider a victim of coerced or forced intercourse (Koss et al., 2007). Twenty women (4.7%) endorsed at least one of the tactics for this item. These instances of sexual aggression by women would have been missed by the standard SES-LFP items. A new and separate measure to classify and identify how women coerce men into sex could include the addition of forced intercourse against men as well as additional tactics that were identified in this study (i.e., sex with a sleeping partner and just "going ahead" despite a partner's reluctance).

### **Aim 2: Sexual Scripts and Perpetration**

Next, I hypothesized two patterns of attitudes for men and women as predictors of endorsing sexually coercive behavior and found partial support for these hypotheses. For men, I had predicted that endorsing traditional male and female sexual roles would be



associated with endorsement of sexually coercive behavior. This prediction was supported: When looking at the use of verbal coercion, traditional male sexuality - in the form of the male sexual accessibility factor - and both traditional male and female sexuality - in the form of the SDSS variable - were predictive both with and without the inclusion of the victimization and alcohol use co-variants. When looking at perpetration of sexual assault, traditional male sexuality in the form of the male sexual accessibility factor was significantly predictive even after the inclusion of the co-variables. Traditional female sexuality was not a factor significantly associated with use of sexual assault tactics when the co-variables were included. It is possible that men could reject ideas about traditional female sexuality, given changing cultural norms, and instead believe that women want to have sex just as much as do men; this belief could influence their sexually coercive behavior just as much as traditional beliefs about token resistance because they may believe that women are likely to be open to and interested in sex if they simply receive a bit of encouragement.

I had predicted that, for women, endorsement of traditional male sexuality and rejection of traditional female sexuality would be associated with perpetrating sexual coercion. When I entered only the sexual attitude variables, these two factors were indeed significantly predictive. Consistent with this, Clements-Schreiber, Rempel, and Desmarais (1998) found that women who believed that men are readily sexually accessible and who disagreed with the notion that women need and want sex less than do men were more likely to be willing to use pressure tactics to engage in sex. However, after controlling for the influence of previous adult and childhood victimization and substance use, the SSQ male sexual accessibility factor remained a significant predictor.

This indicates that women who endorse the idea that men always want to have sex are more likely than other women to use verbally coercive tactics to have sex when they want it. Thus, as with men, belief about men's sex roles was a more robust predictor of women's sexual aggression than was belief about women's sex roles.

The expected pattern did not continue into the sexual assault category (exploitation of an incapacitated state and physical force). For this outcome, traditional male and female sexuality in the form of the SSQ Male Sexual Accessibility factor and the SDSS were significantly predictive, both before and after the inclusion of the victimization and alcohol variables. It is possible that because the SDSS measures the sexual double standard (i.e., the supposed discrepancy between men's traditional sexual role and women's traditional sexual role), high scores on the SDSS in our sample may reflect a strong belief in traditional male sexuality rather than a strong belief in traditional female sexuality. This is consistent with the fact that acceptance of traditional male sexuality was consistently associated with women's sexual aggression, whereas belief in traditional female sexuality as measured by the Token Resistance Scale and by the Gender Dependent Sex Drive subscale of the SSQ was not associated with women's sexual aggression. It is also possible that the unexpected pattern found for women's sexual assault perpetration reflected the low rates of sexual assault endorsement combined with some false positive endorsements as described above. Several of the women included in this sexual assault category endorsed in a false positive manner (this was also the case with verbal coercion, but because more women endorsed verbal coercion, a smaller percentage were false positives). Those who endorsed false positives could have been eliminated to provide a cleaner sample of sexual coercion perpetrators.

However, one of the goals of this study was to evaluate factors associated with endorsement of sexual coercion on existing scales; thus, attitudes that were associated with *reporting sexual coercion*, even in cases in which we did not agree with participants' self-report, were of interest. Additionally, women were categorized as sexually aggressive based on responses to both the SES-LFP and the PRSP scale; because qualitative data was not gathered for the PRSP, it was not possible to classify endorsements on that scale as false or true positives.

It is notable that the factors related to attitudes about traditional male and female sexuality were still significantly predictive, even when the contributions of childhood sexual abuse, adult sexual victimization, and binge alcohol use were controlled. This suggests that, beyond a person's history and current habits, their beliefs about sexual behavior are important in predicting whether they will use sexually coercive tactics. These findings reinforce the importance of beliefs about sexual behaviors and norms and their link to coercive behavior.

Although the ability to analyze the association between the open-ended scripts and sexual aggression was limited because of the limited number of non-traditional scripts and the inability to separate traditional male and female sexuality, the obtained results do fit with the other data reported in this study. For men, spontaneously providing traditional sexual roles within an open-ended script was associated with endorsing use of coercion; this was not true for women. Men's patterns of responses fit within the hypothesis that holding traditional sexual scripts would be associated with use of coercion. For women, the predictive variables may be more complicated and involve a rejection of traditional female roles in addition to the endorsement of traditional male

roles. Overall, the generation of traditional roles within the spontaneous scripts was not associated strongly with any of the other sexual attitude measures in this study despite the fact that these quantitative measures were intended to serve as proxy measures for traditional sexual scripts. This discrepancy may be due to some individuals holding traditional sex roles and revealing them in spontaneous scripts but not in objective attitudinal measures; the purpose of the open-ended script generation is less obvious than asking for agreement with a statement and thus open-ended questions may encourage less socially desirable responding. Alternatively, some individuals may hold traditional scripts that they do not reveal spontaneously but that they endorse when specifically asked.

### **Limitations and Future Directions**

The main limitation of this study was the small number of individuals endorsing perpetration, limiting the amount of information able to be analyzed. Of those individuals who did endorse an item on the SES-LFP, not all of them provided a qualitative answer in the follow-up section; of those who did provide such an answer, a large portion of these were unable to be categorized by the two raters as a false positive, false negative, true positive, or true negative.

Although one of the aims of this research was to examine the convergent validity between the SES-LFP and the PRPS, this was only able to be done with comparisons of simple item endorsement or non-endorsement. No qualitative data were gathered using the PRPS due to concerns about respondent fatigue, and, thus, an analysis of false negatives and false positive to the PRPS items was not possible. Future studies examining qualitative responses to PRPS items could increase understanding of why individuals appear to more readily endorse these items, as opposed to those on the SES-LFP. For

example, it is possible that the PRPS items result in lower levels of false negatives and/or higher levels of false positives than the SES-LFP items.

Another aim of this study was to examine spontaneously written sexual scripts for traditional and non-traditional sex roles. There was quite a bit of variation in the amount and quality of written response each person provided. Although almost all participants provided a response, a majority of individuals did not include either traditional or non-traditional sex roles in their script, and it is not clear whether this is because those sex roles were not salient for the individuals or because the individuals simply did not provide enough detail in their scripts to allow us to interpret their views about men's and women's sex roles. Notably, there were not enough non-traditional roles included to be able to conduct statistical analyses and examine their association with reports of coercion; this likely reflects the fact that non-traditional roles are truly not a part of most individuals' prototypical script for sexual activity, but the lack of non-traditional scripts did limit our ability to test our primary hypotheses.

Lastly, our sample did not include enough gay and lesbian participants to allow for comparisons with the heterosexual sample; thus, this study examines primarily heterosexual coercive interactions. In the future, it will be important for this type of work to be done looking at the sexually coercive behaviors of gays and lesbians and how it is similar to and different from that of heterosexual individuals. Given the impact of normative sexual behavior and beliefs about how men and women should behave in heterosexual interactions, how do beliefs about normative gay and lesbian sexual behavior impact sexually coercive situations and the way in which the individuals

involved perceive them? What are the appropriate and effective ways that researchers can ask questions about gay and lesbian coercive behavior?

Future research may also look at responses to victimization queries in a similar manner to how this study approached perpetration queries. How do beliefs about normative sexual behavior impact whether a person will endorse a victimization item? Although sexually coerced, assaulted, and raped women have been studied in detail, less is known about how men answer questions about victimization and interpret items that ask about their experiences of being coerced. Given the recent redefinition of rape by the Justice Department (Basu, 2012), more information on men's experiences of sexual coercion and assault and how to accurately obtain it are important areas of study for researchers in the future.

## **Conclusions**

This study gathered novel and valuable data regarding differences in how men and women report sexual coercion perpetration on commonly used measures. The findings suggest that asking men and women the same questions on gender-neutral perpetration measures may sometimes lead to inaccurate and misleading results, particularly for women. Results support the value of designing a new perpetration measure specifically for women that takes into account some of the issues raised in this study.

In addition, the data related to the association between belief in traditional sexual roles and sexual aggression suggest that prevention of coercion may be at least partially accomplished by interventions that address and alter attitudes about sexuality, in particular traditional male and female sexuality. For both men and women, endorsement

of traditional male sexuality was a significant predictor of reporting use of coercive tactics, even when controlling for past victimization and use of alcohol. This suggests that targeting these beliefs about men's need and desire for sex may be useful in reducing perpetration of coercion among both men and women.

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